

<b>BROOKHAVEN NATIONAL LABORATORY PHYSICS DEPARTMENT</b>	<b>Number:</b> <b>PO-LEP-02</b>	<b>Revision:</b> <b>02</b>
	<b>Effective:</b> <b>6/16/04</b>	Page 1 of 4
Subject: Local Emergency Plan, Building 820 (ATF)		820-LEP.doc
Prepared by: R. Gill	Reviewed by: S. Shapiro	Approved by: S. Aronson

## Local Emergency Plan

### ACCELERATOR TEST FACILITY LOCAL EMERGENCY PLAN

**Buildings: 820, 820B, 820M, and Trailer 351**

**Occupancy: 20**

Position	Name	Extension	Home Phone	Pager No.
Plan Preparer	R. Gill	3987	N/A	N/A
Building Manager	R. Leigel	2281	727-2346	(631) 291-7627
Primary LEC	K. Kusche	3116	878-6834	
Secondary LEC	ATF Operator	2306		
ES&H Coordinator	M. Zarcone	5890	246-5070	8502
ES&H Coordinator	R. Gill	3987	744-5285	5607
FSS Representative	J. Vignola	3846	399-4596	6160

Date Prepared: June 16, 2004

Frequency of Review: Annual

Date reviewed	Reviewed By	Review Type/Pages Changed
6/216/2004	R. Gill	Remove Rodrigues from LEP.

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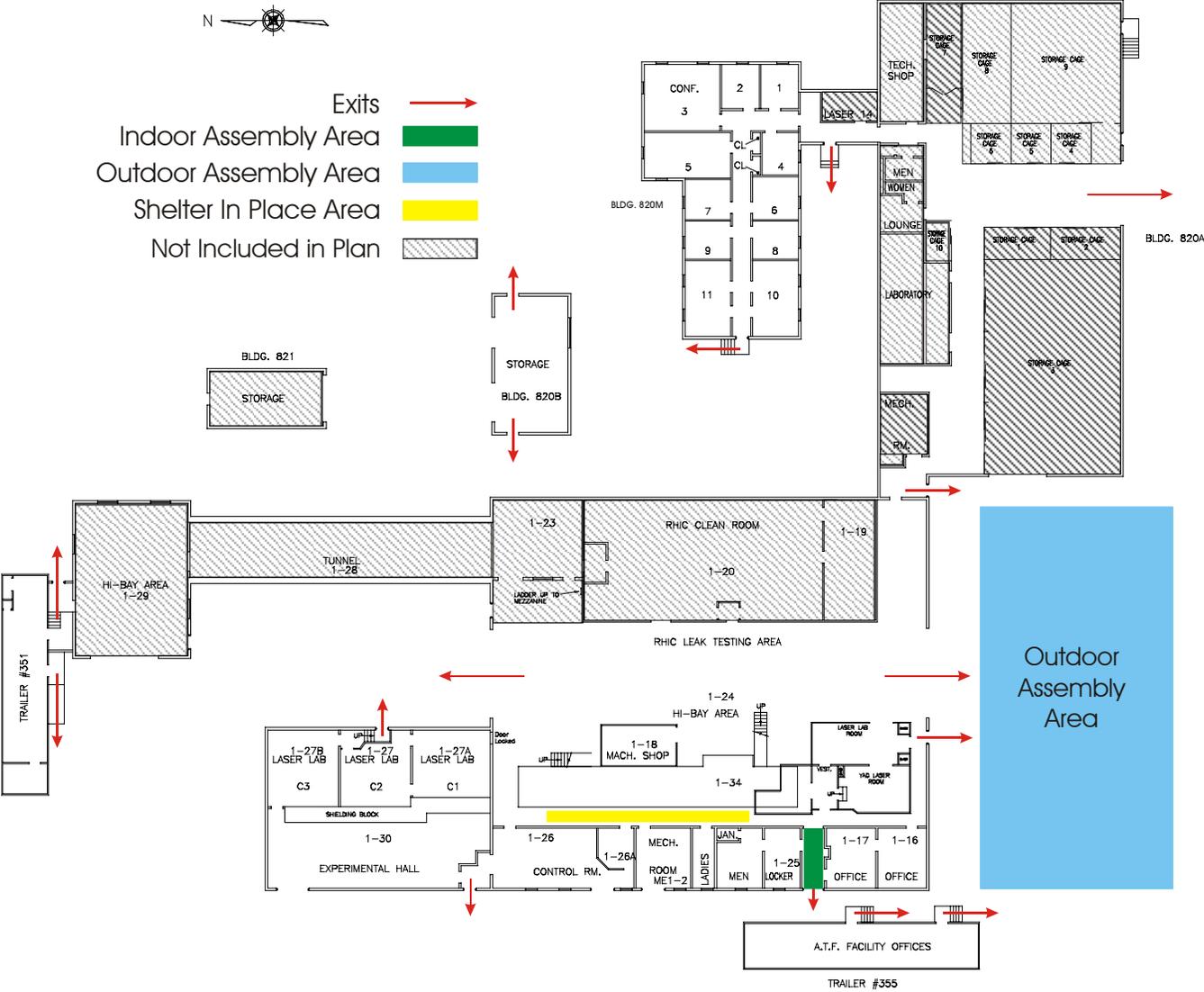
Every facility should establish an effective program to respond to emergencies. For this to work, every employee should be prepared to handle emergencies before they arise. This documents outlines the Employee Action Plan to address workplace emergencies.

**TO REPORT A FIRE, SPILL, MEDICAL OR OTHER EMERGENCY, DIAL 911 OR 2222. IF USING A CELL PHONE, DIAL 631-344-2222. IF A TELEPHONE IS NOT AVAILABLE, USE A FIRE ALARM BOX.**

**EMERGENCY EVACUATION PROCEDURES AND ROUTES**

Every employee should familiarize themselves with exits in their workplaces, including a second way out in case the main way is blocked.

**Building Map**



**All employees are expected to leave the building and report to the outdoor assembly area when the fire alarm bells ring. No one is authorized to remain in the facility during an emergency.**

**ACCOUNTABILITY FOR EMPLOYEES**

Accountability for employees should be performed after an evacuation. Based upon direction given in an emergency, all employees must assemble at the appropriate areas.

- BUILDING INDOOR ASSEMBLY AREA: West Side Lobby.
- BUILDING OUTDOOR ASSEMBLY AREA: South Parking Lot Between 820 & 820A.
- SHELTER-IN-PLACE AREA: Concrete Hallway Adjacent to the West Side Lobby.

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- EVACUATION ZONE: 2.
- PERSONNEL ACCOUNTABILITY: Because of the large number of different groups who work in Building 820 who come and go on their own schedule, it is not possible to determine that the building is empty by accounting for those who have left the building. Instead, information will be gathered from occupants about the possibility of people left inside, and ultimate reliance will be placed on a sweep by emergency personnel.

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#### SITE-EMERGENCY SIGNALS

- CONTINUOUS SOUNDING OF SITE SIRENS FOR FIVE MINUTES - Proceed immediately to the Indoor Building Assembly Area. Await instructions that may include the nature of the emergency, the type, sequence, and routes for evacuation.
- INTERMITTENT SOUNDING OF SITE SIRENS FOR FIVE MINUTES - Evacuate the Site Immediately.
- Plectron:

Location: ATF Control Room.

Responsible Individual: On duty operator.

**Note: The Plectron must be placed in an area that is constantly occupied or in an area that is accessible to occupants of the buildings, e.g., corridor near mailboxes.**

FOR ADDITIONAL INFORMATION OR QUESTIONS, CONTACT THE  
LOCAL EMERGENCY COORDINATOR

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#### LOCAL EMERGENCIES AND SIGNALS

**FIRE:** Upon notice of fire or sounding of the alarm bells, proceed immediately to the outdoor Building Assembly Area. Await instructions that may include the nature of the emergency, the type, sequence, and routes for further evacuation. When the fire alarm bells ring, a call must be made to the BNL Fire Rescue Group on extension 2222, confirming their receipt of the alarm. Any information known about the condition that caused the alarm should be given at that time.

**MEDICAL:** Rescue and Medical Duties - Employees are expected to help minimize damage and assist personnel during an emergency to the best of their abilities and when their safety is not threatened. The BNL Fire Rescue Group is trained, equipped, and has the main responsibility to render emergency assistance.

**SPECIFIC HAZARDS:** Any emergencies in Building 820 must be reported to the control room at x2306. The operator on duty is responsible for coordinating the response to that emergency. This includes: determining the nature and seriousness of the situation; taking actions to protect people from danger; notifying emergency personnel; providing information and assistance to emergency personnel; and providing any information to building occupants which might be useful to them in responding to the emergency

- Radiological – It should be noted that the radiation produced by the accelerator and within the experimental beam lines stops immediately when the machines are turned off, and interlock systems are provided to give this protection. There is no significant hazard from residual radiation or radioactive contamination at the ATF. Certain components within the machines are somewhat radioactive, but this would not be a hazard factor in an emergency at the facility.
- Toxicological – Chemicals are used and stored in various places in the facility.
- Physical – Flammability hazards exist where certain chemicals and cleaning agents are in use.
- Other – Electrical shock hazards are present in the facility.

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#### OTHER INFORMATION

**Training** - The Department/Division must designate and train a sufficient number of persons to assist in the safe and orderly emergency evacuation of employees for this facility. They are as follows:

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1. Karl Kusche, x3116.
2. ATF Operator on Duty, x2306.

The Training Coordinator is responsible for reviewing the plan with each employee covered by the plan. This training occurs when the plan is initially developed; whenever the employee's responsibilities or designated actions under the plan change; and whenever the plan is changed.

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**Provide Fire/Rescue ([Chief@bnl.gov](mailto:Chief@bnl.gov)) with one copy of this plan each time it is issued.**

## OPTIONAL INFORMATION

### Description of Facility

The Accelerator Test Facility (ATF) occupies the West Low Bay Area of Building 820 with an Experimental Area which is attached to the North end of the building. Access to the Experimental Area is possible from the High Bay Area of 820 as well as from the Low Bay Area near the ATF Control Room.

The ATF comprises a radio frequency photo-excited cathode electron gun which provides electrons at up to 7MeV energy for injection into an electron linear accelerator which boosts the electron energy to a maximum of 120 MeV. The 120 MeV electron beam is transported into the Experimental Area where experiments on new acceleration techniques or new radiation sources may be carried out in any of three beam lines. During beam operation the Experimental Area is a secured and interlocked radiation area. However, entry into the area will automatically turn off the electron beam leaving no radiation hazard to personnel. Part of the Experimental Building also contains high power lasers for both generation of the electrons in the electron gun and for acceleration of the beam in the Experimental Area. Again, entry into the laser rooms will automatically block the beam to the gun or the experiment as appropriate, so no laser hazard exists.

The ATF has automatic sprinklers and fire detectors in all equipment areas except for the linear accelerator tunnel where minimum fire hazard exists and no occupancy is possible during beam operations.

Exit aisle widths and travel distances to exits are designed for the occupant load and are properly marked.

### Hazards

- A. 120 MeV electron accelerator with two 40-megawatt RF amplifiers (75 gallons of non-PCB transformer oil in each; 1000 gauss magnetic field at contact) covered by a fire retardant plastic tent.
- B. A one million volt oil-filled (500 gal. non-PCB transformer oil) power supply is located in the High Bay area outside the Laser Lab. Secondary containment is provided.
- C. Gas and pressure systems (Nitrogen, Helium, Carbon Dioxide, Sulfur Hexafluoride, Acetylene). A cylinder of Hydrogen gas is located outside the north wall in a locked cage.
- D. Flammable and corrosive chemicals stored in posted cabinets.
- E. The experimental floor is a radiologically Controlled Area and can be interlocked. Laser rooms are interlocked and contain Class IV lasers.
- F. Building 820 does not contain a 90-day collection point for hazardous chemical waste.
- G. This facility does not have quantities of chemicals in excess of SARA Threshold Planning Quantities (TPQ).

### Building Emergency Equipment

The locations and types of building emergency equipment are listed on the building Run Card.