HALL C WORKER SAFETY AWARENESS TRAINING (SAF112)

Purpose

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

Training

A guided walkthrough covering the Hall C Counting House, labyrinth and Hall C 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 SAF112 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 C/SAF112 - J. Beaufait (x-7131, beaufait@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 SAF112 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 SAF112 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 SAF112 training.

SAF112 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.

Updated 20160501

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 C Worker Safety Awareness Training (SAF112)

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. 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 C - W. Kellner [cell (757)592-1527, kellner@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). **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:

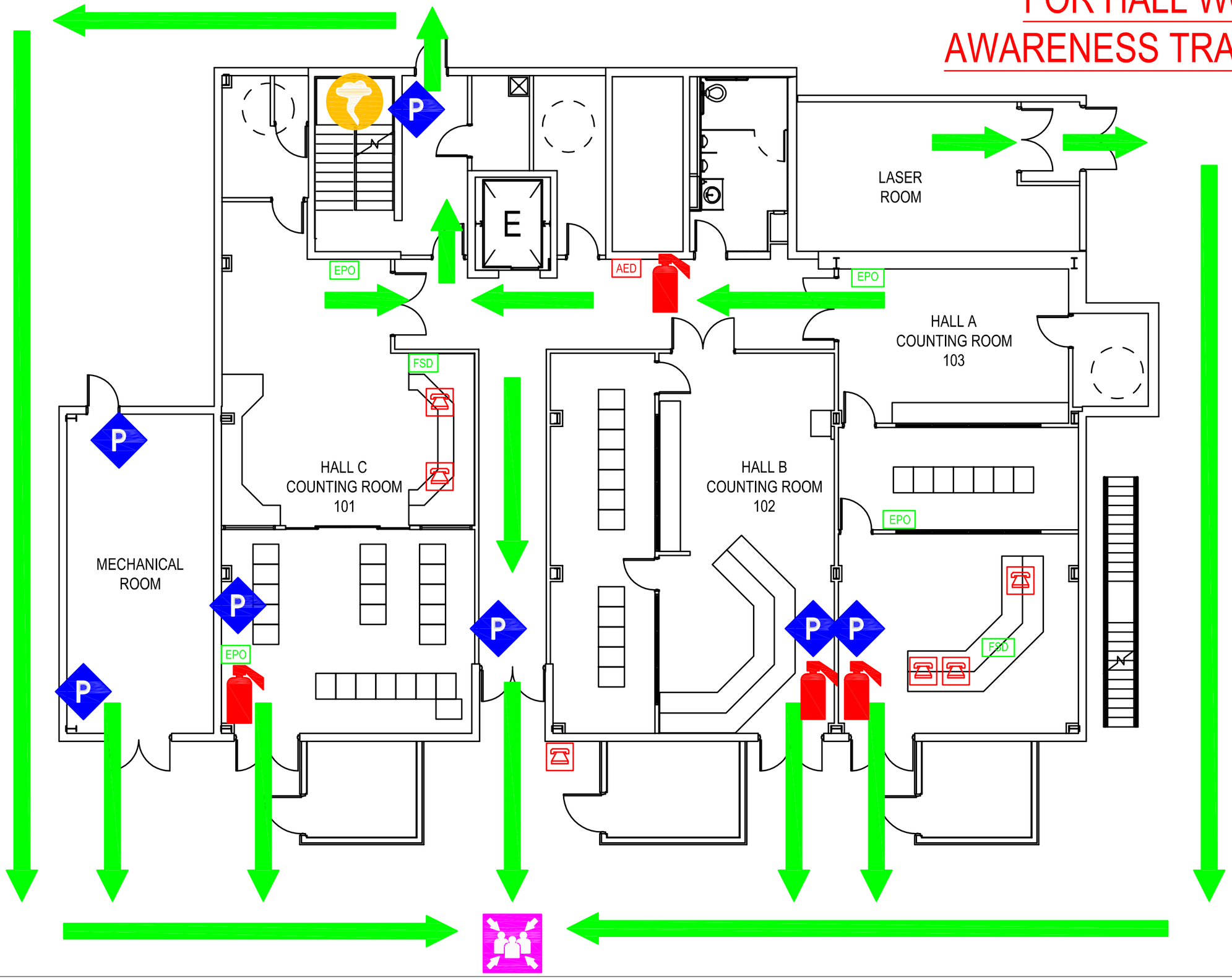
- Fire (electrical equipment, breaker panels, paper, trash, cables)
- Tripping and overhead hazards
- Falling hazards
- Elevated work
- High-pressure systems including low-conductivity water distribution
- Radiation hazards (beam-on, contaminated and activated areas)
- Loud noise hazards (thin vacuum 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
    - 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 JLAB 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
- E ELEVATOR -DO NOT USE IN A FIRE
- EPO EMERGENCY SHUT OFF
- FSD ACCELERATOR FAST SHUT DOWN
- AED AUTOMATED EXTERNAL DEFIBRILLATOR
- TELEPHONE

REVISED: APRIL 2016

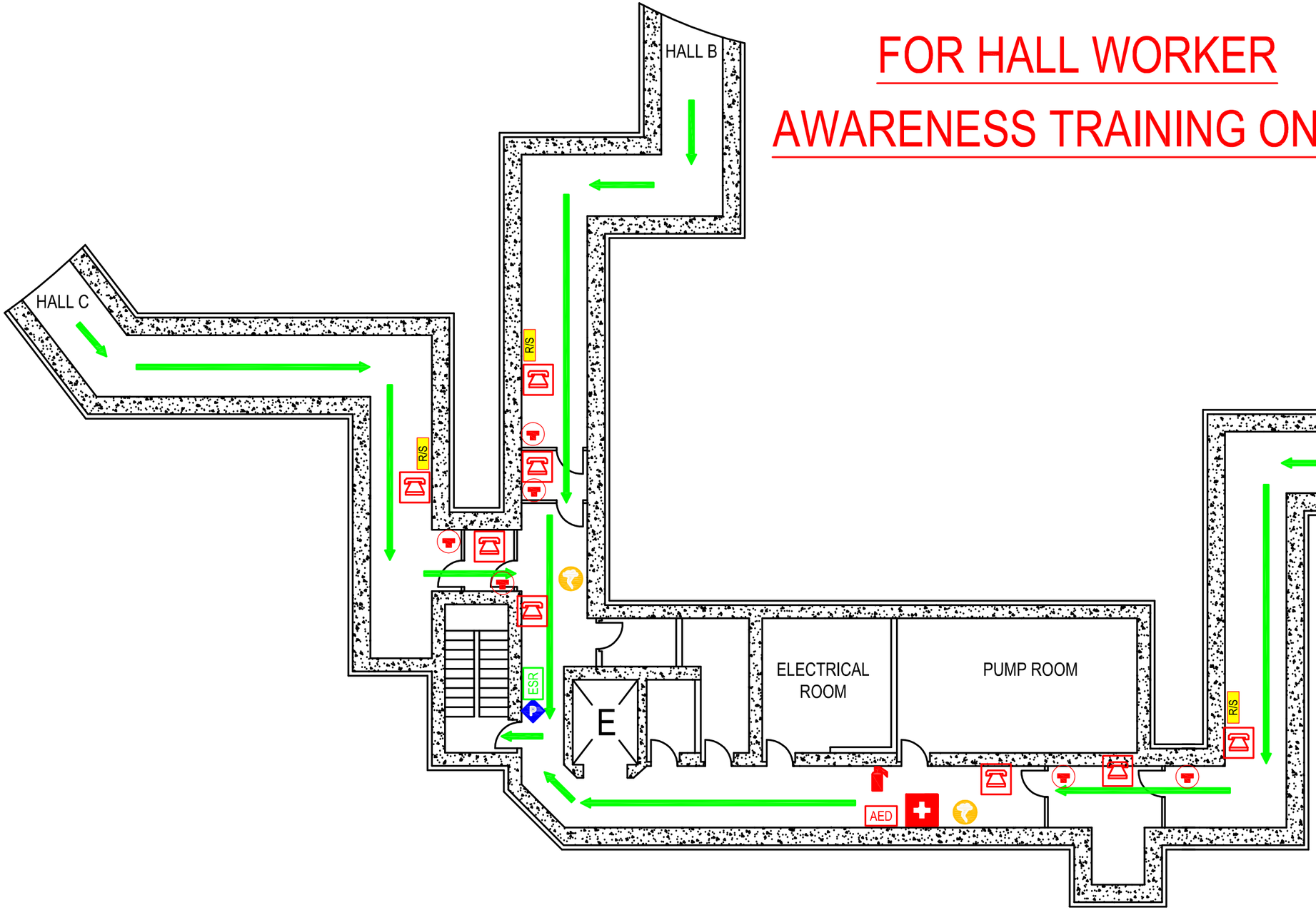
FOR HALL WORKER

AWARENESS TRAINING ONLY

COUNTING HOUSE
BUILDING 97, FLOOR 0
EMERGENCY PLAN

IN CASE OF FIRE:

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



FIRST LEVEL
OUTSIDE

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
- E ELEVATOR -DO NOT USE IN A FIRE
- EMERGENCY EXIT SWITCH
- R/S RUN/SAFE BOX
- EPO EMERGENCY SHUT OFF
- ESR EMERGENCY SMOKE REMOVAL
- TELEPHONE
- AED AUTOMATED EXTERNAL DEFIBRILLATOR
- FIRST AID

N

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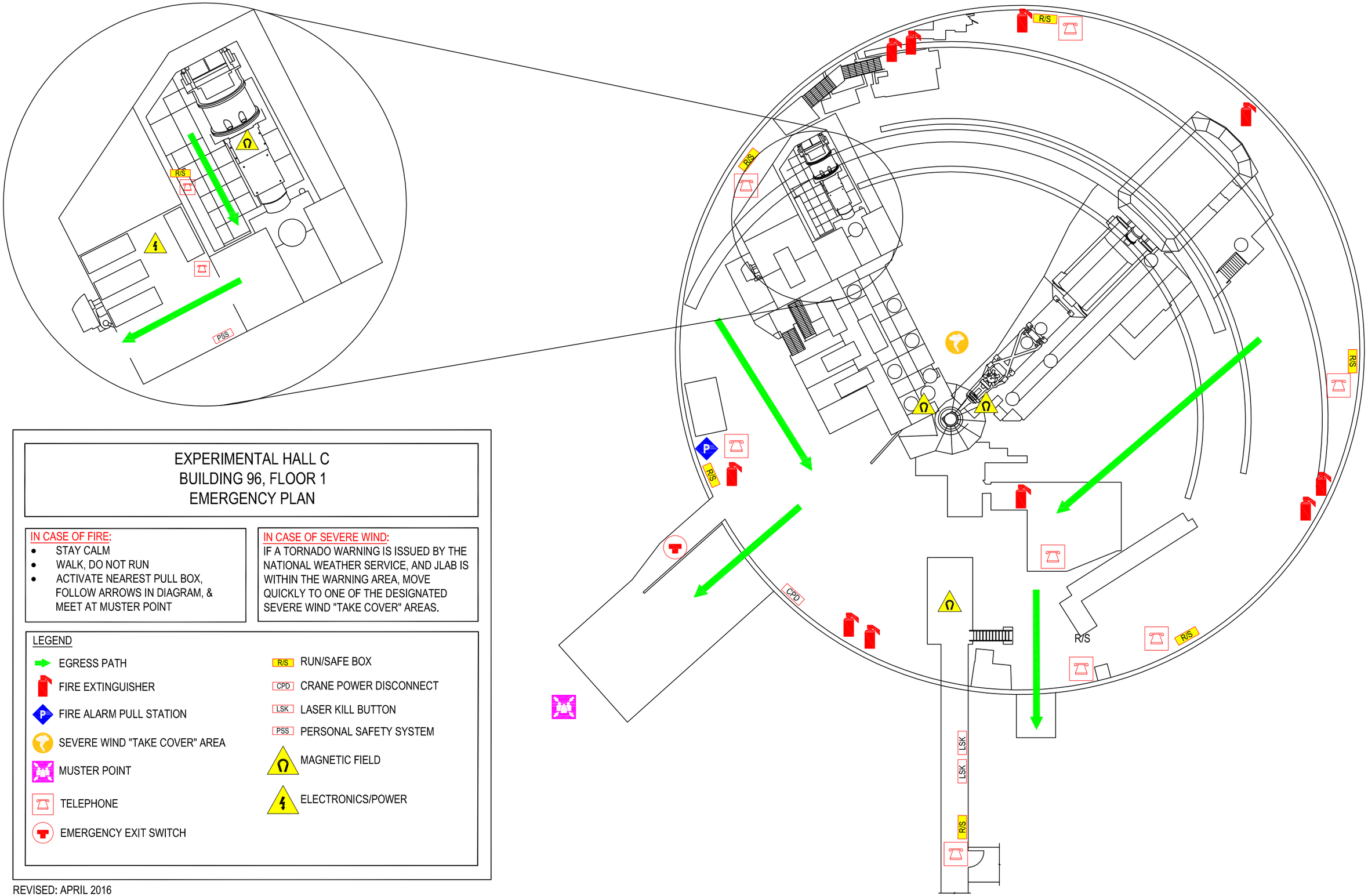

EXPERIMENTAL HALL C
BUILDING 96, FLOOR 1
EMERGENCY PLAN

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 RUN/SAFE BOX
- CPD CRANE POWER DISCONNECT
- LSK LASER KILL BUTTON
- PSS PERSONAL SAFETY SYSTEM
- MAGNETIC FIELD
- ELECTRONICS/POWER

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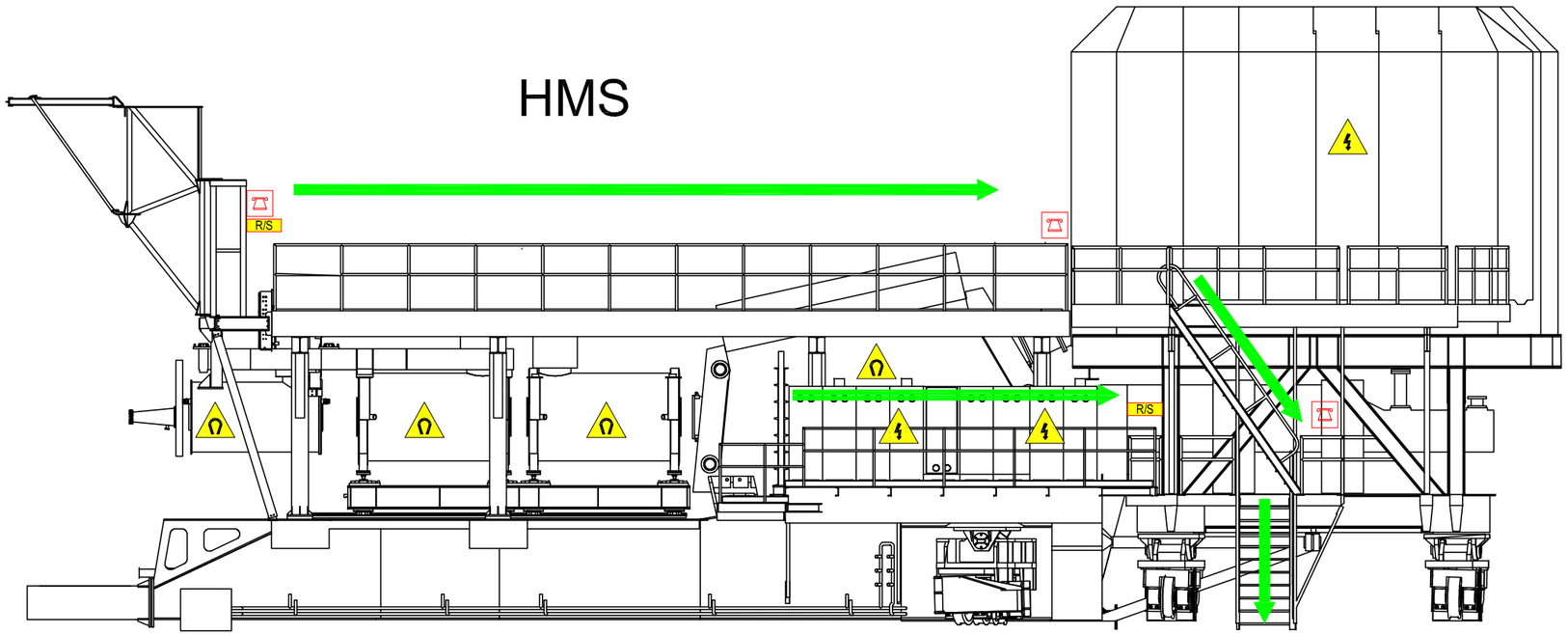
HMS



HALL C
HMS SPECTROMETER

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

LEGEND
- EGRESS PATH
- TELEPHONE
- R/S RUN/SAFE BOX
- MAGNETIC FIELD
- ELECTRONICS/POWER

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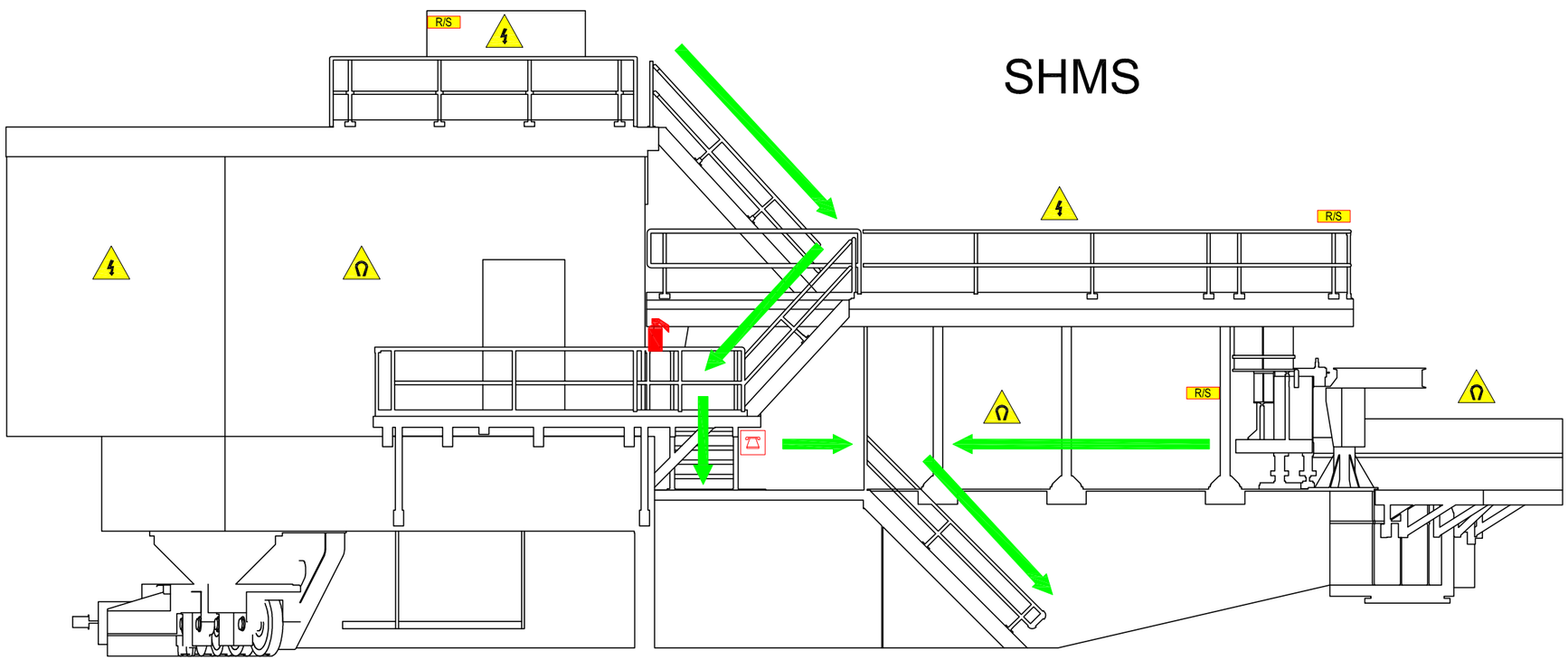
SHMS



HALL C
SHMS SPECTROMETER

IN CASE OF FIRE:
- STAY CALM
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LEGEND
- EGRESS PATH
- FIRE EXTINGUISHER
- TELEPHONE
- R/S RUN/SAFE BOX
- MAGNETIC FIELD
- ELECTRONICS/POWER

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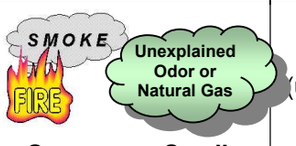
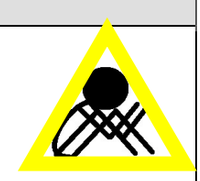
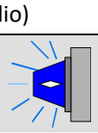
Jefferson Lab
Thomas Jefferson National Accelerator Facility

Emergency Response Procedures

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: • 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**	• Do not move the victim (unless they are in danger) • Administer first aid/CPR if willing and trained • Avoid contact with blood	• Stay with the victim while awaiting emergency responders
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.
	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	• **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:** • 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**		

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