

HALL A WORKER SAFETY AWARENESS TRAINING (SAF110)

Purpose

Familiarize users with safety hazards and protection systems in the Counting House and Hall.

Training

A guided walkthrough covering the Hall A Counting House, labyrinth and Hall A using the latest update of the Emergency Response Guidelines (ERG) document for the hall.

First time or expired training

If the worker has never had the SAF110 training before or the training has been invalidated (forced to expire, see below), he/ she should take a guided walkthrough of the Counting House, the personnel access stairs and tunnel and the hall proper. For this, the user should contact the person responsible for the training,

Hall A/SAF110 - J. Gomez (x-7498, gomez@jlab.org)

The guided training will, at a minimum, go over the likely hazards as well as the protection & emergency systems and procedures outlined in Appendix A of the ERG that one finds in the Counting House, personnel access stairs/tunnel and the hall. The JLab Skill Requirements List (SRL) tracking system (i.e. training) will be used to track the training status.

The SAF110 training does not have an expiration date. If however, the conditions of a hall are deemed to have changed sufficiently by the Division Safety Officer, the SAF110 training will be invalidated (forced to expire). The training tracking system will, like with any other training, notify all those affected so that they can make arrangements to take again the guided SAF110 training.

SAF110 training is required for unescorted access to the hall and to be able to take shifts in the Counting House – “escorting” of shift personnel is not allowed.

Emergency Response Guidelines (ERG)

As part of the Experiment Readiness Review Process and Approval, every experiment is required to submit, in addition to the Conduct-of-Operations (COO), Experiment Safety Assessment Document (ESAD) and, Radiation Safety Assessment Document (RSAD), a document that summarizes the location of major hazards in the hall, the location of the various emergency systems as well as emergency procedures and egress routes during that experiment: the Emergency Response Guidelines (ERG) – this document. Shift personnel and anyone else wishing access to the hall during the duration of the experiment, must read and sign to indicate they have understood the COO, ESAD, RSAD and ERG of the experiment. Anyone feeling in doubt with the information contained in the ERG should contact the person responsible for the Hall Worker Awareness Training and schedule guided refresher training.

Purpose

Familiarize users with safety hazards and protection systems in the Counting House and Hall.

Prerequisites to access the halls without escort

ES&H Orientation (SAF100)

Rad Worker I Training or equivalent (must have been issued a dosimeter by JLab)

ODH training (SAF103)

General Access Radiological Work Permit [RWP] (SAF801kd)

Hall A Worker Safety Awareness Training (SAF110)

Reminder

- **No one under 18 years may enter the halls**
- **No sandals or open toe shoes in any hall**
- **No food or drinking inside the halls**
- **Check postings at the entrance to the hall for special requirements** (e.g. long pants are required in Hall A). ***If in doubt, please contact the Hall Work Coordinator or his/her designee,***
Hall A - J. Butler [cell (757)768-1302, jbutler@jlab.org]
- Check that all work or test set ups follow the work controls indicated in the ESH&Q manual (<http://www.jlab.org/ehs/ehsmanual/index.html>) and on the supplemental [Physics Division Work Planning Guidance](http://www.jlab.org/div_dept/physics_division//work_guidance_final.pdf) (http://www.jlab.org/div_dept/physics_division//work_guidance_final.pdf). **If in doubt, consult the Safety Warden of the area in which the work will take place, the Physics Division ESH&Q coordinator (B. Manzlak) or the Physics Division Safety Officer (E. Folts).**

The two-person rule (“Buddy Rule”)

Accessing the halls or performing work in the halls may require that personnel work on teams of at least two people. The two-person rule must be followed when entering Hall B or when performing a task in any of the halls that requires two-persons as indicated by the applicable general JLab safety rules or task OSP/TOSP. Examples of tasks that require two-persons would be operation of the hall crane, use of a man-lift, performing cryogenic, electrical or welding work. **Check postings at the entrance to the hall for special requirements. If in doubt, please contact the Hall Work Coordinator or his/her designee.**

Undergraduate Students in the Experimental Halls

Regardless of hall or task, undergraduate students must follow the two-person rule during their first three-months at JLab. During that period, undergraduate students are allowed to work in the hall if (a) their work in the hall is always under the supervision of a hall-authorized “buddy” (the “buddy” can not be another undergraduate) and, (b) a permanent JLab staff member is cognizant of the work to be done, has supervisory responsibility for their work and approves the “buddy”.

Appendix A

This appendix lists likely hazards, protection & emergency systems used and emergency procedures to be reviewed during the Hall Worker Awareness Training

Hazards:

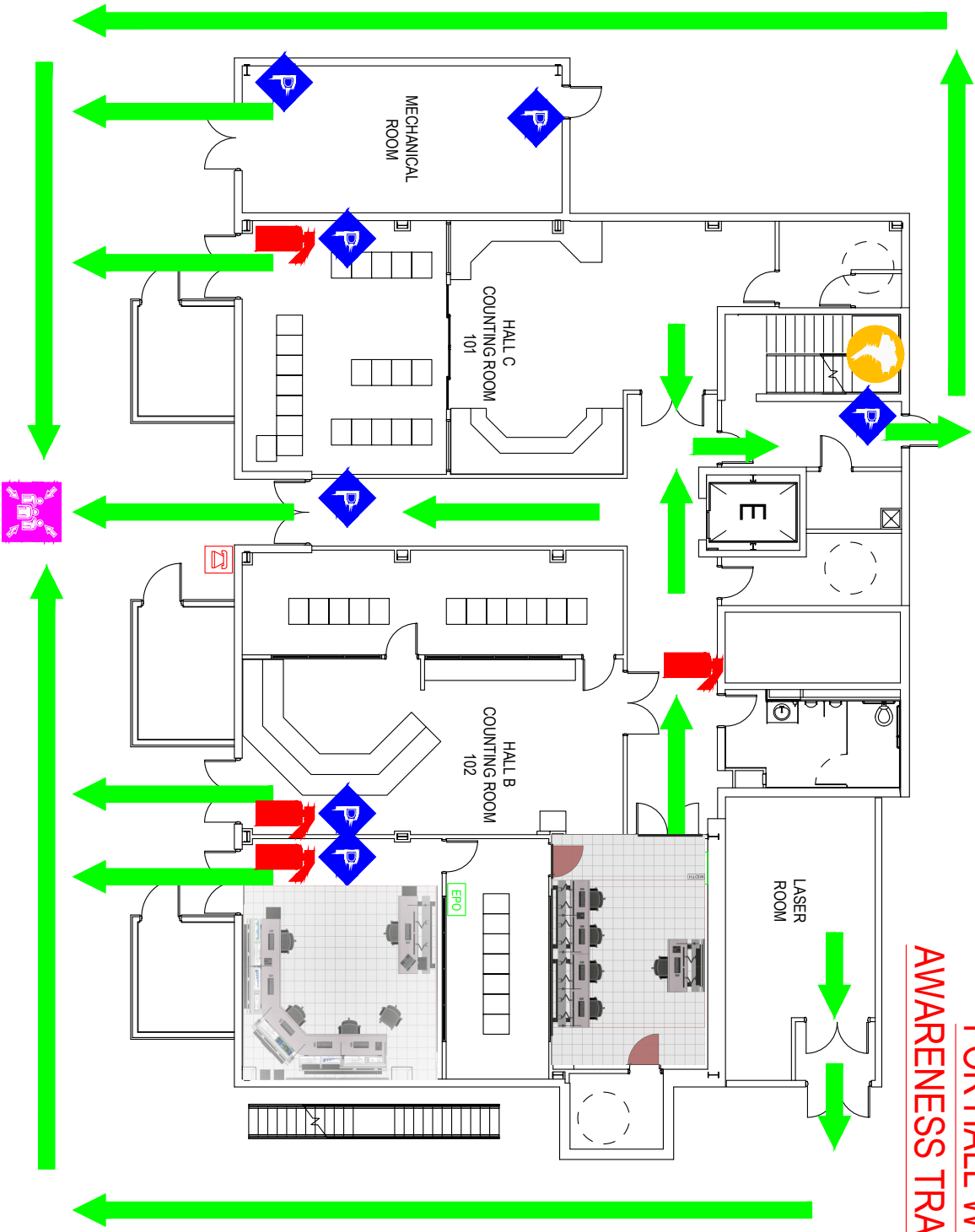
- Fire (electrical equipment, breaker panels, paper, trash, cables)
- Tripping and overhead hazards
- Falling hazards
- Elevated work
- High-pressure systems including low-conductivity water distribution
- Radiation hazards (beam-on, contaminated and activated areas)
- Loud noise hazards (thin vacuum windows)
- Flammable gasses
- Cryogenic (ODH and “cold-bite”)
- Magnets and magnetic fields
- Electrical
 - AC & DC (various voltages)
 - Magnet power supplies and their current distribution systems
 - High-Voltage supplies

Protection & Emergency systems and procedures:

- Signs and postings,
 - Radiation areas
 - Hearing protection requirements
 - Exit signs
 - Exit routes (evacuation plans)
 - Oxygen Deficiency Hazards
- Personnel Protection Requirements (e.g. hardhat, safety glasses, ...)
- First Aid kit and Emergency Defibrillator
- Telephone locations with emergency numbers
- Fire
 - Detection systems (e.g. the Very Early Smoke Detection Apparatus [VESDA])
 - Alarm pull boxes
 - Fire alarm bells
 - Extinguishers and escape equipment (Hall B only)
 - Evacuation routes and muster points

- Electrical
 - Power shutoff switches
 - Circuit breaker panels
- Weather related hazards
 - Tornado emergency response
- Emergency lights
- Beam status, interlock and abort
 - Machine State Status Indicators,
 - Magenta/purple beacons,
 - Access doors to hall
 - Key interlocks
 - Run/Safe boxes
- Oxygen Deficiency Hazard condition detection
 - Sensors locations
 - Blue beacons & alarms locations
- Radiation Monitors (Controlled Area Radiation Monitors – CARMs)
- RadCon staging areas for equipment to be removed from hall
- Red beacons for hazards (e.g. energized magnets and cranes)
- Yellow beacons for warning or caution (e.g. energized lasers, forklifts)
- Cabinets for storing flammable materials
- Lockout/Tagout Stations
- Eye wash stations

**FOR HALL WORKER
AWARENESS TRAINING ONLY**



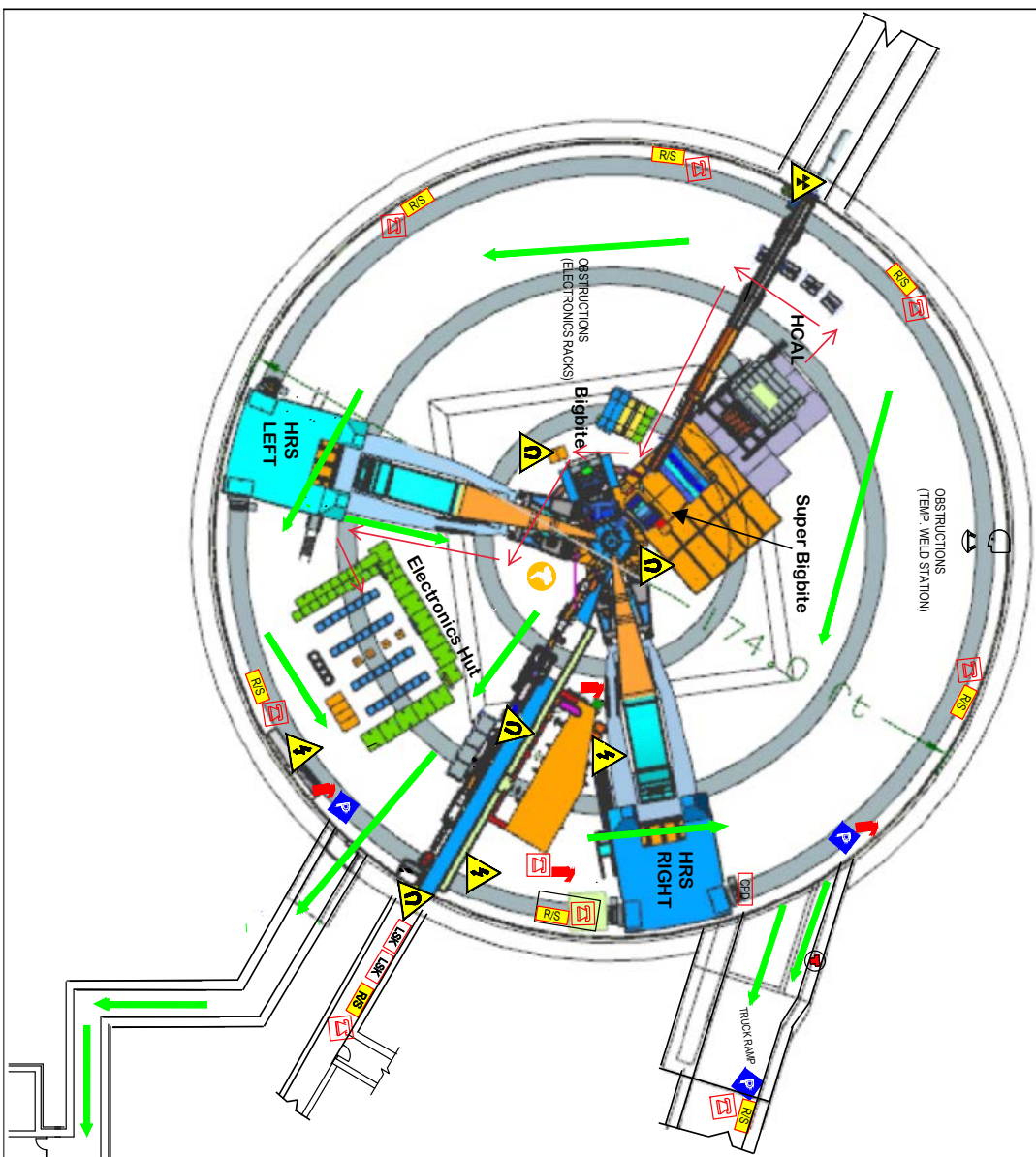
COUNTING HOUSE
BUILDING 97, FLOOR 1
EMERGENCY PLAN

IN CASE OF FIRE:
STAY CALM
WALK, DO NOT RUN
CLOSE YOUR DOOR
ACTIVATE NEAREST PULL BOX,
FOLLOW ARROWS IN DIAGRAM, &
MEET AT MUSTER POINT

IN CASE OF SEVERE WIND:
IF A TORNADO WARNING IS ISSUED BY
THE NATIONAL WEATHER SERVICE AND
LAB IS WITHIN THE WARNING AREA,
MOVE QUICKLY UNDERGROUND BY WAY
OF THE STAIRS, IN THE COUNTING
HOUSE, AND REMAIN IN THE
UNDERGROUND CORRIDOR AREA.

- LEGEND**
- EGRESS PATH
 - FIRE EXTINGUISHER
 - FIRE ALARM PULL STATION
 - SEVERE WIND TAKE COVER AREA
 - MUSTER POINT
 - ELEVATOR - DO NOT USE IN A FIRE
 - EPO: EMERGENCY SHUT OFF
 - FSD: ACCELERATOR FAST SHUT DOWN
 - TELEPHONE

HALL A WORKER AWARENESS TRAINING LAYOUT



EXPERIMENTAL HALL A
BUILDING 101, FLOOR 1
EMERGENCY PLAN

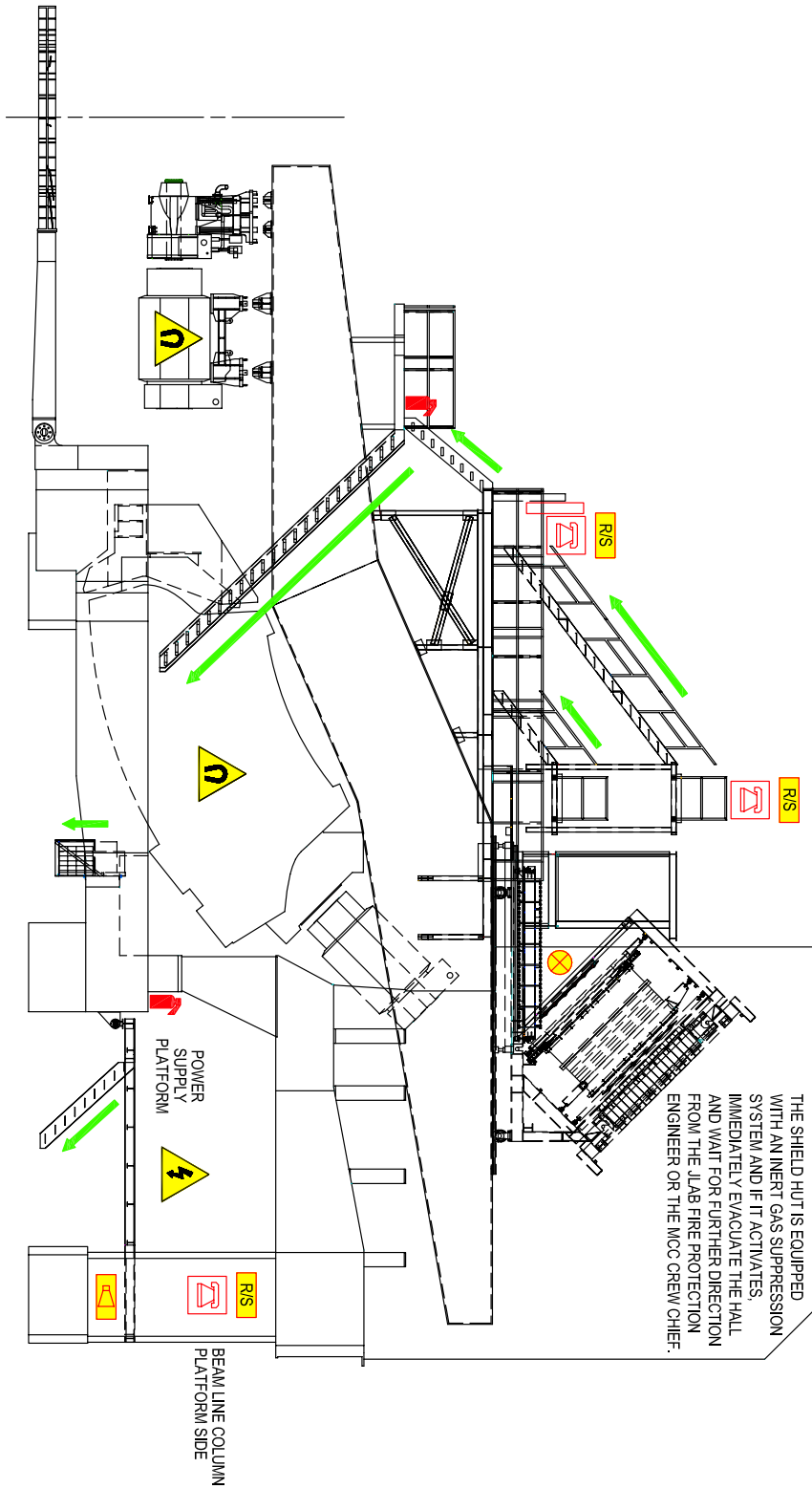
IN CASE OF FIRE:

- STAY CALM
- WALK, DO NOT RUN
- ACTIVATE NEAREST PULL BOX, FOLLOW ARROWS IN DIAGRAM, & MEET AT MUSTER POINT

IN CASE OF SEVERE WIND:



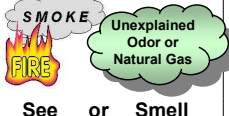










IF A TORNADO WARNING IS ISSUED BY THE NATIONAL WEATHER SERVICE, AND YOU ARE WITHIN THE WARNING AREA, MOVE QUICKLY TO ONE OF THE DESIGNATED SEVERE WIND TAKE COVER AREAS.

LEGEND	
	EGRESS PATH
	FIRE EXTINGUISHER
	FIRE ALARM PULL STATION
	SEVERE WIND TAKE COVER AREA
	MUSTER POINT
	TELEPHONE
	EMERGENCY EXIT SWITCH
	RUNSAFE BOX
	CRANE POWER DISCONNECT
	LASER KILL BUTTON
	MAGNETIC FIELD
	ELECTRONICS / POWER
	EYE WASH
	CABLE PATH



**FOR HALL WORKER
AWARENESS TRAINING ONLY**

<p>HALL A SPECTROMETER</p>	
<p>IN CASE OF FIRE:</p> <ul style="list-style-type: none"> • STAY CALM • WALK, DO NOT RUN • ACTIVATE NEAREST PULL BOX, FOLLOW ARROWS IN DIAGRAM, & MEET AT MUSTER POINT 	
<p>LEGEND</p> <ul style="list-style-type: none"> → EGRESS PATH 🔥 FIRE EXTINGUISHER 🚒 FIRE ALARM PULL STATION 🚒 RUNSAFE ☎ TELEPHONE ⚡ MAGNETIC FIELD ⚡ ELECTRONICS / POWER 📡 SPECTROMETER 📡 MOTION HORN & YELLOW BEACON ⊗ YELLOW BEACON 	

Important information DIAL 9-911 or 911	Both numbers will connect you to: City of Newport News' Emergency Dispatch Center	If dialed from a land-line phone the following are automatically alerted: <ul style="list-style-type: none"> • Jefferson Lab Security • Occupational Medicine • Other key Jefferson Lab Responders. 	If dialed from a cell phone you will also need to call: Jefferson Lab Security 269-5822 Cell 342-9868
EVENT	ACTION 1	ACTION 2	ACTION 3
Injury or acute illness 	Call 9-911 or 911	<ul style="list-style-type: none"> • Do not move the victim (unless they are in danger) • Administer first aid/CPR if willing and trained • Avoid contact with blood 	<ul style="list-style-type: none"> • Stay with the victim while awaiting emergency responders
<p style="color: blue;">Direct minor injuries to Occupational Medicine (Support Service Center, Bldg 28, Room 22) during regular business hours. Most buildings have one or more first-aid cabinets and AEDs for your convenience. There are pamphlets at these locations to assist you.</p>			
 Fire Alarm	Evacuate to Muster Point (refer to the evacuation map for the location)	Await "All-Clear Notification" From Fire Protection Engineer or Building Drill Coordinator before re-entry.	
 See or Smell	Sound Alarm use the nearest pull box)	 Evacuate to Muster Point (refer to the evacuation map for the location)	 Await "All-Clear" Notification From Fire Protection Engineer or Building Drill Coordinator before re-entry.
 Chemical Spill	Evacuate Upwind (keep others away)	Call Jefferson Lab Security 269-5822	Only personnel trained and equipped are permitted to contain and control a spill.
 Suspect Item	<ul style="list-style-type: none"> • DO NOT touch the item • DO NOT change the environment (e.g. turn off lights or open window) 	Back Away (keep others away)	Call Jefferson Lab Security 269-5822
 Bomb Threat	Write Down: <ul style="list-style-type: none"> • Any demands/ instructions • Caller's number if available • Vocal characteristics • Any other relevant details to identify the caller 	Call Jefferson Lab Security 269-5822	Stand by for further instructions from Security or JLab Management
Other Emergency Notifications (via cisco phone system, notification e-mail, outdoor siren, weather alert radio)		(e.g. Off-Site Emergency, Severe Weather Warning, Earthquake)	
Stay in Building (unless told to evacuate) Abide by Instructions Refer to the evacuation map for appropriate locations			
ODH Alarm or visible plume	 Evacuate to Muster Point	Call Jefferson Lab Security 269-5822	If on the Accelerator Site Call the Crew Chief 269-7045
Radiation Alarm	 If you see a Flashing RED Light and Hear an Audible Alarm	Evacuate to Muster Point (refer to the evacuation map for the location)	If on Accelerator Site Call the Crew Chief 269-7045
Hazardous Machine Operations	 Hit "Push to Safe" RED Button	Evacuate to Muster Point (refer to the evacuation map for the location)	Call the Crew Chief 269-7045
Automobile Accident	If anyone is injured Call 9-911 or 911	Call Jefferson Lab Security 269-5822	Call Facilities Management 269-7400
Intruders, Threatening or Abusive Behavior other unauthorized conduct	Call Jefferson Lab Security 269-5822	Protect Yourself to Ensure Your Personal Safety If not imminent danger, report the incident to your lab management ASAP!	
Requests for Jefferson Lab Status , or other information	You are not authorized to provide any information regarding Jefferson Lab status or conditions. Refer Requestor to Jefferson Communications Office 269-7689		