RCRA PART B PERMIT

FOR THE

IDAHO NATIONAL LABORATORY

Volume 22
Idaho Nuclear Technology and Engineering Center

Calcined Solids Storage Facility

Attachment 7 - Section G
Preparedness, Prevention, and Contingency Plan

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G-1 General Information 40 CFR 264.51 Purpose and implementation of Contingency Plan. (a) Each owner or operator must have a Contingency Plan for his facility. The Contingency Plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.	**G-1 General Information** The Idaho Nuclear Technology and Engineering Center (INTEC) is designed, constructed, and operated to exclude or isolate hazardous incidents such as fires, explosions and/or unplanned sudden or nonsudden releases of mixed or hazardous waste or hazardous waste constituents to air, soil, or surface water. The INTEC location, operation, site plan and descriptions/information are presented in detail in Section B, Facility Description. This Resource Conservation and Recovery Act (RCRA) contingency plan matrix discusses emergency response at the INTEC. This matrix addresses emergency actions to protect human health, the environment, and INTEC facilities and equipment in an event originating from or affecting the permitted units, comprised of the Calcined Solids Storage Facility (CSSF). The Idaho National Laboratory (INL) Emergency Plan/RCRA Contingency Plan (INL EP/RCRA CP) is the implementing document for emergency response across the INL and is written to comply with requirements that are in addition to those of the Idaho Hazardous Waste Management Act (HWMA)/RCRA. This matrix provides the HWMA/RCRA contingency plan requirements that are being implemented through the INL EP/RCRA CP.
(b) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.	The contingency plan outlines the response to emergencies that occur in personnel accessible areas. However, emergencies that involve the inside of the CSSF tanks and vaults will be monitored from outside of the vaults. Due to high radiation levels (between 180 and 380 R/hr fields in CSSF 1 that should be comparable with all the vaults except CSSF 7) the vaults will not be entered until the calcine is removed at closure.
40 CFR 264.53 Copies of Contingency Plan A copy of the Contingency Plan and all revisions to the Contingency Plan must be:	The contingency plan is designed to provide the proper preparation and necessary response planning to prevent or minimize hazards to human health and the environment from fires, explosions, or any release of hazardous waste or hazardous waste constituents. The provisions of the contingency plan are carried out immediately whenever a fire, explosion, spill, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment occurs. Facility personnel trained according to the provisions of this plan manage minor incidents that can be controlled with on-Site resources and do not threaten human health or the environment. Such responses are not considered activation of the contingency plan.
(a) Maintained at the facility; and	The contingency plan, with all subsequent revisions, will be maintained with the RCRA permit at the facility at various locations, including the Plant Shift Supervisor's office.
(b) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide	Copies of the contingency plan are maintained on-Site, with copies provided to the following through Memoranda of Understanding (MOUs) and Memoranda of Agreement (MOAs) with the DOE Idaho Operations Office (DOE-ID):

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emergency services.	• Bingham, Bonneville, Butte, Clark, and Jefferson County Sheriffs' Departments and City of Idaho Falls Police Department • Rexburg City/Madison County, City of Ammon, City of Chubbuck, and City of Idaho Falls Fire Departments, South Custer Rural, Shelley/Firth Fire Districts, and Central Fire District and Teton County Fire Protection District • Portneuf Medical Center, Eastern Idaho Regional Medical Center, and Bingham County Memorial Hospital • Bingham County Emergency Management Services, Bonneville County Emergency Management Services, Butte County Emergency Services, Clark County Civil Defense, and Jefferson County Emergency Management • Shoshone-Bannock Tribes • Bureau of Land Management, Department of Interior, and Department of Agriculture • State of Idaho and Idaho Transportation Department
40 CFR 264.54 Amendment of the Contingency Plan. The Contingency Plan must be reviewed, and immediately amended, if necessary, whenever:	The contingency plan is reviewed and immediately amended, if necessary, whenever:
(a) The facility permit is revised;	• The HWMA/RCRA permit is modified.
(b) The plan fails in an emergency;	• The contingency plan fails in an emergency.
(c) The facility changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;	• It is determined/known that changes in the permitted units' design, construction, operation, maintenance, or other circumstances have taken place in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency.
(d) The list of emergency coordinators changes; or	• The list of INTEC emergency action managers (EAMs) changes (refer to Section G-2, Emergency Coordinators).
(e) The list of emergency equipment changes.	• The list of emergency equipment changes (refer to Section G-5, Emergency Equipment).
G-2 Emergency Coordinators **40 CFR 264.52(d) and 264.55** 40 CFR 264.52(d) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see 264.55), and this list must be kept up to date. Where	**G-2 Emergency Coordinators** The Emergency Action Managers (EAMs), listed below, are the emergency coordinators (ECs) for purposes of HWMA/RCRA compliance with respect to the contingency plan. Due to the shift-work structure and remoteness of the INTEC, it is not possible or practical for one individual to assume "primary" responsibilities.

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more than one person is listed, one must be named as primary emergency coordinator and the others must be listed in the order in which they will assume responsibility as alternates. For new facilities, this information must be supplied to the Regional Administrator at the time of certification, rather than the time of permit application.	The responsibility is best assigned through "redundant primary" EAMs, without alternates. Names, home addresses, and home phone numbers of the CWI EAMs are as follows: • Arrowood, Mark S. – 135 Robison Ave, Ammon, ID 83406 – 237-9087 or 406-3510 (home/cell); 533-3600 (work); 5627 (pager) • Blackner, Butch T. – 1011 James Street, Blackfoot, ID 83221 – 604-2506 (home); 526-3100 (work); 2096 or 0032 (pager) • Casteel, Michael S. – 605 Terrace Dr., Idaho Falls, ID 83402 – 521-5620 (home/cell); 526-3100 (work); 2096 (pager) • Newsome, Eugene C. – 281 E. 400 N., Blackfoot, ID 83221 – 785-1658 or 569-0956 (home/cell); 526-3100 (work); 2096 (pager) • Vaden, Randall R. – 515 Vaden Street, Mackay, ID 83251 – 588-3069 (home); 526-3100 (work); 2096 (pager) The business address (P.O. Box 2010, Idaho Falls, Idaho 83403-2010) is the same for all the CWI EAMs. The EAM list above is subject to change due to changes in personnel. The current list of EAMs is maintained in Appendix I of the INTEC Addendum to the ICP EP/RCRA CP.
40 CFR 264.55 Emergency Coordinator. At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's Contingency Plan, all operations and activities at the facility, the location and characteristics of the waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the Contingency Plan.	An INTEC EAM is at the INTEC at all times or on call. All of the INTEC EAMs are thoroughly familiar with all aspects of the contingency plan, all INTEC operations/activities (including these units), the location and characteristics of waste handled, volumes of waste, the location of all records within the INTEC and layout. All of the INTEC EAMs have the authority to commit the necessary resources to carry out the contingency plan. The INTEC EAMs are responsible for: • Ensuring that the emergency procedures are implemented and completed when responding to any incident involving the units permitted herein to mitigate or eliminate any immediate or potential hazard to personnel, the public, or the environment • Serving as the primary lead in coordinating with the INL Fire Department, INL Emergency Operations Center (EOC), and the INL Warning Communications Center (WCC) for the proper support from these organizations • Delegating authority to the INTEC Emergency Response Organization (ERO), as well as the On-Scene Commander (OSC), as appropriate. If an incident overlaps more than one shift, the active INTEC EAM shall maintain the command until responsibility is officially passed to the incoming INTEC EAM.

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G-3 Implementation 40 CFR 264.52(a) and 264.56(d)	**G-3 Implementation**
40 CFR 264.52(a) The Contingency Plan must describe the actions facility personnel must take to comply with 264.51 and 264.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.	The provisions of the contingency plan will be carried out immediately whenever there is a fire, explosion, or unplanned release of hazardous or mixed waste or hazardous waste constituents that threaten human health or the environment (activation of the contingency plan). Such an occurrence (incident) requires classification, as described below, to aid in expediting the appropriate emergency response.
40 CFR 264.51 *[The text of 40 CFR 264.51 is located in Section G-1, General Information.]*	Classification of an occurrence is done in accordance with DOE Orders. Through these orders, the DOE has established definitions for occurrence categories and emergency classes. Occurrences are categorized by severity, in order of increasing severity.
40 CFR 264.56 Emergency procedures. (a) *[The text of 40 CFR 264.56(a) is located in Section G-4a, Notification.]* (b) *[The text of 40 CFR 264.56(b) is located in Section G-4b, Identification of Hazardous Materials.]* (c) *[The text of 40 CFR 264.56(c) is located in Section G-4c, Assessment.]* *(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:* (1) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and	An operational emergency at the INTEC may require response from the INTEC ERO, or support agencies, because the occurrence involves either an actual or potential fire or explosion involving mixed waste, or an uncontrolled release or threat of an uncontrolled release of mixed waste or constituents. Operational emergencies are defined as an unplanned significant event or condition that requires time-urgent response from outside the immediate/affected area of the incident. An operational emergency shall be declared when events have seriously degraded, or have the potential to degrade, the safety or security of the INTEC. Operational emergencies are classified by severity for specifying the appropriate emergency response actions and notifications, which are commensurate with the degree of hazard for the emergency. Classification aids in the rapid communication of critical information and the initiation of appropriate time-urgent emergency response action. The three classes of operational emergencies, in order of increasing severity, are: **ALERT.** Alert shall be declared when events are predicted, are in progress, or have occurred that result in either: • An actual or potential substantial degradation in the level of control over hazardous materials (radiological and nonradiological) OR

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(2) He must immediately notify either the government official designated as the on-scene coordinator for that geographical area, (in the applicable regional contingency plan under part 1510 of this title) or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:	• An actual or potential substantial degradation in the level of safety or security of a facility or process that could, with further degradation, produce a site area emergency or a general emergency. If an actual or potential substantial degradation in the level of control over hazardous materials (radiological and nonradiological) occurs, the radiation dose from any release to the environment of radioactive material or a concentration in air of other hazardous material is expected to exceed either: • The applicable Protective Action Guide (PAG) or Emergency Response Planning Guideline (ERPG) at or beyond 30 m from the point of release to the environment
(i) Name and telephone number of reporter;	OR
(ii) Name and address of facility;	• Ten percent of the applicable PAG or 10% of the ERPG-2 (TEEL-2) value at 100 m
(iii) Time and type of incident (e.g., release, fire);	AND
(iv) Name and quantity of material(s) involved, to the extent known;	It is not expected that the applicable PAG or ERPG will be exceeded at or beyond the facility boundary or exclusion zone boundary.
(v) The extent of injuries, if any; and	
(vi) The possible hazards to human health, or the environment, outside the facility.	**SITE AREA EMERGENCY.** A site area emergency shall be declared when events are predicted, are in progress, or have occurred that result in either: • An actual or potential major failure of functions necessary for the protection of worker or the public OR • An actual or potential major degradation in the level of safety or security of a facility or process that could, with further degradation, produce a general emergency AND The radiation dose from any release of radioactive material or concentration in air from any release of other hazardous material is not expected to exceed the applicable PAG or ERPG at or beyond the site boundary. **GENERAL EMERGENCY.** A general site emergency shall be declared when events are predicted, are in progress or have occurred that result in either:

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	• Catastrophic reduction of facility safety or security systems with a potential for the release of large quantities of hazardous materials (radiological or nonradiological) to the environment actually occurring or imminent OR • The radiation dose from any release of radioactive material or a concentration in air from any release of other hazardous material is expected to exceed the applicable PAG or ERPG at or beyond the site boundary. The following is a list of personnel and organizations with a general description of their actions/responsibilities in response to fires, explosions, or unplanned sudden or nonsudden releases of hazardous waste or hazardous waste constituents to air, soil, or surface water: • Operations Personnel – Ensure personal safety, inform plant shift supervisor of situation/emergency (type of emergency, location, size, material(s) involved, status of other waste materials, equipment, etc.), and, if possible and properly trained, stop waste movements, secure area, and initiate efforts to stabilize the situation • Plant Shift Supervisor/EAM – Sound appropriate alarms, gather information/documents, responsible for conducting emergency response within the INTEC and the immediate implementation of the contingency plan • INL Fire Department – Primary responders to all fires and hazardous incidents, providing fire fighting, hazardous materials (HAZMAT) response, and emergency medical services • INTEC Emergency Response Organization – Trained facility personnel including the INTEC EAM • On-Scene Commander (OSC) – With the assistance of the INTEC EAM, assesses situation from the standpoint of tactical deployment of the INL Fire Department and overall effort to address the situation/emergency • INL Emergency Operations Center (EOC) – Provides support to the INTEC ERO, including dose assessment, off-Site notifications, public information, and other technical/tactical functions that aid in the assessment, control, and return to operations • Emergency Director (ED) – Manages the INL EOC and has jurisdiction over all INL operational emergency response activities • INL Warning Communications Center (WCC) – Serves as the central organization for coordinating efforts between INL EROs and off-Site agencies/support services • Industrial Hygienist – Assists in the assessment of hazards/risk (such as monitor areas with known/suspected high concentrations of hazardous vapors/gases) and appropriate response actions • Waste Technical Specialist – Assists in the identification of waste/materials, proper adsorbent/absorbent, and post-emergency collection, storage, treatment and/or disposal • Central Facilities Area (CFA) EAM – Assists INTEC EAM where required/requested to assess possible effects beyond the perimeter of the

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	INTEC, in which case he would assume a responsibility role. Specific actions which further address 40 CFR 264.52(a) and 264.56(d) are described in Section G-4, Emergency Response Procedures.
G-4 Emergency Response Procedures **G-4a Notification 40 CFR 264.56(a)** 40 CFR 264.56(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately: (1) Activate internal facility alarms or communications systems, where applicable, to notify all facility personnel; and	**G-4 Emergency Response Procedures** **G-4a Notification** In the event of a fire or explosion, fire detection equipment (smoke detectors, heat detectors, water flow alarms, or water sprinkler alarms) will automatically notify the Fire Alarm Center (FAC), which will involve the INL Fire Department and personnel located within the building where the alarm was activated. In any event (fire, explosion or release), the person involved/discovering can activate the nearest manual alarms and use communication devices (such as cell phones, hand-held two way radios) to summon assistance, and make notifications to the plant shift supervisor/EAM and/or the INL Fire Department. The INTEC EAM will ensure that all facility personnel are being, or have been, notified of the imminent or actual emergency situation, including a confirmation call to the WCC, to verify the INL Fire Department is responding. All notifications shall include the following information, as appropriate: • Name and telephone number of the caller • Location of the incident and the caller • Time and type of incident • Severity of the incident • Description of the incident • Cause of the incident, if known • Assistance needed to deal with or control the incident • Name and address of the facility • Name and quantity of material(s) involved, to the extent known • Extent of injuries, if any • Possible hazards to human health, or the environment, outside the facility. Once the EAM is notified of a fire, explosion, or uncontrolled release at the INTEC (by either an eyewitness or an alarm), the EAM will activate the contingency plan. If necessary, the EAM will also request assistance from the INL Fire Department. The INL Fire Department is contacted by dialing 777 or 526-7777. In case of fire, the INL Fire Department will respond to the alarms. The nature of any incident potentially involving hazardous waste or hazardous materials will undergo assessment, as described in Section G-4c. The contingency plan will not be activated if the incident is considered minor and does not constitute an emergency requiring notification of regulatory agencies (such as a fire, explosion, or natural occurrence that does not involve or threaten hazardous or mixed wastes; a release that does not constitute a potential threat to human health or the environment; a spill contained in secondary containment; and/or a spill or release that is less than a reportable quantity specified in 40 CFR 302.4). Reportable quantities under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Emergency Planning and Community Right-to-Know Act (EPCRA) apply to the release of any substance listed in

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	Table 302.4 of 40 CFR Part 302. The INTEC maintains its own emergency response capabilities through the ERO. There are adequate supplies, equipment, and trained personnel available at the INTEC to mitigate expected emergencies. The INL Fire Department and security personnel operate separately, but their activities are coordinated through the EAM. DOE-ID maintains coordination and mutual aid agreements with local outside agencies who make additional emergency personnel and equipment available if outside assistance is required. In addition, as a DOE facility, the staff at the INTEC can call upon the resources of the INL EOC for additional assistance, including, but not limited to, MOU agreements with local agencies (such as outside medical facilities or state and local law enforcement agencies) and other federal agencies. (See Section G-1.) **Communication of Emergency Conditions to Facility Employees** The procedures for notifying facility personnel depend on the type and severity of emergency and may include the following: • Local Fire Alarms – In the event of a fire, these may be activated automatically or manually. • Evacuation – The evacuation signal is an alternating, siren tone, manually activated by the contract security force, or the INTEC Emergency Control Center, at the direction of the EAM. If the primary warning system consisting of alarms and signals fails to operate when activated (as in a total power outage and failure of the backup power systems), security will be directed by the EAM to use voice amplifiers to alert personnel to evacuate the area. • INTEC Voice Paging System – The INTEC voice paging system provides personnel with general and emergency information.
(2) Notify appropriate State or local agencies with designated response roles if their help is needed.	**Notification of Local, State, and Federal Authorities** If it is determined that the permitted units have had a fire, explosion, spill, or release of hazardous waste or hazardous waste constituents, or an emergency resulting in a release of a hazardous substance included in 40 CFR 302.4, that could threaten human health or the environment inside or outside the INTEC, the contingency plan will be activated. The EAM will ensure that local authorities are notified by phone and/or facsimile. Based on the initial information provided by the EAM or the ED these notifications are made by the INL WCC. The agencies to be contacted include, as appropriate: County Dispatch Centers: Butte County (208) 527-3585 Fax Number (208) 527-3916 Bonneville County (208) 522-1644 or (208) 529-1200 Fax Number (208) 529-1153

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	Bingham County (208) 785-7653 Fax Number (208) 785-8067 Clark County (208) 374-5669 Fax Number (208) 374-5614 Fort Hall Police Dispatch (208) 233-7451 Public Safety (208) 237-0137 Fax Number (208) 478-4005 Jefferson County (208) 745-9207 Fax Number (208) 745-9212 DOE-HQ Emergency Operations Center (202) 586-8100 Fax Number (202) 586-8485 State of Idaho Communications Center (800) 632-8000 or (208)846-7610 Fax Number (208) 846-7620 National Response Center 1-800-424-8802 The first notification of regulatory agencies will include, as appropriate: • Name and address of the facility and the name and phone number of the reporter • Type of incident: fire, explosion, release, etc. • Date and time of the incident • Type and quantity of hazardous material(s) involved • Exact location of the incident • Injuries, if any • Possible hazards to human health and the environment (air, soil, water, wildlife, etc.) outside the facility • Name, address, and telephone number of the party in charge of or responsible for the facility or activity associated with the incident • Steps being taken or proposed to contain and clean up the material involved in the incident. The ED and EAM will also be available to help the appropriate local, state, or federal officials decide whether local areas should be evacuated. **Notification of the General Public** The INL Emergency Director or the EAM will notify the general public through the public safety and emergency agencies listed above. DOE policy is to provide accurate and timely information to the public, by the most expeditious means possible, concerning emergency situations that may affect

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	employees, off-Site personnel, public health and safety, and/or the environment.
G-4b Identification of Hazardous Materials 40 CFR 264.56(b) 40 CFR 264.56(b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. He may do this by observation or review of facility records or manifests, and, if necessary, by chemical analysis.	**G-4b Identification of Hazardous Materials** The identification of hazardous wastes or hazardous waste constituents involved in a fire, explosion, or release to the environment is a necessary part of the assessment of an incident. RCRA-regulated hazardous waste and hazardous substances and materials listed in 40 CFR 302.4 involved in any release at the permitted units will be identified. In normal storage configuration, the CSSF provides for protection of human health and the environment by isolating the calcined waste from the environment and INTEC personnel. The INTEC EAM will determine the identity, exact source, amount, and extent of any released materials. Sources of information include, but may not be limited to: • Observations of personnel involved in or discovering the situation • Permitted units operating records • Material safety data sheets (MSDSs) • Monitoring performed by an industrial hygienist • The INL Fire Department's findings/reports. Released or residual materials (residuals from a fire or explosion) that cannot be identified by labels, records, logbooks, identification numbers, or electronic databases will be sampled in accordance with a waste analysis plan (WAP), and analyzed to determine the chemical properties of the waste. The analytical results will determine the proper disposition of unidentifiable waste materials.
G-4c Assessment 40 CFR 264.56(c) and 264.56(d) 40 CFR 264.56(c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). 40 CFR 264.56(d) *[The text of 40 CFR 264.56(d) is located in Section G-3, Implementation.]*	**G-4c Assessment** Once the required notifications have been made, the EAM will ensure the identity, exact source, amount, and extent of released materials spreading from the event location can be determined. Individuals entering the affected area to gather information for the assessment will wear appropriate personal protective equipment (PPE). Robotic equipment and/or portable shielding may be used to determine and reduce the radiological hazards from released waste to protect INTEC personnel. The EAM will determine the identity of materials released, based on knowledge of the area and access to the waste identification/characterization information described in Section G-4b. After the materials involved in an emergency are identified, the specific information on the associated hazards, appropriate PPE, decontamination method, etc., will be obtained from MSDSs or other appropriate chemical reference materials.

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	Based on default conservative estimates of potential source terms, emergency action levels (EALs) have been developed for fires, explosions, radiological releases, and other emergency events. EALs are specific, predetermined, observable criteria used to determine the emergency classification and initial protective actions for operational emergencies. These EALs provide guidance for activating the INL EROs at the appropriate level in response to the incident. These EALs specify the initial protective actions (that is, evacuation or take cover) to be taken in response to the event. The emergency assessment requires determination of hazards involving evaluation of several criteria, including the following: • Nature of the accident – Known or probable cause; current/projected status of the affected area; facility conditions; status of containment boundaries/systems; type(s) and quantities of hazardous waste/material (nonradiological and radiological) involved in the incident • Weather conditions, present and expected – Wind speed and direction; precipitation; time of day; stability class; weather forecast; anticipated dispersion pattern; direction of travel and width of plume; locations affected • Exposure – Magnitude of actual or potential exposure to employees, the general public, and the environment; duration of human and environmental exposure; pathways of exposure • Toxicity – Types of adverse health or environmental effects associated with exposures; the relationship between the magnitude of exposure and adverse effects • Reactivity (if applicable) – Hazardous materials or wastes involved in an incident will be assessed through accessing the MSDSs for the affected material to determine its reactivity and the recommended method(s) for managing such waste • Effects – Direct and indirect effects of the release, fire, or explosion (such as the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire or explosions) • Uncertainties – Considerations for undeterminable or future exposures; uncertain or unknown health effects including future health effects. If the assessment indicates no real or potential threat to human health or the environment, the occurrence will be considered a minor incident. Minor incidents do not require further activation of the contingency plan. If the assessment indicates that a potential threat exists to off-Site human health or the environment due to airborne contaminants, the EAM or ED will advise the appropriate off-Site response personnel of the nature of the potential threat. Wind data for the INTEC and the nature of the wastes normally stored at the permitted units do not indicate that an airborne release is likely to occur outside the CSSF.

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G-4d Control Procedures **40 CFR 264.52(a)** 40 CFR 264.52(a) The Contingency Plan must describe the actions facility personnel must take to comply with 264.51 and 264.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.	**G-4d Control Procedures** • Personnel at INTEC do not enter the CSSF vaults because of the radiological hazards. If a release within the vaults is detected by the CAMs, additional radiological characterization will be conducted. This characterization will be completed using radiological instrumentation that can be lowered into the vaults though instrumentation ports. This will allow for radiological characterization of the released waste while still providing adequate protection of human health and the environment. In addition, this monitoring can be completed at multiple points in time to assess whether waste continues to be released within the vaults or if the radiological conditions within the vault have stabilized. In any case, personnel will not enter the vaults to complete cleanup of released materials. The released materials will be removed from the vault as part of the calcine retrieval operations in preparation for treatment or final disposal. **Natural Phenomena Emergencies** After any natural emergency (earthquake, flood, lightning strike, etc.) that may have affected the permitted units, the EAM shall ensure the following actions are performed as appropriate: • Check to ensure all automatic and manual alarms in the permitted units are working if feasible • Conduct a general survey of the exterior of the permitted units looking for potential problems (including radiological characterization) • Take any necessary corrective measures, however temporary, to rectify potential or real problems • Record all inspection results. **Power Failure** Should power fail, battery-operated lights will automatically illuminate. In the event of a power failure, personnel will secure any work in progress and leave the area until power is restored. The utilities have backup power replacements as shown: • Lights – Fixed battery-operated lights will operate • Alarms – Emergency communication and fire alarm systems have battery backup • Communication Devices – cell phone and/or radio networks will be used

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G-4e Prevention of Recurrence or Spread of Fires, Explosions, or Releases 40 CFR 264.56(e) and (f) 40 CFR 264.56(e) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers. 40 CFR 264.56(f) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.	**G-4e Prevention of Recurrence or Spread of Fires, Explosions, or Releases** **Equipment Failure** There will be no impact to the permitted units from an equipment failure. Maintenance personnel will repair mechanical failures that do not result in spills. During an emergency, the EAM will ensure that reasonable measures are taken so that fires, explosions, and releases do not occur, recur, or spread to mixed waste or other hazardous materials at the facility. These measures may include the following as appropriate: • Stopping processes and operations • Collecting and containing released wastes and materials • Removing or isolating containers of waste or hazardous materials • Ensuring wastes managed during an emergency are handled, stored, or treated with due consideration for compatibility with other wastes and materials onsite and with any containers utilized (see Section G-4g) • Restricting personnel not needed for response activities from the area of the incident • Evacuating the area if necessary • Curtailing nonessential activities in the area • Conducting preliminary inspections of adjacent facilities and equipment to assess damage • Over-packing and/or removing damaged containers/drums from affected areas • Repairing damaged equipment and facilities, as appropriate • Constructing, monitoring, and reinforcing temporary dikes, as needed. As described in Section G-4a above, once the EAM is notified (by either an eyewitness or alarm) of a fire, explosion, or release, the EAM will immediately report the situation to the WCC and take action to notify the INL Fire Department and ERO, as necessary. If necessary, the EAM may request other INL support. All personnel not involved in combating the emergency shall evacuate the affected area and assemble in designated locations away from the affected area as informed by the EAM by appropriate means. Emergencies originating at the permitted units will be addressed by activation of the contingency plan under the direction of the EAM. The contingency plan may be activated at any time, at the discretion of the EAM. **Fires** The design of the bin sets eliminated combustible loading within the vaults therefore, fires within the vaults themselves will not occur. Fires that occur outside the vaults will be addressed as follows. Fires that involve or threaten hazardous or mixed wastes are considered emergencies for the purposes of the contingency plan. Planned actions include:

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	• The INL Fire Department will be contacted by pulling the fire-alarm call box or by dialing 777 or 526-7777 • Fire fighting personnel will don appropriate PPE • If the fire is small and the fuel source is small, portable fire extinguishers may be used to put out the fire • Whenever possible, flammable material will be removed from the area of the fire • If the fire spreads or increases in intensity, all personnel will be evacuated to an upwind location • The EAM will remain in contact with responding personnel to advise them of the known hazards • As necessary, actions will be taken to ensure storm drains do not receive potentially hazardous run-off. Dikes will be built around storm drains and any valves controlling discharge will be closed. The EAM is responsible for all emergency response actions conducted within the facility, supporting and coordinating with the On-Scene Commander and for the overall mitigation of the event until the emergency event is terminated. Selection of methods and tactics of fire fighting is the responsibility of the INL Fire Department. An absorbent will be poured over all chemical residues resulting from a hazardous waste fire. Once the liquid is absorbed, the waste will be swept or shoveled back into containers, and the surface will be cleaned using cleaners appropriate to the identified chemicals. Fire fighting waters will be collected and analyzed, whenever possible, to determine an appropriate disposal method. **Explosions** The design of the bin sets eliminated the potential for explosions; therefore explosions within the vaults themselves will not occur. Explosions that occur outside the vaults will be addressed as follows. Explosions that involve or threaten hazardous or mixed waste or an explosion that is imminent are considered emergencies for the purposes of the contingency plan. Planned actions include: • The area will be immediately evacuated. • Any injured personnel will be immediately transported to the appropriate medical facility for treatment. • The EAM will immediately notify the appropriate emergency response personnel and the WCC about the explosion. • The EAM will remain in contact with responding personnel to advise them of the known hazards involved and the degree and location of the explosion and associated fires. • The EAM is responsible for all emergency response actions conducted within the facility, supporting and coordinating with the On-Scene Commander and for the overall mitigation of the event until the emergency event is terminated. Selections of methods and tactics of responding to an explosion are the responsibility of the On-Scene Commander. • An adsorbent/absorbent will be poured over all chemical residues

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	resulting from a hazardous waste explosion. Once the liquid is absorbed, the waste will be swept or shoveled back into the drums, and the surface cleaned using cleaners appropriate to the identified chemicals. • The EAM will ensure all operational units are secured (e.g., process equipment, and ventilation equipment) that may be affected directly or indirectly by the explosion, once the areas have been determined safe for reentry. **Releases** Released materials within the vaults are addressed in Section G-4d. Any other releases that occur outside the vaults will be addressed as follows. The EAM will implement the following, as appropriate, in the event that: (a) a hazardous or mixed waste or hazardous material spill causes an immediate health hazard; (b) a hazardous or mixed waste or hazardous material spill cannot be contained with secondary containment or application of absorbents; or (c) a threat exists for spilled material to move out of the permitted units: • Evacuate the immediate area • Review facility records to determine the identity and chemical nature of released material • Don appropriate PPE to prevent exposure to the material • Secure the source of the release, if possible • Build a dike to contain run-off • Ensure storm drains do not receive potentially hazardous run-off or spill material • Build dikes around storm drains or close any valves controlling discharge • Collect and contain released wastes by stabilizing or neutralizing the spilled material, as appropriate, pouring an absorbent over the spilled material, and sweeping or shoveling the absorbed material into drums or other appropriate containers • Ensure that waste that may be incompatible with the released material will be managed in the affected area until cleanup procedures are complete. After collection of a released material, the incident location will be sampled and evaluated. If contamination is found to exist, contaminated materials may be collected, drummed (if appropriate), and removed from the area for disposal at a permitted disposal facility. Depending on the specific conditions, however, INTEC personnel may choose to implement an alternative decontamination method, such as surface cleaning or in situ neutralization or stabilization. Any such alternative will be discussed with the Director of the Idaho Department of Environmental Quality, before implementation.

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G-4f Storage and Treatment of Released Materials 40 CFR 264.56(g) 40 CFR 264.56(g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.	**G-4f Storage and Treatment of Released Materials** Once initial spill containment has been completed, the EAM will ensure that recovered hazardous materials and waste are properly stored, treated, and/or disposed of, as required by IDAPA 58.01.05.006; 58.01.05.007; and 58.01.05.008 (40 CFR 262, 263, and 264). For spills of liquid that escaped secondary containment, the perimeter of the spill will be diked with an absorbent material, such as absorbent pillows, that is compatible with the material(s) released. Freestanding liquid will be transferred to a labeled compatible container. The remaining liquid will be absorbed with an absorbent material and swept or scooped into a labeled compatible container. Spill residue will be removed. Spills of dry material will be swept or shoveled into a labeled compatible recovery container. Material recovered from the spill will be transferred to a new or clean-washed container. All containers will meet Department of Transportation (DOT) specifications for shipping the recovered wastes and materials. Hazardous waste resulting from the cleanup of a fire, explosion, or release will be contained and managed as a hazardous waste until such time that it can be determined that the waste is not hazardous, as defined in IDAPA 58.01.05.005 (40 CFR 261, Subparts C and D). In most cases, the hazardous waste inventory logs completed when containers are placed in storage at the permitted units will allow a determination of the hazardous wastes and hazardous waste constituents present in any cleanup of a release or the residues from an emergency condition. When necessary, however, samples of the waste will be collected and analyzed to determine the presence of any hazardous characteristics and/or hazardous waste constituents; this information is needed to evaluate disposal options. Approved sampling and analytical methods will be used. If the entire permitted unit has been impacted because of a fire, explosion, or spill, pending decontamination, no hazardous or mixed waste will be accepted for storage or treatment, until it is restored to design status. All cleanup and decontamination residues will be packaged, handled, and stored according to applicable state or federal regulations, DOE orders, and permitted unit procedures. During this period, storage will occur at a less-than-90-day storage site. All liquid wastes will be provided with secondary containment. If unaffected areas of the permitted unit can be used, containers of waste from the affected area(s) will be cleaned, over-packed, placed in spill pans, or transferred to new containers and moved to the unaffected areas.

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	The contaminated area will be decontaminated. If the release results in contamination to a permeable surface, such as soil, asphalt, or other surface, the material will be removed and placed in DOT-approved shipping containers. Contaminated surface materials, as well as materials used in the cleanup (such as rags and absorbent material), will be containerized and placed into storage, pending transfer to an on- or off-Site treatment or disposal facility, in accordance with applicable regulations.
G-4g Incompatible Waste 40 CFR 264.56(h)(1) 40 CFR 264.56(h) The emergency coordinator must ensure that, in the affected area(s) of the facility: (1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and	**G-4g Incompatible Waste** In the event of a hazardous material or hazardous waste release, the EAM will ensure that no wastes will be received, treated, or stored in the affected areas until cleanup operations have been completed. This will ensure that incompatible waste will not be present in the vicinity of the release. If waste is generated as the result of a spill or release of hazardous materials or hazardous waste, the waste generated as a result of abatement and cleanup will be evaluated to determine its compatibility with other wastes being managed in temporary storage areas. The evaluation will identify the material or waste that was spilled or released and determine its characteristics (ignitable, reactive, corrosive, and toxic). The waste generated by the abatement and cleanup activities will be stored in that part of the temporary storage area of the permitted units that has been established to manage wastes with which it is compatible. Administrative controls, such as installing barriers and/or a cordon around the temporary storage area(s), will be implemented to ensure segregation of wastes. The EAM will not allow hazardous or mixed waste operations to resume in a building or area in which incompatible materials have been released before ensuring that necessary postemergency cleanup operations to remove potentially incompatible materials have been completed.
G-4h Post-Emergency Equipment Maintenance 40 CFR 264.56(h)(2) 40 CFR 264.56(h) The emergency coordinator must ensure that, in the affected area(s) of the facility: (2) All emergency equipment listed in the CP is cleaned and fit for its intended use before operations are resumed.	**G-4h Postemergency Equipment Maintenance** The EAM will ensure that emergency equipment is cleaned and ready for its intended use before operations are resumed. Any equipment that cannot be decontaminated may be discarded as waste (that is, hazardous, mixed, solid, as appropriate). Equipment or supplies that cannot be reused following an emergency will be replaced. After the equipment has been cleaned, repaired, or replaced, a postemergency facility and equipment inspection will be performed, and the results will be recorded. Cleaning and decontaminating equipment may be accomplished using nonhazardous materials whenever possible, by physically removing gross or solid residue, rinsing with water or another nonhazardous liquid, and/or washing with detergent and water. Decontamination and cleaning will be conducted in a confined area, such as a wash pad or building equipped with a floor drain and sump isolated from the environment. Care will be taken to prevent wind dispersion of particles and spray. Liquid or particulate resulting from cleaning and decontamination of equipment will be placed in clean, compatible containers. Waste resulting from decontamination

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	operations will be analyzed for hazardous waste constituents and/or hazardous waste characteristics to determine proper management. When INTEC facility personnel have completed any post-emergency cleanup of waste and hazardous residues and waste management operations are ready to resume, the EAM will ensure the following have occurred: • All emergency equipment used in managing the emergency has been cleaned or replaced and is fit for service • Notification of the Director of the Department of Environmental Quality and any relevant local authorities. This postemergency notification complies with IDAPA 58.01.05.008; [40 CFR 264.56(i)].
G-4j Tank Spills and Leakage 40 CFR 264.194 (c) 40 CFR 264.194(c) The owner or operator must comply with 264.196 if a leak or a spill occurs in the tank system. 40 CFR 264.196 Response to leaks or spills and disposition of leaking or unfit-for-use tank systems. A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:	**G-4j Tank Spills and Leakage** In addressing this section, it is important to realize that the INTEC buildings are designed, constructed and remotely operated to exclude or isolate hazardous incidents. In the case of the permitted tank systems (tanks and ancillary equipment), all are contained within a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and personnel and heavy equipment that may operate within the building(s).
(a) Cessation of use; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.	When a spill or leak from a tank system is encountered, the plant shift supervisor/EAM will assess the situation, and determine the proper and safe action(s), if any, necessary to best stop the spill or leak (e.g., stop the flow of waste into or out of the tank). Additional waste will not be added to the tank.
(b) Removal of waste from tank system or secondary containment system. (1) If the release was from the tank system, the owner/operator must, within 24 hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.	All of the subject tanks are mixed waste tanks and radiological considerations will in most cases impede efforts to remove the waste from the tank. However, the waste will be addressed in as timely a manner as possible to prevent harm to human health and the environment while ensuring the safety of the facility personnel responding to the spill/leak. After ensuring personnel safety, the most important task is to identify the source of the spill/leak and the actual and potential extent of the leak/spill, for example: • A minor leak from ancillary equipment (a pump or valve, that can be easily stopped/controlled) • A minor tank leak/spill that can be easily stopped • A minor leak or spill to a containment system or portion of the INTEC that can be easily stopped

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(2) If the material released was to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment	• A major tank leak from which total loss of contents could be realized. Upon notification of the emergency, the INL Fire Department is responsible for response and mitigation. Once the source of the leak/spill is identified and controlled, trained INTEC facility personnel will assess the extent of the spill/leak and will initiate corrective actions and cleanup activities. In the most extreme case of tank failure, the INTEC EAM will be notified and the contingency plan will be activated.
(c) Containment of visible releases to the environment. The owner/operator must immediately conduct a visual inspection of the release and, based upon that inspection: (1) Prevent further migration of the leak or spill to soils or surface water; and (2) Remove, and properly dispose of, any visible contamination of the soil or surface water.	Since all tanks and ancillary equipment for the CSSF are contained within permanent structures, release to soils or surface water is extremely unlikely. Migration of the leak or spill toward soils or surface water will be prevented as practicable, and any contaminated materials will be removed, characterized, and properly disposed of.
(d) Notifications, reports. (1) Any release to the environment, except as provided in paragraph (d)(2) of this section, must be reported to the Regional Administrator within 24 hours of its detection. If the release has been reported pursuant to 40 CFR Part 302, that report will satisfy this requirement. (2) A leak or spill of hazardous waste is exempted from the requirements of this paragraph if it is: (i) Less than or equal to a quantity of one (1) pound, and (ii) Immediately contained and cleaned up. (3) Within 30 days of detection of a release to the environment, a report containing the following information must be submitted to the Reg. Admin. (i) Likely route of migration; (ii) Characteristics of the surrounding soil (composition, geology, hydrogeology, climate); (iii) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Reg. Admin. as soon as they become available. (iv) Proximity to down-gradient drinking water, surface water, and populated areas; and (v)	Any release from the tank system to the soil, groundwater, or surface water will be reported to the Director of the Idaho Department of Environmental Quality within 24 hours of detection, unless: • The release has already been reported pursuant to 40 CFR Part 302 • It is a spill of hazardous waste totaling less than or equal to one pound that was immediately contained and cleaned up. Within 30 days of detection of a release from the tank system to the soil, groundwater, or surface water, a report detailing the release will be submitted to the Director of the Idaho Department of Environmental Quality. This report will, at a minimum, contain the following: • The likely route of migration • Characteristics of the surrounding soil • The results of any monitoring or sampling conducted in connection with the release, if available • Proximity to down-gradient drinking water, surface water, and populated areas • A description of response actions taken or planned. In all cases the proper reports will be filed in accordance with Section G-8, the incident will be documented in the unit's operating record, and the PPE/equipment used in the response will be decontaminated or disposed and replaced.

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Description of response actions taken or planned.	
(e) Provision of secondary containment, repair, or closure.	
(1) Unless the owner/operator satisfies the requirements of paragraphs (e)(2) through (4) of this section, the tank system must be closed in accordance with Sec. 264.197. (2) If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made. (3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service. (4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Sec. 264.193 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of paragraph (f) of this section are satisfied. If a component is replaced to comply with the requirements of this subparagraph, that component must satisfy the requirements for new tank systems or components in Sections 264.192 and 264.193. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or	A variance from secondary containment for the tank systems identified in this permit has been requested. However, once a release has been contained and cleaned up, the affected unit(s) will be inspected and returned to service, provided that: • The cause of the release has been identified • The integrity of the tank and/or ancillary equipment has not been compromised • The source of the release has been repaired, as necessary • The affected area has been decontaminated • Spill response equipment has been replenished or decontaminated and returned to service.

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onground tank), the entire component must be provided with secondary containment in accordance with Sec. 264.193 prior to being returned to use. (f) Certification of major repairs. If the owner/operator has repaired a tank system in accordance with paragraph (e) of this section, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner/operator has obtained a certification by an independent, qualified, registered, professional engineer in accordance with Sec. 270.11(d) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification must be submitted to the Regional Administrator within seven days after returning the tank system to use.	When a tank system repair has been extensive (such as repair of a ruptured primary containment), the tank system will not be returned to service until a certification by an independent, qualified, registered, professional engineer in accordance with 40 CFR 270.11(d) has been obtained. The certification will reflect that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification will be submitted to the DEQ within seven days after returning the tank system to use.
G-5 Emergency Equipment 40 CFR 264.52(e) 40 CFR 264.52(e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), 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.	**G-5 Emergency Equipment** A variety of equipment is available at the INTEC for emergency response, containment, and cleanup operations. This includes equipment for spill control, fire control, personnel protection, monitoring and medical attention, communications, and alarms. This equipment is immediately available to emergency response personnel. A listing of available emergency equipment is shown in Table G-1. In the event a spill cannot be mitigated with the supplies kept at the permitted units, additional response supplies are available throughout the INTEC, and throughout the INL. Examples of safety and emergency equipment located at the CSSF include: • Portable fire extinguisher • Plant voice paging and evacuation alarm system • Internal voice paging system • Communication devices • Emergency lights and exit sign. Safety and emergency equipment provide adequate capabilities for trained personnel to respond to and control leaks, spills, and emergency situations until assistance arrives. The INL Fire Department has other emergency equipment including, but not limited to, self-contained breathing apparatus (SCBAs), stretchers, and first-aid kits.

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G-6 Coordination Agreements 40 CFR 264.52(c) and 264.37 40 CFR 264.52(c) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to 264.37. 40 CFR 264.37Arrangements with local authorities. (a) The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations: (1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes. (2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority; (3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and (4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility. (b) Where State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the	**G-6 Coordination Agreements** The INTEC EAM will ensure initial responders are dispatched to an emergency event originating at the INTEC. However, the level of response depends on the nature and extent of the incident. If warranted, additional INL resources are obtained, such as on-Site security, medical, and fire assistance, which are available on a 24-hour basis. Section G-1, General Information [40 CFR 264.53 (b)], contains the list of off-Site state, local and tribal agencies that are familiar with the contingency plan and may be called upon through agreements with the DOE-ID.

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operating record.	
G-7 Evacuation Plan 40 CFR 264.52(f) 40 CFR 264.52(f) The plan must include an evacuation plan for facility personnel where there is a possibility that an evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).	**G-7 Evacuation Plan** The normal actions to protect nonemergency personnel are to minimize their exposure to radiation, airborne radioactivity, hazardous chemicals, and airborne hazardous chemicals, by seeking shelter, avoiding the accident area, or evacuating selected buildings or areas. In the event of an emergency that results in high radiation, hazardous chemical levels, or a continuing release to the environment, it may become necessary to evacuate the entire INTEC area. Building and Emergency Plan Maps depicting evacuation routes are located throughout the INTEC buildings. Upon exiting a building, personnel proceed to a designated staging area not affected by the emergency. The INTEC evacuation system alerts personnel of the need to evacuate the area. This system is on backup power; should power fail, it will automatically switch to a battery. Evacuation sirens are strategically located throughout the INTEC to provide coverage for all occupied areas. If the evacuation alarm is out of service or fails to operate, the evacuation will be communicated over the voice paging system, by word of mouth, or by security personnel using sirens or the voice amplifiers in their vehicles. Designated personnel known as area wardens are assigned responsibility for ensuring that personnel are evacuated from the area warden's assigned area or building or accounted for during evacuations. The following will allow for a safe, coordinated evacuation: • When an evacuation is announced, stop work • If possible and directed by the EAM, shut down designated operations that could contribute to further hazards, unless an "immediate" building evacuation is announced • Follow the voice-paging instruction or proceed to the closest building exit, unless blocked by hazards • Do not remain in the affected area, and assist injured personnel in leaving the area, if possible • Exit the facility through the security access points to the designated assembly area • Report to the designated assembly area • Be continually cognizant of wind direction (stay upwind) and emergency equipment • Do not reenter the fenced area of the INTEC, until the EAM authorizes reentry. During an evacuation, all personnel will remain in the designated assembly area, until given further instructions. The primary evacuation routes for the permitted units are depicted in the exhibits located at the end of this section. Alternative evacuation routes are through the nearest unobstructed emergency exit.

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	Evacuation Alarm signal is an alternating tone-generated siren. **Fire Alarm** is announced over the INTEC voice paging system. **Take-Cover Alarm** is a steady tone-generated siren. This signal provides an emergency option to total INTEC evacuation**.**
G-8 Required Reports 40 CFR 264.56(j) and 40 CFR 264.56(i) 40 CFR 264.56(j) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the CP. Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator. The report must include: (1) Name, address, and telephone number of the owner or operator; (2) Name, address, and telephone number of the facility; (3) Date, time, and type of incident (e.g., fire, explosion); (4) Name and quantity of material(s) involved; (5) The extent of injuries, if any; (6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and (7) Estimated quantity and disposition of recovered material that resulted from the incident. 40 CFR 264.56(i) The owner or operator must notify the Regional Administrator, and appropriate State and local authorities, that the facility is in compliance with paragraph (h) of this section before operations are resumed in the affected area(s) of the facility.	**G-8 Required Reports** Any fire, explosion, or unplanned release of hazardous or mixed waste or hazardous constituent requiring activation of the contingency plan will be reported by the Permittee in writing within 15 days to the Director of the Department of Environmental Quality. Such reports will include, as a minimum, the following: • Name, address, and telephone number of the facility owner/operator • Name, address, and telephone number of the facility • Date, time, and type of incident (such as fire, explosion, release) • Name and quantity of the material(s) involved • Extent of any injuries to personnel at the facility • An assessment of any actual or potential hazards to human health or the environment, as applicable • Estimated quantity and disposition of material recovered from the incident (includes fire fighting materials, such as water, foam, adsorbents/absorbents, etc.). In accordance with IDAPA 58.01.05.008 [40 CFR 264.56(I)], the Permittee will notify the Director of the Department of Environmental Quality that: • The permitted units are in compliance with requirements for the cleanup of areas affected by the emergency and that the emergency equipment used in the emergency response has been cleaned or replaced and is fit for the intended use, before the resumption of waste management activities • The permitted units have experienced a fire, explosion, spill, or release of hazardous waste or hazardous waste constituents or an emergency resulting in a release of a hazardous substance included in 40 CFR 302.4 that could threaten human health or the environment outside the INTEC • The contingency plan will be activated, and the EAM will ensure that local authorities are notified in writing.

Table G-1. Emergency response equipment available at the CSSF.

Emergency Equipment	Location	Capabilities
Fire control		
Portable fire extinguisher (ABC or CO_2)	Inside the personnel door of each CSSF, or near the door on the outside	Use during incipient stage of fire (10–60-sec discharge time)
Emergency Communication/Alarm System		
Manual fire alarm boxes	Located at each CSSF	Summon INL Fire Department
Communication Devices	Located at each CSSF	On-Site / Off-Site communications
Two-way radios	Used by field personnel	On-Site communications
Sitewide evacuation alarm	Alarm may be sounded throughout the INTEC	Provides immediate notice of evacuation
Internal voice paging system	Located throughout the INTEC	Provides general and emergency information

Note: Fire extinguishers are not currently present at CSSF 7 as it contains no waste.

Exhibit G-1. Evacuation Routes for CSSFs 1–7.

CPP 639

Building Emergency Plan

Emergency Response .... 777 or 526-7777

Person discovering an event should:

- **Immediately telephone 777 or 526-7777 or activate nearest appropriate alarm**
- **Then call Plant Shift Supervisor at 526-3100 or pager 526-4444 #2096**

Event Reporting Information

Type of event
Location
Magnitude
Cause needed
Affected personnel

Alarms and Responses:

Steady Siren — Take Cover

Seek shelter in the nearest building.
All doors and windows are to be shut.
Do not eat, drink, chew, or smoke.
Turn ventilation off as directed by management.
Prepare for evacuation.

Steady Siren with Voice — Security Take Cover

Voice Message

Seek shelter in the nearest building.
Do not leave work area.
Stay away from windows and doors.
Listen for instructions over the emergency warning system.

Alternating Siren — Evacuate

Proceed immediately to the designated assembly area as indicated by the evacuation route (see inset).
Report to your personnel warden.

Fire Alarm — Fire

Voice Message

Evacuate immediate area and go to the staging area (see inset).

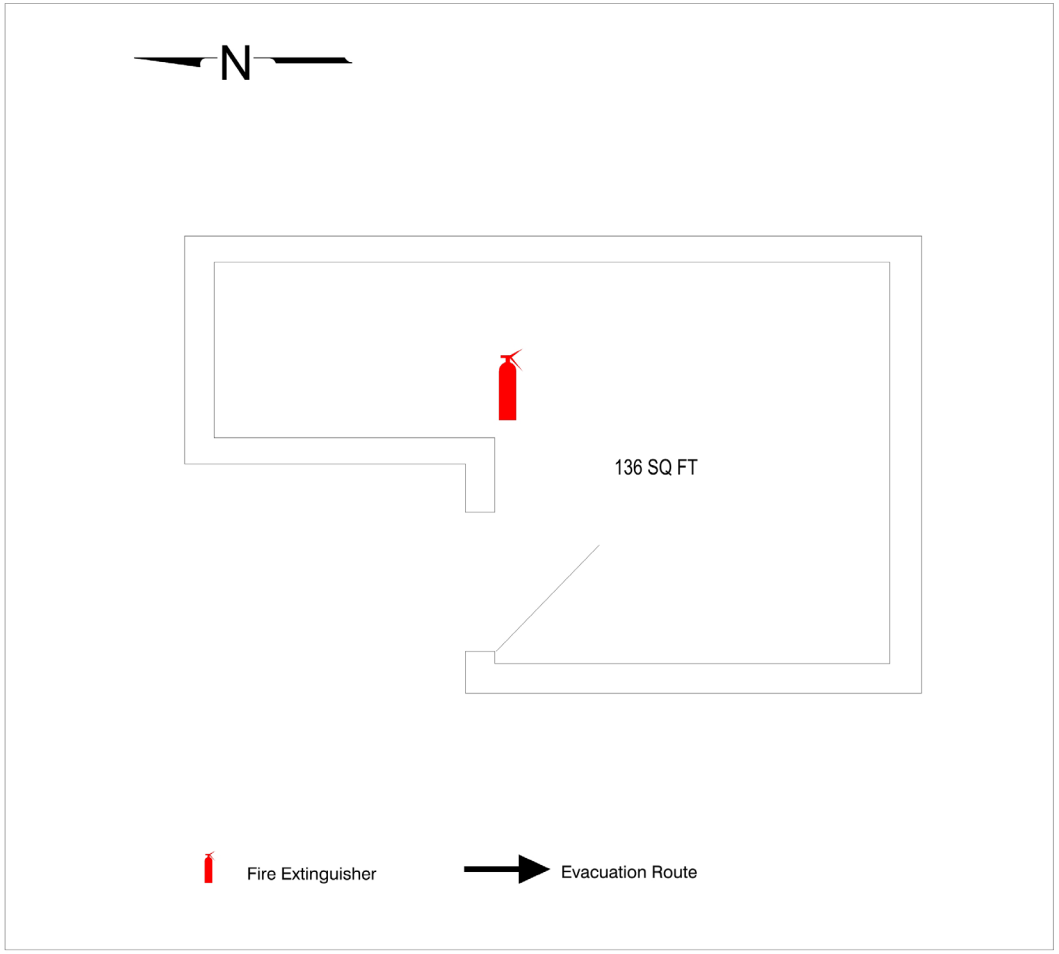
Emergency Warning System — Other

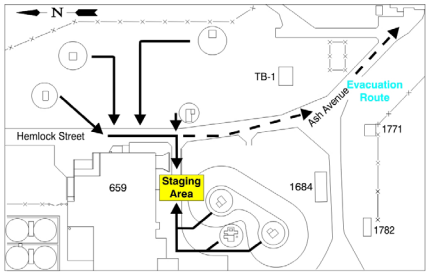
Voice Message

Follow directions of message.

Hazards

General hazards associated with storage and handling of nuclear fuel.





G08-2152-06
4/23/08

CPP 646

Building Emergency Plan

Emergency Response .... 777 or 526-7777

Person discovering an event should:

- **Immediately telephone 777 or 526-7777 or activate nearest appropriate alarm**
- **Then call Plant Shift Supervisor at 526-3100 or pager 526-4444 #2096**

Event Reporting Information

Type of event
Location
Magnitude
Cause needed
Affected personnel

Alarms and Responses:

Steady Siren — Take Cover

Seek shelter in the nearest building.
All doors and windows are to be shut.
Do not eat, drink, chew, or smoke.
Turn ventilation off as directed by management.
Prepare for evacuation.

Steady Siren with Voice — Security Take Cover

Voice Message

Seek shelter in the nearest building.
Do not leave work area.
Stay away from windows and doors.
Listen for instructions over the emergency warning system.

Alternating Siren — Evacuate

Proceed immediately to the designated assembly area as indicated by the evacuation route (see inset).
Report to your personnel warden.

Fire Alarm — Fire

Voice Message

Evacuate immediate area and go to the staging area (see inset).

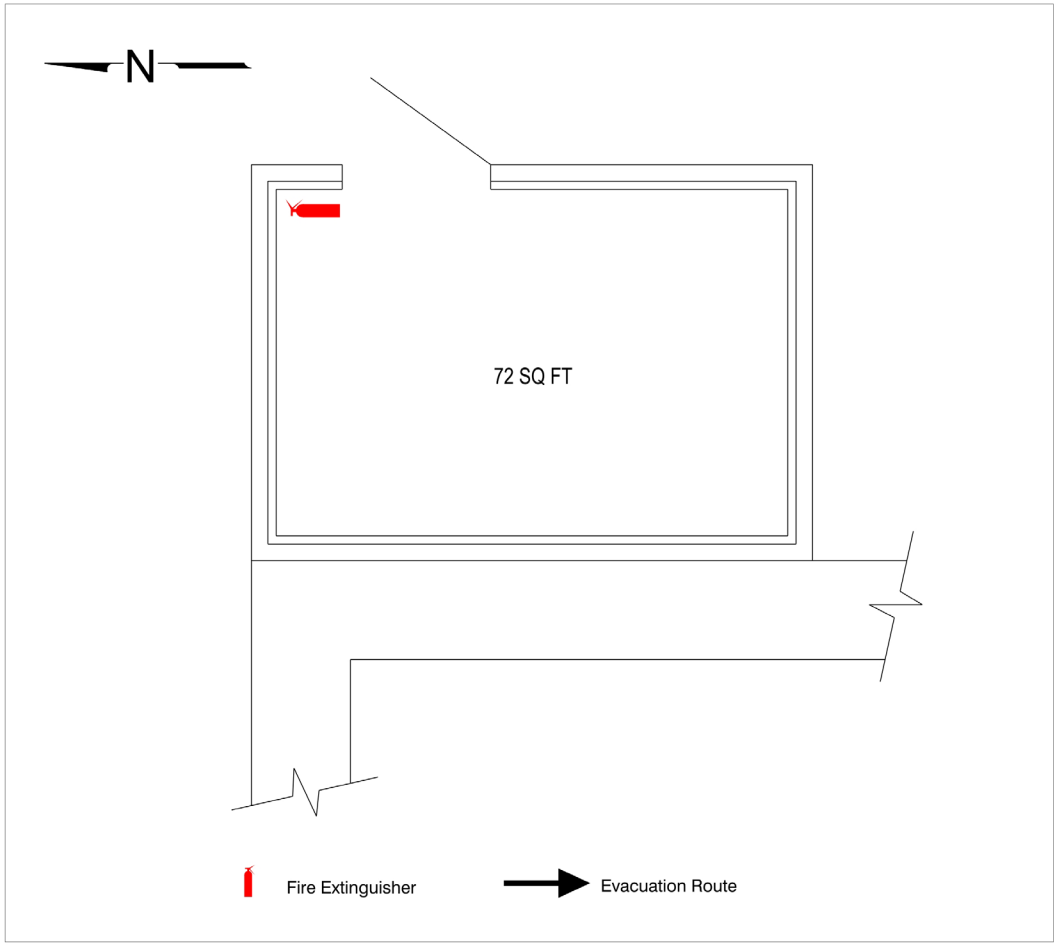
Emergency Warning System — Other

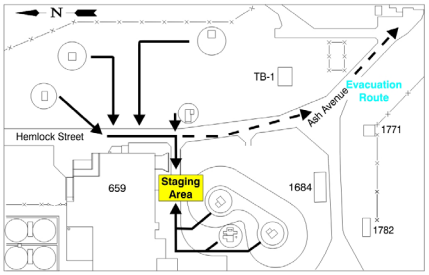
Voice Message

Follow directions of message.

Hazards

General hazards associated with storage and handling of nuclear fuel.





G08-2152-04
4/23/08

CPP 647

Building Emergency Plan

Emergency Response .... 777 or 526-7777

Person discovering an event should:

- **Immediately telephone 777 or 526-7777 or activate nearest appropriate alarm**
- **Then call Plant Shift Supervisor at 526-3100 or pager 526-4444 #2096**

Event Reporting Information

Type of event
Location
Magnitude
Cause needed
Affected personnel

Alarms and Responses:

Steady Siren — Take Cover

Seek shelter in the nearest building.
All doors and windows are to be shut.
Do not eat, drink, chew, or smoke.
Turn ventilation off as directed by management.
Prepare for evacuation.

Steady Siren with Voice — Security Take Cover

Voice Message

Seek shelter in the nearest building.
Do not leave work area.
Stay away from windows and doors.
Listen for instructions over the emergency warning system.

Alternating Siren — Evacuate

Proceed immediately to the designated assembly area as indicated by the evacuation route (see inset).
Report to your personnel warden.

Fire Alarm — Fire

Voice Message

Evacuate immediate area and go to the staging area (see inset).

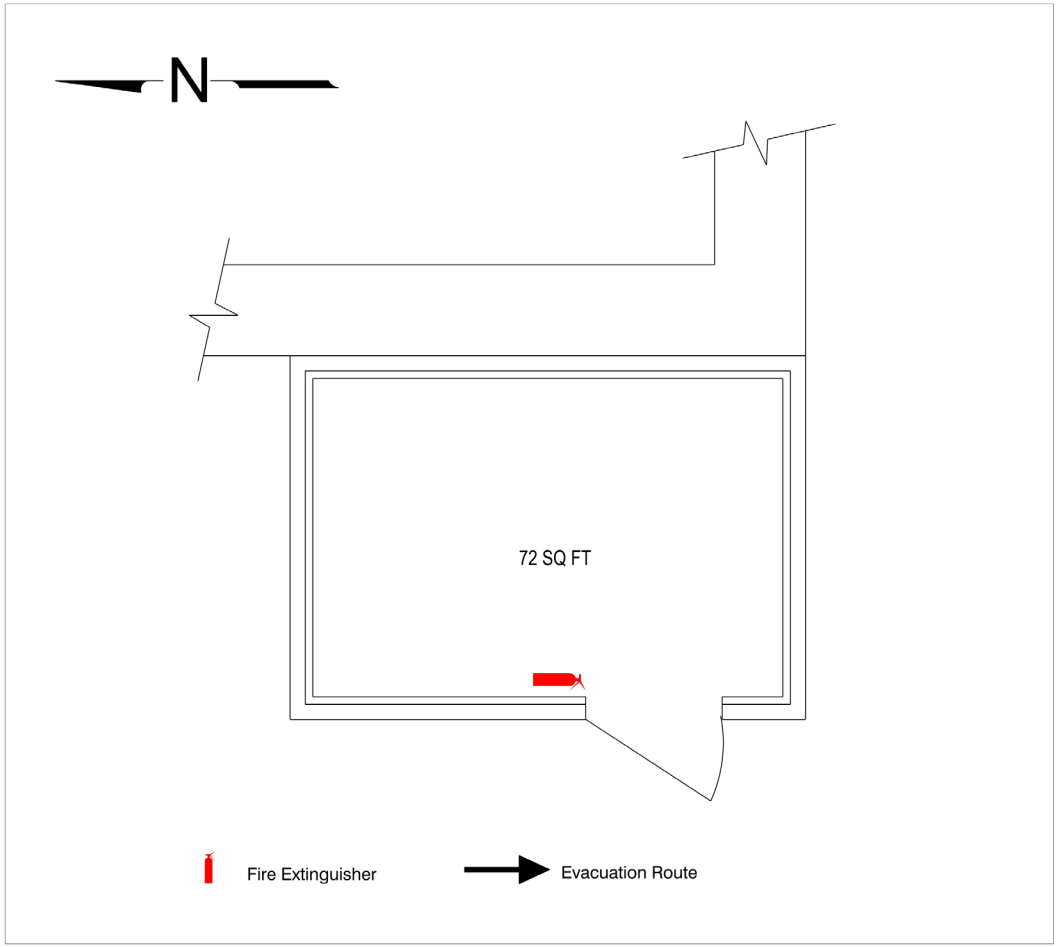
Emergency Warning System — Other

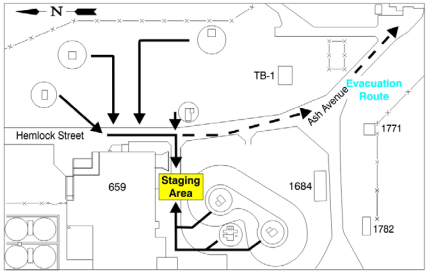
Voice Message

Follow directions of message.

Hazards

General hazards associated with storage and handling of nuclear fuel.





G08-2152-05
4/23/08

CPP 760/658

Building Emergency Plan

Emergency Response .... 777 or 526-7777

Person discovering an event should:

- **Immediately telephone 777 or 526-7777 or activate nearest appropriate alarm**
- **Then call Plant Shift Supervisor at 526-3100 or pager 526-4444 #2096**

Event Reporting Information

Type of event
Location
Magnitude
Cause needed
Affected personnel

Alarms and Responses:

Steady Siren — Take Cover

Seek shelter in the nearest building.
All doors and windows are to be shut.
Do not eat, drink, chew, or smoke.
Turn ventilation off as directed by management.
Prepare for evacuation.

Steady Siren with Voice — Security Take Cover

Voice Message

Seek shelter in the nearest building.
Do not leave work area.
Stay away from windows and doors.
Listen for instructions over the emergency warning system.

Alternating Siren — Evacuate

Proceed immediately to the designated assembly area as indicated by the evacuation route (see inset).
Report to your personnel warden.

Fire Alarm — Fire

Voice Message

Evacuate immediate area and go to the staging area (see inset).

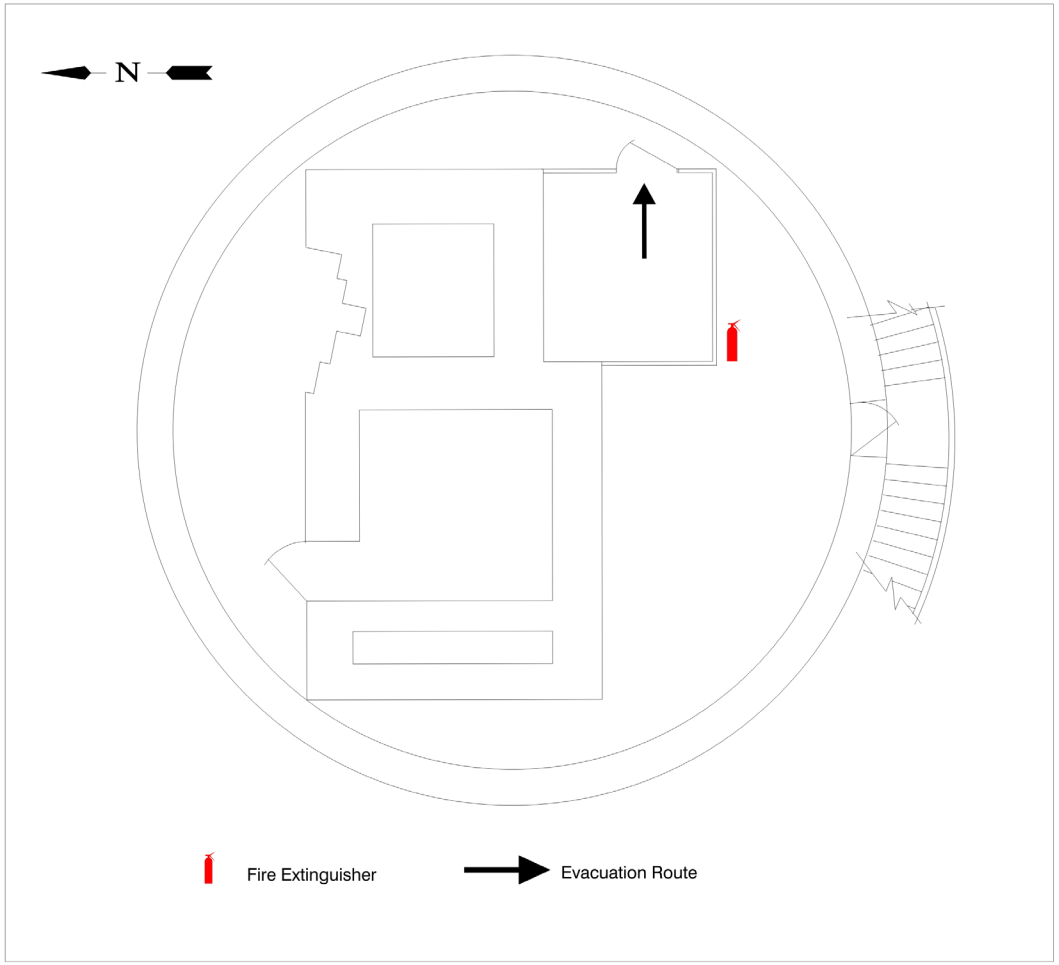
Emergency Warning System — Other

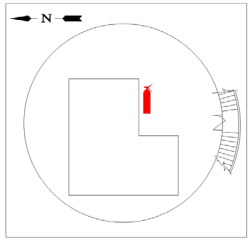
Voice Message

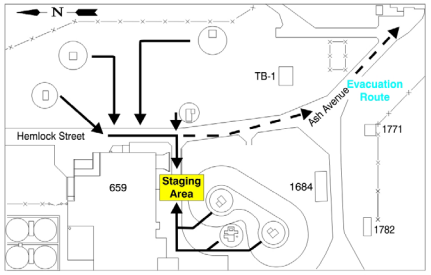
Follow directions of message.

Hazards

General hazards associated with storage and handling of nuclear fuel.







G08-2152-03
4/23/08

CPP 765/671

Building Emergency Plan

Emergency Response .... 777 or 526-7777

Person discovering an event should:

- **Immediately telephone 777 or 526-7777 or activate nearest appropriate alarm**
- **Then call Plant Shift Supervisor at 526-3100 or pager 526-4444 #2096**

Event Reporting Information

Type of event
Location
Magnitude
Cause needed
Affected personnel

Alarms and Responses:

Steady Siren — Take Cover

Seek shelter in the nearest building.
All doors and windows are to be shut.
Do not eat, drink, chew, or smoke.
Turn ventilation off as directed by management.
Prepare for evacuation.

Steady Siren with Voice — Security Take Cover

Voice Message

Seek shelter in the nearest building.
Do not leave work area.
Stay away from windows and doors.
Listen for instructions over the emergency warning system.

Alternating Siren — Evacuate

Proceed immediately to the designated assembly area as indicated by the evacuation route (see inset).
Report to your personnel warden.

Fire Alarm — Fire

Voice Message

Evacuate immediate area and go to the staging area (see inset).

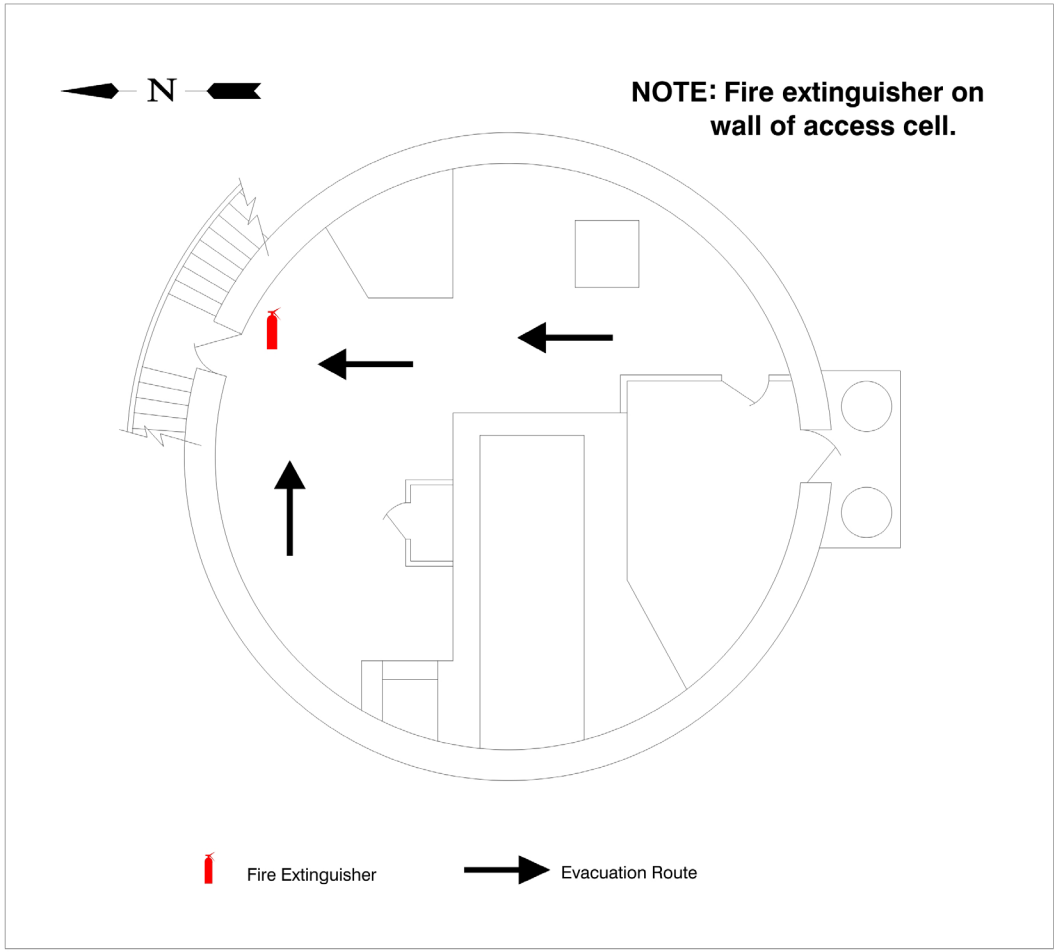
Emergency Warning System — Other

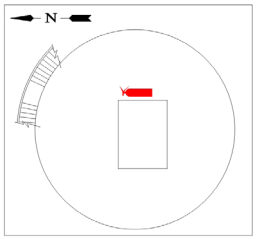
Voice Message

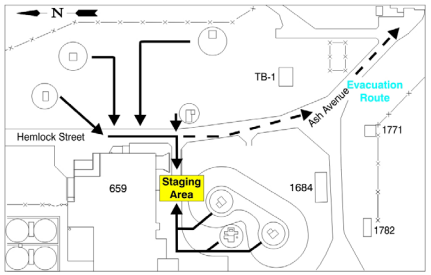
Follow directions of message.

Hazards

General hazards associated with storage and handling of nuclear fuel.







G08-2152-02
4/23/08

CPP 791/673

Building Emergency Plan

Emergency Response .... 777 or 526-7777

Person discovering an event should:

- **Immediately telephone 777 or 526-7777 or activate nearest appropriate alarm**
- **Then call Plant Shift Supervisor at 526-3100 or pager 526-4444 #2096**

Event Reporting Information

Type of event
Location
Magnitude
Cause needed
Affected personnel

Alarms and Responses:

Steady Siren — Take Cover

Seek shelter in the nearest building.
All doors and windows are to be shut.
Do not eat, drink, chew, or smoke.
Turn ventilation off as directed by management.
Prepare for evacuation.

Steady Siren with Voice — Security Take Cover

Voice Message

Seek shelter in the nearest building.
Do not leave work area.
Stay away from windows and doors.
Listen for instructions over the emergency warning system.

Alternating Siren — Evacuate

Proceed immediately to the designated assembly area as indicated by the evacuation route (see inset).
Report to your personnel warden.

Fire Alarm — Fire

Voice Message

Evacuate immediate area and go to the staging area (see inset).

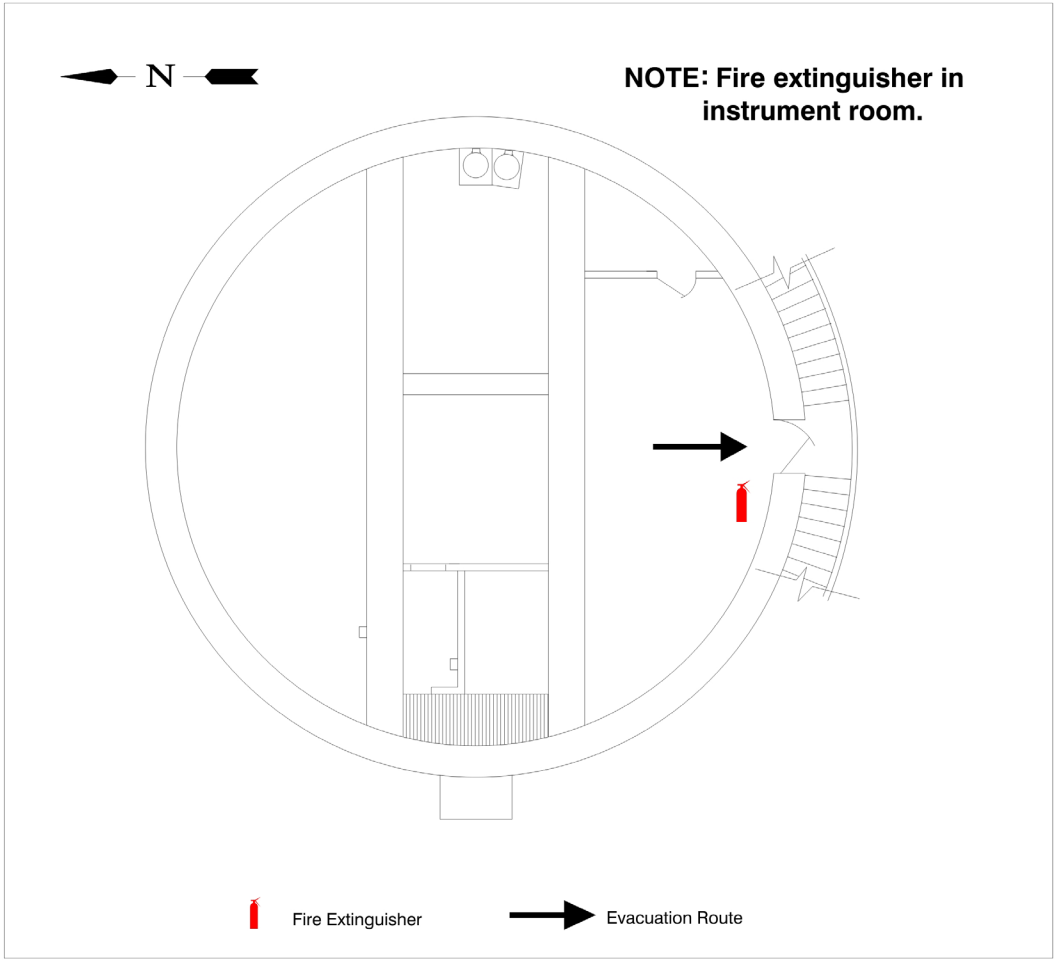
Emergency Warning System — Other

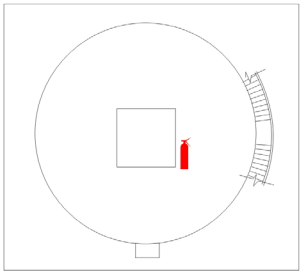
Voice Message

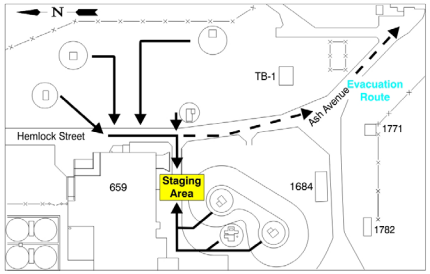
Follow directions of message.

Hazards

General hazards associated with storage and handling of nuclear fuel.







G08-2152-07
4/23/08

CPP 795/1615

Building Emergency Plan

Emergency Response .... 777 or 526-7777

Person discovering an event should:

- **Immediately telephone 777 or 526-7777 or activate nearest appropriate alarm**
- **Then call Plant Shift Supervisor at 526-3100 or pager 526-4444 #2096**

Event Reporting Information

Type of event
Location
Magnitude
Cause needed
Affected personnel

Alarms and Responses:

Steady Siren — Take Cover

Seek shelter in the nearest building.
All doors and windows are to be shut.
Do not eat, drink, chew, or smoke.
Turn ventilation off as directed by management.
Prepare for evacuation.

Steady Siren with Voice — Security Take Cover

Voice Message

Seek shelter in the nearest building.
Do not leave work area.
Stay away from windows and doors.
Listen for instructions over the emergency warning system.

Alternating Siren — Evacuate

Proceed immediately to the designated assembly area as indicated by the evacuation route (see inset).
Report to your personnel warden.

Fire Alarm — Fire

Voice Message

Evacuate immediate area and go to the staging area (see inset).

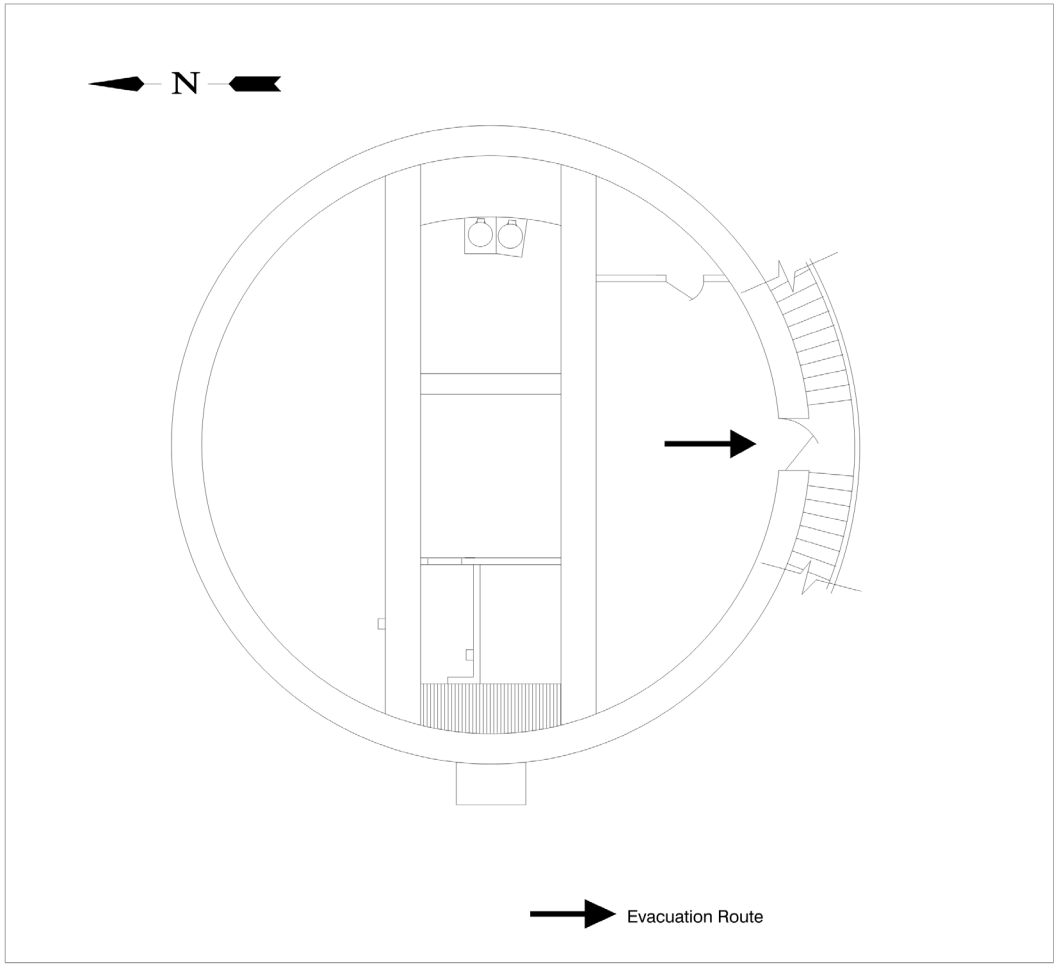
Emergency Warning System — Other

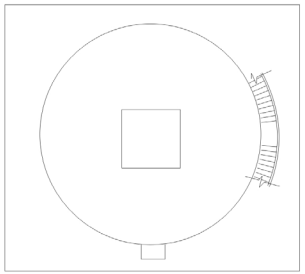
Voice Message

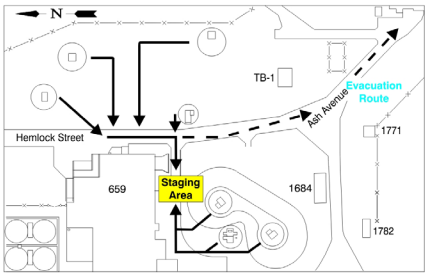
Follow directions of message.

Hazards

General hazards associated with storage and handling of nuclear fuel.







G08-2152-01
4/23/08