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Attachment 4

Hanford Facility Contingency Plan
Rev. 1, June 1993

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APPENDIX

7A HANFORD FACILITY CONTINGENCY PLAN APP 7A-i

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7.0 CONTINGENCY PLAN [G]

The WAC 173-303 requirements for a contingency plan are satisfied by the *Hanford Facility Contingency Plan* (Appendix 7A), together with each TSD unit-specific contingency plan contained in the Unit-Specific Portion of this permit application. Appendix 7A includes response to a nonradiological hazardous materials spill or release at Hanford Facility locations not covered by TSD unit-specific contingency plans or building emergency plans. The *Hanford Facility Contingency Plan* also includes response to a spill or release as a result of transportation activities, movement of materials, packaging, and storage of hazardous materials.

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APPENDIX 7A

HANFORD FACILITY CONTINGENCY PLAN

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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 U.S. Environmental Protection Agency/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 by the U.S. Government and operated by the U.S. Department of Energy, Richland Operations Office (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).

2.0 PURPOSE

The *Hanford Facility Contingency Plan (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.

3.0 EMERGENCY COORDINATORS

The overall responsibility for implementation of this 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. A list of all BEDs and alternates is maintained at various locations throughout the Hanford Facility, and these individuals can be reached 24 hours a 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 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.

1 Response by a BED (or an Emergency Coordinator) usually is obtained
2 through the DOE-RL single point-of-contact* by dialing telephone number 811
3 or 373-3800 or 375-2400. The single point-of-contact has been designated as
4 the contact point to mobilize a response to any Hanford Facility emergency.
5 The single point-of-contact is available at all times and has the
6 responsibility to initiate notifications to the BED or alternate to begin
7 responses to emergencies, as well as to dispatch emergency responders (Hanford
8 Fire Department, Hanford Patrol, or ambulance services). All emergency
9 notifications to the BED, building managers, etc., can be made directly from
10 the affected TSD unit or through the single point-of-contact.

11
12 The unit-specific DOE-RL technical contact responds to regulatory agency
13 inquiries regarding this Plan. The unit-specific DOE-RL technical contact is
14 accessed by contacting 373-3800 or 375-2400.

15 16 17 18 4.0 IMPLEMENTATION OF THE CONTINGENCY PLAN 19 20

21 This Plan describes parallel decision flow paths for evaluating and
22 classifying an incident. The U.S. Department of Energy (DOE) Orders and
23 WAC 173-303-360 require incident classification. The definition of
24 emergencies according to DOE Orders differs from the definition contained in
25 WAC 173-303. Because of this, a dual incident classification decision path is
26 necessary to meet both DOE Orders and WAC 173-303 requirements. Incident
27 classification according to DOE Orders is described in this Plan for
28 completeness only. The DOE Orders will not be used to evaluate whether an
29 incident requires implementation of a contingency plan.

30
31 Implementation of a contingency plan will occur when a BED has determined
32 that a release, a fire, or an explosion has occurred at the Hanford Facility
33 that could threaten human health and the environment. A release is defined in
34 WAC 173-303-040 within the definition of "discharge". An incident requiring
35 evacuation of personnel or the summoning of emergency response units will not
36 necessarily indicate that a contingency plan has been or will be implemented.

37
38 Any incident that poses a potential threat to human health and the
39 environment discovered by TSD unit personnel requires immediate notification
40 of the BED and the single point-of-contact, who then notifies the Hanford Fire
41 Department. Personnel may respond, in accordance with the procedures
42 described in TSD unit-specific contingency plans, before the arrival of the
43 BED, as long as such response is within their level of training. The Hanford
44 Fire Department is contacted through the single point-of-contact on all
45 incidents involving dangerous materials or mixed waste.

46
47
48 _____
49 *The single point-of-contact is the Hanford Patrol Operations Center
50 (811 or 373-3800) and/or the Pacific-Northwest Laboratory single Point-of-
Contact (375-2400).

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5.0 INCIDENT RESPONSE

Incident response procedures have been established for each 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 onsite notification requirements exist to ensure that the appropriate organizations are contacted and that the incident is classified correctly.

5.1 INCIDENT GENERIC RESPONSES

Responses made by the discoverer, single point-of-contact, and the BED are discussed in the following sections. Identification of hazardous materials and dangerous waste and the assessment of hazards also are discussed.

5.1.1 Discoverer

The discoverer performs the following actions:

1. Immediately notifies potentially affected personnel (including the BED, if present, for a TSD unit incident) of the incident
2. Immediately notifies the single point-of-contact (811* 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

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

- 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.
- 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

The single point-of-contact performs the following actions:

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 as needed
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, 400, or 600 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) to activate 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.

1 5.1.3 Building Emergency Director (or alternate)
2

3 The BED (or alternate) performs the following actions:
4

- 5 1. Sounds appropriate alarms to notify occupants
6
7 2. Notifies the single point-of-contact if additional support or an
8 area evacuation is needed
9
10 3. Activates the building emergency response organization as necessary
11
12 4. Arranges for care of any injured employees
13
14 5. Requests the single point-of-contact to activate the appropriate ECC
15 if required. Activation of the ECC should be done whenever
16 technical assistance is required in evaluating a spill, when the
17 emergency might affect neighboring buildings, or when otherwise
18 deemed necessary by the BED
19
20 6. Provides for event notification in accordance with DOE Order 5000.3B
21 and other established Hanford Facility procedures
22
23 7. Provides details of the event to appropriate management as the
24 details become available.
25

26
27 5.1.4 Identification of Hazardous Materials and Dangerous Waste
28 and Assessment of Hazards
29

30 The BED ensures that trained personnel identify the character, source,
31 amount, and areal extent of the hazardous material or dangerous waste involved
32 in the incident to the extent possible. Identification of waste can be made
33 by visual inspection of involved containers; by sampling; by reference to
34 inventory records, shipping manifests, or waste tracking forms; or by
35 consulting with TSD unit operations personnel. Samples of materials involved
36 in an emergency might be taken by qualified personnel and analyzed as
37 appropriate.
38

39 Concurrently, the hazards that the incident poses to human health and the
40 environment also must be assessed. The assessment must take into
41 consideration the direct, indirect, immediate, and long-term effects of the
42 incident. In addition to the information sources identified previously, the
43 hazard assessment should include other sources such as material safety data
44 sheet toxicity and health information, and results from any personnel
45 monitoring examinations conducted at medical facilities. These are the types
46 of tools that will aid in ascertaining the extent to which human health and
47 the environment is threatened.
48

49 Upon activation, the ECC is available to assist the BED if needed.
50 Possible assistance could include determining the extent of an emergency,
51 identifying the hazards associated with the materials or waste involved in the

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1 incident, assisting in response to the incident, or coordinating the
2 mobilization of special equipment or supplies to the incident site.

3
4 If assessment of all available information does not yield a positive
5 assessment of the danger posed by the incident, a worst-case condition will be
6 presumed and appropriate protective actions will be initiated. The BED is
7 responsible to initiate any protective actions.
8
9

10 5.1.5 Incident Classification

11
12 After the assessment has been completed, the incident should be ready for
13 classification. If not, the BED will take whatever means are necessary to
14 obtain the information to complete the classification. The BED must classify
15 the incident according to the DOE Order and contingency plan implementation
16 criteria in this section.
17

18 1. DOE Order Incident Classification

19
20 There are three categories of incidents on the Hanford Facility:
21 offnormal event, unusual occurrence, and emergency. Incidents are
22 categorized based on degradation of TSD-unit safety systems and
23 impact to other TSD units, employees, structures, public safety, and
24 the environment. Incidents categorized as offnormal events and
25 unusual occurrences are communicated as described in Section 9.0.
26 Incidents categorized as an emergency are further classified into
27 one of three emergency classes as required by DOE Orders. Incidents
28 categorized as emergencies will prompt automatic activation of the
29 appropriate ECCs.
30

31 2. WAC 173-303 Incident Classification

32
33 If the BED determines that the incident meets the criteria for a
34 release, a fire, or an explosion that threatens human health and the
35 environment, the BED notifies the ECC (if activated) or the
36 Occurrence Notification Center (ONC) for notification to local
37 authorities for evaluation and/or action. In addition, the BED,
38 with assistance from the ONC and environmental compliance/protection
39 personnel, must immediately (within 2 hours) notify Ecology, and
40 either the government official designated as the on-scene
41 coordinator or the National Response Center. The information
42 included in the assessment report to these agencies is described in
43 Section 9.0.
44
45

46 5.1.6 Protective Actions

47
48 Evacuation and take cover alarms and procedures are discussed as follows:
49

- 50 1. Evacuation (Signal: Steady siren). Each TSD unit has emergency
51 procedures that include an evacuation plan identifying emergency
52 signals and staging area locations. In the event a Hanford Facility

1 evacuation is required, TSD unit personnel evacuate to their
2 designated staging area, are accounted for, and receive directions
3 on routes to take to safely evacuate the area. If the primary route
4 is blocked by the emergency, personnel use alternate evacuation
5 routes determined at the time of the event.
6

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

- 10
- 11 2. Take Cover (Signal: Wavering siren). In the event of a take cover
12 alarm, personnel should go inside the nearest building, or remain
13 inside, close all exterior doors, and regulate ventilation to meet
14 building-specific requirements. Personnel secure all waste and
15 classified documents.
16

17

18 5.2 RESPONSE TO MINOR SPILLS OR RELEASES

19

20 (Signal: None) The TSD unit personnel generally perform immediate
21 cleanup of minor spills or releases using sorbents and emergency equipment.
22 Personnel detecting such spills or releases contact the single point-of-
23 contact to notify of the detection of such spills or releases and to ensure
24 notification of the BED and the Hanford Fire Department. Responses to spills
25 or releases occurring within individual storage cells, structures, modules,
26 etc., during routine handling and storage are contained in TSD unit-specific
27 contingency plans. Response to minor spills generally does not require the
28 implementation of the contingency plan.
29

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

- 32
- 33 • The spill does not threaten the health and safety of personnel at the
34 TSD unit, i.e., an evacuation is not necessary
 - 35
 - 36 • The spill is small in size (generally less than half of the
37 immediately dangerous to life and health quantities identified in
38 material safety data sheets)
 - 39
 - 40 • The composition of the material or waste is known or can be quickly
41 determined from label, manifest, material safety data sheets, or
42 disposal request information.
43

44 If one or more of the foregoing conditions are not met, responses are
45 performed as outlined in Section 5.3. Notification of the spill or release is
46 made as outlined in Section 5.1.
47

48

49 5.3 MAJOR DANGEROUS WASTE AND/OR MIXED WASTE SPILL OR MATERIAL RELEASE

50

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

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1
2 **5.3.1 Discoverer**
3

4 The discoverer performs the following:
5

- 6 1. If within the TSD unit, notifies personnel (including BED) of
7 discovery of spill or release by sounding the appropriate alarm,
8 using the public address system, etc.
9
- 10 2. Initiates notifications to the Hanford Fire Department (and BED if
11 necessary) by contacting the single point-of-contact and provides
12 all known information, in accordance with Section 5.1.
13
- 14 3. Takes action to contain and/or to stop the spill if all of the
15 following are true:
16
- 17 • Identity of the substance(s) involved is known
 - 18 • Appropriate protective equipment and control/cleanup supplies are
19 readily available
 - 20 • Action(s) can be performed safely without assistance, or
21 assistance is readily available from other trained TSD unit
22 personnel.
23
- 24

25
26 If any of the above conditions are not met, or there is any doubt, the
27 discoverer evacuates the area and remains outside, upwind of the TSD unit,
28 pending the arrival of the BED. The discoverer remains available for
29 consultation with the BED, Hanford Fire Department, or other emergency
30 response personnel.
31

32
33 **5.3.2 Single Point-of-Contact**
34

35 The single point-of-contact performs the following:
36

- 37 1. Notifies the Hanford Fire Department and relays information received
38 from the event scene
39
- 40 2. Initiates notification to the BED if the BED is not at the TSD unit
41
- 42 3. Remains available to support further notification and response
43 activities if needed.
44

45
46 **5.3.3 Building Emergency Director**
47

48 The BED performs or arranges for the following:
49

- 50 1. Proceeds directly to the TSD unit to coordinate further activity and
51 to establish a command post at a safe location
52

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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 the 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

- 1 17. Provides required reports after the incident in accordance with
2 Section 9.0.
3
4

5 **5.3.4 Hanford Fire Department Response to Major or Unknown Spills**
6

7 The Hanford Fire Department response to unknown spills is as follows.
8

- 9 1. Initial Hanford Fire Department response includes one engine
10 company, one hazardous materials unit, one ambulance unit, and one
11 battalion commander.
12
13 2. The Hanford Fire Department, as the Hazardous Materials Incident
14 Command Agency, establishes command and control of the situation.
15 The first arriving unit assumes incident command and determines
16 location of the command post, and evacuates personnel from a red
17 zone consisting of a minimum of 100 feet (30.5 meters) in all
18 directions. The red zone could be adjusted as deemed necessary by
19 the hazardous materials team leader.
20
21 3. The Incident Commander evacuates all personnel within the red zone
22 area.
23
24 4. The hazardous materials team leader establishes a yellow zone and
25 decontamination corridor.
26
27 5. The hazardous materials team leader assigns fully trained and
28 qualified team members specific tasks, i.e.,
29
30 Team Safety Officer Decontamination Team Leader
31 Entry Team Resource Leader
32 Backup Team Science Leader
33
34 6. The hazardous materials team safety leader controls and directs the
35 medical evaluations for personnel working in the red and the yellow
36 zones.
37
38 7. Team members performing entry, back up, and decontamination, suit up
39 in level "A" protection.
40
41 8. The entry team members make entry to obtain samples of unknown
42 hazardous material, and observe for other pertinent information.
43
44 9. Entry team collects sample and exits area going through
45 decontamination by decontamination team.
46
47 10. The hazardous materials sample is analyzed on scene by hazardous
48 materials team personnel using available testing equipment. This
49 testing is to determine hazard group classification, i.e., poison,
50 acid, flammable, oxidizer, etc.
51

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- 1 11. Once the hazard classification has been identified, the hazardous
2 materials entry team makes re-entry to stabilize and control
3 hazardous materials to the point that the emergency no longer
4 exists.
5
6 12. The entry team exits the area going through decontamination by the
7 decontamination team.
8
9 13. The spill site is turned over to cleanup personnel for cleanup and
10 disposal.
11
12 14. The hazardous materials response command is dissolved; all units
13 return to stations.
14
15 15. A critique of the hazardous materials incident is held with team
16 members as soon as possible after Hanford Fire Department units have
17 returned to their stations.
18
19

20 **5.4 RESPONSE TO FIRE**

21
22 (Signal: Gong) In the event of a fire, the discoverer activates a fire
23 alarm and calls the single point-of-contact. Automatic initiation of a fire
24 alarm (through the smoke detectors and sprinkler systems) also is possible.
25 The TSD unit personnel are trained in the use of portable fire extinguishers
26 for incipient fires. Personnel use their best judgment whether to fight a
27 fire or to evacuate. Under no circumstances do personnel remain to fight a
28 fire if unusual hazards exist.
29

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

- 31
32 1. On actuation of the fire alarm, personnel shut down equipment,
33 secure waste, and lock up classified documents (or carry the
34 documents with them), ONLY if time permits. The alarm automatically
35 signals the Hanford Fire Department and the Hanford Patrol
36 Operations Center.
37
38 2. Personnel leave the area/building by the nearest safe exit and
39 proceed to the designated staging area for accounting.*
40
41 3. The single point-of-contact is notified immediately, who in turn
42 initiates notifications to the BED (or alternate) if necessary.
43
44 4. The BED proceeds directly to the scene (if not already there).
45
46 5. The BED obtains all necessary information pertaining to the
47 incident.

48 *Nuclear or nuclear reactor facilities are not required to evacuate upon
49 sound of a fire alarm but are provided supplemental information via building
50 notification systems relative to evacuations.

- 1 6. Depending on the severity of the event, the BED (or lead TSD unit
2 manager) contacts the ONC and requests additional notifications to
3 offsite agencies (e.g., Ecology, local counties, and DOE-
4 Headquarters), informing them as to the extent of the emergency
5 (including estimates of dangerous waste or mixed waste quantities
6 released to the environment) and any actions necessary to protect
7 nearby buildings and/or structures.
8
- 9 7. Depending on the severity, the BED requests activation of the
10 affected area ECC to establish organizations to provide assistance
11 from the DOE-RL, other Hanford Facility contractors, and outside
12 agencies.
13
- 14 8. The Hanford Patrol establishes roadblocks within the area to route
15 traffic away from the emergency scene.
16
- 17 9. Hanford Fire Department medical personnel remove injured personnel
18 to a safe location, apply first aid, and prepare the injured for
19 transport to medical aid stations or to local hospitals in
20 accordance with established memoranda of understanding (MOUs)
21 (copies of the MOUs are maintained by the Hanford Fire Department).
22 Medical personnel are on standby at the fire stations 24 hours a
23 day.
24
- 25 10. Hanford Fire Department firefighters extinguish the fire.
26
- 27 11. All emergency equipment is cleaned and fit for its intended use
28 following completion of cleanup procedures.
29
30

31 5.5 UNUSUAL, IRRITATING, OR STRONG ODORS

32
33 (Signal: None) If an unusual, irritating, or strong odor is detected,
34 and the discoverer has reason to believe that the odor might be the result of
35 an uncontrolled release of a toxic or dangerous material, the discoverer
36 performs the following:
37

- 38 • Activates the building evacuation alarm or fire alarm system to
39 evacuate the building
40
- 41 • Notifies the single point-of-contact, the building manager, and
42 cognizant line management.
43

44 If the discoverer knows of the source and scope of the release, this
45 information is reported quickly to the BED. Measures are taken to contain the
46 release and ventilate the area, if safe and advisable to do so.
47

48 If an unusual odor is detected within the building or structure, and the
49 source of the odor is unknown, the BED considers additional protective
50 actions.
51
52

1 5.6 RESPONSE TO CONTAINER SPILLS OR LEAKS
2

3 In addition to the foregoing Plan provisions, the following specific
4 actions could be taken for leaks or spills from containers at TSD units.
5 These actions may be taken only by appropriately trained personnel.
6

- 7
- 8 • Container leaks are stopped as soon as possible using appropriate
9 procedures. Appropriate personnel protective equipment is used.
 - 10 • If it is inadvisable to approach the container, absorbent materials
11 are used, and access is restricted pending notification of the BED and
12 implementation of the Plan.
 - 13 • Contents of leaking containers could be transferred to appropriate
14 nonleaking containers. Transfer procedures for fire safety are
15 followed for ignitable or reactive waste (e.g., use of nonsparking
16 tools, bonding and grounding of containers, isolation of ignition
17 sources, and use of explosion-proof electrical equipment).
 - 18 • Overpacked containers are marked and labeled in the same manner as the
19 contents. All containers of spill debris, recovered product, etc.,
20 are managed in the same manner as waste containers received from
21 outside the TSD unit. Overpacks in use at the TSD unit are marked
22 with information pertaining to their contents and noted as to whether
23 the container inside the overpack is leaking or is in good condition.
24
25
26
27

28 5.7 RESPONSE TO TRANSPORTATION AND/OR PACKAGING INCIDENTS
29

30 This section describes the actions taken in the event of an unplanned
31 sudden or nonsudden release of dangerous waste or dangerous waste constituents
32 to air, soil, surface water, or groundwater during onsite transportation
33 activities, or at locations not covered by a unit-specific contingency plan.
34 This includes spills or releases as a result of transportation activities,
35 movement of materials, packaging, and storage of hazardous materials.
36

37 The following actions are performed by those individuals responding to a
38 hazardous materials transportation incident at the Hanford Facility.
39

40
41 5.7.1 Initial Responder Actions
42

43 The initial responder or discoverer of a hazardous materials spill or
44 release resulting from onsite transportation activities initiates the
45 following response actions, if the actions can be performed without
46 jeopardizing personnel safety, as appropriate:
47

- 48 • Determines the nature of incident
49 - Personnel injuries
50 - Hazardous material spill with fire
51 - Hazardous material spill without fire.
52

- 1 • Assists injured personnel
- 2
- 3 • Initiates notifications to the single point-of-contact by any
- 4 means available (telephone, radio, passing motorist, etc.) to
- 5 request assistance from the Hanford Fire Department (Emergency
- 6 Coordinator for these type of events), Hanford Patrol, and
- 7 medical personnel
- 8
- 9 • Remains in a safe location and attempts to isolate the area to prevent
- 10 inadvertent personnel access.
- 11

12 5.7.2 Event Commander--Outside Treatment, Storage, and/or Disposal Units

13 If the emergency event is located within the responsibility of a BED, the
14 BED will establish event command.

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

18 The Event Commander ensures that the cause of the incident and its
19 possible effects are investigated and evaluated as soon as possible. The
20 Event Commander, with input from the Incident Commander, assesses possible
21 hazards to human health and the environment (considering direct, indirect,
22 immediate, and long-term effects) that might result from the release, fire, or
23 explosion and takes the following actions as appropriate:

- 24 • Isolate event from employees:
 - 25 - Cordon off access
 - 26 - Place apparatus to block roadways
 - 27 - Use Hanford Patrol roadblocks
 - 28 - Use TSD unit/vehicle public address systems
 - 29 - Sound appropriate alarms.
- 30 • Determine type of hazardous materials involved:
 - 31 - Occupancy/location
 - 32 - Container shapes
 - 33 - Markings and colors
 - 34 - Placards and labels
 - 35 - Shipping papers
 - 36 - Consult reference materials [(U.S. Department of Transportation,
 - 37 National Institute of Occupational Safety and Health *Pocket Guide to*
 - 38 *Chemical Hazards* (NIOSH 1993)]
 - 39 - Unit managers/employees.
- 40 • Notify the appropriate manager of the incident and ensure that the
- 41 incident is reported properly in accordance with Section 9.0 of this
- 42 Plan
- 43
- 44
- 45
- 46
- 47
- 48
- 49
- 50

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- 1 • If the TSD unit stops operations in response to a fire, an explosion,
2 or a release, the BED will monitor for leaks, pressure buildup, gas
3 generation, or ruptures in valves, pipes, or other equipment, wherever
4 this is appropriate
 - 5
 - 6 • Coordinate with emergency response organizations to establish a
7 command post, upwind and uphill of the incident:
 - 8 - Ensure command post is located so as to minimize the need for
9 relocation
 - 10 - Direct incoming response vehicles to a safe staging area
 - 11 - Coordinate tasks with other responders
 - 12 - Activate required emergency centers
 - 13 - Dispatch radiological and nonradiological field teams to help define
14 and locate the plume.
 - 15
 - 16 • Ensure that all personnel who enter the area are equipped with proper
17 protective clothing and respiratory protection
 - 18 - Rescue should only be attempted when the risks have been evaluated
19 and are considered acceptable
 - 20 - If the risks are unknown, or considered unacceptable, wait for the
21 Hazardous Materials Response Team.

22
23 Rescue/evacuation can be performed by trained personnel, other than
24 the Hanford Fire Department, if the victim's location could present an
25 immediate life-threatening situation or further injuries to the
26 victim.

- 27
- 28 • Complete other actions necessary to effect control of the scene,
29 including but not limited to the following:

30
31 NOTE: The following steps normally are conducted and/or directed by a
32 Hanford Fire Department Hazardous Materials Response Team leader:

- 33 - Secure the scene
- 34 - Use absorbents
- 35 - Use covering (blankets, polyethylene, etc.)
- 36 - Overpack
- 37 - Plug/patch
- 38 - Transfer to new container
- 39 - Venting/vapor suppression.
- 40
- 41 • Initiate other measures as needed, including but not limited to, the
42 following:
 - 43 - Place hose streams and unmanned monitors
 - 44 - Establish confinement dikes to prevent run-off
 - 45 - Perform first aid.
- 46
- 47 • Obtain additional information:
 - 48 - Who is operating the equipment
 - 49 - What and how much hazardous material is involved
 - 50 - Manufacturer, shipper, receiver
 - 51 - Weather conditions.
- 52

- 1 • Set up resource areas:
2 - Command post location
3 - Logistics area
4 - Triage area
5 - Decontamination area (personnel and equipment)
6 - Staging area
7 - Planning.
8
9 • Reevaluate evacuation boundaries and identify containment zones to
10 adequately protect responding personnel
11
12 • Take any additional actions to mitigate the incident, possibly
13 including the following:
14 - Cool tanks involved in a fire or exposed to heat to reduce the
15 potential for explosion
16 - Remove all available ignition sources
17 - Divert liquid and run-off water to prevent contamination spread
18 - Dike and retain liquids from a leak or spill
19 - Limit property damage as much as possible
20 - Provide on-scene emergency medical services.
21
22 • Document the response to the incident and provide a report to
23 appropriate management
24
25 • Conduct a critique, including cause(s), impact(s), and lesson(s)
26 learned from an incident, following the emergency incident and on
27 completion of the emergency response to that incident. The Emergency
28 Coordinator and/or BED ensures that all appropriate parties are aware
29 of, and participate in, decisions on the best course(s) of action to
30 take to prevent or minimize the possibility of future occurrences.
31 Steps are listed in Section 5.9.
32
33

34 **5.8 DAMAGED, UNACCEPTABLE SHIPMENTS.**

35
36 (Signal: None) When a damaged shipment of hazardous material or
37 dangerous waste arrives at a TSD unit and the shipment is unacceptable for
38 receipt, the damaged shipment should not be moved. The TSD unit personnel
39 instead perform the following steps.
40

- 41 • If the release from the damaged package is a 'minor' spill under the
42 criteria of Section 5.2, the following actions are performed:
43 - Notify the BED, the Hanford Fire Department, and the single point-
44 of-contact to advise of the situation. The BED responds and assists...
45 in the evaluation of, and response to, the incident
46 - Notify the generating unit of the damaged shipment and provide any
47 chemical information necessary to assist in responding to the
48 'minor' spill
49 - Proceed with remedial action, including overpacking damaged
50 containers, cleanup of spilled material, or other necessary actions
51 to contain the spill.
52

- 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

Information concerning termination of event, incident recovery, and restart of operations is provided in the following sections.

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 DOE-RL-EACT is activated, only the DOE-RL director officially terminates the event. In all cases, however, the BED or Emergency Coordinator must be consulted before reentry is initiated.

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1
2 **6.2 INCIDENT RECOVERY AND RESTART OF OPERATIONS**
3

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

10
11 If the contingency plan was implemented, notification must be made to
12 Ecology before operations can be resumed. Section 9.0 discusses different
13 reports to outside agencies. This notification is in addition to the required
14 reports in Section 9.0. This notification must include assurances that there
15 are no incompatibility issues with the waste and released materials from the
16 incident, and that all the equipment has been cleaned, fit for its intended
17 use, and placed back into service. The notification can be made via telephone
18 conference. Any additional information that Ecology requests regarding these
19 restart conditions could be included in the required 15-day report identified
20 in Section 9.2.

21
22 For emergencies not involving activation of the ECC, the BED ensures that
23 conditions are restored to normal before operations are resumed. If the ECC
24 was activated and the emergency phase is complete, a special recovery
25 organization could be appointed at the discretion of the BED to restore
26 conditions to normal. The makeup of this organization depends on the extent
27 of the damage and its effects. The recovery organization will be appointed by
28 the appropriate contractors' emergency director.

29
30
31 **6.3 INCOMPATIBLE WASTE**
32

33 After an event, the BED or the recovery organization ensures that no
34 waste that might be incompatible with the released material is treated,
35 stored, and/or disposed of until cleanup is completed. Cleanup actions are
36 taken by TSD unit operations personnel or other assigned personnel. Actions
37 to be taken might include, but are not limited to, any of the following:

- 38
- 39 • Neutralization of corrosive spills
- 40
- 41 • Chemical treatment of reactive materials to reduce hazards
- 42
- 43 • Overpacking or transfer of contents from leaking containers
- 44
- 45 • Use of sorbents to contain and/or absorb leaking liquids for
- 46 containerization and disposal
- 47
- 48 • Decontamination of solid surfaces impacted by released material, e.g.,
- 49 intact containers, equipment, floors, containment systems, etc.
- 50
- 51 • Disposal of contaminated porous materials that cannot be
- 52 decontaminated and any contaminated soil

- 1 • Containerization and sampling of recovered materials for
- 2 classification and determination of proper disposal technique
- 3
- 4 • Follow up sampling of decontaminated surfaces to determine adequacy of
- 5 cleanup techniques as appropriate.
- 6

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

12

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

18

19

20 6.4 POST-EMERGENCY EQUIPMENT MAINTENANCE AND DECONTAMINATION

21

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

26

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

32

33 Equipment and personnel decontamination stations are established. Items
34 to consider when establishing a decontamination station are as follows:

- 35
- 36 • Water supplies
- 37 • Containment/catch basins and/or systems
- 38 • Staff necessary to accomplish proper decontamination
- 39 • Protective clothing
- 40 • Decontamination supplies (buckets, brushes, soap, chemicals as needed)
- 41 • Risk to personnel
- 42 • Weather conditions; i.e., severe heat, cold (current and forecasted)
- 43 • Toxicity of material
- 44 • Porosity of equipment to be decontaminated
- 45 • Disposal requirements of decontamination rinse
- 46 • Use of controlled zones to maintain contamination control.
- 47
- 48
- 49

1 **7.0 EMERGENCY CONTROL CENTERS, EMERGENCY EQUIPMENT,**
2 **AND EMERGENCY ORGANIZATIONS**

3
4
5 Hanford Facility ECCs, emergency equipment, and emergency organizations
6 are discussed in the following sections.
7

8
9 **7.1 HANFORD FACILITY EMERGENCY CONTROL CENTERS**

10 The ECCs are those locations staffed to provide assistance to building
11 emergency organizations in an emergency situation. The ECCs are established
12 to support and to provide overall direction of emergency events occurring at
13 locations within their geographic area of responsibility, within the Hanford
14 Facility. This includes acquisition of and assignment of resources to respond
15 to emergency events. Responsibilities also include personnel protection
16 (employee and public), TSD unit safety, and environmental protection. The
17 establishment of ECCs ensures that notification and communication of emergency
18 conditions are communicated properly.
19

20
21 There are five ECCs located throughout the Hanford Facility and Hanford
22 Site (Table 1).
23

24
25 **7.2 COMMUNICATIONS EQUIPMENT**

26
27 The Hanford Facility has alarm systems that are monitored by the Hanford
28 Fire Department and the Hanford Patrol Operations Center. The alarm signals
29 that exist at the Hanford Facility are identified in Table 2. The TSD unit
30 operations personnel also can use telephones, building public address systems,
31 portable radios, and cellular telephones to summon assistance.
32

33
34 **7.3 FIRE CONTROL EQUIPMENT**

35
36 Many Hanford Facility buildings are equipped with automatic fire-
37 suppression (sprinkler) systems. Portable fire extinguishers are located in
38 working areas in compliance with National Fire Protection Association safety
39 codes. Each Class ABC extinguisher is capable of suppressing fires involving
40 ordinary combustible materials, flammable liquids, oils, paints, flammable
41 gases, and electrical equipment. All extinguishers comply with the National
42 Fire Code standards for portable extinguishers and are inspected monthly. The
43 inspections are recorded on tags attached to each extinguisher.
44

45
46 **7.4 PERSONAL PROTECTIVE EQUIPMENT**

47
48 The TSD units have safety showers and eyewash stations, located as
49 necessary, for personnel protection. Drainage from these stations is
50 contained. In addition to these stations, portable eyewash equipment is
51 maintained at protective storage areas as necessary. These eyewash/shower
52 stations are inspected regularly.

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1 Protective clothing and respiratory protective equipment are maintained
2 for use during both routine and emergency operations. This equipment is
3 identified in the unit-specific contingency plans.
4
5

6 7.5 SPILL CONTROL AND CONTAINMENT SUPPLIES 7

8 Supplies of absorbent pillows are located in operating areas as
9 necessary. These pillows absorb organic or inorganic materials and have a
10 rated absorption capacity of approximately 0.26 gallon (1 liter) of waste
11 each. Absorbents might be used for barriers to contain liquid spills as well
12 as for absorbent purposes. Diatomaceous earth for absorption of liquid waste
13 spills is available. Neutralizing absorbent is available for response to acid
14 or caustic spills. A supply of empty containers (U.S. Department of
15 Transportation 17E tight head and U.S. Department of Transportation 17H open
16 head) and salvage containers (overpacks) also are maintained, as well as
17 brooms, shovels, and miscellaneous spill response supplies.
18
19

20 7.6 HANFORD SITE EMERGENCY ORGANIZATIONS 21

22 The Hanford Facility has fire and patrol personnel trained and equipped
23 to respond in emergency situations. The Hanford Fire Department is the
24 Hazardous Materials Incident Command Agency for the Hanford Site and has a
25 Hazardous Materials Response Team that is trained to stabilize and control
26 hazardous materials emergencies. A description of equipment for hazardous
27 materials responses available through the Hazardous Materials Response Team is
28 given in Table 3. Locations of the four fire stations on the Hanford Facility
29 are shown on Figure 1.
30

31 The Hanford Patrol provides support to the Hanford Fire Department during
32 an incident, including such activities as activation of area crash alarm
33 telephone systems or area sirens (for evacuation or take cover), access
34 control, traffic control, and assistance in emergency notifications.
35
36
37

1 8.0 COORDINATION AGREEMENTS 2 3

4 This section describes a number of coordination agreements, or memoranda
5 of understanding (MOU) established by and through the DOE-RL to ensure proper
6 response resource availability for incidents involving the Hanford Facility.
7

8 An agreement among the four major Hanford Site contractors (an operations
9 and engineering contractor, a research and development contractor, an engineer
10 and constructor contractor, and a medical and health services contractor)
11 defines the interfaces and notifications required during an emergency. The
12 DOE-RL has the overall responsibility for emergency preparedness. Per the
13 agreements, the operations and engineering contractor has responsibility for
14 Site-wide emergency preparedness while each contractor retains responsibility
15 for emergency preparedness at individual units. Agreements have been

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1 established with a number of offsite authorities to reduce the impact to human
2 health and the environment in the event that an incident has offsite public
3 health implications, or if an onsite emergency warrants offsite assistance.
4 These agreements are activated through the emergency notification of the
5 DOE-RL (Section 4.1).
6
7

8 8.1 LOCAL, STATE, AND FEDERAL AUTHORITIES

9
10 Various agreements have been established among the DOE-RL and Benton,
11 Franklin, and Grant Counties and the states of Washington and Oregon. These
12 agreements describe the cooperative arrangements among these agencies for any
13 onsite emergency that warrants offsite assistance. These agreements describe
14 the planning for, communication of, and response to emergencies at the Hanford
15 Facility that might have offsite consequences.
16
17

18 8.2 HANFORD FIRE DEPARTMENT MUTUAL AID

19
20 The Hanford Fire Department provides fire department services for the
21 Hanford Site and Hanford Facility. Mutual aid agreements have been
22 established with the Richland, Kennewick, and Pasco fire departments; with
23 Benton County Fire Districts 1 through 6, Franklin County Fire District 3, and
24 Walla Walla Fire District 5.
25
26

27 8.3 MEDICAL AND FIRST AID

28
29 Professional medical help is provided onsite by the DOE-RL through the
30 Hanford Environmental Health Foundation. Doctors and nurses are available for
31 emergency assistance at all times. These medical personnel are trained in
32 procedures to assist personnel contaminated with hazardous and/or radioactive
33 material. Emergency call lists are maintained to provide professional medical
34 consultation at all times.
35

36 Referral to offsite hospital facilities is made by the Hanford
37 Environmental Health Foundation physician providing emergency assistance by
38 telephone or in person. The primary hospital used in emergencies is Kadlec
39 Hospital, Richland. Kennewick General Hospital, Kennewick, and Our Lady of
40 Lourdes Hospital, Pasco, are used as backup facilities. Agreements have been
41 established among these hospitals and the DOE-RL.
42
43

44 8.4 AMBULANCE SERVICE

45
46 Ambulance service is provided by the Hanford Fire Department, which uses
47 paramedics and emergency medical technicians as attendants. This service is
48 available from area fire stations on a 24-hour, 7-day basis. Additional
49 ambulance service is available from other local city fire departments through
50 the mutual aid agreements (Section 8.2).
51
52

1 **8.5 UNIFIED DOSE ASSESSMENT CENTER**
2

3 The Unified Dose Assessment Center (UDAC) is the technical extension of
4 the DOE-RL-EACT, providing services to both the DOE-RL-EACT and the ECC. The
5 primary mission of the UDAC is to provide recommendations for protective
6 actions, dose calculations and projections, and consultation in the area of
7 industrial hygiene for hazardous materials, biology, environmental monitoring,
8 and meteorology to support the DOE-RL-EACT and the ECC.
9

10 Industrial hygiene and biological consultants at the UDAC advise and
11 assist in determining proper response procedures for spills or releases of
12 toxic, flammable, carcinogenic, and pathogenic materials. The UDAC personnel
13 are responsible to provide a central unified assessment of the dispersion and
14 impact of environmental releases from the Hanford Facility. In communication
15 with the ECC, the UDAC coordinates the assessment of impacts and assists in
16 the determination of actual and potential release scenarios.
17

18
19 **8.6 HANFORD PATROL/BENTON COUNTY SHERIFF**
20

21 The Hanford Patrol serves as the security agency for the Hanford
22 Facility. The Benton County Sheriff's Department provides law enforcement for
23 the Hanford Facility. In the event of an emergency, the Hanford Patrol
24 provides services such as activating the crash alarm systems or area sirens,
25 coordinating the movement of emergency responders through security gates,
26 assisting evacuation, establishing barricades, and making necessary
27 notifications through the single point-of-contacts. Benton County Deputies
28 will assist with traffic control activities. Agreements also have been
29 established with the Richland, Kennewick, and Pasco police departments to
30 provide additional backup capabilities if required.
31

32
33
34 **8.7 ALERTING OF PERSONNEL ON THE COLUMBIA RIVER**
35

36 An agreement exists among the DOE-RL, the Washington Public Power Supply
37 System, Benton and Franklin Counties, and the Thirteenth Coast Guard District
38 to ensure safety on the Columbia River during an emergency at the Hanford
39 Facility and to coordinate response activities for alerting personnel on the
40 Columbia River.
41

42
43 **8.8 METEOROLOGICAL INFORMATION**
44

45 An agreement is in place between the DOE-RL and the National Weather
46 Service to define mutual responsibilities for providing meteorological
47 information in an emergency situation. Additional meteorological information
48 can be obtained from the Hanford Site Meteorological Station.
49
50

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1 8.9 WASHINGTON PUBLIC POWER SUPPLY SYSTEM
2

3 An agreement has been established between the DOE-RL and Washington
4 Public Power Supply System for providing mutual assistance as needed. This
5 assistance is available in the use of facilities and equipment for personnel
6 decontamination, first aid, evacuation and reassembly areas, respiratory
7 protective equipment, protective clothing, radiological survey equipment,
8 resources for river evacuation, and radiological assistance response.
9

10
11
12 9.0 REQUIRED REPORTS
13

14
15 Three types of written post-incident reports are required for incidents
16 at the Hanford Facility. These reports are summarized in the following
17 sections.
18

19
20 9.1 ASSESSMENT REPORT TO ECOLOGY AND GOVERNMENT OFFICIAL OR
21 NATIONAL RESPONSE CENTER
22

23 Immediately following classification of an incident as a WAC 173-303
24 emergency, an assessment report must be transmitted when the regulatory
25 agencies are notified. This initial assessment report will be submitted by
26 DOE-RL and must include:
27

- 28 • Name and telephone number of reporter
- 29 • Name and address of the Hanford Facility/TSD unit
- 30 • Time and type of incident
- 31 • Name and quantity of material(s) involved to the extent known
- 32 • Extent of injuries if any
- 33 • Possible hazards to human health and the environment outside the
34 Hanford Facility.
- 35
- 36
- 37
- 38
- 39
- 40
- 41

42 9.2 WRITTEN REPORT TO ECOLOGY
43

44 Following an incident that requires implementation of the contingency
45 plan, the BED must ensure that the time, date, and details of the incident are
46 recorded in the operating record. Within 15 day of the incident, a written
47 report must be submitted to Ecology. The report generated through the DOE-RL
48 reporting system may be used to supplement this written report, but will not
49 be used as a substitute. The 15 day report will be submitted by DOE-RL and
50 must include:
51

- 1 • Name, address, and telephone number of the owner or operator
- 2
- 3 • Name, address, and telephone number of the Hanford Facility/TSD unit
- 4
- 5 • Date, time, and type of incident
- 6
- 7 • Name and quantity of material(s) involved
- 8
- 9 • Extent of injuries if any
- 10
- 11 • Assessment of actual or potential hazards to human health and the
- 12 environment where this is applicable
- 13
- 14 • Estimated quantity and disposition of recovered material that resulted
- 15 from the incident
- 16
- 17 • Cause of incident
- 18
- 19 • Description of corrective action taken to prevent recurrence of the
- 20 incident.
- 21
- 22

23 9.3 OCCURRENCE REPORTING

24
25 Under DOE Order 5000.3B, an occurrence report is required for incidents
26 occurring at the Hanford Facility involving hazardous materials release, fire,
27 or explosion. Specific details of this reporting system are found in the
28 DOE Order. To summarize, the event is categorized within 2 hours and proper
29 notifications are completed to onsite and offsite agencies to include
30 contractor, DOE, county, and state organizations.

31
32 These occurrences are investigated, reported, and analyzed promptly to
33 ensure that effective corrective actions are taken in compliance with
34 contractual and statutory requirements. All such occurrences are recorded in
35 the building manager's log book, and the log book is audited to ensure that
36 incidents were reported and handled properly. In the DOE reporting system,
37 three levels of incidents are described, in descending order of severity:
38 emergency, unusual occurrence, and offnormal occurrences.

39 40 41 9.3.1 Emergency Event Reporting

42
43 An emergency event involves an incident in progress, or having occurred,
44 that is the most serious occurrence and requires an increased alert status for
45 onsite and, in specified cases, for offsite authorities. There are three
46 classifications associated with emergency events: Alert, Site Area Emergency,
47 and General Emergency. Occurrences are classified into one of the three
48 levels based on real or potential consequences to personnel, facilities, or
49 the environment, both on and off the Hanford Facility. Current MOUs between
50 the state of Washington and the Hanford Site identify events that would be
51 classified at the stated levels. Emergency events require notification of
52 classification to affected populations.

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1 9.3.2 Unusual Occurrence Reporting
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3 An unusual occurrence is a nonemergency occurrence that has significant
4 impact or potential for impact on safety, environment, health, security, or
5 operations. Generally, these types of events result in release of radioactive
6 or hazardous materials in minor amounts, involve degradation of unit safety
7 systems; and/or result in fatalities, exposures to hazardous or radioactive
8 materials, or significant contamination incidents.
9

10
11 9.3.3 Offnormal Event Reporting

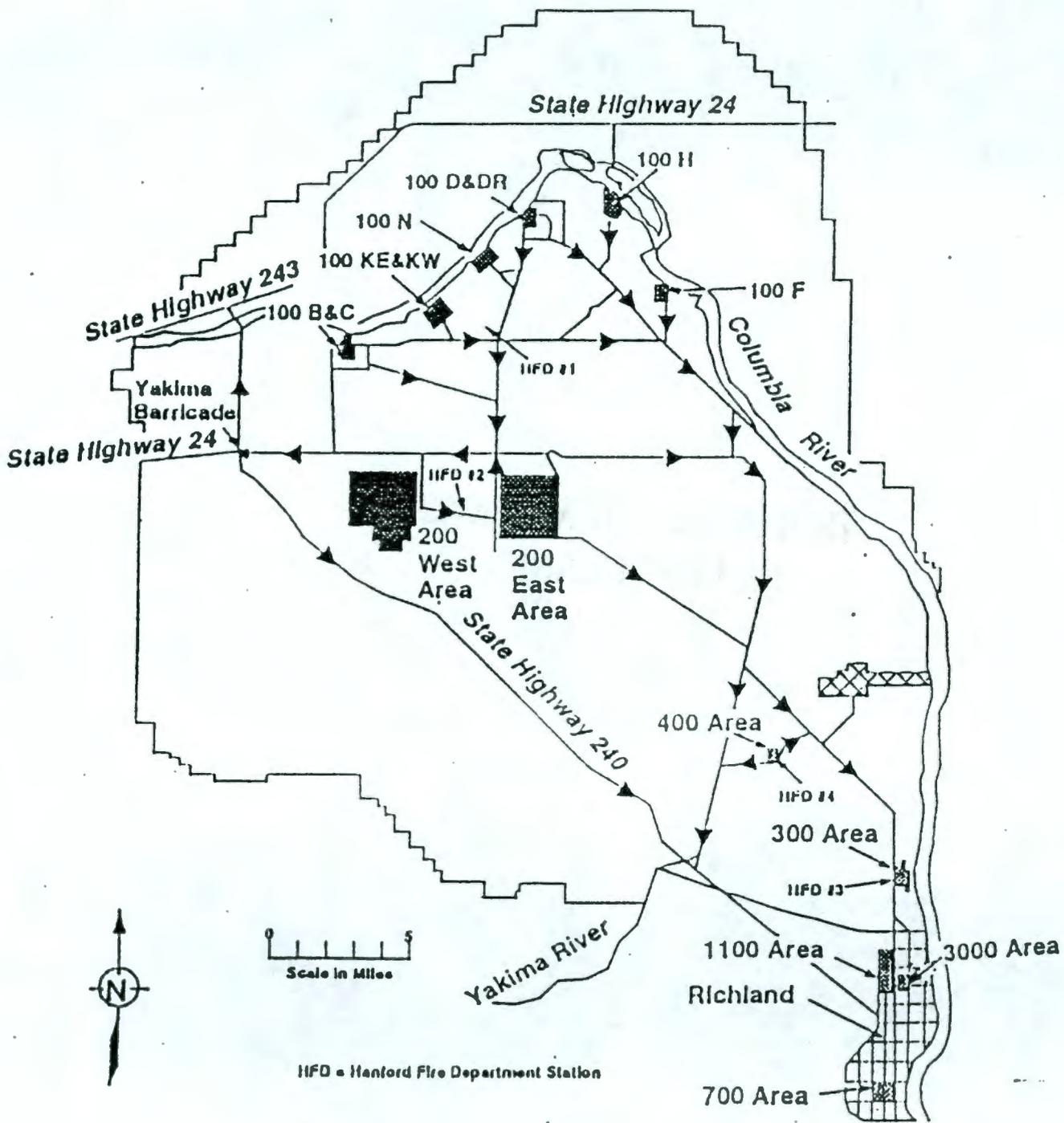
12 An offnormal event is a significant deviation from normal operations that
13 requires categorization and reporting. Hanford Facility management is
14 required to evaluate an event to determine the depth of investigation and
15 level of reporting required.
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20 10.0 CONTINGENCY PLAN LOCATION
21

22
23 Copies of this Plan are maintained at the following locations:
24

- 25 • Each specific TSD unit
- 26 • Hanford Fire Department (area fire stations)
- 27 • Area ECCs
- 28 • ONC
- 29 • The DOE-RL ECC, Federal Building, Richland.
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Figure 1. Hanford Facility Evacuation Routes and Locations of the Fire Stations on the Hanford Facility.

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Table 1. Emergency Control Centers.

Emergency Control Center	Responsibility
<p><u>Northern Area Emergency Control Center</u> Location: 2750-E, 200 East Area</p>	<p>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.</p>
<p><u>300 Area Emergency Control Center</u> Location: 3701-D, 300 Area</p>	<p>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.</p>
<p><u>400 Area Emergency Control Center</u> Location: Fast Flux Test Facility, 400 Area</p>	<p>Geographic area of responsibility: 400 Area.</p>
<p><u>Emergency Management Center</u> Location: 1170 Building</p>	<p>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.</p>
<p><u>DOE-RL Emergency Control Center</u> Location: Federal Building, Richland</p>	<p>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.</p>

RCHS = Richland South.
RCHC = Richland Central.
RCHN = Richland North.

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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.

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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

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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 (1,1335.6 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

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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)

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