

**325 HAZARDOUS WASTE TREATMENT UNITS
ADDENDUM F
PREPARDNESS AND PREVENTION
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
05/2014	

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**ADDENDUM F
PREPAREDNESS AND PREVENTION**

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ADDENDUM F
PREPAREDNESS AND PREVENTION

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1 **F. PREPAREDNESS AND PREVENTION**

2 **F.1 Preparedness and Prevention Requirements**

3 The following section documents the preparedness and prevention measures taken at the 325 Hazardous
4 Waste Treatment Units (HWTU).

5 **F.1.1 Equipment Requirements**

6 The following sections describe the internal and external communications and emergency equipment in
7 use at the 325 HWTUs.

8 **F.1.1.1 Internal Communications**

9 Internal communication systems are used to provide immediate emergency instruction to personnel in the
10 325 HWTUs. Internal communications address general emergencies that might occur in the 300 Area and
11 the 325 Building, as well as specific emergencies that might occur. Personnel have access to these
12 internal communication devices whenever waste is handled.

13 Because of the nature of activities that occur in the 300 Area, the potential exists for emergencies outside
14 of the 325 HWTUs that could impact operations and personnel. Fire alarm signals are located in each
15 building throughout the 300 Area. The nearest emergency siren for 'area evacuation' and 'take cover' is
16 located atop the 318 Building and is audible in all parts of the 325 Building. Numerous criticality
17 howlers (horns) are located throughout the 325 Building and are audible in all parts of the building.

18 Internal communications that provide emergency instruction in the event of an emergency in the
19 325 HWTUs and in the 325 Building are listed below. Any alarm activation results in notification of the
20 Building Emergency Director either directly or via Pacific Northwest National Laboratory's (PNNL)
21 Operations Center (375-2400).

- 22 • Fire alarms: The fire alarms are used to provide notification for immediate evacuation of the
23 325 Building. The fire alarms are initiated on activation of the manual pull boxes, heat detectors,
24 and the sprinkler system. Fire alarm pull boxes are located as indicated in Addendum J, Section
25 13, Attachments 1-3.
- 26 • Differential pressure alarms (for the SAL and the glove boxes in Room 528 and 604A): Air
27 monitoring systems with alarms are located in the 325 HWTUs. These alarms sound when
28 normal hot cell ventilation is disrupted.
- 29 • Leak detection alarms (for the SAL): Alarms sound when liquid is detected behind the hot cells
30 in the SAL, in the space between the inner and outer shells of Tank TK-1 in the SAL, or when
31 liquid is detected in the secondary containment drip pan underneath the tank.
- 32 • PNNL Communicator Notification System (CNS): This system allows emergency messages to
33 be communicated quickly to staff via the PNNL phone system. When the phone is answered, a
34 recorded message will provide event information and inform staff of actions they are expected to
35 take.

36 The following non-emergency systems can also be used as appropriate and available:

- 37 • Building-wide public address (PA) system
- 38 • Intercom system (for the SAL)
- 39 • Telephones
- 40 • Hand-held radios provided by the BED

41 The PA system is used for building wide broadcasting of verbal emergency instructions to 325 Building
42 personnel. The telephone system is used to provide verbal emergency instructions to 325 HWTUs
43 personnel. The telephones also can be used to verbally transmit emergency information to personnel
44 outside of the 325 HWTUs and to request emergency services. A network of telephones is provided
45 throughout the 325 Building.

1 Locations of telephones within the 325 HWTUs are shown in Addendum J, Section 13, Attachments 1-3.
2 In addition to the telephone communication system, personnel have access to hand-held radios. The
3 radios are available from the Building Manager. All of the radios transmit at the same frequency and are
4 capable of summoning the PNNL Single Point Contact in case of an emergency.

5 Hazardous Waste Treatment Unit

6 There are two fire alarm pull boxes near the HWTU; one is located in the hall north of the entrance to
7 Room 528, and one is in the hallway just east of the south entrance to Room 520. Rooms 520 and 528 are
8 equipped with smoke detectors that, upon activation, initiate the fire alarm system and close dampers
9 between the two rooms and the corridor. Heat detectors are provided in the glove box in Room 528.
10 There are two fire alarm bells just outside the HWTU. These fire alarm bells are located north of the
11 entrance to Room 528 in the hall and east of the south entrance to Room 520 in the hall.

12 Additionally, a fire alarm strobe is installed in Room 528. The locations of the fire pull boxes are shown
13 in Addendum J, Section 13, Attachment 1.

14 The glove box in Room 528 is equipped with a differential air pressure alarm that monitors the glove box
15 for loss of negative pressure. If a loss occurs, a local alarm is sounded.

16 The PA system speakers are located in Rooms 520 and 528.

17 Shielded Analytical Laboratory

18 There are four fire alarm pull boxes provided in the SAL; three are in Room 201, and one is in Room 203.
19 Additionally, a fire alarm pull box is located just outside of Room 32. Heat detectors are provided in the
20 six large interconnected hot cells in the SAL. Several fire alarm bells are located throughout the
21 325 Building, including two fire alarm bells within the SAL (one each in Rooms 201 and 203). These
22 alarms are audible at all locations within the SAL.

23 The six interconnected hot cells in the SAL are equipped with a differential air pressure alarm that
24 monitors the hot cells for loss of negative pressure. If a loss occurs, a local alarm is sounded.

25 A cable leak detection system is installed in Room 200. The cable runs behind the back wall of all six hot
26 cells. Liquid escaping from the hot cells on the rear face (Room 200) would contact the cable and
27 automatically sound an alarm device in Room 201. This conductivity cable runs from the hot cells to the
28 secondary containment pan for the SAL tank in Room 32. Any release of the tank system contents to this
29 pan, which contacts the cable, initiates the cable leak detection alarm.

30 The SAL tank is equipped with a conductivity probe for leak detection within the annulus of this double-
31 shelled tank. The tank also is equipped with a high-liquid-level alarm. In the event of an interstitial leak
32 or overfilling, audible alarms sound at the SAL tank's main control panel in Room 201.

33 The PA system speakers are located in Rooms 200, 201, and 203. An intercommunication system
34 supplies two-way voice communications between Rooms 32, 200, 201, and 201a.

35 Cask Handling Area. Fire alarm pull boxes are located near each exit. The locations of the fire pull
36 boxes are shown in Addendum J, Section 13, Attachment 1.

37 The glove box in Room 604A is equipped with a differential air pressure alarm that monitors the glove
38 box for loss of negative pressure. If a loss occurs, a local alarm is sounded.

39 PA system speakers are located in Room 603.

40 Truck Lock. Fire alarm pull boxes are located near each exit. The locations of the fire pull boxes are
41 shown in Addendum J, Section 13, Attachment 1.

42 PA system speakers are located in Room 610.

1 3714 Pad. No unit-specific equipment is located at the pad. In the event of an emergency, staff will
2 utilize cell phones or enter the 325 Building to notify 375-2400 and the BED. The BED will then
3 determine the need for 325 Building protective actions and/or use of the ONC to alert others nearby.

4 **F.1.1.2 External Communications**

5 As mentioned in Section F.1.1.1, a fire alarm system and telephone network system are in place at the
6 325 HWTUs. Both systems can be used to summon emergency assistance. The fire alarm system
7 summons direct response from the 300 Area Fire Station. The telephone system can be used to access the
8 PNNL Single Point Contact directly by dialing 375-2400 or by dialing the emergency number 911. For
9 DOE-RL and other non-PNNL contractor personnel dialing 911 from onsite phones (373-0911 from cell
10 phones), the call goes directly to the Hanford Patrol, which calls the PNNL Single Point Contact.
11 Locations of fire alarm pull boxes and telephones are given in Addendum J, Section 13, Attachment 1.
12 Personnel on the premises have access to these external communication devices.

13 **F.1.1.3 Emergency Equipment**

14 Emergency equipment available for trained 325 HWTUs personnel includes portable fire extinguishers, a
15 fire suppression system, spill response equipment, and decontamination equipment.

16 With the exception of the hot cells, the entire building also is equipped with automatic sprinkler
17 protection consisting of Schedule 40 steel pipe per ASTM A120 (ASTM 1991) and 150-pound malleable
18 iron fittings per ANSI B16.3 (ANSI 1992). All components are UL-listed or FM-approved. The fire
19 sprinkler system was designed and installed in accordance with National Fire Protection Association
20 (NFPA) 13 for 'ordinary hazard' (NFPA 1996).

21 Absorbent pillows are capable of absorbing small quantities of spilled inorganic and organic liquids and
22 can be used to contain temporarily any spills of these materials. Their rated absorption capacities range
23 from 250 to 4,000 milliliters.

24 Mercury spill kits are capable of cleaning up to 25 milliliter of spilled mercury. Acid, caustic, and solvent
25 spill kits contain the materials necessary to clean up small spills of acids, bases, and organic solvents.
26 The absorbent kits in the SAL contain absorbent pads and other materials needed to temporarily contain
27 and clean up small chemical spills.

28 The appropriate spill kits can be applied, respectively, to small acid and base spills for neutralization
29 during cleanup efforts. The caustic neutralizer has similar capabilities for neutralizing small quantities of
30 spilled bases. If needed, the Hanford Fire Department provides additional emergency equipment.

31 Portable fire extinguishers (Class ABC, typically 4.5 Kg) and Class D) are located throughout the
32 building. Eyewashes and safety showers are also located in numerous areas in or near the units. The
33 locations of this equipment are noted in Addendum J, Section 13, Attachment 1-3.

34 Any contaminated water will be contained and cleaned up in accordance with the Addendum J,
35 Contingency Plan.

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37 Four 9.0-kilogram ABC portable fire extinguishers are located in the SAL. A portable fire extinguisher is
38 located in Room 201 and Rooms 200 and 203 each have one portable fire extinguisher. The fourth is
39 located just outside Room 32. Additionally, ABC dry chemical fire extinguishers are provided for each of
40 the six large interconnected hot cells in Room 201. These extinguishers are mounted on the outside of
41 each cell with the distribution system within the cells. The cell manipulator arms are used to direct the
42 discharge at a fire within the cell.

43 **F.1.1.4 Water for Fire Control**

44 The five water pipelines that service the 325 Building for fire protection supply adequate water volume
45 and pressure. Each of these lines is 15.2 centimeters in diameter.

1 Three fire hydrants are located in immediate proximity to the 325 Building; one is approximately
2 30.4 meters east of the southeast corner of the 325 Building; one is approximately 21.3 meters directly
3 north of the northwest corner of the 325 Building, and one is 33.5 meters west of the southwest corner of
4 the 325 Building. In addition, the 300 Area Fire Station is located within 0.4-kilometer of the building.

5 **F.1.2 Aisle Space Requirements**

6 Aisle spacing is sufficient to allow the movement of personnel and fire protection equipment in and
7 around the containers. This storage arrangement also meets the requirements of the National Fire
8 Protection Association and the Life Safety Code (NFPA 1994) for the protection of personnel and the
9 environment. A minimum 76.0-centimeter aisle space is maintained between rows of containers as
10 required by WAC 173-303-630(5)(c).

11 **F.2 Preventive Procedures, Structures, and Equipment**

12 The following sections describe preventive procedures, structures, and equipment.

13 **F.2.1 Unloading Operations**

14 Procedures have been developed to prevent hazards and to minimize the potential for breakage, punctures,
15 or the accidental opening of containers during the transfer of waste to the 325 HWTUs. All waste is
16 inspected before acceptance to ensure that the waste is in appropriate containers and that the containers
17 are in good condition (see Addendum B, Section B.2.1). Inspection of containers before acceptance
18 minimizes the potential for spills during unloading operations. The potential for spills during waste
19 handling also is minimized using appropriate container handling equipment; small waste items can be
20 unloaded by hand.

21 The volumes of dangerous waste entering and exiting the SAL are in relatively small containers
22 (Addendum C, Process Information) and, have secondary containment because of the packaging
23 requirements for the mixed waste materials. Any spill from such containers will be contained and not
24 released to the environment.

25 **F.2.2 Run-off**

26 The 325 HWTU, SAL, Cask Handling Area, and Truck Lock were designed to eliminate the likelihood of
27 waste migration via run-off. Because these units are enclosed completely (i.e., complete roof and no open
28 walls), run-off of precipitation is not a factor. The following paragraphs address additional design
29 features provided to eliminate the likelihood of run-off.

30 Hazardous Waste Treatment Unit. The concrete floor in Rooms 520 and 528 of the HWTU is provided
31 with a chemical resistant polypropylene coating. The coating covers the entire floor and extends
32 approximately 10 centimeters up on each perimeter wall in each room. The rooms also are provided with
33 floor drains and floor trenches at each entrance. The trenches and floor drains flow into the firewater
34 containment tank located in the basement of the 325 Building. The management of any mixed waste that
35 might accumulate in the tank because of a fire is discussed in Addendum C, Process Information.

36 Shielded Analytical Laboratory. The secondary containment in the SAL is divided into three systems
37 based on three designated areas of the SAL. These areas are the six large, interconnected hot cells, the
38 front face (Room 201), and the back face (Rooms 200, 202, and 203).

39 The secondary containment system for the six large, interconnected hot cells consists of the stainless steel
40 base of the cell. All waste requiring it is stored in secondary containment consisting of larger containers
41 (e.g. "paint cans" as noted in Addendum C, Section C.1.2.2) and/or pans/trays.

42 Typically, the use of the secondary containment system is enough to ensure that waste is safely contained.
43 If there were to be a larger scale failure of secondary containment, however, the cell base and trough
44 would collect any spilled waste within the cell. The trough drains by gravity through openings in the
45 bottom of the trough and stainless steel piping to the SAL tank.

1 Overpack containers and/or spill pallets/drip pans are used as the secondary containment system for the
2 back face of the SAL. The back face of the SAL is used to store mainly solid mixed waste in cans, which
3 are packed in the containers. Any liquids stored here are placed in compatible secondary containment
4 (see Addendum C, Section C.1.4.2). The secondary containment system for the front face of the SAL,
5 which is only used minimally to store mixed waste, consists of the same practice.

6 Cask Handling Area and Truck Lock. The floor is coated with an epoxy paint. Large waste containers
7 that contain bulk liquids are stored inside Department of Transportation (DOT) approved containers
8 providing secondary containment, or managed on spill containment pallets or drip pans. For compatible
9 wastes consolidated into lab-pack containers, the DOT approved outer container serves as secondary
10 containment – such outer containers will be stored directly on the floor. Containers holding waste not
11 subject to containment system requirements pursuant to WAC 173-303-630(7)(c) will be stored on the
12 floor.

13 3714 Pad. The 3714 Pad is made of concrete and is not coated. Unimproved adjacent soil areas may also
14 be used for storage. Waste stored at the 3714 Pad unit must therefore:

- 15 • Not contain free liquids
- 16 • Not exhibit the characteristic of ignitability or reactivity.
- 17 • Not designate as F020, F021, F022, F023, F026, or F027.

18 Containers stored outdoors will be kept closed and inspected weekly for signs of damage or potential
19 leakage. These precautions are adequate to prevent contamination from run-off from the 3714 Pad to
20 surrounding areas.

21 The secondary containment system for each unit is described in detail in Addendum C.

22 **F.2.3 Water Supplies**

23 The 325 Building is designed and operated to contain safely waste and to prevent any contamination of
24 water supplies. The secondary containment systems and operational limits described in Addendum C,
25 prevent releases to the environment and infiltration of waste that could contaminate groundwater. The
26 containment systems also prevent waste run-off that could contaminate surface water. The nearest water
27 supply is the 300 Area water intake located on the Columbia River, which is less than 0.8 kilometers from
28 the 325 HWTUs.

29 **F.2.4 Equipment and Power Failure**

30 The 325 Building is provided with an emergency power system that initiates upon failure of the primary
31 power system, thereby minimizing the likelihood of the release of dangerous waste or mixed waste during
32 a power failure or equipment failure. The 325 HWTUs have emergency lighting systems that operate
33 automatically during power failure incidents. For actions to be taken in the event of power failure to unit
34 systems or equipment, refer to Addendum J, Contingency Plan.

35 **F.2.5 Personal Protection Equipment**

36 Protective clothing and equipment are provided to employees during normal and emergency operations.
37 Protection levels for emergencies are determined either in consultation with an industrial hygienist, or
38 applicable control work permits or applicable operating procedure.

39 Per the identified work requirements, protective clothing and equipment is available for all staff working
40 at the SAL and the High-Level Radiochemistry Facility (including the Cask Handling Area and the Truck
41 Lock). Protective clothing and equipment available at the SAL and HLRF include, but are not limited to,
42 the following:

43 Shielded Analytical Laboratory and High-Level Radiochemistry Facility

- 44 • Safety glasses (Rooms 201, 603 and 610)
- 45 • Chemical protective suits (Rooms 200, 201 and 603) (part of absorbent kits)

- 1 • Goggles (Rooms 200, 201 and 603) (part of absorbent kits)
- 2 • Gloves (Rooms 200, 201 and 603) (part of absorbent kits)

3 Storage and treatment of dangerous waste can occur in Room 520, 524, and 528 of the HWTU. Personal
4 protective equipment is required for personnel working these areas of the HWTU. Protective clothing and
5 equipment available at the HWTU include, but are not limited to, the following:

6 Hazardous Waste Treatment Unit

- 7 • Laboratory coats (325 Building – Men’s/women’s change room)
- 8 • Shoe covers (325 Building – Men’s/women’s change room)
- 9 • Surgeon gloves (Rooms 520, 524 and 528)
- 10 • Chemical resistant gloves (Rooms 520, 524 and 528)
- 11 • Chemical resistant aprons (Rooms 520, 524 and 528)
- 12 • Face shields (Rooms 520, 524 and 528)
- 13 • Hard hats (Room 528)
- 14 • Safety glasses (Rooms 520, 524 and 528)

15 Protective equipment for the 3714 Pad is taken from the stock in the HWTU and/or HLRF.

16 The protective equipment storage areas are well stocked at all times. This equipment is replaced
17 periodically as it is used. The above inventory reflects each type of personal protective equipment that
18 typically is present at the 325 HWTUs. Additional personal protective equipment can be obtained, as
19 needed, from storage locations and sources outside of the 325 HWTUs. These areas include the personal
20 protective equipment storage area in the 700 hall men’s and women’s change rooms, Room 529, and the
21 men’s and women’s change rooms in the south end (first floor) of the 325 Building. This personal
22 protective equipment also can be obtained from onsite suppliers for the 325 HWTUs.

23 Respiratory protective equipment (air purifying, full-face/negative pressure respirators) that can be used
24 by personnel is managed by the 325 Building Manager and must be checked out. This equipment is
25 stored within the 325 Building. In addition, the 700 hall men’s and women’s change rooms normally
26 contain a 1-week supply of coveralls, laboratory coats, hoods, skull caps, cloth shoe covers, rubber shoe
27 covers, and gloves (canvas, surgeon’s, and canner’s).

28 **F.3 Prevention of Reaction of Ignitable, Reactive, and/or Incompatible Waste**

29 The following sections describe prevention of reaction of ignitable, reactive, and incompatible waste.

30 **F.3.1 Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste**

31 The 325 HWTUs are used to store a variety of ignitable waste. Precautions to prevent ignition of
32 ignitable waste involve separation of waste from sources of ignition and use of procedures to minimize
33 the potential for accidental ignition. There are no routine sources of ignition or open flame in the
34 325 HWTUs. Work with ignition or heat sources, if required, is limited and controlled in the following
35 ways by management and is performed in compliance with internal requirements for elimination of
36 ignition sources.

- 37 • Use of open flame equipment when working with flammable liquids is prohibited.
- 38 • Smoking is prohibited around flammable liquids (no smoking is allowed in the 325 Building).
- 39 • Electrical equipment used in flammable or explosive atmospheres is required to comply with the
40 National Electrical Code, NFPA 70.
- 41 • Use of equipment with automatic, adjustable temperature controls and high temperature limit
42 switches is required to prevent overheating.

- 1 • Placement of flammable liquids on hot surfaces is prohibited.
- 2 • All static electricity sources require grounding in areas where ignitable vapors might be present.
- 3 • Bonding of conductive containers is required when transferring flammable liquids.
- 4 • Use of nonsparking tools is required in flammable waste storage areas.

5 All maintenance or modifications in the 325 HWTUs that require work with ignition sources must receive
6 prior approval by a safety engineer. This approval is documented in the Hanford Facility Operating
7 Record, 325 HWTUs File. Smoking is not allowed in the 325 Building at any time, and the interior and
8 exterior of the building are clearly posted with 'No Smoking' signs. Waste storage areas are not heated by
9 any radiant heat source. All tools used to open ignitable waste containers are constructed of nonsparking
10 materials.

11 A fire safety engineer familiar with the Uniform Fire Code inspects ignitable waste storage areas
12 annually. This inspection is documented in the Hanford Facility Operating Record, 325 HWTUs File.
13 There also are storage restrictions at the 325 HWTUs for combustible waste as part of fire safety
14 requirements. The storage restrictions defined in Article 50 of the International Fire Code apply to
15 ignitable and reactive waste storage in the 325 Building.

16 **F.3.2 Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible** 17 **Waste**

18 As described in Section F.3.1, ignitable waste is managed to protect the waste from sources of ignition or
19 open flame. Ignitable waste containers are maintained in good condition and inspected weekly to
20 minimize the potential for releases that could result in fire. Containers of ignitable waste are protected
21 from high temperatures to prevent the potential for pressurization and buildup of ignitable vapors.
22 Containers of ignitable waste are stored in flammable material storage cabinets within waste storage areas
23 (Addendum C). Limitations on sizes of containers and amount of storage in cabinets are discussed in
24 Addendum C.

25 Small quantities of reactive waste are accepted for storage in the 325 HWTUs. Information on all
26 reactive and other waste accepted by the HWTU and SAL is documented on a waste tracking form, which
27 is reviewed carefully by personnel before accepting the waste. This form contains information on the
28 unique handling requirements of the waste. Any reactive waste requiring special handling and storage to
29 prevent unwanted reactions is appropriately packaged before arriving at the 325 HWTUs. This packaging
30 safeguards against reactions resulting from air or water contact, shock, and other causes. Reactive waste
31 is handled and stored in a manner commensurate with the specific reaction hazards posed by the waste.
32 This includes segregating the waste from other waste and reagent chemicals with which the waste
33 potentially could react.

34 Because a wide variety of waste can be accepted at the 325 HWTUs, the potential exists for storage of
35 incompatible waste. Mixing of incompatible waste is prevented through waste segregation and storage
36 procedures. Chemical waste stored in the 325 HWTUs is separated by compatibility and hazard class and
37 stored in separate storage areas. Separate storage shelves and cabinets are used within the storage areas
38 (Addendum C) to provide further waste segregation. Before accepting waste from generating units, waste
39 management staff determines the DOT hazard class for each waste (see Addendum B) so that waste can
40 be stored with compatible materials. The following general guidance is used to segregate and separate
41 chemicals:

- 42 • Store acids on a low storage shelf or in acid storage cabinets.
- 43 • Separate acids from bases and alkaline metals such as potassium or sodium.
- 44 • Separate oxidizing acids from organic acids and flammable or combustible materials.
- 45 • Store bases away from acids and store solutions of inorganic hydroxides in polyethylene
46 containers.

- 1 • Store oxidizers away from flammable or combustible materials and reducing agents such as zinc,
2 alkaline metals, and formic acid.
- 3 • Store peroxide forming chemicals in air-tight containers in a dark, cool, and dry place (inside of
4 cabinets).
- 5 • Store flammable materials in approved containers or cabinets.
- 6 • Separate flammable materials from oxidizing acids and oxidizers and keep them away from
7 sources of ignition.
- 8 • Clearly, mark cabinets to identify the hazards associated with their contents.

9 The potential for waste ignition or reaction at the 325 HWTUs also is minimized through storage
10 restrictions on hazardous materials quantities. The storage restrictions defined in the International Fire
11 Code, Article 50 for Class B Occupancy apply to ignitable and reactive waste storage in the 325 HWTUs.
12 The weekly inspection of the 325 HWTUs includes checking to see if waste inventories are below these
13 limits. These inspections are documented in the Hanford Facility Operating Record, 325 HWTUs File.

14 In the unlikely event the fire sprinkler system in Rooms 520, 524, and 528 is activated, the resulting run-
15 off will be contained in the firewater collection tank located in the basement of the 325 Building. This
16 tank is described in detail in Addendum C.

17 **F.3.3 Management of Incompatible Waste in Tank Systems**

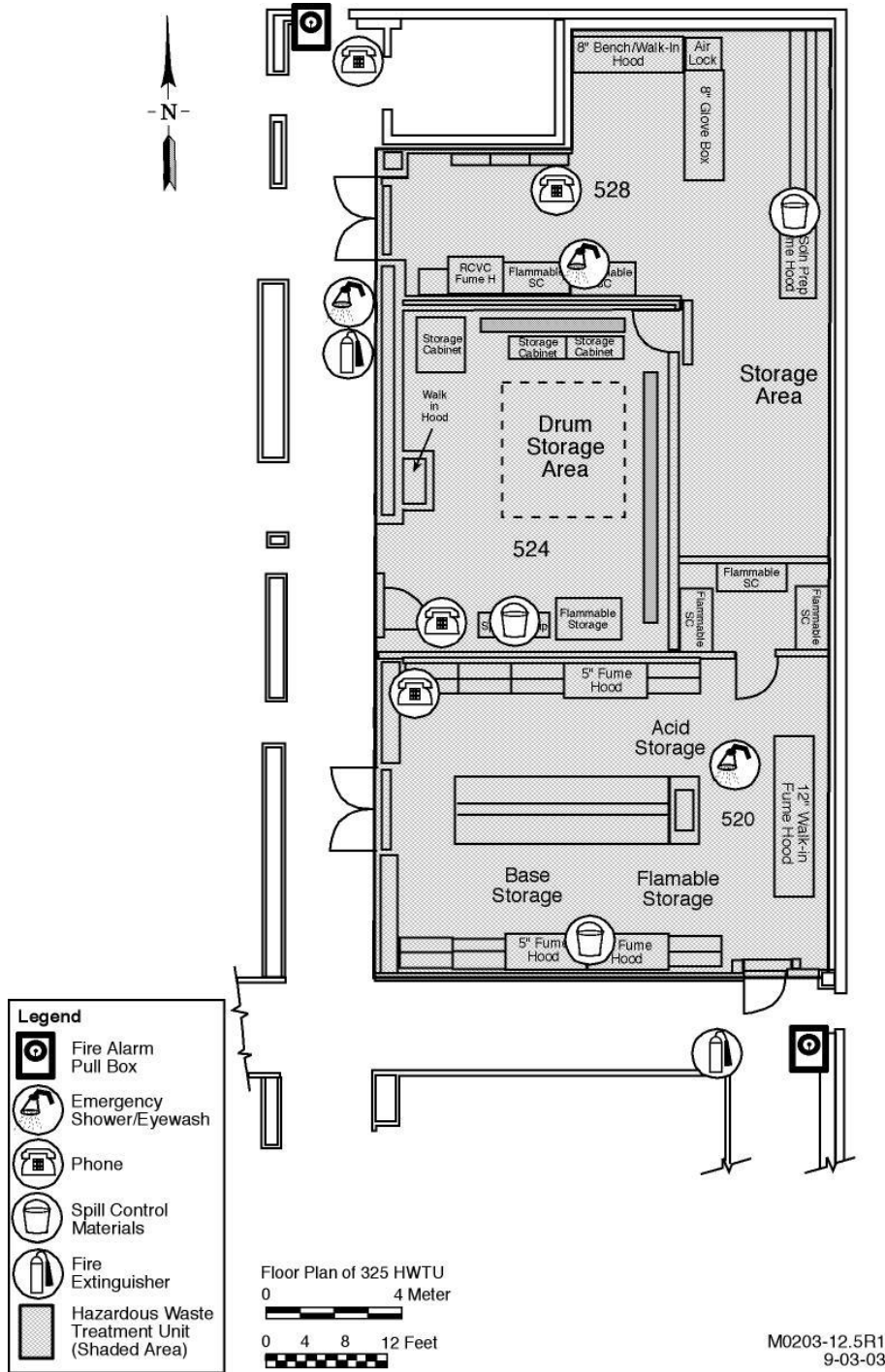
18 Waste discharged to the SAL tank from the hot cells typically consists of the same type of waste managed
19 in the hot cells. Sampling and analysis would be used if sufficient process knowledge were not available
20 to characterize the waste for waste acceptance criteria purposes. The waste is treated in the SAL tank, if
21 necessary.

22 **F.3.4 Management of Incompatible Waste in Containers or Tanks**

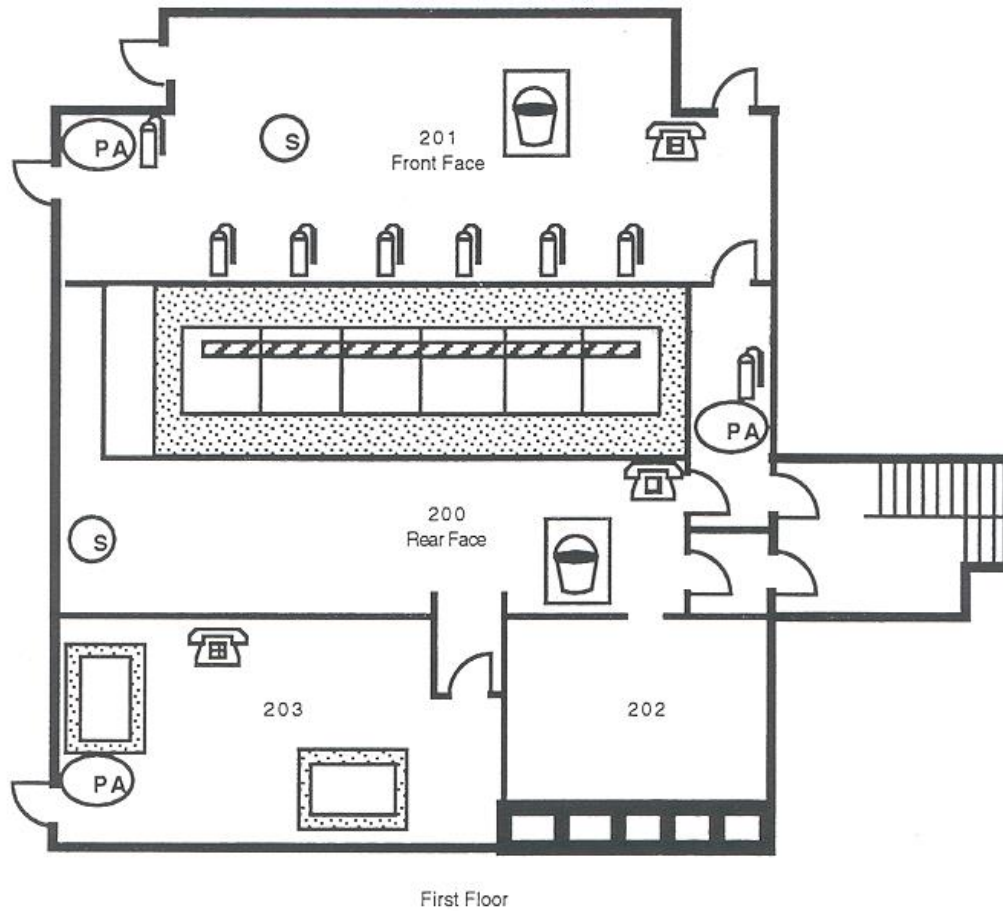
23 Incompatible waste and other materials are handled as described in Section F.3.2 and in accordance with
24 established operating methods. Storage restrictions that ensure proper separation of containers of
25 incompatible material in the 325 HWTUs are described in Section F.3.2.

26 Ignitable or reactive waste is not placed in the tank systems unless the waste has been treated, rendered, or
27 mixed so that the waste no longer meets the definition of ignitable or reactive waste under
28 WAC 173-303-090 (Addendum B).

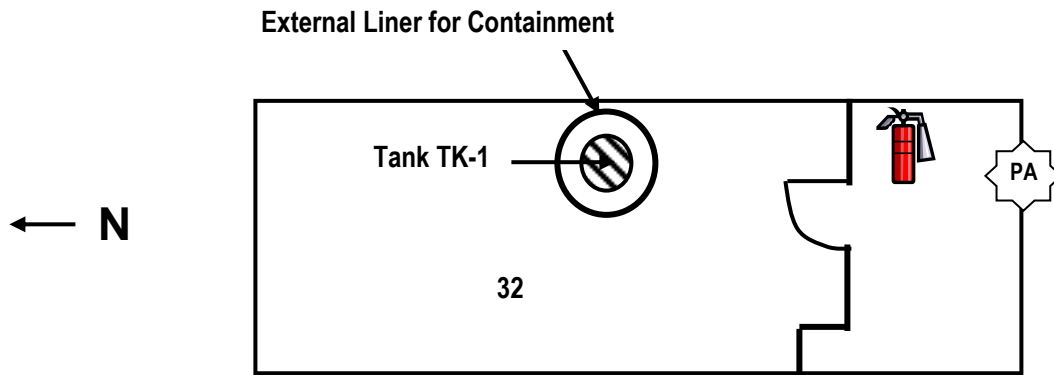
29 Drawings of the 325 HWTUs are available to ensure that ignitable and/or reactive waste is located at least
30 15 meters from the unit's property line.



1 Figure F.1. Locations of Emergency Equipment at the Hazardous Waste Treatment Units



1 **Figure F.2. Locations of Emergency Equipment at the Shielded Analytical Laboratory**
2 **(First Floor)**



Fire Alarm Pull Box



Fire Extinguisher

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Figure F.3. Locations of Emergency Equipment at the Shielded Analytical Laboratory (Basement)

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