# **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 whishing 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)

### Remainder

- 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. hardhats are
  mandatory in Hall B and often required in the other halls, long pants may be required
  during extended shutdowns). If in doubt, please contact the Hall Work Coordinator or
  his/her designee,

Hall A - E. Folts [cell (757)876-1788, folts@jlab.org]

Check that all work or test set ups follow the work controls indicated in the ESH&Q manual and on the supplemental Physics Division Work Planning Guidance. 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 (P. Rossi).

# 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

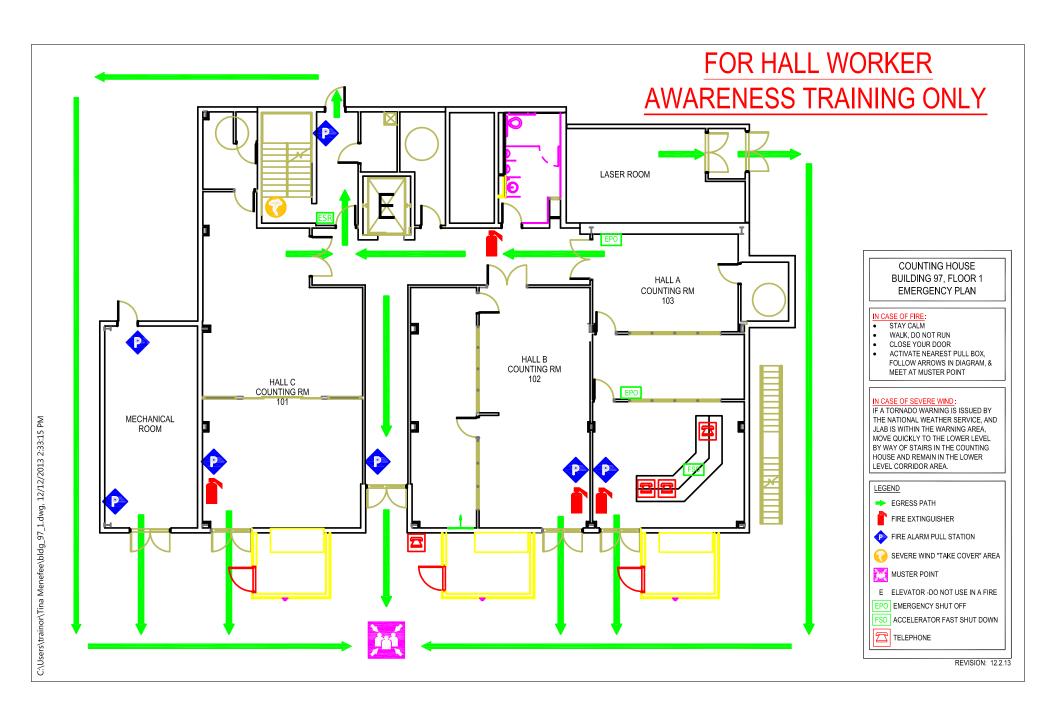
# Hazards:

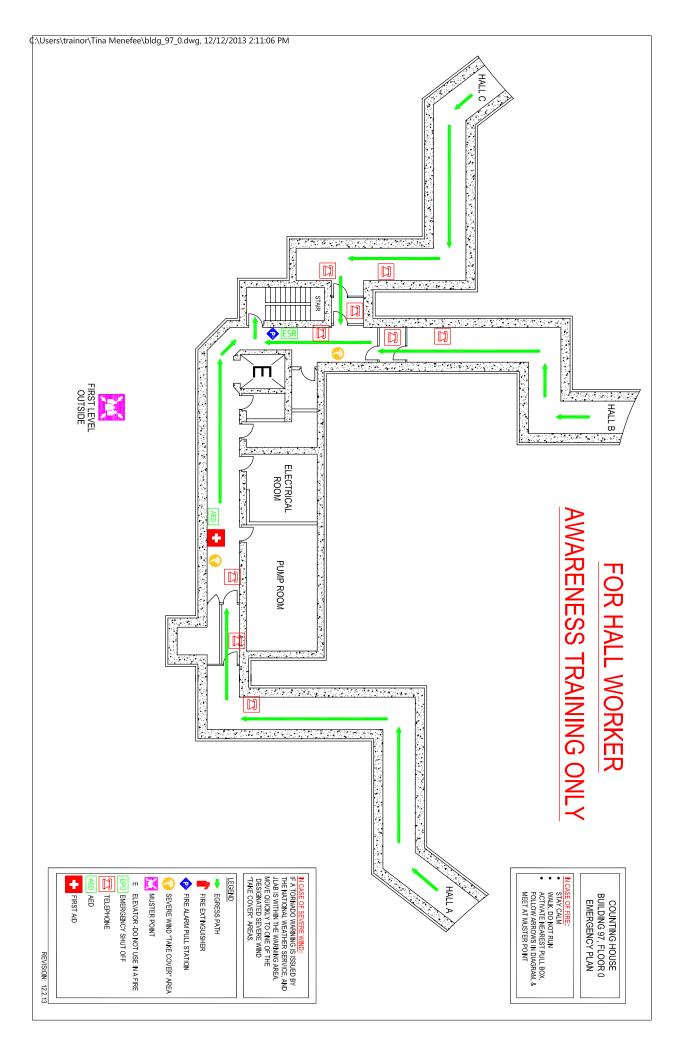
- Fire (electrical equipment, breaker panels, paper, trash, cables)
- Tripping and overhead hazards
- Falling hazards
- Elevated work
- High-pressure systems including low-conductivity water distribution
- Radiation hazards (beam-on, contaminated and activated areas)
- Loud noise hazards (thin vacuum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

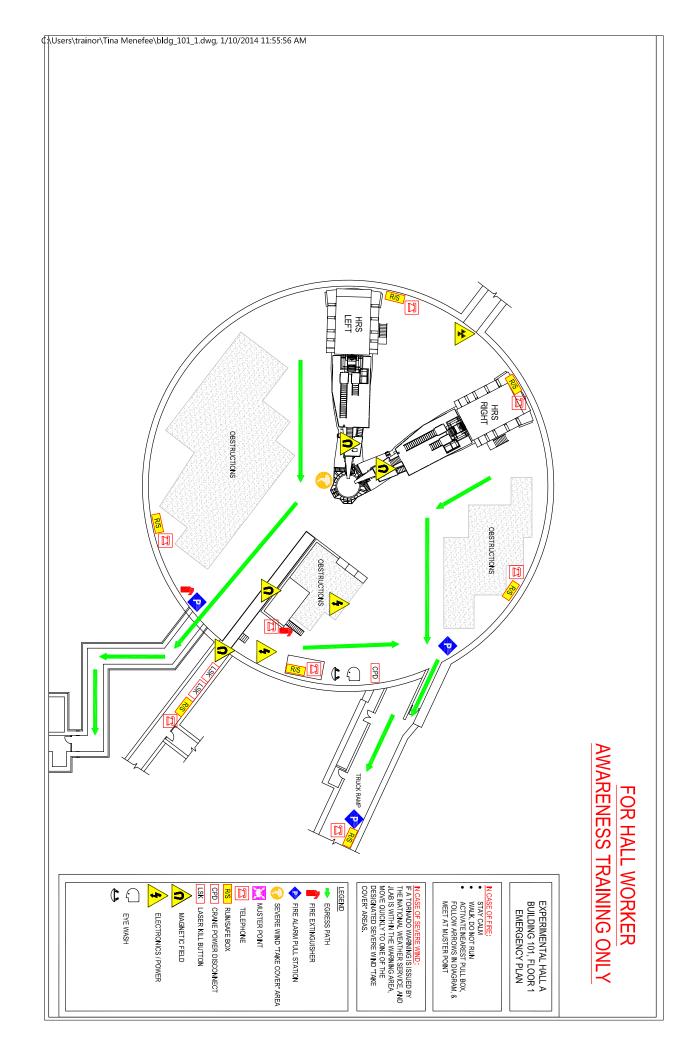
# Protection & Emergency systems and procedures:

- Signs and postings,
  - Radiation areas
  - Hearing protection requirements
  - Exist 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
  - o 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







# THE SHIELD HUT IS EQUIPPED WITH AN INERT GAS SUPPRESSION SYSTEM AND IF IT ACTIVATES, IMMEDIATELY EVACUATE THE HALL AND WAIT FOR FURTHER DIRECTION FROM THE JLAB FIRE PROTECTION ENGINEER OR THE MCC CREW CHIEF. R/S BEAM LINE COLUMN PLATFORM SIDE SPECTROMETER MOTION HORN & YELLOW BEACON LEGEND D R/S RUN/SAFE STAY CALM WALK, DO NOT RUN ACTIVATE NEAREST PULL BOX, FOLLOW ARROWS IN DIAGRAM, & MEET AT MUSTER POINT FIRE ALARM PULL STATION FIRE EXTINGUISHER TELEPHONE EGRESS PATH SPECTROMETER YELLOW BEACON HALL A REVISION 12.2.13

# FOR HALL WORKER AWARENESS TRAINING ONLY



# **Emergency Response Procedures**

OThomas Jefferson National Accelerator F	Emerge Emerge	ency Response	Procedures
Important information	Both numbers will connect you to:	If dialed from a land-line phone the following are automatically alerted:  • JLab Security	If dialed from a cell phone you will also need to call:
9-911 or 911	City of Newport News' Emergency Dispatch Center	Occupational Medicine     Other key JLab Responders.	JLab Security @ 269-5822
EVENT -	ACTION 1	ACTION 2	ACTION 3
Injury or acute illness	Call 9-911 or 911	Stay with the victim while awaiting emergency responders     Do not move the victim unless they are endangered at location     Administer first aid/CPR if willing and trained     Avoid contact with other's blood	If possible send someone to flag down the ambulance
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.			
SMOKE	Sound Alarm (use the nearest pull box)	Evacuate to Muster Point (refer to the evacuation map for your location)	Await "All-Clear Notification" From Fire Protection Engineer or Building Drill Coordinator before re-entry.
Fire Alarm	Evacuate to Muster Point (refer to the evacuation map for your location)  Await "All-Clear Notification" From Fire Protection Engineer or Building Drill Coordinator before re-entry.		
Unexplained Odor of Natural Gas	Sound Alarm (use the nearest pull box)	Evacuate to Muster Point (refer to the evacuation map for your location)	Call JLab Security @ 269-5822
Severe Weather	Immediately:		
Warning (via weather alert radio, outdoor siren, or other official source)	Pass the Word     Taking Cover (refer to the evacuation map for your location)		
Earthquake	Do Not Evacuate Building	Protect Yourself from Falling Objects (get under a desk or table)	If there are injuries or damage  Call JLab Security  @ 269-5822
Bomb Threat	Write Down:  • Any demands/instructions  • Caller's number if available  • Vocal characteristics  • Any other relevant details to identify the caller	Call JLab Security @ 269-5822 or Sound Alarm (use the nearest pull box)	Evacuate to Muster Point (refer to the evacuation map for your location)
CHEMICAL SPILL OIL SPILL	Call JLab Security @ 269-5822	Cordon Off Area Keep people away	Wait for trained and equipped staff to control and contain the spill
ODH Alarm or visible plume	Evacuate to Muster Point (refer to Supervisor's instructions for your location)	Call JLab Security @ 269-5822	Call Crew Chief @ 269-7045
Radiation Alarm	Evacuate to Muster Point  (refer to the evacuation map for your location)	Call JLab Security @ 269-5822	Call Crew Chief @ 269-7045
Automobile Accident	If anyone is injured.	Call JLab Security @ 269-5822	Call Facilities Management
Intruders, Threatening or Abusive Behavior other unauthorized conduct	Call JLab Security @ 269-5822	Ensure Your Personal Safety! Activate the reception area duress (silent alarm) push button	
Trouble Indication audible alert in fire alarm panel	Call Facilities Management @ 269-7400		
Requests to Serve Summons or other legal documents	Call JLab Security @ 269-5822		
Requests for Personal Information about JLab staff or visitors	You are not authorized to provide any information about JLab staff members Refer Requestor to Human Resource Representative @ 269-7068		
Requests for passwords or other Computer-Access information	You are not authorized to provide any information about computer accounts, passwords, user names, and so forth  Refer Requestor to Computer Center Help Desk @ 269-7155		
Requests for JLab News, Status, or other information	You are not authorized to provide any information regarding JLab status or conditions Refer Requestor to JLab Public Information Office @ 269-7689		