Hanford Facility Contingency Plan

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IMPLEMENTATION NOTICE

DOE/RL-93-75, *Hanford Facility Contingency Plan*

This document is being issued for use by personnel who are responsible for facilities that are required to meet the contingency planning requirements contained in *Washington Administrative Code* (WAC) 173-303.

The document is essentially identical to Appendix 7A of document DOE/RL-91-28, *Hanford Facility Dangerous Waste Permit Application, General Information*. There are three minor differences between the documents: (1) this document has the correct reference to the 911 emergency telephone, (2) this document incorporates the consolidation of Kaiser Engineers Hanford Company with Westinghouse Hanford Company, and (3) this document has the figures and tables in the applicable sections rather than consolidated at the end of the document as is the case in DOE/RL-91-28.

This document is intended to be used in conjunction with existing facility contingency planning documentation (e.g., Building Emergency Plans) to present a complete picture of contingency planning to regulatory personnel. This document contains descriptions of the Hanford Site emergency capabilities including equipment, organizations, and standard response actions; descriptions of agreements made with the local agencies; and a description of the occurrence reporting and notification process.

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HANFORD FACILITY CONTINGENCY PLAN

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1.0 GENERAL INFORMATION

The Hanford Facility is defined as a single *Resource Conservation and Recovery Act (RCRA) of 1976* facility, identified by the EPA/State Identification Number WA7890008967, that consists of over 60 treatment, storage, and/or disposal (TSD) units conducting dangerous waste management activities. The Hanford Facility consists of the contiguous portion of the Hanford Site that contains these TSD units and, for the purposes of RCRA, is owned and operated by the U.S. Department of Energy (excluding lands north and east of the Columbia River, river islands, lands owned or used by the Bonneville Power Administration, lands leased to the Washington Public Power Supply System, and lands owned by or leased to the state of Washington).

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2.0 PURPOSE

The Hanford Facility Contingency Plan, together with each TSD unit-specific contingency plan, meets the WAC 173-303 requirements for a contingency plan. This plan includes descriptions of responses to a nonradiological hazardous materials spill or release at Hanford Facility locations not covered by TSD unit-specific contingency plans or building emergency plans. This plan includes descriptions of responses for spills or releases as a result of transportation activities, movement of materials, packaging, and storage of hazardous materials.

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3.0 EMERGENCY COORDINATORS

The overall responsibility for implementation of this Hanford Facility Contingency Plan (Plan) lies with the building emergency director (BED) or their designated alternates. The BED has the responsibilities of the Emergency Coordinator as discussed in WAC 173-303-360 and is also the Event Commander for facility related events. A list of all BEDs and alternates is maintained at various locations throughout the Hanford Facility, and these individuals can be reached 24 hours per day. The BEDs have the authority to commit all necessary resources (both equipment and personnel) to respond to any emergency. Additional responsibilities have been delegated to the Hanford Fire Department personnel who are authorized to act for the BED when the BED is absent. These Hanford Fire Department personnel have the authority to commit all necessary resources (both equipment and personnel) to respond to any emergency.

Response by a BED (or an Emergency Coordinator) usually is obtained through the DOE-RL single point-of-contact* by dialing telephone number 911 or 373-3800 or 375-2400. The single point-of-contact has been designated as the contact point to mobilize a response to any Hanford Facility emergency. The single point-of-contact is available at all times and has the responsibility to initiate notifications to the BED or alternate to begin responses to emergencies, as well as to dispatch emergency responders (Hanford Fire Department, Hanford Patrol, or ambulance services). All emergency notifications to the BED, building managers, etc., can be made directly from the affected TSD unit or through the single point-of-contact.

The unit-specific DOE-RL technical contact responds to regulatory agency inquiries regarding this Plan. The unit-specific DOE-RL technical contact is accessed by contacting 373-3800 or 375-2400.

*The single point-of-contact is the Hanford Patrol Operations Center (811 or 373-3800) and/or the Pacific Northwest Laboratory Security Center (375-2400).

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4.0 IMPLEMENTATION OF THE CONTINGENCY PLAN

This contingency plan describes parallel decision flow paths for evaluating and classifying an incident. DOE orders and WAC 173-303-360 require incident classification. The definition of emergencies according to DOE orders differs from the definition contained in WAC 173-303. Because of this, a dual incident classification decision path is necessary to meet both DOE order and WAC 173-303 requirements. Incident classification according to DOE orders is described in this contingency plan for completeness only. DOE orders will not be used to evaluate whether an incident requires implementation of a contingency plan.

Implementation of a contingency plan will occur when a BED has determined that a release, fire, or explosion has occurred at the facility which could threaten human health or the environment. A release is defined in WAC 173-303-040 within the definition of "discharge". An incident requiring evacuation of personnel or the summoning of emergency response units will not necessarily indicate that a contingency plan has been implemented.

Any incident that poses a potential threat to human health or the environment discovered by TSD unit personnel requires immediate notification of the BED and the single point-of-contact who then notifies the Hanford Fire Department. Personnel may respond, in accordance with the procedures described in TSD unit-specific contingency plans, before the arrival of the BED, as long as such response is within their level of training. The Hanford Fire Department is contacted through the single point-of-contact on all incidents involving dangerous materials or mixed waste.

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5.0 INCIDENT RESPONSE

Incident response procedures have been established for each specific TSD unit. The initial response to any emergency will be to immediately protect the health and safety of persons in the immediate area. Identification of released material is essential to determine appropriate protective actions. Containment, treatment, and disposal assessment will be the secondary responses.

The following sections describe actions for personnel for several different types of incidents, including a generic response, that might occur on the Hanford Facility. Regardless of how an incident is classified, minimum on-site notification requirements exist to assure the appropriate organizations are contacted and that the incident is correctly classified.

5.1 INCIDENT GENERIC RESPONSES

5.1.1 Discoverer

1. The discoverer makes immediate notifications immediately to potentially affected personnel (including the BED for a TSD unit incident, if on site) of the incident.
2. Immediately notifies the single point-of-contact (911* or 375-2400) and provides all known information, if the information can be obtained without jeopardizing personnel safety, including the following:
 - Name(s) of chemical(s) involved and amount(s) spilled, on fire, or otherwise involved, or threatened by, the incident
 - Name and callback telephone number of person reporting the incident
 - Location of incident (identify as closely as possible)
 - Time incident began or was discovered
 - Where the materials involved are going or might go, such as into secondary containment, under doors, through air ducts, etc.

*The DOE-RL and other contractor personnel are trained to notify the Hanford Emergency number (811 from onsite telephones and 375-2400 from 375 prefix telephones) for immediate dispatch of the Hanford Fire Department for fire, ambulance services, hazardous materials/mixed waste response, and for the Hanford Patrol. Hanford Patrol, who operates the 811 number, and Pacific Northwest Laboratory Security, who operates the 375-2400 number, notify other organizations and contractors to ensure appropriate actions are taken.

- Source and cause, if known, of spill or discharge
- Name(s) of anyone contaminated or injured in connection with the incident
- Any corrective actions in progress
- Anyone else who the discoverer has contacted.

5.1.2 Single Point-of-Contact

1. Initiates notification to the BED, or one of the alternates if the BED cannot be reached immediately, to arrange immediate response to the incident
2. Requests immediate response from the Hanford Fire Department for fire, ambulance service, and/or hazardous material/mixed waste incidents
3. Contacts the Hanford Patrol for traffic control and security measures, as needed, based on the report of the discoverer
4. Initiates notification to appropriate management of the spill or release incident
5. Supports the BED in providing further notification and coordination of response activities if needed
6. Activates or requests activation of the appropriate alarm signals (as required) for the affected building or affected 200, 300, or 400 Areas, when the BED determines that protective actions are necessary
7. Notifies the emergency response organizations
8. Prompts the affected area emergency control centers (ECC) if requested by the BED or other authorized persons
9. Prompts activation of the DOE-RL Emergency Action and Coordinating Team (EACT), if necessary, to recommend protective actions for areas outside the Hanford Facility.

5.1.3 Building Emergency Director (or alternate)

1. Sounds appropriate alarms to notify occupants
2. Notifies the single point-of-contact if additional support or an area evacuation is needed
3. Activates the building emergency response organization as necessary
4. Arranges for care of any injured employees

5. Requests the single point-of-contact to activate the affected ECC, if required. Activation of the ECC should be done whenever technical assistance is required in evaluating a spill, when the emergency might affect neighboring buildings, or when otherwise deemed necessary by the BED.
6. Provides for event notification in accordance with DOE Order 5000.3B and other established Hanford Facility procedures
7. Provides details of the event to appropriate management as the details become available.

5.1.4 Identification of Hazardous Materials and Dangerous Waste and Assessment of Hazards

The BED ensures that trained personnel identify the character, source, amount, and areal extent of the hazardous material or dangerous waste involved in the incident to the extent possible. Identification of waste can be made by visual inspection of involved containers; by sampling; by reference to inventory records, shipping manifests, or waste tracking forms; or by consulting with TSD unit operations personnel. Samples of materials involved in an emergency might be taken by qualified personnel and analyzed as appropriate.

Concurrently, the hazards that the incident poses to human health and the environment must also be assessed. The assessment must take into consideration the direct, indirect, immediate, and long-term effects of the incident. In addition to the information sources identified above, the hazard assessment should include other sources such as Material Safety Data Sheet toxicity and health information, and results from any personnel monitoring examinations conducted at medical facilities. These are the types of tools which will aid in ascertaining the extent in which human health and the environment were threatened.

Upon activation, the ECC is available to assist the BED if needed. Possible assistance could include determining the extent of an emergency, identifying the hazards associated with the materials or waste involved in the incident, assisting in response to the incident, or coordinating the mobilization of special equipment or supplies to the incident site.

If assessment of all available information does not yield a positive assessment of the danger posed by the incident, a worst-case condition will be presumed and appropriate protective actions will be initiated. The BED is responsible to initiate any protective actions.

5.1.5 Incident Classification

After the assessment has been completed in Section 5.2, the incident should be ready for classification. If not, the BED shall take whatever means are necessary to obtain the information to complete the classification. The

BED must classify the incident according to the DOE order and contingency plan implementation criteria in this section.

1. DOE Order Incident Classification

There are three categories of incidents on the Hanford Facility: offnormal event, unusual occurrence, and emergency as described in DOE Orders. Incidents are categorized based on degradation of TSD-unit safety systems and impact to other TSD units, employees, structures, public safety, and the environment. Incidents categorized as offnormal events and unusual occurrences are communicated as described in Section 9.0. Incidents categorized as an emergency are further classified into one of three emergency classes as required by DOE orders. Incidents categorized as emergencies will prompt automatic activation of the appropriate ECCs.

2. WAC 173-303 Incident Classification

Based upon the evaluation and hazard assessment in Section 5.2, the BED may determine that the incident is classified as a release, fire, or explosion that threatens human health or the environment. When this occurs, the BED must report his assessment to the ECC, if activated, or to the ONC for dissemination to local authorities for evacuation of local areas, if applicable. In addition, the BED, with assistance from the ONC and environmental compliance/protection personnel, must immediately (within 2 hours) notify Ecology, and either the government official designated as the on-scene coordinator, or the National Response Center. The information included in the assessment report to these agencies is described in Section 9.0.

5.1.6 Protective Actions

1. Evacuation (Signal: Steady siren). Each TSD unit has a building emergency procedure that includes an evacuation plan identifying emergency signals and staging area location. In the event a Facility-wide evacuation is required, TSD unit personnel evacuate to their designated staging area, are accounted for, and receive directions on routes to take to safely evacuate the area. If the primary route is blocked by the emergency, personnel use alternate evacuation routes determined at the time of the event.

Evacuation routes for the Hanford Facility are shown on Figure 1. Specific routes will be determined at the time of the event based on event magnitude, location, and meteorology.

2. Take Cover (Signal: Wavering siren). In the event of a take cover alarm, personnel remain inside, close all exterior doors, and turn off all intake ventilation. Personnel secure all waste and classified documents.

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Figure 1. Hanford Facility Evacuation Routes.

5.2 RESPONSE TO MINOR SPILLS OR RELEASES

(Signal: None) The TSD unit personnel generally perform immediate cleanup of minor spills or releases using sorbents and emergency equipment. Personnel detecting such spills or releases contact the single point-of-contact to notify of the detection of such release and to ensure notification of the BED and the Hanford Fire Department. Responses to spills or releases occurring within individual storage cells, structures, modules, etc., during routine handling and storage are contained in TSD unit-specific contingency plans. Response to minor spills generally does not require the implementation of the contingency plan.

A spill or release of hazardous material or dangerous waste is considered 'minor' if all of the following are true:

- The spill does not threaten the health and safety of occupants of the building, i.e., an evacuation is not necessary
- The spill is small in size (generally less than half of the immediately dangerous to life and health quantities identified in material safety data sheets)
- The composition of the material or waste is known or can be quickly determined from label, manifest, material safety data sheets, or disposal request information.

If one or more of the foregoing conditions are not met, responses are performed as outlined in Section 5.3. Notification of the spill takes place as outlined in Section 5.1.

5.3 MAJOR DANGEROUS WASTE AND/OR MIXED WASTE SPILL OR MATERIAL RELEASE

(Signal: None) The following actions are taken in the event of a major release.

5.3.1 Discoverer

The discoverer performs the following:

1. If within the TSD unit, notify personnel (including BED) of discovery of spill or release by sounding the appropriate alarm, using the public address (PA) system, etc.
2. Initiate notifications to the Hanford Fire Department (and BED if necessary) by contacting the single-point contact and provide all known information, in accordance with Section 5.1.
3. Takes action to contain and/or to stop the spill if all of the following are true:
 - The identity of the substance(s) involved is known

- Appropriate protective equipment and control/cleanup supplies are readily available
- Discoverer can safely perform the action(s) without assistance, or assistance is readily available from other trained TSD unit personnel.

If any of the above conditions are not met, or there is any doubt, the discoverer evacuates the area and remains outside, upwind of the TSD unit, pending the arrival of the BED. The discoverer remains available for consultation with the BED, Hanford Fire Department, or other emergency response personnel.

5.3.2 Single Point-of-Contact

The single point-of-contact performs the following:

1. Notifies the Hanford Fire Department and relays information received from the event scene
2. Initiates notification to the BED if not at the TSD unit
3. Remains available to support further notification and response activities if needed.

5.3.3 Building Emergency Director

The BED performs or arranges for the following:

1. Proceeds directly to the TSD unit to coordinate further activity and to establish a command post at a safe location
2. Obtains all available information pertaining to the incident and determines if the incident requires implementation of the contingency plan
3. Determines need for assistance from agencies listed in Section 8.0 and arranges for their mobilization and response through the single point-of-contact
4. Initiates the appropriate alarm, if building or area evacuation is necessary,
5. Arranges for care of any injured persons
6. Requests activation of the affected area ECC via the single-point of contact, if a threat to surrounding buildings or structures exists
7. Provides for event notification in accordance with Section 5.1

8. Maintains access control at the incident site by keeping unauthorized personnel and vehicles away from the area. Security personnel can be used to assist in site control if control of the boundary is difficult (e.g., repeated incursions). In determining controlled access areas, considers environmental factors such as wind velocity and direction
9. Arranges for proper remediation of the incident after evaluation.
10. Remains available for fire, patrol, and other authorities on the scene and provides all required information
11. Enlists the assistance of alternate BED(s), if around-the-clock work is anticipated
12. Refers media inquiries to the Media Relations/Communications offices of the contractors or DOE-RL.
13. Ensures the use of proper protective equipment, remedial techniques (including ignition source control for flammable spills), and decontamination procedures by all involved personnel, if remediation is performed by TSD unit personnel. Areas of expertise are available in determining necessary equipment or procedures
14. Remains at the scene to oversee activities and to provide information, if remediation is performed by the Hanford Fire Department Hazardous Materials Response Team or other response teams
15. Ensures proper containerization, packaging, and labeling of recovered spill materials and overpacked containers
16. Ensures decontamination (or restocking) and restoration of emergency equipment used in the spill remediation before resuming TSD unit operations
17. Provides required reports after the incident in accordance with Section 9.0.

5.3.4 Hanford Fire Department Response to Major or Unknown Spills

The Hanford Fire Department response to unknown spills is as follows.

1. Initial Hanford Fire Department response includes one engine company, one hazardous materials unit, one ambulance unit, and one battalion commander.
2. The Hanford Fire Department, as the Hazardous Materials Incident Command Agency, establishes command and control of the situation. The first arriving unit assumes incident command and determines location of the command post, and evacuates personnel from a red

zone consisting of a minimum of 100 feet (30.5 meters) in all directions. The red zone could be adjusted as deemed necessary by the hazardous materials team leader.

3. The Incident Commander evacuates all personnel within the red zone area.
4. The hazardous materials team leader establishes yellow zone and decontamination corridor.
5. The hazardous materials team leader assigns fully trained and qualified team members specific tasks i.e.,

Team Safety Officer	Decontamination Team Leader
Entry Team	Resource Leader
Backup Team	Science Leader

6. The hazardous materials team safety leader controls and directs the medical evaluations for personnel working in the red and the yellow zones.
7. Team members performing entry, back up, and decontamination, suit up in level "A" protection.
8. Entry team members make entry to obtain samples of unknown hazardous material, and observe for other pertinent information.
9. Entry team collects sample and exits area going through decontamination by decontamination team.
10. The hazardous materials sample is analyzed on scene by hazardous materials team personnel using available testing equipment. This testing is to determine hazard group classification i.e., poison, acid, flammable, oxidizer, etc.
11. Once hazard classification has been identified, hazardous materials entry team makes re-entry to stabilize and control hazardous material to the point that the emergency no longer exists.
12. The entry team exits the area going through decontamination by decontamination team.
13. The spill site is turned over to cleanup personnel for cleanup and disposal.
14. The hazardous materials response command is dissolved; all units return to stations.
15. A critique of the hazardous materials incident is held with team members as soon as possible after Hanford Fire Department units have returned to stations.

5.4 RESPONSE TO FIRE

(Signal: Gong) In the event of a fire, the discoverer activates a fire alarm and calls the single point-of-contact. Automatic initiation of a fire alarm (through the smoke detectors and sprinkler systems) also is possible. The TSD unit personnel are trained in the use of portable fire extinguishers for incipient fires. Personnel use their best judgment whether to fight a fire or to evacuate. Under no circumstances do personnel remain to fight a fire if unusual hazards exist.

The following actions are taken in the event of a fire or explosion.

1. On actuation of the fire alarm, personnel shut down equipment, secure waste (especially mixed waste), and lock up classified documents (or carry the documents with them), ONLY if time permits. The alarm automatically signals the Hanford Fire Department and the Hanford Patrol Operations Center.
2. Personnel leave the area/building by the nearest safe exit and proceed to the designated staging area for accounting.*
3. The single point-of-contact is notified immediately, who in turn initiates notifications to the BED (or alternate) if necessary.
4. The BED proceeds directly to the scene (if not already there).
5. The BED obtains all necessary information pertaining to the incident.
6. Depending on the severity of the event, the BED (or lead Facility Manager) contacts the Occurrence Notification Center and requests additional notifications to offsite agencies (e.g., Ecology, local counties, and DOE-Headquarters), informing them as to the extent of the emergency (including estimates of dangerous waste or mixed waste quantities released to the environment) and any actions necessary to protect nearby buildings and/or structures.
7. Depending on severity, the BED requests activation of the affected area ECC to establish organizations to provide assistance from the DOE-RL, other Hanford Facility contractors, and outside agencies.
8. The Hanford Patrol establishes roadblocks within the area to route traffic away from the emergency scene.
9. Hanford Fire Department medical personnel remove injured personnel to a safe location, apply first aid, and prepare the injured for transport to medical aid stations or to local hospitals in accordance with established memoranda of understanding (MOUs)

*During a fire alarm condition, all building occupants are required to evacuate unless otherwise stated in their specific building emergency plan.

(copies of the MOUs are maintained by the Hanford Fire Department). Medical personnel are on standby at the fire stations 24 hours per day.

10. Hanford Fire Department fire fighters extinguish the fire.
11. All emergency equipment is cleaned and fit for its intended use following completion of cleanup procedures.

5.5 UNUSUAL, IRRITATING, OR STRONG ODORS

(Signal: None) If an unusual, irritating, or strong odor is detected, and the discoverer has reason to believe that the odor might be the result of an uncontrolled release of a toxic or dangerous material, the discoverer performs the following:

- Activates the building evacuation alarm or fire alarm system to evacuate the building
- Notifies the single point-of-contact, the building manager, and cognizant line management.

If the discoverer knows of the source and scope of the release, this information is reported quickly to the BED. Measures are taken to contain the release and ventilate the area, if safe and advisable to do so.

If an unusual odor is detected within the building or structure, and the source of the odor is unknown, the BED considers additional protective actions.

5.6 RESPONSE TO CONTAINER SPILLS OR LEAKS

In addition to the foregoing Plan provisions, the following specific actions could be taken for leaks or spills from containers at TSD units. These actions may be taken only by appropriately trained personnel.

- Container leaks are stopped as soon as possible using appropriate procedures. Appropriate personnel protective equipment is used.
- If it is inadvisable to approach the container, absorbent materials are used, and access is restricted pending notification of the BED and implementation of the Plan.
- Contents of leaking containers could be transferred to appropriate nonleaking containers. Transfer procedures for fire safety are followed for ignitable or reactive waste (e.g., use of nonsparking tools, bonding and grounding of containers, isolation of ignition sources, and use of explosion-proof electrical equipment).
- Overpacked containers are marked and labeled in the same manner as the contents. All containers of spill debris, recovered product, etc., are managed in the same manner as waste containers received

from outside the TSD unit. Overpacks in use at the TSD unit are marked with information pertaining to their contents and noted as to whether the container inside the overpack is leaking or is in good condition.

5.7 RESPONSE TO TRANSPORTATION AND/OR PACKAGING INCIDENTS

This section describes the actions taken in the event of an unplanned sudden or nonsudden release of dangerous waste or dangerous waste constituents to air, soil, surface water, or groundwater during onsite transportation activities, or at locations not covered by a unit-specific contingency plan. This includes spills or releases as a result of transportation activities, movement of materials, packaging, and storage of hazardous materials.

The following steps are performed by those individuals responding to a hazardous materials transportation incident at the Hanford Facility.

5.7.1 Initial Responder Actions

The initial responder or discoverer of a hazardous materials spill or release resulting from onsite transportation activities initiates the following response actions, if the actions can be performed without jeopardizing personnel safety, as appropriate.

- Determines the nature of incident
 - Personnel injuries
 - Hazardous material spill with fire
 - Hazardous material spill without fire.
- Assists injured personnel.
- Initiates notifications to the single point-of-contact by any means available (telephone, radio, passing motorist, etc.) to request assistance from the Hanford Fire Department (Emergency Coordinator for these type of events), Hanford Patrol and medical personnel.
- Remains in a safe location and attempt to isolate the area to prevent inadvertent personnel access.

5.7.2 Event Commander—Outside Treatment, Storage, and/or Disposal Units

The Hanford Fire Department will establish and maintain incident command on arrival at the emergency event. The Incident Commander will perform or coordinate the event command actions for locations not controlled by a BED.

The Event Commander will ensure that the cause of the incident and its possible effects are investigated and evaluated as soon as possible. The Event Commander, with input from the Incident Commander, assesses possible

hazards to human health and the environment (considering direct, indirect, immediate, and long-term effects) that might result from the release, fire, or explosion and takes the following actions as appropriate:

- Isolate event from employees:
 - Cordon off access
 - Place apparatus to block roadways
 - Use Hanford Patrol roadblocks
 - Use TSD unit/vehicle PA systems
 - Sound appropriate alarms.
- Determine type of hazardous materials involved:
 - Occupancy/location
 - Container shapes
 - Markings and colors
 - Placards and labels
 - Shipping papers
 - Consult reference materials (U.S. Department of Transportation, National Institute of Occupational Safety and Health *Pocket Guide to Chemical Hazards*)
 - Unit managers/employees.
- Notify the appropriate manager of the incident and ensure that the incident is reported properly in accordance with Section 9.0 of this Plan
- If the TSD unit stops operations in response to a fire, an explosion, or a release, the BED will monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate
- Coordinate with emergency response organizations to establish a command post, upwind and uphill of the incident:
 - Ensure command post is located so as to minimize the need for relocation
 - Direct incoming response vehicles to a safe staging area
 - Coordinate tasks with other responders
 - Activate required emergency centers
 - Dispatch radiological and nonradiological field teams to help define and locate the plume.

- Ensure that all personnel who enter the area are equipped with proper protective clothing and respiratory protection
 - Rescue should only be attempted when the risks have been evaluated and are considered acceptable.
 - If the risks are unknown, or considered unacceptable, wait for the Hazardous Materials Response Team.

Rescue/evacuation can be performed by trained personnel, other than the Hanford Fire Department, if the victim's location could present an immediate life-threatening situation or further injuries to the victim.

- Complete other actions necessary to effect control of the scene, including but not limited to the following:

NOTE: The following steps normally are conducted and/or directed by a Hanford Fire Department Hazardous Materials Response Team leader.

- Secure the scene
 - Use absorbents
 - Use covering (blankets, polyethylene, etc.)
 - Overpack
 - Plug/patch
 - Transfer to new container
 - Venting/vapor suppression.
- Initiate other measures as needed, including but not limited to, the following:
 - Place hose streams and unmanned monitors
 - Establish confinement dikes to prevent run-off
 - Perform first aid.
- Obtain additional information:
 - Who is operating the equipment
 - What and how much hazardous material is involved
 - Manufacturer, shipper, receiver
 - Weather conditions.
- Set up resource areas:
 - Command post location
 - Logistics area
 - Triage area
 - Decontamination area (personnel and equipment)
 - Staging area
 - Planning.
- Reevaluate evacuation boundaries and identify containment zones to adequately protect responding personnel

- Take any additional actions to mitigate the incident, possibly include the following:
 - Cool tanks involved in a fire or exposed to heat to reduce the potential for explosion
 - Remove all available ignition sources
 - Divert liquid and run-off water to prevent contamination spread
 - Dike and retain liquids from a leak or spill
 - Limit property damage as much as possible
 - Provide on-scene emergency medical services.
- Document the response to the incident and provide a report to appropriate management
- Conduct a critique, including cause(s), impact(s), and lesson(s) learned from an incident, following the emergency incident and on completion of the emergency response to that incident. The Emergency Coordinator and/or BED ensures that all appropriate parties are aware of, and participate in, decisions on the best course(s) of action to take to prevent or minimize the possibility of future occurrences. Steps are listed in Section 5.9.

5.8 DAMAGED, UNACCEPTABLE SHIPMENTS

(Signal: None) When a damaged shipment of hazardous material or dangerous waste arrives at a TSD unit and the shipment is unacceptable for receipt, the damaged shipment should not be moved. The TSD unit personnel instead perform the following steps.

- If the release from damaged package is a 'minor' spill under the criteria of Section 5.2, the following actions are performed.
 - Notify the BED, the Hanford Fire Department, and the single point-of-contact to advise of the situation. The BED responds and assists in the evaluation of, and response to, the incident.
 - Notify the generating unit of the damaged shipment and provide any chemical information necessary to assist in responding to the 'minor' spill.
 - Proceed with remedial action, including overpacking damaged containers, cleanup of spilled material, or other necessary actions to contain the spill.
- Implement the TSD unit contingency plan, if the release does not meet the criteria of a 'minor' spill as noted previously, or the extent of the spill cannot be determined.

5.9 PREVENTION OF RECURRENCE OR SPREAD OF FIRES, EXPLOSIONS, OR RELEASES

The BED, in coordination with emergency response organizations, takes the steps necessary to ensure that a secondary release, fire, or explosion does not occur. The following actions are taken:

- Isolate the area of the initial incident by shutting off power, closing off ventilation systems, etc., to minimize the spread of a release and/or the potential for a fire or explosion
- Inspect containment for leaks, cracks, or other damage
- Inspect for toxic vapor generation
- Remove released material and waste remaining inside of containment structures as soon as possible
- Contain and isolate residual waste material using dikes and adsorbents
- Cover or otherwise stabilize areas where residual released materials remain to prevent migration or spread from wind or precipitation run-off
- Install new structures, systems, or equipment to enable better management of hazardous materials or dangerous waste
- Reactivate adjacent operations in affected areas only after cleanup of residual waste materials is achieved.

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

6.1 TERMINATION OF EVENT

It is a function of the BED (Emergency Coordinator) to declare the termination of an event. However, in an event where additional emergency centers are activated only the highest activated level of the emergency organization, in conjunction with the BED, will declare that an event has ended. If the RL-EACT is activated, only the RL director officially terminates the event. In all cases, however, the BED or Emergency Coordinator must be consulted before reentry is initiated.

6.2 INCIDENT RECOVERY AND RESTART OF OPERATIONS

A recovery plan is developed when necessary. A recovery plan is needed following an event when further risk could be introduced to personnel, a TSD unit, or the environment through recovery action and/or to maximize the preservation of evidence. If a recovery plan is required, it is reviewed by appropriate personnel and approved before restart. Restart of operations is performed in accordance with the approved plan.

If the contingency plan was implemented, notification must be made to Ecology before operations can be resume. Section 9.0 discusses different reports to outside agencies. This notification is in addition to the required reports in Section 9.0. This notification must include that there are no incompatibility issues with the waste and released materials from the incident, and that all the equipment has been clean, fit for its intended use and placed back into service. The notification may be made via telephone conference. Any additional information that Ecology requests regarding these restart conditions may be included in the required 15-day report identified in Section 9.0.

For emergencies not involving activation of the ECC, the BED ensures that conditions are restored to normal before operations are resumed. If the ECC was activated and the emergency phase is complete, a special recovery organization could be appointed at the discretion of the BED to restore conditions to normal. The makeup of this organization depends on the extent of the damage and its effects. The recovery organization will be appointed by the appropriate contractors' emergency director.

6.3 INCOMPATIBLE WASTE

After an event, the BED or the 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. Cleanup actions are taken by TSD unit operations personnel or other assigned personnel. Actions to be taken might include, but are not limited to, any of the following:

- Neutralization of corrosive spills

- Chemical treatment of reactive materials to reduce hazards
- Overpacking or transfer of contents from leaking containers
- Use of sorbents to contain and/or absorb leaking liquids for containerization and disposal
- Decontamination of solid surfaces impacted by released material, e.g., intact containers, equipment, floors, containment systems, etc.
- Disposal of contaminated porous materials that cannot be decontaminated and any contaminated soil
- Containerization and sampling of recovered materials for classification and determination of proper disposal technique
- Follow up sampling of decontaminated surfaces to determine adequacy of cleanup techniques as appropriate.

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

If it is determined that incompatibility of waste was a factor in the incident, the BED or the recovery organization ensures that the cause is corrected. Examples would be modification of an incompatibility chart or increased scrutiny of waste from a generating unit when incorrectly designated waste caused or contributed to an incident.

6.4 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. Consumables and disposed materials are restocked. Fire extinguishers are recharged or replaced.

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

Equipment and personnel decontamination stations are established considering the following information and techniques.

Items to consider when establishing a decontamination station are as follows:

- Water supplies

- Containment/catch basins and/or systems
- Staff necessary to accomplish proper decontamination
- Protective clothing
- Decontamination supplies (buckets, brushes, soap, chemicals as needed)
- Risk to personnel
- Weather conditions; i.e., severe heat, cold (current and forecasted)
- Toxicity of material
- Porosity of equipment to be decontaminated
- Disposal requirements of decontamination rinse
- Use of controlled zones to maintain contamination control.

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7.0 EMERGENCY EQUIPMENT AND RESOURCES

7.1 HANFORD FACILITY EMERGENCY CONTROL CENTERS

The ECCs are those locations staffed to provide assistance to building emergency organizations in an emergency situation. The ECCs are established to support and to provide overall direction of emergency events occurring at locations within their geographic area of responsibility, within the Hanford Facility. This includes acquisition of and assignment of resources to respond to emergency events. Responsibilities also include personnel protection (employee and public), TSD unit safety, and environmental protection. The establishment of ECCs ensures that notification and communication of emergency conditions are communicated properly.

There are six ECCs located throughout the Hanford Facility and Hanford Site (Table 1).

7.2 COMMUNICATIONS EQUIPMENT

The Hanford Facility has alarm systems that are monitored by the Hanford Fire Department and the Hanford Patrol Operations Center. The alarm signals that exist at the Hanford Facility are identified in Table 2. The TSD unit operations personnel also may use telephones, building PA systems, portable radios, and cellular telephones to summon assistance.

7.3 FIRE CONTROL EQUIPMENT

Many Hanford Facility buildings are equipped with automatic fire-suppression (sprinkler) systems. Portable fire extinguishers are located in working areas in compliance with National Fire Protection Association safety codes. Each Class ABC extinguisher is capable of suppressing fires involving ordinary combustible materials, flammable liquids, oils, paints, flammable gases, and electrical equipment. All extinguishers comply with the National Fire Code standards for portable extinguishers and are inspected monthly. The inspections are recorded on tags attached to each extinguisher.

7.4 PERSONAL PROTECTIVE EQUIPMENT

The TSD units have safety showers and eyewash stations, located as necessary, for personnel protection. Drainage from these stations is contained. In addition to these stations, portable eyewash equipment is maintained at protective storage areas as necessary. These eyewash/shower stations are inspected regularly.

Protective clothing and respiratory protective equipment are maintained for use during both routine and emergency operations. This equipment is identified in the unit-specific contingency plans.

Table 1. Emergency Control Centers.

Emergency Control Center	Responsibility
<u>Northern Area Emergency Control Center</u> Location: 2750-E, 200 East Area	Geographic area of responsibility: All 100 and 200 Areas plus the 600 Area north of the WYE Barricade bounded by the Columbia River and Highway 240.
<u>300 Area Emergency Control Center</u> Location: 3701-D, 300 Area	Geographic area of responsibility: RCHS, RCHC, RCHN, 1100 and 3000 Areas plus the 600 Area south of the WYE Barricade bounded by the Columbia River and Highway 240.
<u>400 Area Emergency Control Center</u> Location: Fast Flux Test Facility, 400 Area	Geographic area of responsibility: 400 Area.
<u>3000 Area Emergency Control Center</u> Location: Pacific Northwest Laboratory Materials Reliability Center Building	Geographic area of responsibility: All Pacific Northwest Laboratory buildings located in RCHN area.
<u>Emergency Management Center</u> Location: 1170 Building	Area of responsibility: Responsible for the remaining 600 Area not covered by the area ECCs, assisting area ECCs, coordinating the Facility-wide response to emergencies, and serving as the focal point for other Hanford Site contractors and DOE-RL during emergencies.
<u>DOE-RL Emergency Control Center</u> Location: Federal Building, Richland	Area of responsibility: Responsible for providing overall direction for all Hanford Facility emergency situations involving the DOE-RL and/or contractor personnel, ensuring direct interface with all offsite agencies for mitigation and protection of offsite populations, facilities, and the environment.

Table 2. Hanford Facility Alarm Systems.

Signal	Meaning	Response
Crash Alarm Telephones (steady ringing phone)	Emergency message	Lift receiver, do not speak, listen to caller and relay message(s) to building occupants and BED or alternate.
Gong (2 gongs/second)	Fire	Evacuate building. Move upwind. Keep clear of emergency vehicles.
Siren (steady blast)	Area evacuation	Proceed promptly to accountability area. Follow instructions.
Wavering Siren	Take cover	Close all exterior doors, turn off all intake ventilation and notify manager of whereabouts. Request call back for status and monitor portable radios.
Howler (AA-00-GAH)	Criticality	Immediately run to the nearest exit and move and remain at least 100 feet (30.5 meters) from the building.

7.5 SPILL CONTROL AND CONTAINMENT SUPPLIES

Supplies of absorbent pillows are located in operating areas as necessary. These pillows absorb organic or inorganic materials and have a rated absorption capacity of approximately 0.26 gallon (1 liter) of waste each. Absorbents might be used for barriers to contain liquid spills as well as for absorbent purposes. Diatomaceous earth for absorption of liquid waste spills is available. Neutralizing absorbent is available for response to acid or caustic spills. A supply of empty containers (U.S. Department of Transportation 17E tight head and U.S. Department of Transportation 17H open head) and salvage containers (overpacks) also are maintained as well as brooms, shovels, and miscellaneous spill response supplies.

7.6 HANFORD SITE EMERGENCY ORGANIZATIONS

The Hanford Facility has fire and patrol personnel trained and equipped to respond in emergency situations. The Hanford Fire Department is the Hazardous Materials Incident Command Agency for the Hanford Site and has a Hazardous Materials Response Team that is trained to stabilize and control hazardous materials emergencies. A description of equipment for hazardous materials responses available through the Hazardous Materials Response Team is given in Table 3. Locations of the four fire stations on the Hanford Facility are shown on Figure 2.

The Hanford Patrol provides support to the Hanford Fire Department during an incident, including such activities as activation of area crash alarm telephone systems or area sirens (for evacuation or take cover), access control, traffic control, and assistance in emergency notifications.

Table 3. Fire Department Equipment List. (sheet 1 of 3)

Equipment	Description	*Normally Located
Engines 4 Ladders 4 Pumpers	Examples of equipment contained on engines: <ul style="list-style-type: none"> • 1,500-2,000 gal/min (5,678.1-7,570.8 L/min) pump • 300-500 gal (1,135.6-1,892.7 L) portable tank • Telescoping nozzle • Jaws of Life. 	1 at each station
Tankers 6 Each	Examples of equipment contained on tankers and pumpers: <ul style="list-style-type: none"> • 500 gal/min (1,892.7 L/min) pump • 1,500 gal (5,678.1 L) tank • 6x6 with 2,000 gal (7,570.8 L) porti-tank • Hose, nozzles, fittings, and tools. 	1 at Station 1 2 at Station 2 1 at Station 4 2 at Station 3
Water Tenders 1 Each	Examples of equipment contained on water tenders: <ul style="list-style-type: none"> • 450 gal/min (1,703.4 L/min) pump • 4,500 gal (17,034.3 L) tank • Hose, nozzles, fittings, and tools. 	Station 1
Grass Fire Units 4 Each	Examples of equipment contained on grass fire units: <ul style="list-style-type: none"> • 100 gal/min (378.5 L/min) pump • 250 gal (946.3 L) tank • 4-wheel drive • Hose, nozzles, fittings, and tools. 	1 at each station
Ambulances 5 Each	Examples of equipment contained on ambulances: <ul style="list-style-type: none"> • Life support systems • Medical supplies and emergency response supplies. 	1 at Station 1 2 at Station 2 1 at Station 3 1 at Station 4
Command Vehicles 3 Each	Contains communications equipment and protective equipment for commander.	Station 2

Table 3. Fire Department Equipment List. (sheet 2 of 3)

Equipment	Description	*Normally Located
Attack Vehicles 1 Each	Examples of equipment contained on attack vehicles: <ul style="list-style-type: none"> • 450 lb (204.1 kg) of purple-K • 300 gal (1,135.6 L) aqueous film-forming foam concentrate • 300 gal (1,135.6 L) of aqueous film-forming foam pre-mix solution • Hose, nozzles, fittings, and tools. 	Station 2
Hazardous Materials Vehicle 2 Each	Examples of equipment contained on hazardous materials vehicle: <ul style="list-style-type: none"> • Protective clothing for Hazardous Materials Response Team • Breathing apparatus for Hazardous Materials Response Team • Diking, plugging, and damming equipment • Detection instruments for Hazardous Materials Response Team • Tools for plugging and repairing leaking containers • Overpack containers for leaking containers • Command module with material safety data sheets, software, and portable meteorological station • Tools and communications devices necessary to provide communications during emergency response activities. 	1 at Station 2 1 at Station 3
Metal Fire Response Vehicle 1 Each	Examples of equipment contained on metal fire response vehicle: <ul style="list-style-type: none"> • Equipment for response to special metals fire • 500 lb (226.8 kg) of extinguishing powder • 1,000 lb (453.6 kg) of carbon microspheroids. 	Station 4

Table 3. Fire Department Equipment List. (sheet 3 of 3)

Equipment	Description	*Normally Located
Mobile Air Vehicle 1 Each	Examples of equipment contained on mobile air vehicle: <ul style="list-style-type: none"> • Mobile air compressor, recharges self-contained breathing apparatus cylinders • Tools and fittings for operation of vehicle and spare cylinders. 	Station 4

*The Hanford Fire Department Chief has the authority to direct the placement of Fire Department equipment as needed to control emergency events. The Hanford Fire Department Chief also has the authority to take pro-active action and assign different vehicle locations based on such conditions as fuel moisture content, area fire history, work in progress, or other conditions that could arise.

gal = gallon(s)
gal/min = gallon(s) per minute
kg = kilogram(s)
L = liter(s)
L/min = liter(s) per minute
lb = pound(s)

29209007.1

Figure 2. Locations of the Fire Stations on the Hanford Facility.

8.0 COORDINATION AGREEMENTS

This section describes a number of coordination agreements (MOUs) established by and through the DOE-RL to ensure proper response resource availability for incidents involving the Hanford Facility.

An agreement among the four major Hanford Site contractors (an operations and engineering contractor, a research and development contractor, an engineer and constructor contractor, and a medical and health services contractor) defines the interfaces and notifications required during an emergency. The DOE-RL has the overall responsibility for emergency preparedness. Per the agreements, the operations and engineering contractor has responsibility for Site-wide emergency preparedness while each contractor retains responsibility for emergency preparedness at individual units. Agreements have been established with a number of offsite authorities to reduce the impact to human health and/or the environment in the event that an incident has offsite public health implications, or if an onsite emergency warrants offsite assistance. These agreements are activated through the emergency notification of the DOE-RL (Section 4.1).

8.1 LOCAL, STATE, AND FEDERAL AUTHORITIES

Various agreements have been established among the DOE-RL and Benton, Franklin, and Grant Counties and the states of Washington and Oregon. These agreements describe the cooperative arrangements among these agencies for any onsite emergency that warrants offsite assistance. These agreements describe the planning for, communication of, and response to emergencies at the Hanford Facility that might have offsite consequences.

8.2 HANFORD FIRE DEPARTMENT MUTUAL AID

The Hanford Fire Department provides fire department services for the Hanford Site and Hanford Facility. Mutual aid agreements have been established with Richland, Kennewick, and Pasco fire departments; with Benton County Fire Districts 1 through 6, Franklin County Fire District 3, and Walla Walla Fire District 5.

8.3 MEDICAL AND FIRST AID

Professional medical help is provided onsite by the DOE-RL through the Hanford Environmental Health Foundation. Doctors and nurses are available for emergency assistance at all times. These medical personnel are trained in procedures to assist personnel contaminated with hazardous and/or radioactive material. Emergency call lists are maintained to provide professional medical consultation at all times.

Referral to offsite hospital facilities is made by the Hanford Environmental Health Foundation physician providing emergency assistance by telephone or in person. The primary hospital used in emergencies is Kadlec

Hospital, Richland. Kennewick General Hospital, Kennewick, and Our Lady of Lourdes Hospital, Pasco, are used as backup facilities. Agreements have been established among these hospitals and the DOE-RL.

8.4 AMBULANCE SERVICE

Ambulance service is provided by the Hanford Fire Department, which uses paramedics and emergency medical technicians as attendants. This service is available from area fire stations on a 24-hour, 7-day basis. Additional ambulance service is available from other local city fire departments through the mutual aid agreements (Section 8.2).

8.5 UNIFIED DOSE ASSESSMENT CENTER

The Unified Dose Assessment Center (UDAC) is the technical extension of the DOE-RL-EACT, providing services to both the DOE-RL-EACT and the ECC. The primary mission of the UDAC is to provide recommendations for protective actions, dose calculations and projections, and consultation in the area of industrial hygiene for hazardous materials, biology, environmental monitoring, and meteorology to support the DOE-RL-EACT and the ECC.

Industrial hygiene and biological consultants at the UDAC advise and assist in determining proper response procedures for spills or releases of toxic, flammable, carcinogenic, and pathogenic materials. The UDAC personnel are responsible to provide a central unified assessment of the dispersion and impact of environmental releases from the Hanford Facility. In communication with the ECC, UDAC coordinates the assessment of impacts and assists in the determination of actual and potential release scenarios.

8.6 HANFORD PATROL/BENTON COUNTY SHERIFF

The Hanford Patrol serves as the security agency for the Hanford Facility. The Benton County Sheriff's Department provides law enforcement for the Hanford Facility. In the event of an emergency, the Hanford Patrol provides services such as activating the crash alarm systems or area sirens, coordinating the movement of emergency responders through security gates, assisting evacuation, establishing barricades, and making necessary notifications through the single point-of-contacts. Benton County Deputies will assist with traffic control activities. Agreements also have been established with the Richland, Kennewick, and Pasco police departments to provide additional backup capabilities if required.

8.7 ALERTING OF PERSONNEL ON THE COLUMBIA RIVER

An agreement exists among the DOE-RL, the Washington Public Power Supply System, Benton and Franklin Counties, and the Thirteenth Coast Guard District to ensure safety on the Columbia River during an emergency at the Hanford Facility and to coordinate response activities for alerting personnel on the Columbia River.

8.8 METEOROLOGICAL INFORMATION

An agreement is in place between the DOE-RL and the National Weather Service to define mutual responsibilities for providing meteorological information in an emergency situation. Additional meteorological information can be obtained from the Hanford Site weather station.

8.9 WASHINGTON PUBLIC POWER SUPPLY SYSTEM

An agreement has been established between the DOE-RL and Washington Public Power Supply System for providing mutual assistance as needed. This assistance is available in the use of facilities and equipment for personnel decontamination, first aid, evacuation and reassembly areas, respiratory protective equipment, protective clothing, radiological survey equipment, resources for river evacuation, and radiological assistance response.

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9.0 REQUIRED REPORTS

Three types of written post-incident reports are required for incidents at the Hanford Facility. These reports are summarized in the following sections.

9.1 ASSESSMENT REPORT TO ECOLOGY AND GOVERNMENT OFFICIAL OR NATIONAL RESPONSE CENTER

Immediately following classification of an incident as a WAC 173-303 emergency, an assessment report must be transmitted when the regulatory agencies are notified. This initial assessment report will be submitted by DOE-RL and must include:

- Name and telephone number of reporter
- Name and Address of facility
- Time and type of incident (e.g., release, fire)
- Name and quantity of material(s) involved, to the extent known
- The extent of injuries, if any; and
- The possible hazards to human health and the environment outside the facility

9.2 WRITTEN REPORT TO ECOLOGY

Following an incident that requires implementation of the contingency plan, the BED must ensure that the time, date, and details of the incident are recorded in the TSD units operating record. Within 15 days of the incident, a written report must be submitted to Ecology. The report generated through the DOE-RL reporting system may be used to supplement this written report, but will not be used as a substitute. The 15 day report will be submitted by DOE-RL and must include;

- Name, address, and telephone number of RL contact
- Name, address, and telephone number of the affected TSD unit
- Date, time, and type of incident (e.g., fire, explosion)
- Name and quantity of material(s) involved
- The extent of any injuries if any
- Assessment of any actual or potential hazards to human health or the environment caused by the incident, where this is applicable;

- Estimated quantity and disposition of recovered material that resulted from the incident
- Cause of the incident
- Description of corrective action taken to prevent reoccurrence of the incident.

9.3 OCCURRENCE REPORTING

Under DOE Order 5000.3B, an occurrence report is required for incidents occurring at the Hanford Facility involving hazardous materials release, fire, etc. Specific details of this reporting system are found in the DOE Order. To summarize, the event is categorized within 2 hours and proper notifications are completed to onsite and offsite agencies to include contractor, DOE, county, and state organizations.

These occurrences are investigated, reported, and analyzed promptly to ensure that effective corrective actions are taken in compliance with contractual and statutory requirements. All such occurrences are recorded in the building manager's log book, and the log book is audited to ensure that incidents were reported and handled properly. In the DOE reporting system, three levels of incidents are described, in descending order of severity: emergency, unusual occurrence, and offnormal occurrences.

9.3.1 Emergency Event Reporting

An emergency event involves an incident in progress or having occurred that is the most serious occurrence and requires an increased alert status for onsite and, in specified cases, for offsite authorities. There are three classifications associated with emergency events: Alert, Site Area Emergency, and General Emergency. Occurrences are classified into one of the three levels based on real or potential consequences to personnel, facilities, or the environment, both on and off of the Hanford Facility. Current MOUs between the state of Washington and the Hanford Site identify events that would be classified at the stated levels. Emergency events require notification of classification to affected populations.

9.3.2 Unusual Occurrence Reporting

An unusual occurrence is a nonemergency occurrence that has significant impact or potential for impact on safety, environment, health, security, or operations. Generally, these types of events result in release of radioactive or hazardous materials in minor amounts, involve degradation of unit safety systems, result in fatalities, exposures to hazardous or radioactive materials, or significant contamination incidents.

9.3.3 Offnormal Event Reporting

An offnormal event is a significant deviation from normal operations that requires categorization and reporting. Hanford Facility management is required to evaluate an event to determine the depth of investigation and level of reporting required.

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10.0 CONTINGENCY PLAN LOCATION

Copies of this Plan are maintained at the following locations:

- Each specific TSD unit
- Hanford Fire Department (area fire stations)
- Area ECCs
- Occurrence Notification Center
- The DOE-RL Emergency Control Center, Federal Building, Richland.

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11.0 REFERENCES

DOE Order 5000.3B, *Occurrence Reporting and Processing of Operations Information*

DOE Order 5500.1B, *Emergency Management Systems*

NIOSH, 1985, *Pocket Guide to Chemical Hazards*, National Institute of Occupational Safety and Health, U.S. Department of Health and Human Resources, Public Health Service, Centers for Disease Control, Washington, D.C.

WAC 173-303, *Dangerous Waste Regulations*, Washington State Department of Ecology, Olympia, Washington.

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