

# HALL B WORKER SAFETY AWARENESS TRAINING (SAF111)

*Hall-B\_ERG.docx – Updated: April 11, 2018*

## ***Purpose***

Familiarize users with safety hazards and protection systems in the Hall B Counting House, Labyrinth, and Experimental Hall B.

## ***Training***

All users should take the guided walkthrough covering the Hall B Counting House, the Labyrinth, and Experimental Hall B using the latest update of the Emergency Response Guidelines (ERG) document for the hall. For this, the user should contact the people responsible for the training:

Hall B/SAF111 - Eugene Pasyuk, [(757)-269-6020, [pasyuk@jlab.org](mailto:pasyuk@jlab.org)]  
Denny Insley, [cell: (757)-810-9576, [dinsley@jlab.org](mailto:dinsley@jlab.org)].

The guided training will, at a minimum, go over the likely hazards, the protection and emergency systems, and the procedures within the Hall B Counting House, the Labyrinth, and in Experimental Hall B. This information is outlined in Appendix A of the ERG that is located in the Hall B Counting House. The JLab Skill Requirements List (SRL) tracking system (i.e. training) will be used to track each user's training status.

The SAF111 training does not have an expiration date. If, however, the conditions of Experimental Hall B are deemed to have changed sufficiently by the Division Safety Officer, the SAF111 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 retake the guided SAF111 training.

SAF111 training is required for unescorted access to Experimental Hall B and to be able to take shifts in the Hall B 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, and the Emergency Response Guidelines detailing emergency procedures and egress routes during the experiment. 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 Hall B Counting House, the labyrinth, and Experimental Hall B.

### ***Prerequisites to Access the Hall B Without an 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)

Physics Division Work Governance (SAF116kd)

Hall B Worker Safety Awareness Training (SAF111)

### ***Reminder***

- **No one under 18 years may enter the halls**
- **No sandals or open toe shoes in any hall**
- **No shorts, long pants are required in the hall**
- **No food or drinking inside the halls**
- **Check postings at the entrance to the hall for special requirements** (e.g. hardhats are mandatory in Hall B and often required in the other halls). ***If in doubt, please contact the Hall Work Coordinator or his/her designee,***  
Hall B - D. Insley [cell (757)-810-9576, [dinsley@jlab.org](mailto:dinsley@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 Safety Officer (E. Folts) or the Physics Division ESH&Q Liaison (B. Manzlak).***

### ***The Two-Person Rule ("Buddy Rule")***

Accessing the halls or performing work in the halls may require that personnel work in teams of at least two people. The two-person rule must be followed when entering Experimental Hall B or when performing a task in any of the halls that requires two people as indicated by the applicable general JLab safety rules or task OSP/TOSP. Examples of tasks that require two people would be operation of the hall crane, use of a man-lift, and performing cryogenic, electrical or welding work. **Check postings at the entrance to the hall for special requirements. If in doubt, contact the Hall B 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 and emergency systems used, and emergency procedures to be reviewed during the Hall B Worker Awareness Training

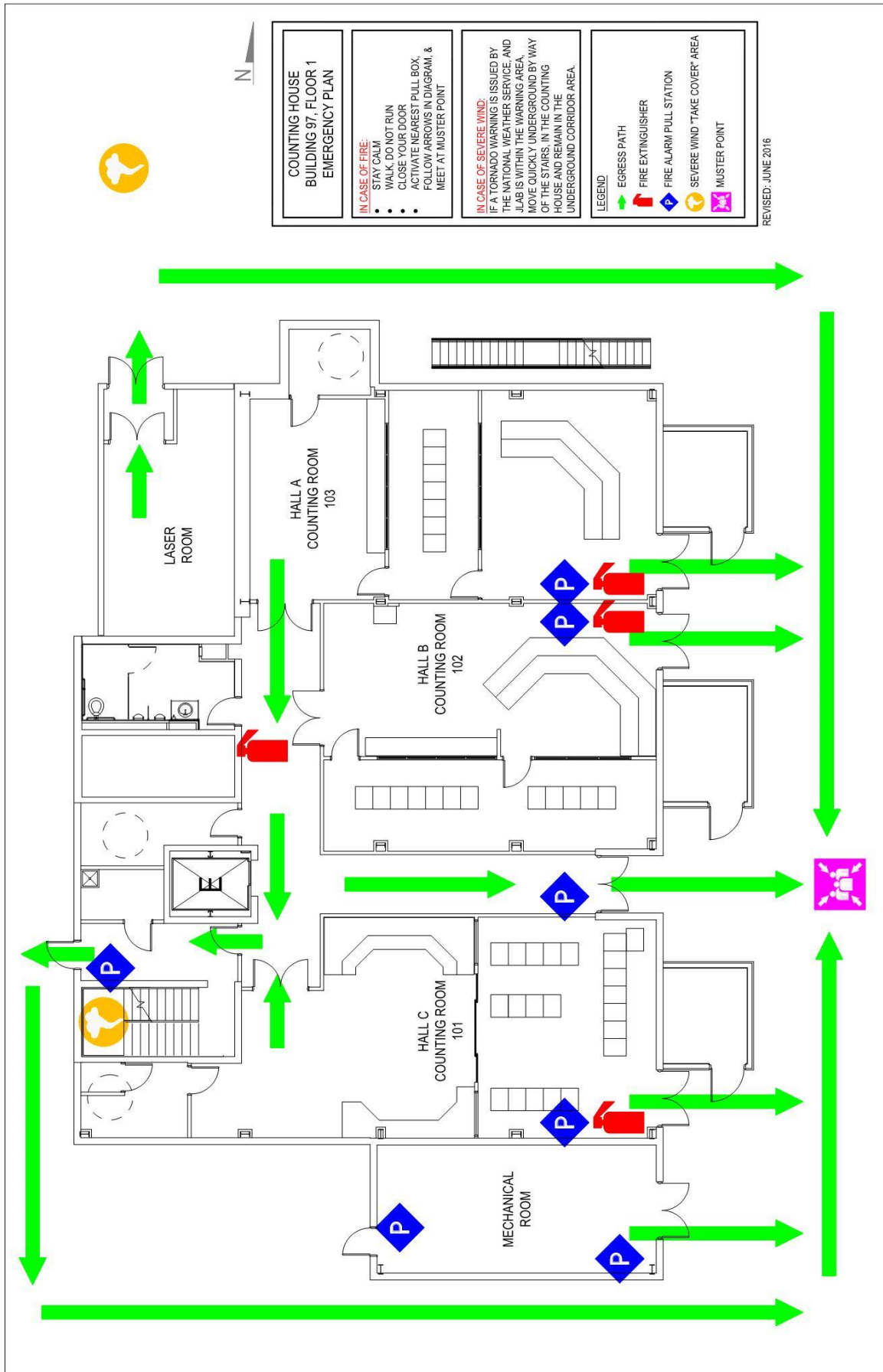
### Hazards:

- 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

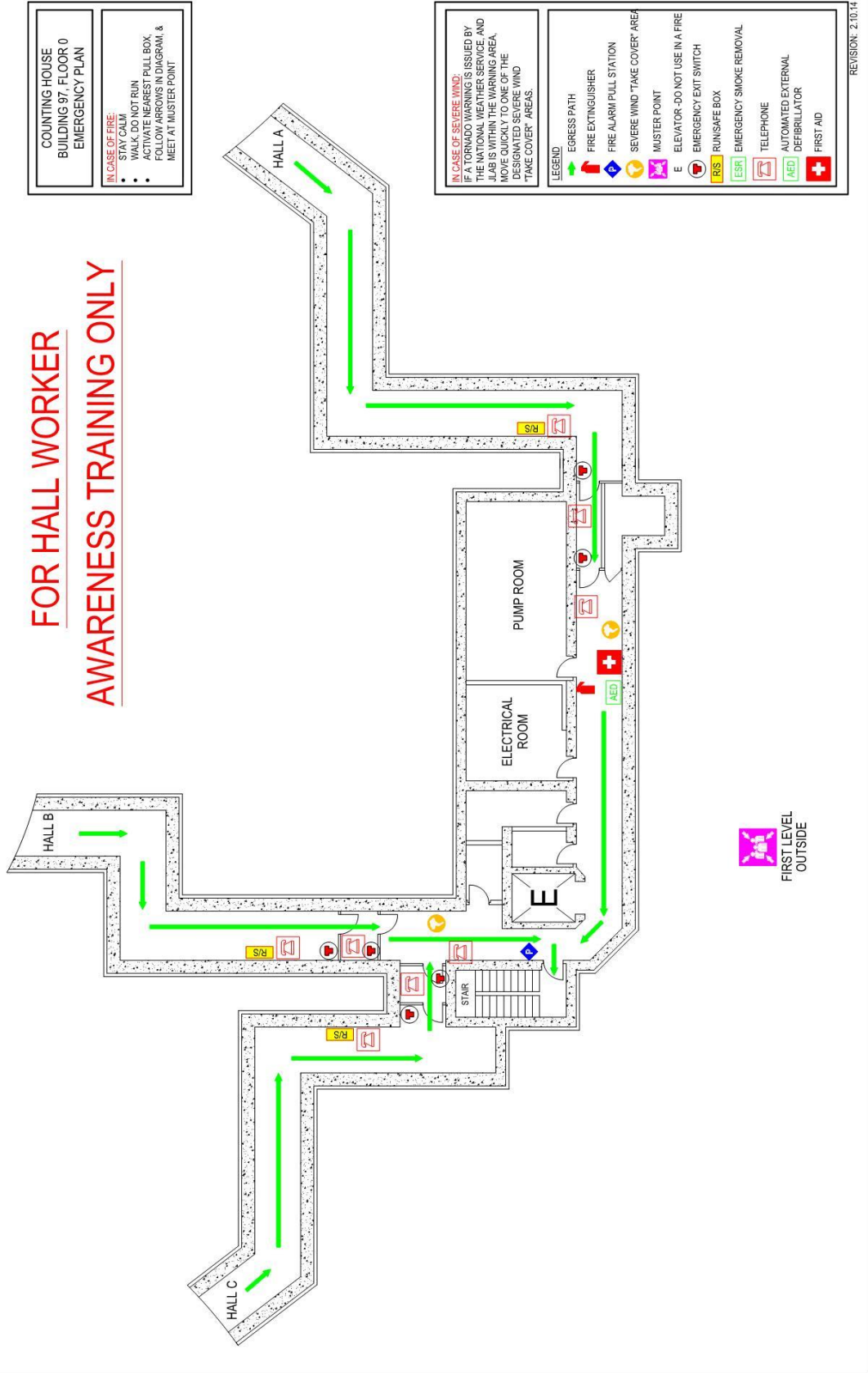
### Protection and Emergency Systems and Procedures:

- 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
  - Fire extinguishers
  - Evacuation routes and muster points
- Electrical

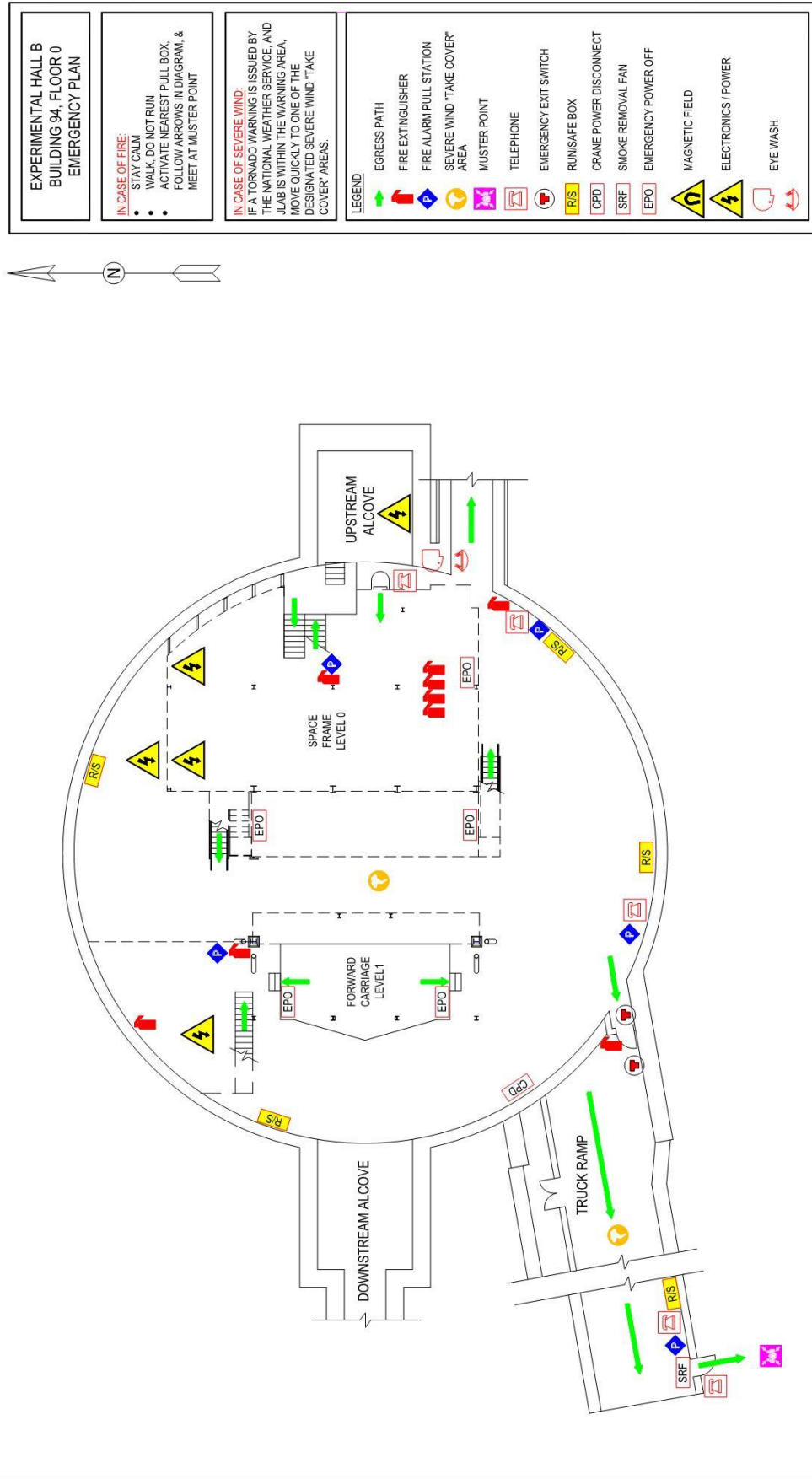
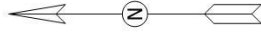
- Power shutoff switches
  - Circuit breaker panels
- Weather related hazards
  - Tornado emergency response
- Emergency lights
- Beam status, interlock and abort
  - Machine State Status Indicators,
  - Magenta/purple beacons,
  - Access doors to hall
  - Key interlocks
  - Run/Safe boxes
- Oxygen Deficiency 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

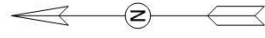


**FOR HALL WORKER  
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**EXPERIMENTAL HALL B  
BUILDING 94, FLOOR 1  
EMERGENCY PLAN**

**IN CASE OF FIRE:**

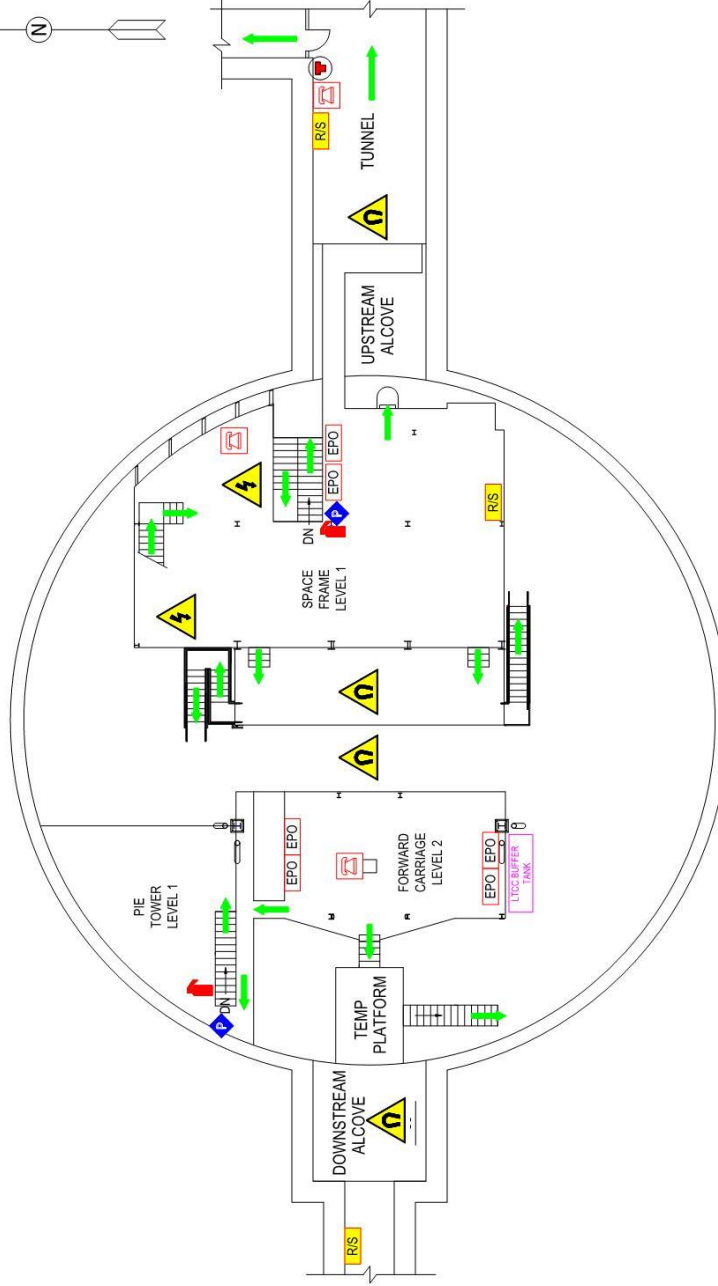
- STAY CALM
- WALK, DO NOT RUN
- ACTIVATE NEAREST PULL BOX
- FOLLOW ARROWS IN DIAGRAM, & MEET AT MUSTER POINT

**IN CASE OF SEVERE WIND:**

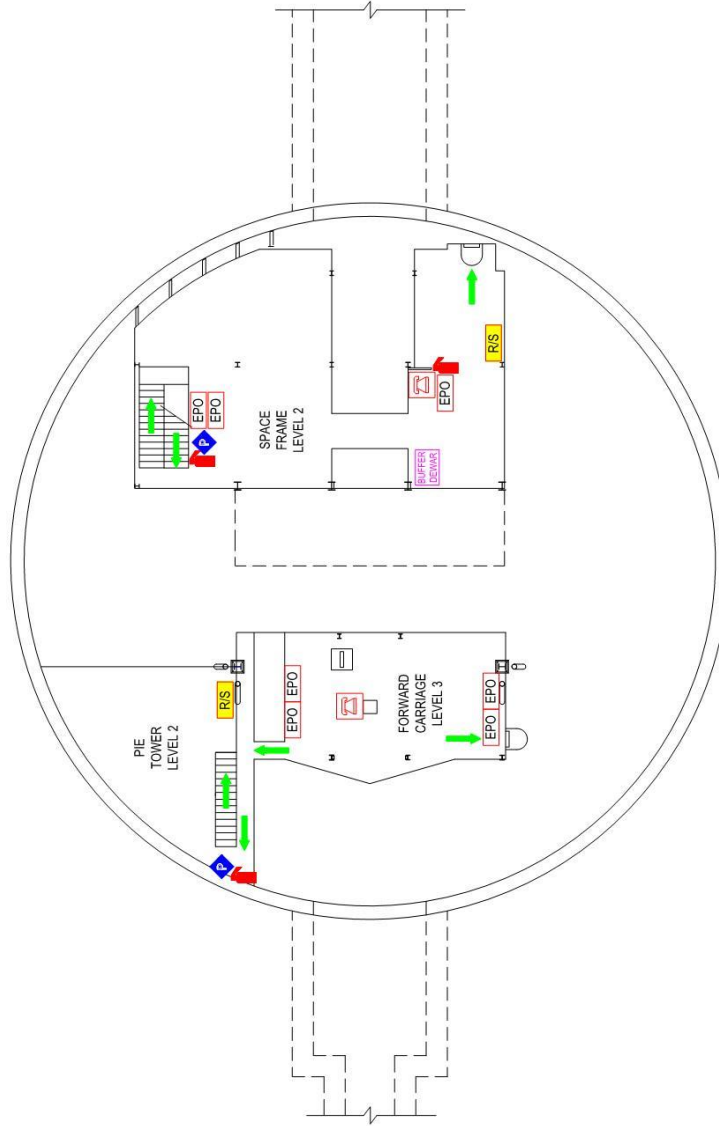
IF A TORNADO WARNING IS ISSUED BY THE NATIONAL WEATHER SERVICE, AND JLAB IS WITHIN THE WARNING AREA, MOVE QUICKLY TO ONE OF THE DESIGNATED SEVERE WIND "TAKE COVER" AREAS.

**LEGEND**

- EGRESS PATH
- FIRE EXTINGUISHER
- FIRE ALARM PULL STATION
- SEVERE WIND "TAKE COVER" AREA
- MUSTER POINT
- TELEPHONE
- EMERGENCY EXIT SWITCH
- R/S RUNSAFE BOX
- CPD CRANE POWER DISCONNECT
- SRF SMOKE REMOVAL FAN
- EPO EMERGENCY POWER OFF
- MAGNETIC FIELD
- ELECTRONICS / POWER
- EYE WASH

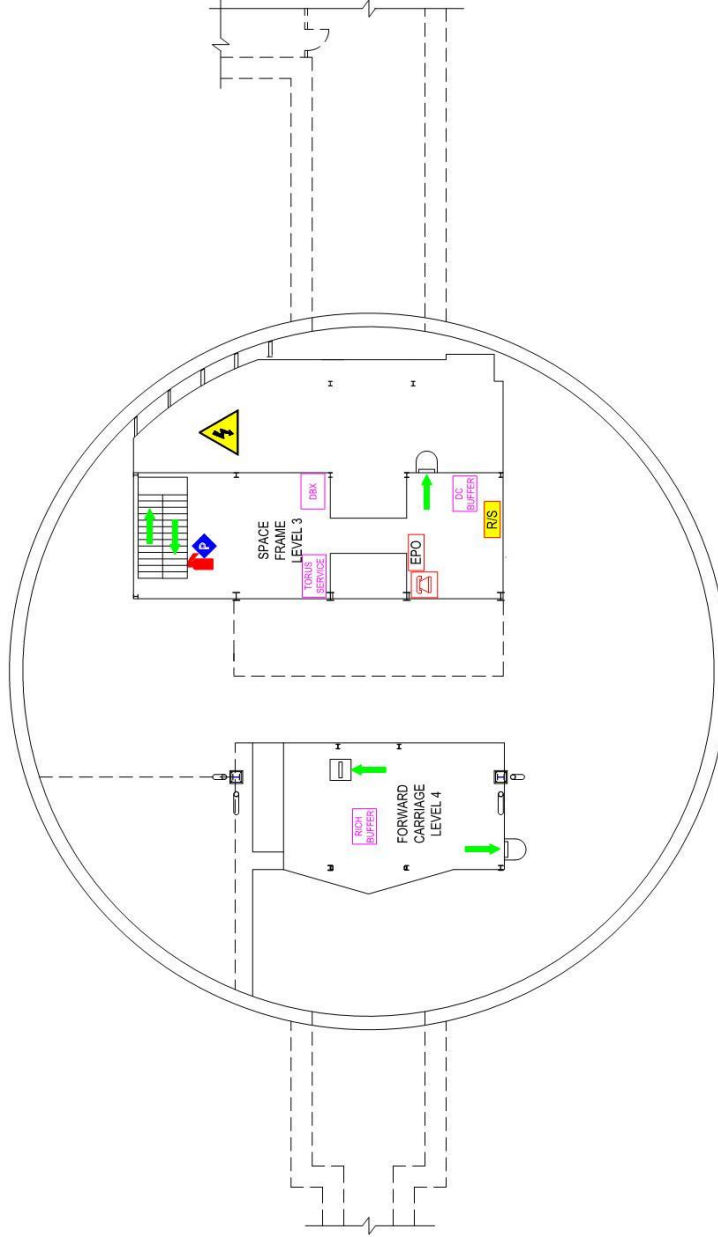


# **FOR HALL WORKER** **AWARENESS TRAINING ONLY**
















<p><b>EXPERIMENTAL HALL B BUILDING 94, FLOOR 2 EMERGENCY PLAN</b></p>	<p><b>IN CASE OF FIRE:</b></p> <ul style="list-style-type: none"> <li>• STAY CALM</li> <li>• WALK, DO NOT RUN</li> <li>• ACTIVATE NEAREST PULL BOX, FOLLOW ARROWS IN DIAGRAM, &amp; MEET AT MUSTER POINT</li> </ul>	<p><b>IN CASE OF SEVERE WIND:</b></p> <p>IF A TORNADO WARNING IS ISSUED BY THE NATIONAL WEATHER SERVICE, AND JLAB IS WITHIN THE WARNING AREA, MOVE QUICKLY TO ONE OF THE DESIGNATED SEVERE WIND TAKE COVER AREAS.</p>	<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>EGRESS PATH (Green arrow)</li> <li>FIRE EXTINGUISHER (Red fire extinguisher icon)</li> <li>FIRE ALARM/PULL STATION (Blue square with 'P')</li> <li>SEVERE WIND "TAKE COVER" AREA (Yellow circle with 'S')</li> <li>MUSTER POINT (Purple square with 'M')</li> <li>TELEPHONE (Red telephone icon)</li> <li>EMERGENCY EXIT SWITCH (Red switch icon)</li> <li>RUN/SAFE BOX (Yellow 'R/S' box)</li> <li>CRANE POWER DISCONNECT (Red 'CPD' box)</li> <li>SMOKE REMOVAL FAN (Red 'SRF' box)</li> <li>EMERGENCY POWER OFF (Red 'EPO' box)</li> <li>MAGNETIC FIELD (Yellow triangle with 'M')</li> <li>ELECTRONICS / POWER (Yellow triangle with 'E')</li> <li>EYE WASH (Red eye wash icon)</li> </ul>
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**FOR HALL WORKER  
AWARENESS TRAINING ONLY**



<p><b>EXPERIMENTAL HALL B BUILDING 94, FLOOR 3 EMERGENCY PLAN</b></p>	<p><b>IN CASE OF FIRE:</b></p> <ul style="list-style-type: none"> <li>• STAY CALM!</li> <li>• WALK, DO NOT RUN</li> <li>• ACTIVATE NEAREST PULL BOX, FOLLOW ARROWS IN DIAGRAM, &amp; MEET AT MUSTER POINT</li> </ul>	<p><b>IN CASE OF SEVERE WIND:</b></p> <p>IF A TORNADO WARNING IS ISSUED BY THE NATIONAL WEATHER SERVICE AND LAB IS WITHIN THE WARNING AREA, MOVE QUICKLY TO ONE OF THE DESIGNATED SEVERE WIND "TAKE COVER" AREAS.</p>	<p><b>LEGEND</b></p> <p>EGRESS PATH </p> <p>FIRE EXTINGUISHER </p> <p>FIRE ALARM PULL STATION </p> <p>SEVERE WIND "TAKE COVER" AREA </p> <p>MUSTER POINT </p> <p>TELEPHONE </p> <p>EMERGENCY EXIT SWITCH </p> <p>RUN/SAFE BOX </p> <p>CRANE POWER DISCONNECT </p> <p>SMOKE REMOVAL FAN </p> <p>EMERGENCY POWER OFF </p> <p>MAGNETIC FIELD </p> <p>ELECTRONICS / POWER </p> <p>EYE WASH </p>
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Important information <b>DIAL</b> <b>9-911 or 911</b>	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: • 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"><li>Do not move the victim (unless they are in danger)</li><li>Administer first aid/CPR if willing and trained</li><li>Avoid contact with blood</li></ul>	<ul style="list-style-type: none"><li>Stay with the victim while awaiting emergency responders</li></ul>	
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.				
 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 OIL 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"><li>DO NOT touch the item</li><li>DO NOT change the environment (e.g. turn off lights or open window)</li></ul>	Back Away (keep others away)	Call Jefferson Lab Security 269-5822	
 Bomb Threat	Write Down: <ul style="list-style-type: none"><li>Any demands/ instructions</li><li>Caller's number if available</li><li>Vocal characteristics</li><li>Any other relevant details to identify the caller</li></ul>	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 <b>RED</b> 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" <b>RED</b> 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 Jeffers on Communications Office 269-7689			

Rev. 06/2017

Employees please contact Eugene Pasyuk (pasyuk@jlab.org) or Denny Insley (cell: 810- 9576) (dinsley@jlab.org) to make an appointment for your walk-through. Subcontractors arrange walk-through with SOTR.

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