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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 HWTUs.

4 **F.1.1 Equipment Requirements**

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

7 **F.1.1.1 Internal Communications**

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

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

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

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

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

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

39 The PA system is used for building wide broadcasting of verbal emergency instructions to 325 Building
40 personnel. The telephone system is used to provide verbal emergency instructions to 325 HWTUs
41 personnel. The telephones also can be used to verbally transmit emergency information to personnel
42 outside of the 325 HWTUs and to request emergency services. A network of telephones is provided
43 throughout the 325 Building. Locations of telephones within the 325 HWTUs are shown in Addendum J,
44 Section 13, Attachments 1-3. In addition to the telephone communication system, personnel have access

1 to hand-held radios. The radios are available from the Building Manager. All of the radios transmit at the
2 same frequency and are capable of summoning the PNNL Single Point Contact in case of an emergency.

3 Hazardous Waste Treatment Unit

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

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

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

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

15 Shielded Analytical Laboratory

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

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

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

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

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

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

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

37 PA system speakers are located in Room 603.

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

40 PA system speakers are located in Room 610.

41 3714 Pad. No unit-specific equipment is located at the pad. In the event of an emergency, staff will
42 utilize cell phones or enter the 325 Building to notify 375-2400 and the BED. The BED will then
43 determine the need for 325 Building protective actions and/or use of the ONC to alert others nearby.

1 **F.1.1.2 External Communications**

2 As mentioned in Section F.1.1.1, a fire alarm system and telephone network system are in place at the
3 325 HWTUs. Both systems can be used to summon emergency assistance. The fire alarm system
4 summons direct response from the 300 Area Fire Station. The telephone system can be used to access the
5 PNNL Single Point Contact directly by dialing 375-2400 or by dialing the emergency number 911. For
6 DOE-RL and other non-PNNL contractor personnel dialing 911 from onsite phones (373-0911 from cell
7 phones), the call goes directly to the Hanford Patrol, which calls the PNNL Single Point Contact.
8 Locations of fire alarm pull boxes and telephones are given in Addendum J, Section 13, Attachment 1.
9 Personnel on the premises have access to these external communication devices.

10 **F.1.1.3 Emergency Equipment**

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

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

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

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

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

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

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

33 **Shielded Analytical Laboratory**

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

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

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

43 Three fire hydrants are located in immediate proximity to the 325 Building; one is approximately
44 30.4 meters east of the southeast corner of the 325 Building; one is approximately 21.3 meters directly

1 north of the northwest corner of the 325 Building, and one is 33.5 meters west of the southwest corner of
2 the 325 Building. In addition, the 300 Area Fire Station is located within 0.4-kilometer of the building.

3 **F.1.2 Aisle Space Requirements**

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

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

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

11 **F.2.1 Unloading Operations**

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

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

23 **F.2.2 Run-off**

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

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

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

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

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

44 Overpack containers and/or spill pallets/drip pans are used as the secondary containment system for the
45 back face of the SAL. The back face of the SAL is used to store mainly solid mixed waste in cans, which

1 are packed in the containers. Any liquids stored here are placed in compatible secondary containment
2 (see Addendum C, Section C.1.4.2). The secondary containment system for the front face of the SAL,
3 which is only used minimally to store mixed waste, consists of the same practice.

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

10 3714 Pad. The 3714 Pad is made of concrete and is not coated. Unimproved adjacent soil areas may also
11 be used for storage. Waste stored at the 3714 Pad unit must therefore:

- 12 • Not contain free liquids,
- 13 • Not exhibit the characteristic of ignitability or reactivity, and
- 14 • Not designate as F020, F021, F022, F023, F026, or F027.

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

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

19 **F.2.3 Water Supplies**

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

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

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

32 **F.2.5 Personal Protection Equipment**

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

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

40 Shielded Analytical Laboratory and High-Level Radiochemistry Facility

- 41 • Safety glasses (Rooms 201, 603 and 610)
- 42 • Chemical protective suits (Rooms 200, 201 and 603) (part of absorbent kits)
- 43 • Goggles (Rooms 200, 201 and 603) (part of absorbent kits)
- 44 • Gloves (Rooms 200, 201 and 603) (part of absorbent kits).

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

4 Hazardous Waste Treatment Unit

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

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

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

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

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

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

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

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

- 35 • Use of open flame equipment when working with flammable liquids is prohibited.
- 36 • Smoking is prohibited around flammable liquids (no smoking is allowed in the 325 Building).
- 37 • Electrical equipment used in flammable or explosive atmospheres is required to comply with the
38 National Electrical Code, NFPA 70.
- 39 • Use of equipment with automatic, adjustable temperature controls and high temperature limit
40 switches is required to prevent overheating.
- 41 • Placement of flammable liquids on hot surfaces is prohibited.
- 42 • All static electricity sources require grounding in areas where ignitable vapors might be present.
- 43 • Bonding of conductive containers is required when transferring flammable liquids.
- 44 • Use of nonsparking tools is required in flammable waste storage areas.

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

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

12 **F.3.2 Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible** 13 **Waste**

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

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

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

- 38 • Store acids on a low storage shelf or in acid storage cabinets
- 39 • Separate acids from bases and alkaline metals such as potassium or sodium
- 40 • Separate oxidizing acids from organic acids and flammable or combustible materials
- 41 • Store bases away from acids and store solutions of inorganic hydroxides in polyethylene
42 containers
- 43 • Store oxidizers away from flammable or combustible materials and reducing agents such as zinc,
44 alkaline metals, and formic acid
- 45 • Store peroxide forming chemicals in air-tight containers in a dark, cool, and dry place (inside of
46 cabinets)
- 47 • Store flammable materials in approved containers or cabinets

- 1 • Separate flammable materials from oxidizing acids and oxidizers and keep them away from
- 2 sources of ignition
- 3 • Clearly, mark cabinets to identify the hazards associated with their contents.

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

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

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

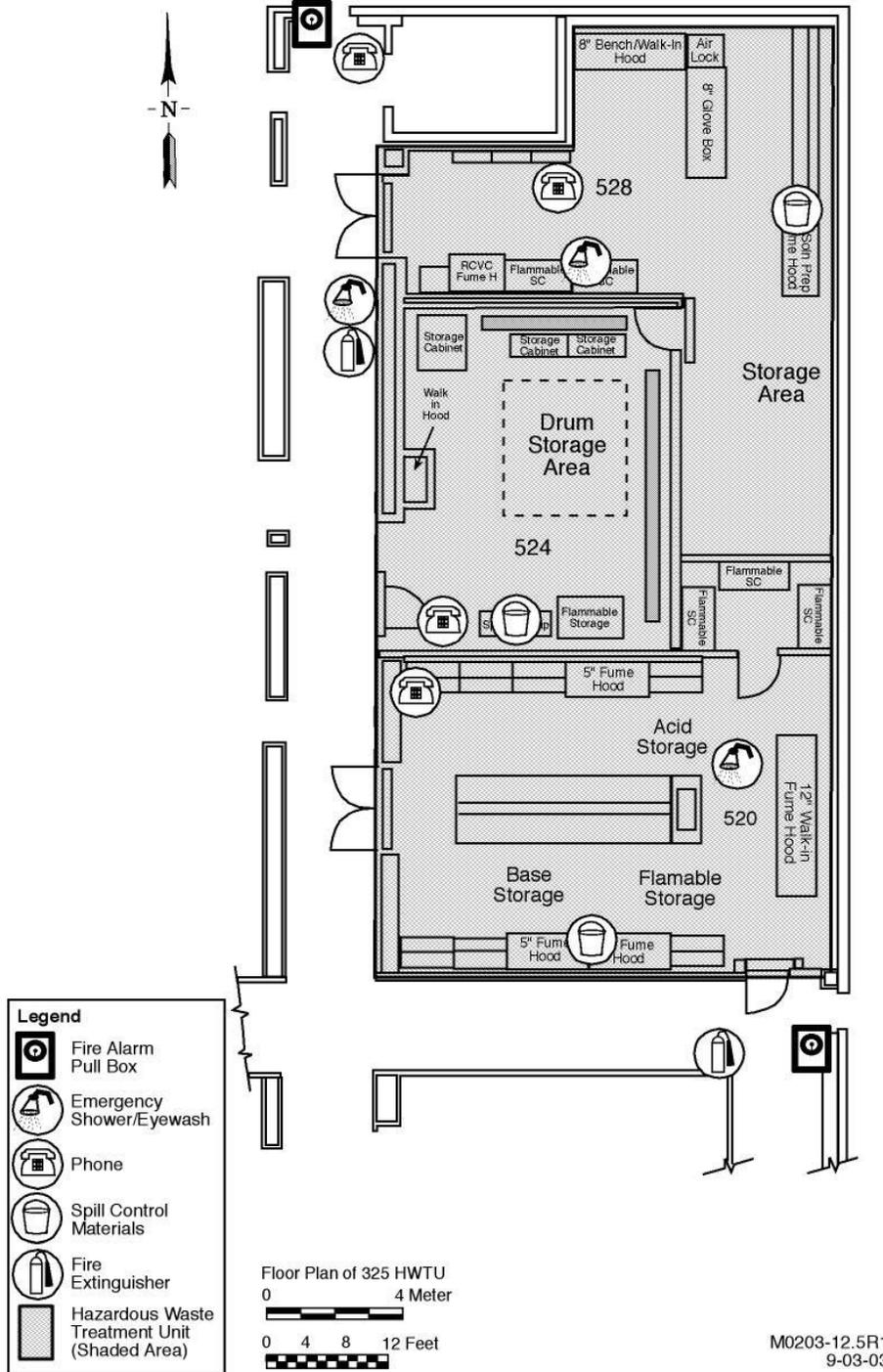
13 Waste discharged to the SAL tank from the hot cells typically consists of the same type of waste managed
14 in the hot cells. Sampling and analysis would be used if sufficient process knowledge were not available
15 to characterize the waste for waste acceptance criteria purposes. The waste is treated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

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

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

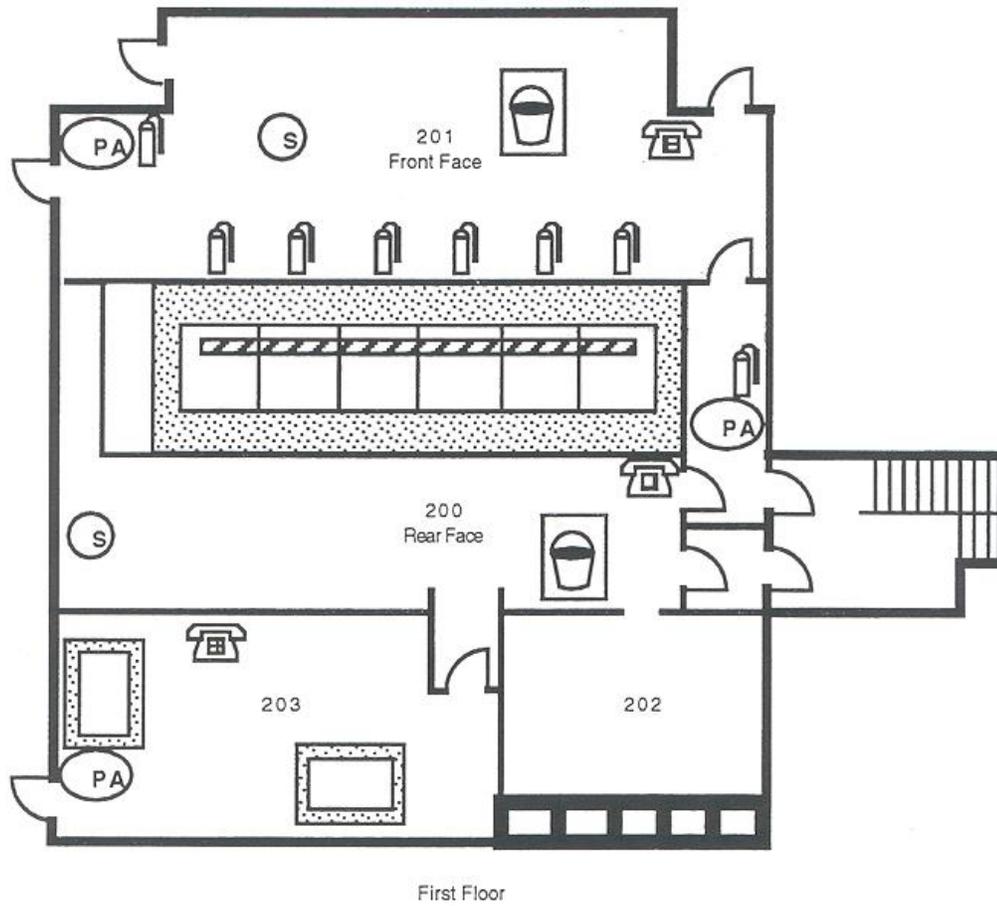
21 Ignitable or reactive waste is not placed in the tank systems unless the waste has been treated, rendered, or
22 mixed so that the waste no longer meets the definition of ignitable or reactive waste under
23 [WAC 173-303-090](#) (Addendum B).

24 Drawings of the 325 HWTUs are available to ensure that ignitable and/or reactive waste is located at least
25 15 meters from the unit's property line.



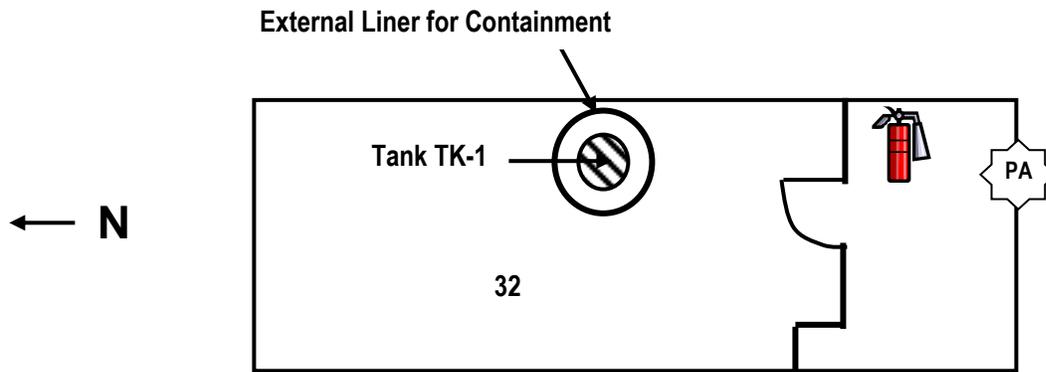
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Figure F.1. Locations of Emergency Equipment at the Hazardous Waste Treatment Units



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Figure F.2. Locations of Emergency Equipment at the Shielded Analytical Laboratory (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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