Bigelow | Laboratory for Ocean Sciences

Bigelow Laboratory

Emergency & Evacuation Plan

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INTRODUCTION

The development of an emergency action plan for the East Boothbay facility is prompted by concern for the safety and well-being of the employees, as well as the protection of property.

All employees should take the time to familiarize themselves with the contents of this plan, for their own safety and that of their fellow workers.

Emergency Evacuation and Action Program

Emergencies that could result in an evacuation at Bigelow include:

A spill, leak or explosion that results in a release of toxic or irritating vapors that can effect the body by direct contact with eyes or skin or by inhalation, causing severe breathing difficulties or other adverse reactions immediately or in the future.

A fire that produces heat and smoke, and/or causes release of toxic or irritating vapors.

Fire drills will be held at periodic intervals to familiarize all personnel with procedures and proper conduct.

Once a fire or other emergency has been discovered:

1. Sound alarm: Pull any fire alarm (located at staircases and exit doors).

2. Dial 911 if directly involved with fire or emergency. Notify Bigelow facilities (x 108), safety (x116), and reception (x 100). If safe to do so, the facilities personnel will:

- Cut power to buildings, including generator power.
- Direct a search in evacuated areas to be certain all employees are out of danger.
- Request aid from staff with special training in any emergency procedures.

3. Employees are not expected to use fire extinguishers, but if comfortable doing so, and it's safe to do so, attack the fire with proper fire extinguishers to retard spread of fire. Fire extinguishers locations are detailed on the Bigelow Lab building diagrams within the HazCom document.

4. If safe to do so, turn off gases and electrical equipment. Close all doors upon exit.

5. Evacuate the building.

Emergency Procedures at Sounding of Alarm

The evacuation of any area that is involved in an emergency situation must begin immediately.

1. All employees should evacuate the respective building using the quickest route to exit. Do not use elevators. Building exits are detailed on the Bigelow Lab building diagrams within the HazCom document.

2. Floor managers shall ensure everyone has departed from their specified areas before reporting to the assembly area.

3. Bigelow employees will assemble in the parking lot in front of the building, unless directed to another site by emergency or security personnel. The assembly point for the Residence is the parking area just above that building.

4. The receptionist shall perform a head-count at the assembly point.

5. Employees should remain at the assembly point until otherwise instructed by authorized personnel.

6. Bigelow facilities and safety personnel will coordinate and direct emergency action until fire/emergency personnel arrive.

Other Emergencies

Emergencies exist for which evacuation is not the best response:

In the event of severe weather (e.g. tornado, earth quake), staff should take shelter in the basements/lower level corridors or internal rooms, away from glass and windows.

Emergency Numbers

Local Police, Fire and Medical Rescue	911
Bigelow Laboratory central number	207-315-2567
Bigelow Phones as Intercom (All Bigelow Phones) Press on speaker phone screen: *More, Paging, Page*	
Bigelow Director of Facilities (Chris Salatino) Edgecomb, ME	207-350-1032 work = ext 108
Bigelow Safety Officer (Adam Smart) Boothbay Harbor, ME	207-467-0846 work = ext 116
Bigelow Radiation Safety Officer (Adam Smart) Boothbay Harbor, ME	207-467-0846 work = ext 116
Bigelow President/CEO (Deborah Bronk) Barters Island, Trevett, ME	757-561-8097 work = ext 115
Bigelow V.P. of Education (Ben Twining) Brunswick, ME	207-449-7822 work = ext 309
Bigelow V.P. of Research &Admin (Beth Orcutt) Portland, ME	682-970-0499 work = ext 312
Bigelow Media Contact (Steve Profaizer) Portland, ME	207-350-9013 work = ext 103

Medical Care:

St Andrews Urgent Care (8am-8pm), 6 St Andrews Ln, Boothbay Hbr, ME 207-633-5983
Miles Memorial Hospital, 35 Miles St, Damariscotta, ME 207-563-1234
Mid Coast Hospital, 123 Medical Center Dr., Brunswick, ME 207-729-0181

Other Aid:

Domestic Violence Family Crisis Center	866-834-4357
Mental Crisis 24hr Hotline	888-568-1112
Sexual Assault Support Services	800-822-5999

In case of Workplace Violence or Harassment

Bigelow Laboratory for Ocean Sciences (BLOS) has a zero-tolerance policy toward workplace violence, and is a posted "No Firearms" facility. (Note, however, that hunting is not banned on the property.)

For the purposes of this policy, workplace violence is defined as a single behavior or series of behaviors which constitute actual or potential assault, battery, harassment, intimidation, threats or similar actions, attempted destruction, or threats to BLOS or personal property, which occur at the workplace, while using BLOS resources, or while an individual is engaged in BLOS business.

In all cases, our employees' personal safety is the primary concern at all times.

In the case of a perceived threat or harassment from an employee or guest, employees must immediately notify their supervisor (or the safety officer or president or vice presidents or HR) so prompt action can be taken to address the issue.

In the event of an obvious threat toward an employee(s) by an individual or group, the employee(s) concerned should make themselves as safe as possible. Gauge appropriate action based on the type of threat.

Evacuate if the building is unsafe and inform other employees to do the same. Do not pull a fire call box. Instead, evacuate using the most secure route and assemble in a protected place (for example behind Marine Ops, the greenhouse, or against the exterior basement walls at the end of each wing).

If evacuation is not an option, employees should hide in rooms with solid, locking doors (such as bathrooms and many of the rooms in the lower levels).

When safe, employees should dial 911, then notify Facilities (ex 108), Reception (ex 100) and Safety (ex 116). If still in the building an employee can also use Bigelow phones as an intercom by pressing *More, Paging, Page* (displayed on the phone screen). The employee's message will broadcast to all Bigelow speaker phones.

Note that all personnel are required to have annual harassment prevention training.
See Human Resources for details.

Alarm System

Maine Fire Protection Systems monitors the alarm systems for Bigelow Laboratory buildings. The system consists of:

- Fire pull-alarms on each floor at exits (stairs, main doors)
- Smoke detectors
- Heat-activated Spinkler system
- Building-wide alarms and strobe alerts
- Low-oxygen alarms for the Cryo room (A012), banks of compressed gases (B203 and B209) and the Instrument lab (C012B)
- Emergency pull-alarm in Chemical Storage (A010)
- Freezer and Incubator temperature alarms (on select units)

Upon activation of a pull alarm, a continuous ringing alarm will be heard. Maine Fire Protection Systems will receive the alarm signal and contact the fire department and the Director of Facilities. The fire department may also be contacted directly by dialing 911.

Safety & Hazard Control Facilities at Bigelow Laboratory

Eyewash/Drench stations are located at sinks in every lab area and are marked with signs.

Safety Showers are located on each floor at the beginning and end of each corridor and are marked with signs. Additionally, safety showers are marked with either red floor tiles or yellow & black stripes on floors.

Spill kits are mounted at safety shower locations. Additional large volume spill kits are located in the Chemical Storage (A010) and at the B211a hood. There are also spill kits in the Loading Bay, the Marine Operations building, Greenhouse, Ocean Modular lab, and in the Shore building.

Fire extinguishers are located on each floor at the beginning and end of each corridor and at other select locations (see building maps).

Each research group is required to equip their labs with proper lab coats, gloves, eye protection, noise protection and other Personal Protective Equipment (PPE) based on the work being performed.

Medical and First Aid Equipment at Bigelow Laboratory

Employees are not expected to render first aid unless they are comfortable doing so.

AED (Automatic External Defibrillator) is located at the Café area and outside of 2nd floor B wing door.
Emergency First Aid kits are located at corridor ends in each wing and in out-buildings
Non-emergency first aid supplies are located in the Café and kitchen area

Building A: Lower level – First Aid kit in hallway outside loading bay.
First level – First Aid kits between rest rooms and in A109 (NCMA).
AED near the Café.
Second level – First Aid kits in A201 (FCM/SCGC) and A211 (Emerson)
Building B: Lower level – First Aid kit in B004 (Mass Spec)
First level – First Aid kits in B101 (Balch), B107 (Virology), and B113 (Rad).
Second level – First Aid kits in B201 (Lomas) and B211 (Archer/Matrai)
Building C: Lower level – First Aid kit in hallway across from C012 (east end)
First level – First Aid kits in C101 (Rasher) and C105 (Fields/Price)
Second level – First Aid kits in C201 (Aellpi) and C205 (Countway)
Shore Facility: First Aid kit in compressor/storage room
Marine Operations: First Aid in workshop area
Greenhouse: First Aid kit on wall near main entrance
Residence: First Aid kits in marked Galley drawer and at the base of the stairs

Notify the Safety Officer of use of any Emergency Supplies so they can be re-stocked.

Report all accidents to human resources and the safety officer. (Accident Report Form is in the appendix of this document.)

Medical and First Aid Assistance

While employees are not expected to render first aid, many staff members at Bigelow Laboratory are trained in basic first aid and CPR.

Ask for Help. If in any doubt, ask the safety officer or facilities manager for assistance.

Bloodborne Pathogens Information

Bloodborne pathogens are diseases that are transmitted by contact with blood or other body fluids containing infectious materials. Transmittable diseases that merit special attention are Acquired Immunodeficiency Syndrome (AIDS) and Hepatitis B and C.

Bigelow Laboratory employees may be exposed to blood or other potentially infectious materials in the case of an accident involving injury to co-workers, or if infectious biological samples are unknowingly brought into the lab.

Bigelow Laboratory seeks to minimize bloodborne pathogen thransmission through prevention of exposure (e.g. safe practices with sharps such as needles, broken glass, metal) and protection (e.g. the use of gloves, protective clothing, and suitable biosafety cabinets) when dealing with injuries and all biologicals**.**

Sharps should be handled with care. Needles should always be disposed of in hard containers labeled ("SHARPS-DO NOT RECYCLE") for this purpose. Fine Glass (Pasteur pipets, slides) should be placed in designated boxes for recycling. Broken glass should be disposed of in designated Broken Glass Disposal boxes (located in hallway). Care must be used while working around sharp metal parts.

Injuries must be handled with care. Use gloves (in the first-aid kits) when possible, but always be sure to wash carefully immediately after contact with potentially dangerous materials such as bodily fluids.

A Hepatits B vaccine must be offered to anyone whose work requires them to work with blood or other potentially infectious material. Any unvaccinated person who renders first aid and is thus exposed, must be provided with the full Hepatitis B vaccine series within 24 hrs of exposure.

Report all exposures to human resources and to the safety officer.

Hazardous Materials

All laboratory areas have the potential to contain hazardous materials. In addition, the following spaces have specific hazards:

Building A, Lower Level:
A001 (Mechanical Room) - acid/base for neutralization system, compressed gas
A007 (Storage/Freezers) - compressed gases (hydrogen only)
A009 (Air handling) – compressed gas
A010 (Chemical Storage) – chemicals, wastes, & compressed gases
A012 Lab (Cryo Lab) – large tanks of cryogenic liquids (nitrogen, argon)
Loading Bay – compressed gases

Building A, First Level:
A101 Lab (IC lab) – compressed gases
A105 Lab (NCMA transfer area) - butane burners
A109 Lab (NCMA lab) – compressed gases

Building A, Second Level:
A203 (Microscopy) – compressed gases
A205 (SCGC) – possible biosafety hazards
A209 (Equipment room) – compressed gases
A211 (GeoMicro lab) – compressed gases

Building B, Lower Level:
B004 (Mass Spec) – compressed gases, liquid argon, chemicals

Building B, First Level:
B103 Lab (Optics) – compressed gases
B107 (Cellular Biogeochem) – small propane tank
B109 lab (Cell Biochem support) – biosafety hazards
B111 (Storage area) – compressed gases
B113 Lab (Rad lab) – radioactive materials

Building B, Second Level:
B203 Lab (LCMS lab) – compressed gases
B209 Lab (Dark lab) – compressed gases

Building C, Lower Level:
C007 (Seawater area) – compressed gases
C008 Lab (Algae growth) – compressed gases
C012A Lab (SEM) – compressed gases
C012B Lab (Instruments) – hydrogen generator, liquid nitrogen

Hazardous Materials (continued)

Building C, Second Level:
C201 Lab (Molecular Bio) – compressed gases

Green House:
Upper level - compressed gases
Lower level - compressor

Map of Bigelow Campus

A map of all Bigelow facilities is in the following section.