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Attachment 4

Hanford Facility Contingency Plan
Rev. 1, June 1993

1240-42016

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APPENDIX

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7.0 CONTINGENCY PLAN [G]

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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

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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.

5.0 INCIDENT RESPONSE

1
2
3
4 Incident response procedures have been established for each TSD unit.
5 The initial response to any emergency will be to immediately protect the
6 health and safety of persons in the immediate area. Identification of
7 released material is essential to determine appropriate protective actions.
8 Containment, treatment, and disposal assessment will be the secondary
9 responses.

10
11 The following sections describe actions for personnel for several
12 different types of incidents, including a generic response, that might occur
13 on the Hanford Facility. Regardless of how an incident is classified, minimum
14 onsite notification requirements exist to ensure that the appropriate
15 organizations are contacted and that the incident is classified correctly.
16
17

18 5.1 INCIDENT GENERIC RESPONSES

19
20 Responses made by the discoverer, single point-of-contact, and the BED
21 are discussed in the following sections. Identification of hazardous
22 materials and dangerous waste and the assessment of hazards also are
23 discussed.
24

25
26 5.1.1 Discoverer

27
28 The discoverer performs the following actions:

- 29
30 1. Immediately notifies potentially affected personnel (including the
31 BED, if present, for a TSD unit incident) of the incident
32
33 2. Immediately notifies the single point-of-contact (811* or 375-2400)
34 and provides all known information, if the information can be
35 obtained without jeopardizing personnel safety, including the
36 following:
37
38 • Name(s) of chemical(s) involved and amount(s) spilled, on fire,
39 or otherwise involved, or threatened by, the incident
40
41 • Name and callback telephone number of person reporting the
42 incident
43

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.

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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

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. Obtains all available information pertaining to the incident and
2 determines if the incident requires implementation of the
3 contingency plan
4
- 5 3. Determines need for assistance from agencies listed in Section 8.0
6 and arranges for their mobilization and response through the single
7 point-of-contact
8
- 9 4. Initiates the appropriate alarm if building or area evacuation is
10 necessary
11
- 12 5. Arranges for care of any injured persons
13
- 14 6. Requests activation of the affected area ECC via the single point-
15 of-contact if a threat to surrounding buildings or structures exists
16
- 17 7. Provides for event notification in accordance with Section 5.1
18
- 19 8. Maintains access control at the incident site by keeping
20 unauthorized personnel and vehicles away from the area. Security
21 personnel can be used to assist in site control if control of the
22 boundary is difficult (e.g., repeated incursions). In determining
23 controlled access areas, considers environmental factors such as
24 wind velocity and direction
25
- 26 9. Arranges for proper remediation of the incident after evaluation
27
- 28 10. Remains available for fire, patrol, and other authorities on the
29 scene and provides all required information
30
- 31 11. Enlists the assistance of alternate BED(s) if around-the-clock work
32 is anticipated
33
- 34 12. Refers media inquiries to the Media Relations/Communications offices
35 of the contractors or the DOE-RL
36
- 37 13. Ensures the use of proper protective equipment, remedial techniques
38 (including ignition source control for flammable spills), and
39 decontamination procedures by all involved personnel if remediation
40 is performed by TSD unit personnel. Areas of expertise are
41 available in determining necessary equipment or procedures
42
- 43 14. Remains at the scene to oversee activities and to provide
44 information if remediation is performed by the Hanford Fire
45 Department Hazardous Materials Response Team or other response teams
46
- 47 15. Ensures proper containerization, packaging, and labeling of
48 recovered spill materials and overpacked containers
49
- 50 16. Ensures decontamination (or restocking) and restoration of emergency
51 equipment used in the spill remediation before resuming TSD unit
52 operations

- 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 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
 - 14 • Contents of leaking containers could be transferred to appropriate
15 nonleaking containers. Transfer procedures for fire safety are
16 followed for ignitable or reactive waste (e.g., use of nonsparking
17 tools, bonding and grounding of containers, isolation of ignition
18 sources, and use of explosion-proof electrical equipment).
 - 19
 - 20 • Overpacked containers are marked and labeled in the same manner as the
21 contents. All containers of spill debris, recovered product, etc.,
22 are managed in the same manner as waste containers received from
23 outside the TSD unit. Overpacks in use at the TSD unit are marked
24 with information pertaining to their contents and noted as to whether
25 the container inside the overpack is leaking or is in good condition.
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

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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

- 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 • 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 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 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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- Name, address, and telephone number of the owner or operator
- Name, address, and telephone number of the Hanford Facility/TSD unit
- Date, time, and type of incident
- Name and quantity of material(s) involved
- Extent of injuries if any
- Assessment of actual or potential hazards to human health and the environment where this is applicable
- Estimated quantity and disposition of recovered material that resulted from the incident
- Cause of incident
- Description of corrective action taken to prevent recurrence 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, or explosion. 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.

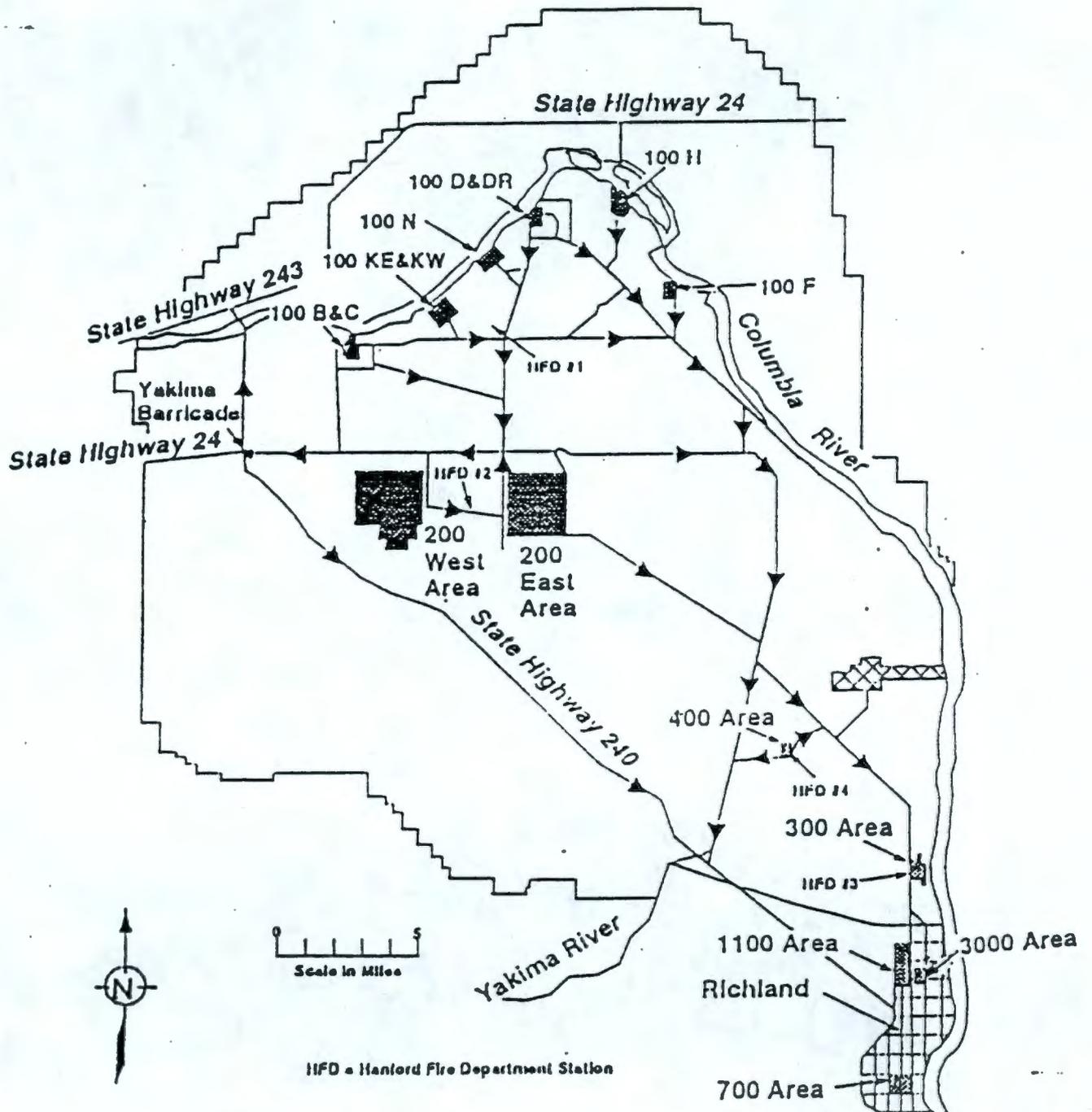
These occurrences are investigated, reported, and analyzed promptly to ensure that effective corrective actions are taken in compliance with contractual and statutory requirements. All such occurrences are recorded in the building manager's log book, and the log book is audited to ensure that incidents 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 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.

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Figure 1. Hanford Facility Evacuation Routes and Locations of the Fire Stations on the Hanford Facility.

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>

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17 RCHS = Richland South.
18 RCHC = Richland Central.
19 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 (1,133.6 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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