

**WASTE TREATMENT AND IMMOBILIZATION PLANT
CHAPTER 7.0
CONTINGENCY PLAN
CHANGE CONTROL LOG**

Change Control Logs ensure that changes to this unit are performed in a methodical, controlled, coordinated, and transparent manner. Each unit addendum will have its own change control log with a modification history table. The “**Modification Number**” represents Ecology’s method for tracking the different versions of the permit. This log will serve as an up to date record of modifications and version history of the unit.

Modification History Table

Modification Date	Modification Number
08/2011	

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CHAPTER 7.0
CONTINGENCY PLAN

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CHAPTER 7.0
CONTINGENCY PLAN

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3
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5
6 **TABLE OF CONTENTS**

7	7.0 Contingency Plan	5
8	7.1 General Facility Information	5
9	7.1.1 Facility Name.....	5
10	7.1.2 Facility Location.....	5
11	7.1.3 Owner	6
12	7.2 Emergency Response Organization.....	6
13	7.2.1 Building Emergency Director/Emergency Coordinator	6
14	7.3 Circumstances Prompting Implementation	7
15	7.3.1 Facility Hazards	7
16	7.3.2 Response to Facility Operations Emergencies.....	10
17	7.3.3 Natural Phenomena.....	13
18	7.4 Emergency Response Procedures.....	14
19	7.4.1 Incident Response, Hazard Assessment, and Identification	14
20	7.4.2 Notification	14
21	7.4.3 Containment and Control of Emergencies.....	14
22	7.4.4 Protective Actions.....	14
23	7.4.5 Identification of Dangerous Materials	15
24	7.4.6 Prevention of Recurrence or Spread of Fires, Explosions, or Releases	17
25	7.4.7 Post-Emergency Actions.....	17
26	7.5 Emergency Equipment	18
27	7.5.1 Communications Equipment/Warning Systems	18
28	7.5.2 Portable Emergency Equipment	19
29	7.5.3 Communications Equipment.....	19
30	7.5.4 Personal Protective Equipment.....	19
31	7.5.5 Spill Control and Containment Supplies.....	20
32	7.5.6 Incident Command Post.....	20
33	7.6 Coordination Agreements.....	21
34	7.7 Evacuation Plan.....	21
35	7.8 Required Reports, Recordkeeping, and Certifications	21
36	7.8.1 General Requirements.....	21

1 7.8.2 Requirements For Tank Systems 21
2 7.9 Plan Locations and Amendment to Contingency Plan 21
3 7.10 References..... 21
4 Appendix 7-1 Hanford Site Evacuation Routes 22
5 Appendix 7-2 WTP Site Evacuation Routes 24
6
7 **TABLES**
8 Table 7.5-1 Fixed Emergency Equipment 18
9 Table 7.5-2 Portable Emergency Equipment 19
10 Table 7.5-3 Communications Equipment 19
11 Table 7.5-4 Personal Protective Equipment..... 19
12 Table 7.5-5 Spill Kits and Spill Control Equipment..... 20
13 Table 7-1 Hanford Facility Documents Containing Contingency Plan Requirements of
14 WAC 173-303-350(3) 27
15
16 **FIGURES**
17 Figure App-7-1 Hanford Site Evacuation Routes 23
18 Figure App-7-2 WTP Site Evacuation Routes 25
19

1 7.0 CONTINGENCY PLAN

2 The contingency plan requirements provided in Washington Administrative Code ([WAC](#)) [173-303-350](#),
3 *Contingency Plan and Emergency Procedures*, are satisfied in portions of [this Contingency Plan](#) and the
4 following documents: ~~*River Protection Project—Waste Treatment Plant (RPP-WTP) Emergency Response*~~
5 ~~*Plan (Appendix 7A of this document)*~~.

- 6 • *Hanford Emergency Management Plan* (DOE/RL-94-02 ~~4999~~2014)(Attachment 4 of the
7 *Dangerous Waste Portion of the Resource Conservation and Recovery Act (RCRA) Permit for the*
8 *Treatment, Storage, and Disposal of Dangerous Waste*)(~~Ecology 1994a~~)

9 ~~A detailed outline of the Emergency Response Plan was provided to meet Compliance Schedule Item 5.~~
10 ~~A final Emergency Response Plan will be provided prior to receipt of waste to demonstrate compliance~~
11 ~~with [WAC 173-303-340](#), Preparedness and Prevention; [WAC 173-303-350](#), Contingency Plan and~~
12 ~~Emergency Procedures; and [WAC 173-303-360](#), Emergencies. The *RPP-WTP Emergency Response*~~
13 ~~Plan~~ [Contingency Plan](#) also serves to satisfy a broad range of other requirements (e.g., *Occupational*
14 *Safety and Health Administration Standards* [[29 CFR 1910](#)], *Toxic Substance Control Act of 1976*
15 [[40 CFR 761](#)], and United States Department of Energy Orders). Therefore, revisions made to portions of
16 this ~~contingency~~ [Contingency Plan](#) document that are not governed by the requirements of [WAC](#)
17 [173-303](#) will not be considered as a modification subject to [WAC 173-303-830](#) or Hanford Facility
18 Dangerous Waste Permit, Condition I.C.3.

19 [Table 7-1](#) identifies which portions of the ~~*RPP-WTP Emergency Response Plan*~~ [Contingency Plan](#) are
20 written to meet [WAC 173-303](#) contingency plan requirements. In addition to the ~~*RPP-WTP Emergency*~~
21 ~~*Response Plan*~~ [Contingency Plan](#) portions identified in [Table 7-1](#), Section ~~12.07.9~~ of the ~~*RPP-WTP*~~
22 ~~*Emergency Response Plan*~~ [Contingency Plan](#) is written to meet [WAC 173-303](#) requirements identifying
23 where copies of the *Hanford Emergency Management Plan* and the ~~*RPP-WTP Emergency Response*~~
24 ~~Plan~~ [Contingency Plan](#) are maintained on the Hanford Facility. Therefore, revisions to Section ~~12.07.9~~
25 and the portions identified in [Table 7-1](#) are considered a modification subject to [WAC 173-303-830](#) or
26 Hanford Facility Dangerous Waste Permit, Condition I.C.3.

27 [7.1 General Facility Information](#)

28 [The Hanford Tank Waste Treatment and Immobilization Plant \(WTP\) will be a dedicated treatment plant](#)
29 [that will treat mixed waste transferred from the US Department of Energy \(DOE\), Office of River](#)
30 [Protection \(ORP\) Double-Shell Tank System Unit at the Hanford Site. The WTP is located on the](#)
31 [Hanford Site, a 560-square-mile \(1,450-square kilometer\) DOE site in southeastern Washington State.](#)
32 [The WTP is located in the east portion of the 200 Area near the center of the Hanford Site.](#)

33 [The Hanford Site Emergency Preparedness Program is based on the incident command system \(ICS\) that](#)
34 [allows a graded approach for response to emergency events. This plan contains a description of WTP](#)
35 [facility specific emergency planning and response and is used in conjunction with the *Hanford*](#)
36 [Emergency Management Plan \(DOE/RL-94-02\). Response to events is performed using WTP and](#)
37 [Hanford Site level emergency procedures. A revised and updated contingency plan will be submitted at](#)
38 [least 18 months before the start of cold commissioning, when all information necessary for emergency](#)
39 [planning is available. The plan will be updated to incorporate additional WTP facilities as they are](#)
40 [completed and become operational.](#)

41 [7.1.1 Facility Name](#)

42 [US Department of Energy Hanford Site](#)
43 [Waste Treatment Plant](#)

44 [7.1.2 Facility Location](#)

45 [Benton County, Washington, within the 200 East Area.](#)

1 Buildings and facilities covered by this plan are as follows:

- 2 • Pretreatment Facility (PTF)
- 3 • Low-Activity Waste (LAW) Facility
- 4 • High-Level Waste Facility (HLW)
- 5 • Balance of Facilities (e.g., support buildings)
- 6 • Analytical Laboratory (Lab)
- 7 • Effluent Management Facility

8 **7.1.3 Owner**

9 United States Department of Energy
10 Office of River Protection
11 P.O. Box 450
12 Richland, Washington 99352

13 **Facility Manager:**

14 Bechtel National, Inc.
15 2435 Stevens Center Pl.
16 Richland, Washington 99354

17 **7.2 Emergency Response Organization**

18 The Emergency Response Organization (ERO), as described in this section and in Section 2.2 of
19 DOE/RL-94-02, is available 24 hours each day to respond to events at the plant. The Building
20 Emergency Director (BED) is prepared to carry out his or her duties immediately and whenever an
21 imminent or actual emergency exists, as required by *Washington Administrative Code*
22 (WAC) 173-303-360 (2)(a), (b), and (c). DOE/RL-94-02, Section 2.2.1, details the responsibilities of the
23 BED. An on-duty BED will be the designated primary BED. A designated alternate BED will also be
24 available on each shift. Other ERO personnel will be on duty with either primary or alternate
25 responsibilities. A BED, Incident Command Post (ICP) Hazards Communicator, ICP Communicator, and
26 a Hazards Assessor (chemical or radiological, or both, depending on the event) will staff the ERO along
27 with various BED support personnel. In addition, the BED will designate a plant operations specialist to
28 support the Hanford Fire Department (HFD) personnel.

29 **7.2.1 Building Emergency Director/Emergency Coordinator**

30 Emergency response will be directed by the BED, as the Emergency Coordinator, until the Incident
31 Commander (IC) arrives. The Incident Command System (ICS) staff with supporting on call personnel
32 then fulfill the responsibilities of the Emergency Coordinator as discussed in WAC 173-303-360. During
33 events, facility personnel perform response duties under the direction of the BED. The Incident
34 Command Post (ICP) is managed by either the senior Hanford Fire Department member present on the
35 scene or senior Hanford Patrol member present on the scene (security events only). These individuals are
36 designated as the IC and as such, have the authority to request and obtain any resources necessary for
37 protecting people and the environment. The BED becomes a member of the ICP and functions under the
38 direction of the IC. In this role, the BED continues to manage and direct facility operations.

39 A listing of BEDs by title, work location, and work telephone numbers will be inserted in the Building
40 Emergency Plan when issued prior to operations. The BED is located at the WTP (current locations are
41 not determined at this time) or available through an “on-call” list 24 hours a day.

42 Names and home telephone numbers of the BEDs will be available from the Patrol Operations
43 Center (POC) prior to operations, in accordance with Permit Condition II.A.4.

7.3 Circumstances Prompting Implementation

This plan will be implemented when the BED has determined that a release, fire, or explosion has occurred at the facility or in adjacent site facilities. Actions determined in DOE/RL-94-02 and the requirements of WAC 173-303 will be implemented ~~as described below.~~

The BED ensures that trained personnel identify the character, source, amount, and aerial extent of the release, fire, or explosion to the extent possible. Waste identification is made by activities that can include, but are not limited to the following:

- Visual inspection of involved containers
- Sampling activities in the field
- Reference to inventory records
- Consulting with facility personnel

Samples of materials involved in an emergency will be taken by qualified personnel and analyzed as appropriate.

The BED will use the following guidelines to determine if an event has met the requirements of WAC 173-303-360(2)(d):

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

AND

2 a The unplanned spill or release involved a dangerous waste, or the material involved became a dangerous waste as a result of the event (e.g., product that is not recoverable), or

2 b The unplanned fire or explosion occurred at the WTP or transportation activity subject to the Resource Conservation and Recovery Act of 1976 (RCRA) contingency planning requirements,

AND

3 Time-urgent response from an emergency services organization was required to mitigate the event, or a threat to human health or the environment exists.

As soon as possible, after stabilizing event conditions, the BED will determine in consultation with the Environmental Organization if notification to the Washington State Department of Ecology (Ecology) is needed to meet WAC 173-303-360(2)(d) reporting requirements. Additional information is found in Permit Attachment 4 and DOE/RL-94-02, Section 4.2.

If review of all available information does not yield a definitive assessment of the danger posed by the incident, a worst-case condition will be presumed and appropriate protective actions and notifications will be initiated. The BED will be responsible for initiating any protective actions based on their best judgment of the incident.

The BED will assess each incident to determine the response necessary to protect personnel, facility, and the environment. If assistance from Hanford Patrol, HFD, or ambulance units is required, the Hanford Emergency Response Number (911 from site office phones or 373-0911 from cellular phones) will be used to contact the Patrol Operations Center and request the desired assistance.

7.3.1 Facility Hazards

Chemical and radiological hazards will be present in the WTP operating facilities. In addition, while construction is ongoing, dangerous wastes will be generated that are typical of construction, consisting mostly of ignitable materials (e.g., spent solvents, waste fuels), corrosives (acids and bases), and toxic materials, which are packaged in various-sized US Department of Transportation containers for shipment to permitted, offsite treatment and disposal facilities. The WTP Project has established accumulation

1 areas for these construction-type wastes. Prior to facilities becoming operational, this plan will be
2 updated to reflect additional hazards information.

3 **7.3.1.1 Hazardous Materials**

4 The WTP maintains and manages a chemical Safety Data System (SDS) database on a real time basis
5 and can be queried to provide a list of all chemicals on site meeting the criteria for further evaluation.
6 Chemicals used at the WTP Construction Site are evaluated in accordance with procedures that will be
7 developed prior to the receipt of waste. During the chemical evaluation, if the product has a 3 or 4 on a
8 the health hazard rating (National Fire Protection Agency or Hazardous Materials Identification System
9 [NFPA or HMIS]) or contains a chemical that is listed on the Superfund Amendments and
10 Reauthorization Act (SARA) Extremely Hazardous Substance (EHS) list 302, it is sent to the
11 Emergency Management Administrator for evaluation.

12 A list of chemicals meeting the listed criteria above can be generated using the WTP SDS database
13 at any time to provide the most up to date list. In addition, 24590-WTP-RPT-CON-03-001, Rev 6,
14 Emergency Planning Hazards Survey provides a brief summary of chemicals that will be evaluated for
15 future WTP Operations.

16 Chemicals that meet the following criteria are excluded from further consideration if they meet one or
17 more of the criteria:

18 Public Use - Commonly available to and used by the general public (if the formulation and is the same
19 as for products that are distributed without significant restrictions to the public.)

20 Dispersible - Materials that do not present an airborne exposure hazard due to its physical form or other
21 factors. Materials may be eliminated if they meet one of the following tests:

- 22 • The substance is a solid at normal temperatures and does not contain or include a significant
23 fraction of small particles readily dispersible (less than 10 microns in diameter).
- 24 • No plausible release mechanism/process by which a large fraction of a solid material can be
25 reduced to small particles for dispersion and inhalation (less than 10 microns in diameter).
- 26 • The substance is a liquid and exhibits a vapor pressure (or partial pressure of a hazardous material
27 in solution) of less than 11 mmHg at about 25 degrees Celsius.

28 Human Health Hazard - Materials that have been assigned a NFPA health hazard category rating (or a
29 health hazard rating assigned locally using the criteria published in NFPA 704) of 0, 1, or 2.

30 Quantity - Individual container quantities smaller than those "easily and safely manipulated by one
31 person (i.e., "laboratory scale" quantities). As used here, containers with capacities of no more than
32 5 gallons (19 L) for liquids, 40 pounds (18 kg) for solids or 10 pounds (4.5 kg) for compressed gases
33 meet such a definition. Note that this threshold is used as a final screening criterion for material that
34 could not be screened out using any of the other criteria above.

35 Currently the WTP chemical screening process identified no hazardous chemicals having an NFPA or
36 HMIS hazard rating of 3 or 4 that require an Emergency Planning Hazard Assessment (EPHA) to be
37 completed. Future chemical use for operational activities and processes will be evaluated when
38 established.

39 **7.3.1.2 Industrial Hazards**

40 Industrial hazards associated with the WTP Site include electrical equipment, pressurized equipment and
41 systems, high temperature equipment, rotating equipment, confined spaces, forklifts, cranes, lifting
42 operations, and compressed gas cylinders.

Safe design of the plant, job safety analysis, job control system work packages, and SDSs provide the basis for the safe use of this equipment in the workplace. Personnel will be trained in the safe use and handling of compressed gas cylinders, cranes, forklifts etc., as applicable.

7.3.1.3 Radioactive, Dangerous, and Mixed Waste

Safe design of the plant, job safety analysis, job control system work packages, and SDSs provide the basis for safe handling of radioactive, dangerous, and mixed waste.

Dangerous waste categories managed at the WTP will be identical to the double-shell tank farms when tank waste treatment commences. Categories include characteristic, listed, and state-only wastes, two of which are designated as extremely hazardous waste (WT01 and WP01). The following summarizes the dangerous waste numbers:

<u>Characteristic Waste Numbers</u>			
<u>D001</u>	<u>D002</u>	<u>D003</u>	<u>D004</u>
<u>D005</u>	<u>D006</u>	<u>D007</u>	<u>D008</u>
<u>D009</u>	<u>D010</u>	<u>D011</u>	<u>D018</u>
<u>D019</u>	<u>D022</u>	<u>D028</u>	<u>D029</u>
<u>D030</u>	<u>D033</u>	<u>D034</u>	<u>D035</u>
<u>D036</u>	<u>D038</u>	<u>D039</u>	<u>D040</u>
<u>D041</u>	<u>D043</u>		
<u>Listed Waste Numbers</u>			
<u>F001</u>	<u>F002</u>	<u>F003</u>	<u>F004</u>
<u>F005</u>	<u>F039^a</u>		
<u>State-only Wastes^b</u>			
<u>WT01</u>	<u>WT02</u>	<u>WP01</u>	<u>WP02</u>
^a Multi-source leachate (F039) is included as a waste derived from non-specific wastes F001 through F005.			
^b Washington State criteria			

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

- Storage in containers
- Treatment and storage in tanks
- Treatment in miscellaneous units (e.g., the melters)
- Containment buildings
- Miscellaneous Units

Solid Form

Radioactive, dangerous, and mixed wastes may be generated at the WTP during process and maintenance activities. Any waste generated will be properly managed in a designated accumulation area(s) and transported to a permitted storage area. Temporary SAAs and/or 90-day pads may also be used during an event if necessary and will be regulated in accordance with WAC 173-303-200(2).

Liquid Form

Highly radioactive mixed waste solutions may be present at the WTP operating facilities. Although these solutions and slurries contain chemicals that are hazardous, the bounding consequence for spills or releases of this waste is usually based on the radiological components of the waste.

Gaseous Form

The WTP airborne effluent streams are produced through the following:

- Radiological control area heating ventilation air conditioning (HVAC) system – exhaust from radiological controlled areas.
- Vessel off-gas systems – vapors and gases from these systems.

The off-gas systems remove particulate, condensate NO_x, and organic vapors from the air stream before discharging them to the radiological controlled area HVAC system. The combined air stream passes through high efficiency particulate air filtration and is monitored for radioactivity and chemicals.

7.3.2 Response to Facility Operations Emergencies

Depending on the severity of the event, the BED reviews the site-wide procedures and the WTP emergency response procedure(s) and, as required, categorizes and/or classifies the event. If necessary, the BED initiates protective actions and Hanford Site ERO activation. The steps identified in the following description of actions do not have to be performed in sequence because of the unanticipated sequence of incident events.

7.3.2.1 Facility Operations Emergencies

7.3.2.1.1 Loss of Utilities

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

7.3.2.1.1.1 Loss of Electrical Power

Should there be a partial or total loss of electrical power to the WTP; automatic measures ensure the plant is in a safe operational configuration. (Safe operational configuration is defined as a shutdown to minimal operations that will prevent releases and prevent unnecessary damage to the equipment.)

The emergency power system will consist of two diesel turbine- automatically controlled emergency diesel generators and one diesel engine standby generator. The automatic and standby generators are connected to three separate 4.16kV emergency switchgears. Upon loss of power the emergency diesel turbine generators will automatically start. The emergency diesel turbine generators are capable of starting, accelerating, and being loaded with the design load in a specified time limit. The standby diesel generator is started manually or automatically in the event of a prolonged loss of offsite power. The emergency power system will be connected to essential loads in order to ensure only a short-term power interruption for those loads designated as essential. Critical indications and controls are backed up by uninterruptible power supplies and batteries. The plant will remain in a safe condition during loss of electrical power.

Egress lighting will consist of self-contained fixtures with battery packs and charging systems. These lighting systems will be located in stairways, exit routes, and fire alarm stations and will come on automatically upon loss of normal power to the fixture. A selected part of the normal lighting will operate as essential lighting, and will provide a minimum level of illumination throughout the plant to aid in restoring the plant to normal operation. Essential lighting will be powered by the EPS and will be available after an offsite power loss, following a delay required to start the emergency power supply diesel generators and for the generators to pick up the essential loads.

Selected instrumentation and controls will also be powered by an un-interruptible power supply (UPS) system and therefore will be unaffected by a loss of offsite power. UPS systems will be battery backed, and the battery chargers will be connected to the EPS. Radiation monitors, such as Continuous Air

1 Monitors (CAMs) and area 1 radiation monitors, are also powered by the UPS systems and continue
2 operating during power failure.

3 **7.3.2.1.1.2 Loss of Water**

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

8 **7.3.2.1.1.3 Loss of Ventilation**

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

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

18 Supply air in C2 areas flows via C3 to the C5 areas, where it will be discharged by the C5 exhaust fans.
19 In some instances, the airflow will flow from the C2 areas to the C3 areas, where it will be discharged by
20 the C3 exhaust fans. Some C2 air flow will be directly exhausted. Upon loss of the ventilation system,
21 restoration of the C3 and C5 exhaust fans will be immediately attempted. If the C3 and C5 exhaust fans
22 cannot be restored immediately, the C2 supply fans are automatically stopped, and personnel may be
23 notified to evacuate C3 areas, as a precautionary measure.

24 The BED and either the ERO or the IC will take the following actions:

- 25 • Locate the source of the problem, and take steps necessary to control the event
- 26 • Ensure appropriate areas have been evacuated
- 27 • Monitor contamination levels in the plant
- 28 • Restore ventilation system

29 **7.3.2.1.1.4 Loss of Process or Instrument Air**

30 The process air system will use redundant air compressors. One will be in operation and the other(s) will
31 be in autostart mode. If the standby compressor fails to start on loss of the operating compressor, a
32 backup compressor will be started locally.

33 **7.3.2.1.2 Major Process Disruption/Loss of Plant Control**

34 A major process disruption or loss of plant control could be caused by a failure of the process control
35 system. A system condition that causes loss of the process control system could cause plant abnormalities
36 that would lead to increased radiological challenges to WTP protection systems.

37 Non-essential personnel will exit the area of WTP where the system condition has occurred. The system
38 condition will be assessed, and corrective actions will be implemented. Operations will be placed on
39 recirculation by securing the waste feed to the plant. Facility shutdown will be accomplished by
40 performing manual, localized actions such as system isolation, equipment shutdown, etc.

41 **7.3.2.1.3 Pressure Release**

42 The WTP has high-pressure steam and low-pressure compressed air and steam systems. Loss of the
43 compressed air or steam system or systems could result in loss of plant control or a process disruption.

1 Process disruption or loss of plant control could interrupt operations. However, it is not likely that this
2 event would be classified as an emergency.

3 Pressurized gases are used throughout the WTP. In addition, compressed gas cylinders will be stored in
4 the compressed gas storage area. The inventory of gases includes flammable and nonflammable gases.
5 These gases pose a hazard in the immediate storage area, or in the immediate area of the location being
6 used. Failure of compressed gas bottles could cause flying debris hazards.

7 A process system pressure release is categorized as a condensate spray release.

8 **7.3.2.1.4 Fire and (or) Explosion**

9 In the event of a fire, the discoverer activates a fire alarm; calls 911 from site office phones/373-0911
10 from cellular phones or verifies that 911 has been called. Automatic initiation of a fire alarm (by the
11 smoke detectors, sprinkler systems, or pull boxes) is also possible.

- 12 • Unless otherwise instructed, personnel shall evacuate the area/building by the nearest safe exit
13 and proceed to the designated staging area for accountability.
- 14 • On actuation of the fire alarm, ONLY if time permits, personnel should shut down equipment,
15 secure waste, and lock up classified materials (or hand carry them out). The alarm automatically
16 signals the Hanford Fire Department.
- 17 • The BED proceeds directly to the ICP, obtains all necessary information pertaining to the
18 incident, and sends a representative to meet Hanford Fire Department.
- 19 • The BED provides a formal turnover to the IC when the IC arrives at the ICP.
- 20 • The BED informs the Hanford Site ERO as to the extent of the emergency (including estimates of
21 dangerous waste, mixed waste, or radioactive material quantities released to the environment).
- 22 • If operations are stopped in response to the fire, the BED ensures that systems are monitored for
23 leaks, pressure buildup, gas generation, and ruptures.
- 24 • Hanford Fire Department firefighters extinguish the fire as necessary.

25 The following is representative of the type of information that the BED may be called upon to provide to
26 the incident command structure or other response agencies:

- 27 • Location and health of personnel, including missing personnel and possible locations for fire
28 fighters to search for them
- 29 • Location and severity of fire, including character, exact source, and the amount, area, and extent
30 of any released materials
- 31 • Known hazardous conditions (such as, radiological, non-radiological, electrical, thermal,
32 flammable materials, pressurized cylinders, toxic gas, pressure systems, batteries, radiation areas)
- 33 • Plant operating status
- 34 • Utility systems status
- 35 • Support for WTP radiological control personnel (that is, monitoring, surveys, sampling,
36 decontamination)
- 37 • WTP layout
- 38 • Support for firefighter activities as required
- 39 • Notifications as required in accordance with plant procedures and Hanford Emergency
40 Management Plan (DOE/RL-94-02),

41 NOTE: Following a fire and/or explosion, WAC 173-303-640(7) will be addressed for the WTP regarding
42 fitness for use.

1 **7.3.2.1.5 Hazardous Material, Dangerous and/or Mixed Waste Spill**

2 Dangerous waste or mixed waste could spill due to equipment failure or operator error. The severity of
3 the event would depend on the nature and quantity of the spill. In addition, the presence of process
4 chemicals could result in a spill of hazardous materials, due to equipment failure or operator error. See
5 section 7.4 of this document for details on responding to incidents.

6 **7.3.2.1.6 Transportation and (or) Packaging Incidents**

7 A transportation or packaging event involving hazardous chemicals or radioactive material could result in
8 personnel exposure to hazardous materials. Potential environmental damage could occur due to the
9 release of hazardous or radioactive materials.

10 **7.3.3 Natural Phenomena**

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

17 **7.3.3.1 Seismic Event**

18 Depending on the magnitude of the beyond design basis event, severe structural damage can occur,
19 resulting in serious injuries or fatalities and the release of hazardous materials to the environment.
20 Damaged electrical circuits and wiring could result in the initiation of fires.

21 **7.3.3.2 Volcanic Eruption or Ash Fall**

22 Though not expected to cause structural damage, the ash resulting from a volcanic eruption could cause
23 shorts in electrical equipment and plug ventilation system filters.

24 **7.3.3.3 High Winds or Tornadoes**

25 High winds defined as sustained winds above a threshold that would potentially or actually cause
26 significant structural damage to the facility are not expected to occur. (Significant structural damage is
27 interpreted to mean a breach of facility containment and confinement systems sufficient to cause an actual
28 or potential release of hazardous material to the environment). However, dirt and dust from windstorms
29 could cause shorts in electrical equipment, or could plug ventilation system filters. Disruption of normal
30 operations is possible.

31 **7.3.3.4 Flood**

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

37 **7.3.3.5 Range Fire**

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

7.4 Emergency Response Procedures

7.4.1 Incident Response, Hazard Assessment, and Identification

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

The following sections describe the process for implementing basic protective actions as well as descriptions of response actions for the events listed in Section 7.3 of this plan. DOE/RL-94-02, Section 1.3, provides concept of operations for emergency response on the Hanford Site. Site-specific procedures are detailed in *RL Emergency Plan Implementing Procedures* (DOE-0223) and DOE/RL-94-02, Section 1.3.3.2. will be used as necessary for hazard assessment and identification of hazards. Facility specific actions will be denoted in WTP Building Emergency Plan (BEP).

7.4.2 Notification

As soon as possible after stabilizing event conditions, the BED will determine in consultation with the Environmental Organization if notification to Ecology is needed to meet WAC 173-303-360(2)(d) reporting requirements. Additional information regarding requirements for appropriate notifications is found in Permit Attachment 4, ~~and~~ DOE/RL-94-02, Section 4.2.

7.4.3 Containment and Control of Emergencies

Site-specific procedures are detailed in *RL Emergency Plan Implementing Procedures* (DOE-0223) and will be used as necessary for the containment and control of emergencies. Facility specific actions will be denoted in WTP Building Emergency Plan (BEP).

7.4.4 Protective Actions

Depending on the severity of the event, the BED reviews the site-wide and WTP emergency response procedure(s) and, as required, categorizes and (or) classifies the event. If necessary, the BED initiates area protective actions and Hanford Site ERO activation. The steps identified in the following description of actions do not have to be performed in sequence because of the unanticipated sequence of incident events.

The following emergency signals will be used to initiate emergency response:

- Evacuation - steady siren
- Take cover - wavering siren
- Fire - gong/bell

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

7.4.4.1 Evacuation

The objective of a facility evacuation order is to limit personnel exposure to hazardous materials or dangerous/mixed waste by increasing the distance between personnel and the hazard. The scope of the evacuation includes evacuation of the facility due to an event at the facility as well as evacuation of the facility in response to a site evacuation order. Evacuation is directed by the BED when conditions warrant and applies to all personnel not actively involved in the event response or in emergency plan related activities.

The BED initiates the evacuation by directing an announcement be made to evacuate along with the evacuation location over the public address system and facility radios. Personnel proceed to a predetermined staging area (see Figure App-7-2 WTP Site Evacuation Routes), or other safe upwind

1 location, as determined by the BED. The BED determines the operating configuration of the facility and
2 identifies any additional protective actions to limit personnel exposure to the hazard.

3 Emergency organization personnel or assigned operations personnel conduct a sweep of occupied
4 buildings to ensure that all personnel and visitors have evacuated. For an immediate evacuation,
5 accountability is performed at the staging area. The BED assigns Personnel Accountability Aides (PAAs)
6 and Staging Area Managers (SAMs) with the responsibility to ensure that evacuation actions are taken at
7 WTP. When evacuation actions are complete, the aides/managers provide a status report to the BED.
8 The BED provides status to the IC.

9 **7.4.4.2 Take Cover**

10 The objective of the take cover order is to limit personnel exposure to hazardous or dangerous/mixed
11 waste when evacuation is inappropriate or not practical. Evacuation might not be practical or appropriate
12 because of extreme weather conditions or the material release might limit the ability to evacuate
13 personnel safely.

14 The BED initiates the take cover by directing an announcement be made over the public address system
15 and facility radios, and, as conditions warrant, by activating the 200 Area take cover alarms by calling the
16 POC using 373-3800. Protective actions associated with operations include configuring, or shutting
17 down, the ventilation systems. Determination of additional take cover actions is based on operating
18 configuration, weather conditions, amount and duration of release, and other conditions, as applicable to
19 the event and associated hazard. As a minimum, personnel exposure to the hazard is minimized. The
20 BED assigns personnel as accountability aides with responsibility to ensure that take cover actions are
21 taken at all occupied buildings (take cover locations at WTP). When take cover actions are complete, the
22 PAAs provide the BED with a status report.

23 **7.4.5 Identification of Dangerous Materials**

24 The WTP has engineering controls to contain and/or minimize spills. These controls include containment
25 berms, dedicated spill control sumps, remote leak detection systems, remote gauges, and level indicators.
26 The WTP operating procedures will provide alarm response and maintenance actions for leak detection
27 equipment, surveillance of possible leak locations, and response actions for detected spills.

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

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

33 The person discovering a spill will immediately:

34 Stops work

35 Warns others in the vicinity

36 Isolates the area, so others do not wander into the hazard

37 Minimizes exposure by moving upwind (if outside) or to another area (if indoors)

- 38 • The discoverer notifies the BED and provides details, including size of spill, location, quality, and
39 item spilled.
- 40 • The BED determines if emergency conditions exist requiring response from the HFD based on
41 classification of the spill, injured personnel, and evaluates need to perform additional protective
42 actions.
- 43 • If HFD resources are not needed, the spill is mitigated with resources identified and proper
44 notifications are made.

- 1 • If the HFD resources are needed, the BED calls 373-0911 and requests emergency services.
- 2 • The BED sends a representative to meet the HFD.
- 3 • The BED provides a formal turnover to the IC when the IC arrives.
- 4 • The BED informs the Hanford Site ERO as to the extent of the emergency (including estimates of
5 dangerous waste, mixed waste, or radioactive material quantities released to the environment).
- 6 • If operations are stopped in response to the spill, the BED ensures that systems are monitored for
7 leaks, pressure buildup, gas generation, and ruptures.
- 8 • The HFD stabilizes the spill.

9 As necessary, the BED will also initiate or arrange for the following and ensure all personnel involved
10 follow the guidance from Hanford Emergency Management Plan (DOE/RL-94-02 1999):

- 11 • Notify plant personnel of the spill or release by making an announcement over the public address
12 system and facility radios.
- 13 • Establish a control point at a safe location, and coordinate further spill mitigation activities.
- 14 • Notify the contractor Environmental Point of Contact for support.
- 15 • Obtain all available information pertaining to the event, evaluate the need for event categorization
16 or classification, and begin ERO activation as necessary.
- 17 • Initiate use of plant and emergency response procedures.
- 18 • Arrange for care of any injured persons.
- 19 • Maintain access control at the event site by keeping unauthorized personnel and vehicles away
20 from the area. Security personnel can be used to assist in site control. In determining which
21 areas are to be controlled, the BED will consider environmental factors such as wind velocity and
22 direction.
- 23 • Arrange for proper remediation of the event after evaluation, and if required, incident
24 investigation processes have been initiated.
- 25 • Remain available for fire, patrol, and other authorities on the scene, and provide all required
26 information.
- 27 • Enlist the assistance of alternate BED(s) or ERO personnel, if response activities are projected to
28 be long term.
- 29 • Ensure the use of proper protective equipment, remedial techniques, transfer procedures, and
30 decontamination procedures by all involved personnel, if remediation is performed by plant
31 personnel.
- 32 • Remain at the scene to oversee activities and provide information, if remediation is performed by
33 the HFD Hazardous Materials (HAZMAT) Team or other response teams.
- 34 • Ensure proper containerization, packaging, and labeling of recovered spill materials.
- 35 • Ensure decontamination (or restocking) and restoration of emergency equipment used in the spill
36 remediation before resuming operations.
- 37 • Provide required reports after the event in accordance with WTP procedures

38 Additional actions to be taken in response to a leaking tank include the following:

- 39 • Removal of the leaking tank from service.
- 40 • Conduct an investigation to determine the cause of the event.
- 41 • Perform repairs or replacements before the tank is returned to service—with, as required—final
42 approval from an independent certified professional engineer.

- Following an emergency event involving a tank system, address all requirements of WAC 173-303-640(7) regarding fitness for use.

If a catastrophic dumping of mixed waste occurs, affected plants or processes will be immediately shut down. The actions described in Section 7.3 will be performed. If a catastrophic dumping causes a high radiation alarm on the C5 or C3 ventilation systems, the standby systems will be started, and actions described in Section 7.3.2.1.1.3 will be performed.

7.4.5.1 Damaged or Unacceptable Shipments

No waste will be received at the WTP from outside of the Hanford Site. Therefore, this section of the plan is not applicable.

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

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

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

7.4.7 Post-Emergency Actions

DOE/RL-94-02, Section 9, describes actions for event termination, incident recovery, and restart of operations. The extent by which these actions are employed is based on the incident classification of each event. In addition, DOE/RL-94-02 also contains actions for management of incompatible wastes that might apply.

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

The BED ensures that equipment used during the incident is cleaned and fit for its intended use before operations are resumed. Depleted stocks of neutralizing and absorbing materials are replenished.

7.4.7.1 Termination of Event

Hanford Emergency Management Plan (DOE/RL-94-02), Section 9.0, describes actions for event termination, incident recovery, and restart of operations. The extent by which these actions are employed is based on the incident classification of each event. In addition, Hanford Emergency Management Plan (DOE/RL-94-02) also contains actions for the management of incompatible wastes that might apply.

For events where the RL-EOC is activated, the RL and DOE Office of River Protection Emergency Manager has the authority to declare event termination. This decision is based on input from the BED, IC, and other emergency response organization members. For events where the RL-EOC is not activated, the ICS and staff will declare event termination.

7.4.7.2 Incident Recovery and Restart of Operations

A recovery plan is developed when necessary in accordance with DOE/RL-94-02, Section 9.2. A recovery plan is needed following an event where further risk could be introduced to personnel, the facility, or the environment through recovery action and (or) to maximize the preservation of evidence.

If the emergency response is implemented in accordance with Section 4 of this plan, Ecology will be notified before operations can resume. This notification is in addition to the required reports discussed in Section 5.1 of DOE/RL-94-02 and will include the following statements:

- There are no incompatibility issues with the waste and released materials from the incident
- All the equipment has been cleaned, fit for its intended use, and placed back into service

The notification required by WAC 173-303-360(2)(j) may be made via telephone conference and documentation of the notification will be included in the WTP operating record. Additional information that Ecology requests regarding these restart conditions will be included in the required 15-day report identified in Section 7.8 of this plan and required by WAC 173-303-360(2)(k).

For emergencies not involving activation of the RL-EOC, the BED ensures that conditions are restored to normal before operations are resumed. If the Hanford Site ERO was activated and the emergency phase is complete, a special recovery organization could be appointed at the discretion of RL to restore conditions to normal. This process is detailed in RL and contractor emergency procedures. The makeup of this organization depends on the extent of the damage and the effects. The onsite recovery organization will be appointed by the appropriate contractor’s management.

After an event, the BED or the onsite recovery organization ensures that no waste that might be incompatible with the released material is treated, stored, and (or) disposed of until cleanup is completed pursuant to WAC 173-303-360(2)(j). Cleanup actions are taken by WTP personnel or other assigned personnel. DOE/RL-94-02, Section 9.2.3, describes actions to be taken.

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

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

7.5 Emergency Equipment

Hanford Site emergency resources and equipment are described and listed in DOE/RL-94-02, **Section 11.2**. Emergency resources and equipment for the entire WTP are presented in this section.

7.5.1 Communications Equipment/Warning Systems

Table 7.5-1 lists the fixed emergency equipment available at the WTP.

<u>Table 7.5-1 Fixed Emergency Equipment</u>		
<u>Type</u>	<u>Location</u>	<u>Capability</u>
<u>Safety shower/eye wash station</u>	<u>Throughout the WTP in locations designated by facility procedures.</u>	<u>Assist in flushing chemicals and materials from body or eyes and face.</u>
<u>Automatic sprinkler system</u>	<u>Throughout the WTP.</u>	<u>Assist in the control of fire.</u>
<u>Fire alarm pull boxes</u>	<u>Throughout the WTP.</u>	<u>Activate the building fire alarm and notify fire department, as developed by Coordination Agreements.</u>
<u>Emergency diesel generators</u>	<u>East of the LAW Facility.</u>	<u>Provide emergency power.</u>
<u>Fire hose connections</u>	<u>Throughout the WTP in locations designated by facility procedures.</u>	<u>Allow for connection of fire hoses to site water system for manual fire suppression.</u>

7.5.2 Portable Emergency Equipment

Table 7.5-2 lists the portable emergency equipment available at the WTP.

<u>Table 7.5-2 Portable Emergency Equipment</u>		
<u>Type</u>	<u>Location</u>	<u>Capability</u>
<u>General purpose fire extinguishers</u>	<u>Throughout the WTP.</u>	<u>Fire suppression for class A, B, and C fires.</u>
<u>CO₂ or clean-agent fire extinguishers</u>	<u>Throughout the WTP.</u>	<u>Suppress electrical fires.</u>
<u>Miscellaneous emergency equipment</u>	<u>Throughout the facility located in emergency equipment cabinets as designated by facility procedures.</u>	<u>Safety harnesses, blankets, first aid kits, stretchers, emergency lights, and emergency tools.</u>

7.5.3 Communications Equipment

Table 7.5-3 lists communications and warning systems at the WTP.

<u>Table 7.5-3 Communications Equipment</u>		
<u>Type</u>	<u>Location</u>	<u>Capability</u>
<u>Siren System</u> <u>Evacuation</u> <u>STEADY SIREN</u> <u>Take Cover</u> <u>WAVERING SIREN</u> <u>Fire</u> <u>GONG/BELL</u>	<u>Throughout the WTP.</u>	<u>Alert facility personnel of emergency conditions.</u>
<u>Public address system</u>	<u>Throughout the WTP.</u>	<u>Provides for information dissemination to facility personnel.</u>
<u>Telephone system</u>	<u>WTP CCR, office areas, and other plant locations.</u>	<u>Internal and external communications.</u>
<u>Portable two-way radios</u>	<u>Throughout the WTP.</u>	<u>Communications to the CCR.</u>

7.5.4 Personal Protective Equipment

Table 7.5-4 lists types of protective equipment available at the WTP.

<u>Table 7.5-4 Personal Protective Equipment</u>		
<u>Type</u>	<u>Location</u>	<u>Capability</u>
<ul style="list-style-type: none"> • <u>Waterproof coveralls</u> • <u>Leather protective wear</u> • <u>Respirators</u> • <u>Filtered masks</u> • <u>Oxygen supplies</u> • <u>Escape packs</u> • <u>SCBAs</u> 	<u>Throughout the facility in or near emergency equipment cabinets as designated by facility procedure.</u>	<u>Protection from various hazards (e.g., smoke, fumes, oxygen deficient atmosphere, chemicals, high airborne radioactivity concentrations, and radiological contamination)</u>
<u>SCBA = self-contained breathing apparatus.</u>		

Table 7-5 Hanford Facility Documents Containing Contingency Plan Requirements of WAC 173-303-350(3)

1 **7.5.5 Spill Control and Containment Supplies**

2 Table 7.5-5 lists the locations of spill kits and includes a basic listing of contents.

<u>Table 7.5-6 Spill Kits and Spill Control Equipment</u>		
<u>Type</u>	<u>Location</u>	<u>Capability</u>
<u>Absorbents and spill response materials</u> <u>55-gal drums</u> <u>Overpack drums</u> <u>Bags</u> <u>Step-off pads</u> <u>Protective clothing</u> <u>Chemical resistant coveralls</u> <u>Surgical and chemical gloves</u> <u>Acid Goggles/Face shields</u> <u>Sodium-bicarbonate</u> <u>Barrier Tape</u> <u>Rags</u> <u>Scissors</u> <u>Flashlight</u> <u>Batteries</u> <u>pH paper</u> <u>Mop handles</u> <u>Mop heads</u> <u>Mop bucket with wringer</u> <u>Hazardous material labels</u> <u>Non-sparking shovel</u> <u>Hazardous absorbent booms</u> <u>Ear plugs</u> <u>Portable barriers</u>	<u>Throughout the facility in or near spill kit cabinets as designated by facility procedures.</u>	<u>Control and mitigation of radioactive and chemical spills.</u>

3 **7.5.6 Incident Command Post**

4 If the ICP is activated, the BED will notify appropriate personnel of its location by either the public
 5 address system, radios, or telephones. Emergency resource materials are stored at each location. The IC
 6 could activate the Hanford Fire Department Mobile Command Unit if necessary.

7 The ICP will contain the following:

- 8 • Telephone communications, (including speakerphones and headsets) including the Hanford
 9 Site Emergency Alerting System (HSEAS)
- 10 • Radio communications
- 11 • Access to the public address system
- 12 • Access to plant operations data

- 1 • [Access to plant systems information](#)
- 2 • [Access to accountability and building access control information](#)

3 **7.6 Coordination Agreements**

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

7 **7.7 Evacuation Plan**

8 [Figure App-7-1 and Figure App-7-2 shows the evacuation routes for the Hanford Site and WTP Facility.](#)
9 [Evacuation routing maps for the WTP will be maintained in the facility operating record and provide](#)
10 [identification of the primary staging area and a general layout of the facility. Alternate evacuation routes](#)
11 [and staging areas will be determined and used on a case-by-case basis, and based on meteorological](#)
12 [conditions at the time of an event.](#)

13 **7.8 Required Reports, Recordkeeping, and Certifications**

14 [Post incident written reports are required for certain incidents on the Hanford Site. The reports are](#)
15 [described in DOE/RL-94-02, Section 5.1.](#)

16 **7.8.1 General Requirements**

17 [Facility management will note in the WTP operating record, the time, date, and details of any incident](#)
18 [that requires implementation of the contingency plan \(refer to Section 7.3 of this plan\). Within fifteen](#)
19 [\(15\) days after the incident, a written report on the incident will be submitted to Ecology. The report will](#)
20 [include all items specified in WAC 173-303-360\(2\)\(k\).](#)

21 **7.8.2 Requirements For Tank Systems**

22 [If a release from a tank system occurs that requires notification according to WAC 173-303-640\(7\),](#)
23 [notification as described in WTP procedures will be followed.](#)

24 **7.9 Plan Locations and Amendment to Contingency Plan**

25 [Copies of this Contingency plan are maintained at the following locations:](#)

- 26 • [WTP ICP](#)
- 27 • [WTP Control Room](#)

28 [Portions of the plan will be reviewed and immediately amended if necessary when conditions described in](#)
29 [DOE/RL-94-02, Section 14.3.1.1, occur. In addition, the plan will be revised prior to operation of](#)
30 [additional WTP facilities. This will include information that is not currently available. Subsequently, the](#)
31 [plan will be reviewed annually and updated as needed.](#)

32 **7.10 References**

33 [DOE/RL-94-02, Hanford Emergency Management Plan, as amended](#)

34 [WAC 173-303, Washington State Dangerous Waste Regulations, Washington Administrative Code,](#)
35 [Washington State Department of Ecology, Olympia, Washington, as amended](#)

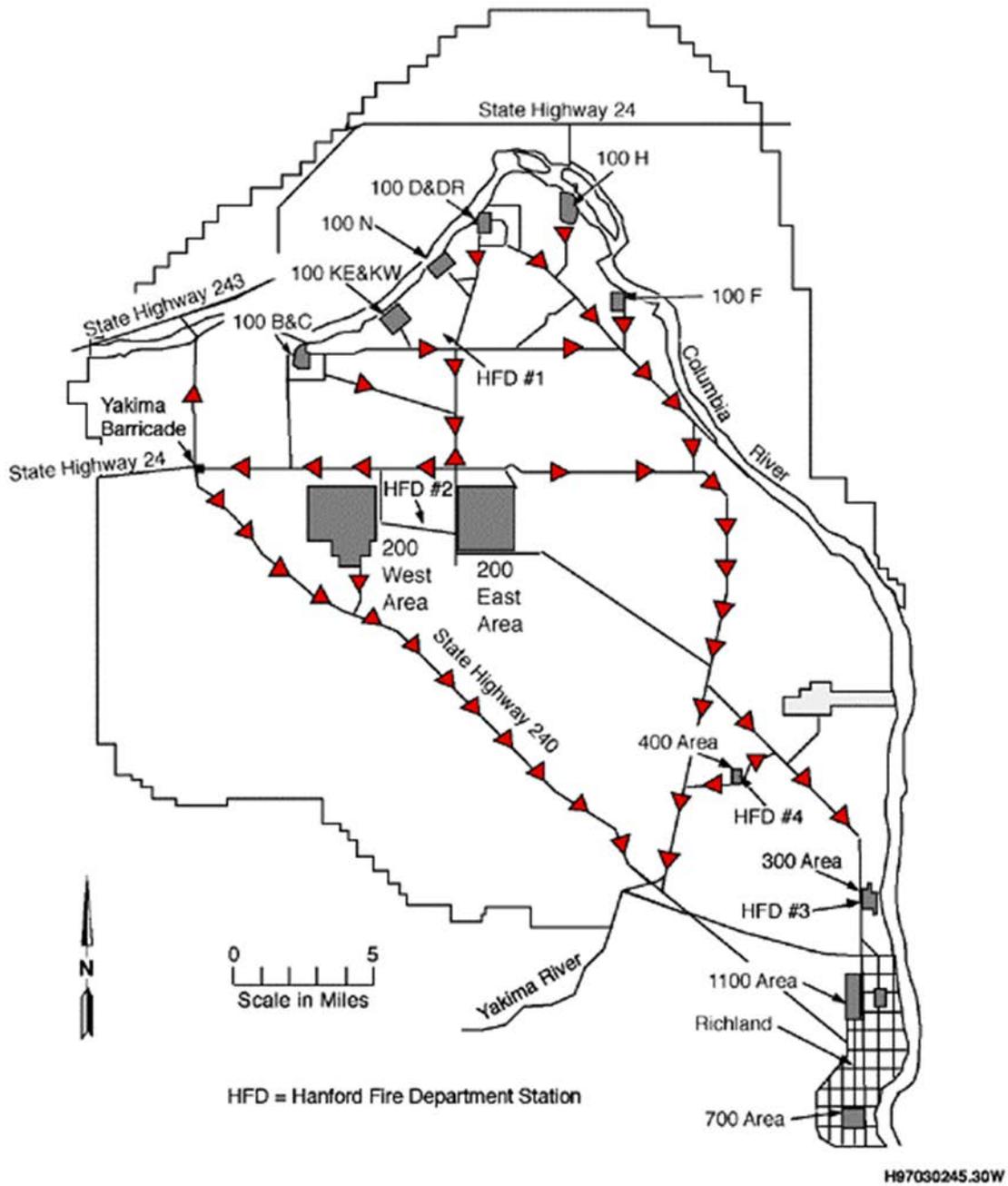
36 [Ecology, 2011, Dangerous Waste Portion of the Hanford Facility Resource Conservation and Recovery](#)
37 [Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Permit Number](#)
38 [WA7890008967, Washington State Department of Ecology, Olympia, Washington, as amended](#)

39 [DOE-0223, Emergency Plan Implementing Procedures](#)

40 [24590-WTP-RPT-CON-03-001, Rev 6, Emergency Planning Hazards Survey](#)

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APPENDIX 7-1
HANFORD SITE EVACUATION ROUTES

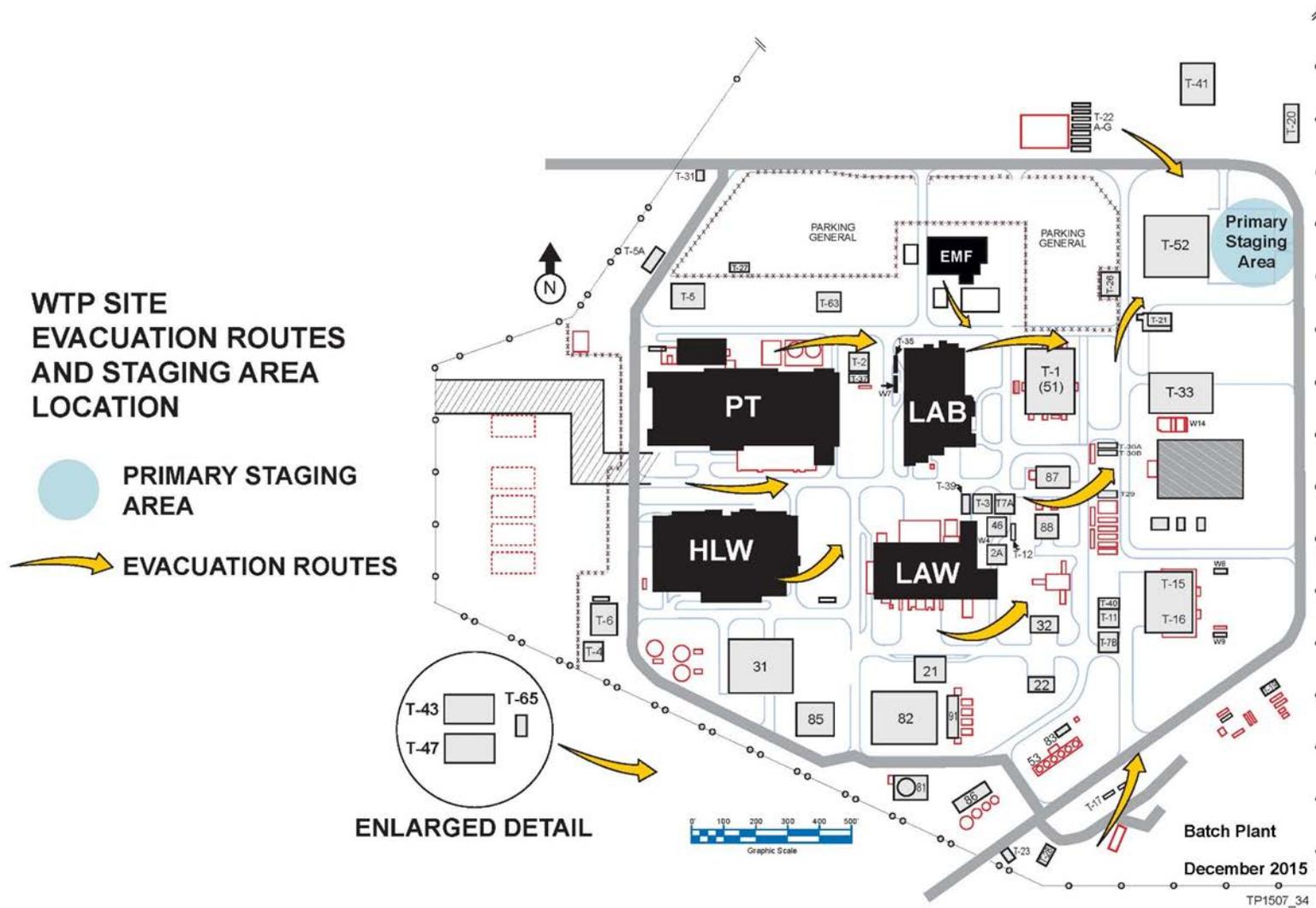


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Figure App-7-1 Hanford Site Evacuation Routes

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APPENDIX 7-2
WTP SITE EVACUATION ROUTES



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Figure App-7-2 WTP Site Evacuation Routes

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1 **Table 7-1 Hanford Facility Documents Containing Contingency Plan Requirements of**
2 **WAC 173-303-350(3)**

Requirement	<i>Hanford Emergency Management Plan (DOE/RL-94-02): Attachment 4 of the Hanford Facility Dangerous Waste Permit</i>	RPP-WTP Emergency Response Plan Chapter 7.0 Contingency Plan¹
<u>-350(3)(a)</u> – A description of the actions which facility personnel must take to comply with this section and WAC 173-303-360 .	X ² Section 1.3.4	X ² Sections 7.3 through 7.3.2 and 7.4.4 and 7.4.6 1 , 7.2 through 7.2.5 , and 7.3 ³ Sections 4.0, 8.2, 8.3, 8.4, 11.07.3.2.1.6
<u>-350(3)(b)</u> – A description of the actions which shall be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, arrives at the facility, and is not acceptable to the owner or operator, but cannot be transported pursuant to the requirements of WAC 173-303-370(5) , Manifest system, reasons for not accepting dangerous waste shipments.	X ² Section 1.3.4	X ^{2,4} Section 7.2.5 14.5.1
<u>-350(3)(c)</u> – A description of the arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services as required in WAC 173-303-340(4) .	X Sections 3.2.3, 3.3.1, 3.3.2, 3.4, 3.4.1.1, 3.4.1.2, 3.4.1.3, 3.7, and Table 3-1	
<u>-350(3)(d)</u> – A current list of names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator required under WAC 173-303-360(1) . Where more than one person is listed, one must be named as primary emergency coordinator, and others must be listed in the order in which they will assume responsibility as alternates. For new facilities only, this list may be provided to the department at the time of facility certification (as required by WAC 173-303-810 (14)(a)(i)), rather than as part of the permit application.		X ⁵ Section 3.1 , 13.07.2.1

Requirement	<i>Hanford Emergency Management Plan (DOE/RL-94-02): Attachment 4 of the Hanford Facility Dangerous Waste Permit</i>	RPP WTP Emergency Response Plan <u>Chapter 7.0 Contingency Plan</u> ¹
350 (3)(e) – A list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.	X Hanford Fire Department: Appendix <u>Section 11.2C</u>	X Section 9.07.5
350 (3)(f) – An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe the signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.	X ⁶ Figure 7-3 and Table 5-1	X ⁷ Section 1.57.4.4 through 7.4.4.2 <u>Section 7.7</u>

1 **An “X” indicates requirement applies.**

2 ¹Portions of the *Hanford Emergency Management Plan* not enforceable through Appendix A of that document are not made
3 enforceable by reference in ~~the RPP WTP Emergency Response Plan~~Chapter 7.0 Contingency Plan.

4 ²The *Hanford Emergency Management Plan* contains descriptions of actions relating to the Hanford Site Emergency
5 Preparedness System. No additional description of actions are required at the Hanford Site level. If other credible scenarios exist
6 or if emergency procedures at the WTP are different, the description of actions contained in the ~~RPP WTP Emergency Response~~
7 ~~Plan~~Chapter 7.0 Contingency Plan will be used during an event by a building emergency director.

8 ³Sections ~~7.1, 7.2 through 7.2.5, and 7.37.3.2, 7.4.4 and 7.4.6~~ of ~~the RPP WTP Emergency Response Plan~~Chapter 7.0
9 Contingency Plan are those sections subject to the Class 2 “Changes in emergency procedures (i.e., spill or release response
10 procedures)” described in WAC 173-303-830, Appendix I, Section B.6.a.

11 ⁴This requirement only applies to TSD units that receive shipment of dangerous or mixed waste defined as offsite shipments in
12 accordance with WAC 173-303.

13 ⁵Emergency Coordinator names and home telephone numbers are maintained separately from the contingency plan document, on
14 file in accordance with Hanford Facility Dangerous Waste Permit General Condition II.A.3, and is updated, at a minimum,
15 monthly.

16 ⁶The Hanford Facility (site-wide) signals are provided in this document. No unit/building signal information is required unless
17 unique devices are used at the unit/building.

18 ⁷An evacuation route for the WTP is provided. Evacuation routes for occupied buildings surrounding the WTP are provided
19 through information boards posted within buildings.