

Chesapeake Biological Laboratory - Disaster Management Plan

2016-2017 Academic Year

Purpose:

The Chesapeake Biological Lab – Disaster Management Plan (DMP) outlines the policies and procedures for any large-scale emergency or disaster. This plan will be implemented to assure the maximum and efficient utilization of resources during such incident.

For the purpose of this plan, “disaster” shall be defined as any condition, man-made or natural, which results in a significant disruption to the function to Chesapeake Biological Laboratory. The onset of a disaster is usually very rapid and allows little or no time for preparation. The scale of a disaster is determined by the potential for loss of life, damage to property, and the amount of external resources needed to return the facility to normal operation.

Mission:

UMCES CBL strives to provide a safe environment to facilitate and support a research university. The DMP will use CBL and outside resources to:

- Protect the safety and life of CBL students, faculty, staff, and visitors
- Protect and stabilize any research and work on campus
- Minimize damage and cost to facilities and material resources on our campus, and
- Provide for continuity of facility management and damage assessment and re-establish CBL’s normal operations.

Situation:

CBL is vulnerable to a wide spectrum of man-made and natural disasters, including but not limited to: hurricanes, tornadoes, fires or explosions originating on campus or surrounding areas, chemical spills, death (accidental or suicide), and violence.

Disaster Management Committee

This committee’s primary function is to develop and maintain the DMP.

- The committee will hold bi-annual meetings to ensure that the DMP is effective and maintained. The committee will review and update: situations likely to occur, appendix plans, contact persons and location list, and execution plans. This review will help ensure that CBL can effectively and efficiently prepare and handle any disaster/crisis event affecting campus, and then restore and resume campus operations as quickly as feasible.
- The committee consists of the following individuals:
 - Thomas Miller, Director
 - Stacy Maffei, Assistant Director, Administration
 - Michael Hulme, RFO Manager
 - Mike Santangelo, IT Manager
 - Michael Gonsior, Associate Professor and Safety Officer

After-Hours Emergency Contacts:

- An evening shift maintenance worker is on campus until 5:00 pm. If any emergency arises that does not necessitate calling 911, please call ext. 333 to arrange assistance.
- Signage is posted on all laboratory doors listing our emergency 333 extension, and lab personnel in the event emergency personnel such as the fire department, or a local resident, or an after hours staff member needs to contact a staff member for emergencies.
- Emergency contact number if the campus phone (including ext.333) system is down.

Stacy Maffei

Cell - 301-481-3669

Work - 410-326-7364

Brian Duke

cell - 301-672-8533

Office - 410-326-7352

Closings and Notification:

- CBL will make an individual determination to close campus. These closings will be determined by the Director of CBL, or designee. The Facilities Supervisor will contact the necessary contacts and the closing/delay will be announced via the campus notification system
- All closings/delays will be listed on the CBL website and an E-2 Campus Alert Message will be sent to all CBL employees.

EXECUTION:

1. PRIORITY LIST -- DAMAGE CONTROL AND PREVENTION

- 1.1 Life Safety – CBL is committed to protection of human life/health/safety. All necessary measures will be taken to ensure the safety of all persons at CBL. These measures will include evacuation, closing of campus, shelter as necessary and crisis response including counseling.
- 1.2 Hazardous Material and Chemical Containment – Essential for life/health safety for staff and emergency response persons.
- 1.3 Facility and Campus Infrastructure Preservation – Take measures to protect the building structures, prior to event, when feasible, preparation such as taping or boarding glass, and shutting off utilities.
- 1.4 Document and Historical Item Preservation – Take measures to protect the items that cannot be replaced, including, but not limited to: library books and documents, historical valued items and photographs.

- 1.5 Research Equipment Preservation – Lab capital investments, move research equipment such as spectrometers to safer areas if they are in danger zone (susceptible to flooding etc).
- 1.6 Continuity of Research - Preservation of: live species, samples, research documents, lab equipments.
- 1.7 Recovery & Resumption of Operations – Facilities staff and use of outside contractors to assess and clear campus, clean up damaged areas (equipment and buildings) restore infrastructure as damaged, and begin normal operations as quickly and efficiently as possible.

2. CHEMICAL AND FIRE HAZARD LOCATIONS

- The following list provides the location of our most hazardous materials for emergency response persons, or CBL staff, to respond at or around. Please notify emergency response teams of these hazards and take precaution when working around or in these areas in a crisis event.
 - Mansueti – Flammable/Explosive –
 - Inside - alcohol storage room and chemicals in laboratories, which vary by PI.
 - Storage Building – Flammable/Explosive/ - includes chemical waste and Compressed Gas cylinder storage area
 - BFL Labs – Individual Labs have Compressed Gas cylinders & the types of hazardous chemical vary for each Lab. Underground fuel oil tank and natural gas line
 - Cronin – Lab chemicals that may vary for each area, natural gas to generator
 - Coastal Technology Bldg. – natural gas
 - Becker House – natural gas
 - Parish House – natural gas
 - Carey House – natural gas
 - RFO – natural gas, fuel oil tank, gasoline tank, paints, lubricants and solvents
 - Maintenance – gasoline storage, paints, lubricants, solvents and welding equipment
 - Truitt – natural gas, hazardous chemicals vary for each Lab area

3. CARE OF VERTEBRATE ANIMALS

- Vertebrates are protected through the system redundancies on campus. In the event of a natural or man-made disaster, vertebrates will be moved to a safe location. The transfer location will depend on the scope and magnitude of the emergency and whether movement of the animals would pose any danger to human life. If the danger is imminent and movement is not safe, then the vertebrates will be euthanized under protocols established by IACUC.

4. BEHAVIORAL ASSESSMENT

- The Director will be immediately notified in the event of a potentially distressed or disturbed member of the campus community, including students,

staff and faculty. The Director will immediately refer the individual to the Director of Human Resources at UMCES and UMCES Behavioral Assessment Team. If immediate action needs to take place with the member, the Director and/or UMCES HR Director will communicate with the appropriate parties.

5. COMMUNICATIONS:

- CBL Administration and all Maintenance Staff will carry cell-phones.
- During an electrical outage (building or campus), the Cisco IP phones will not work.
- A direct Verizon line is located in the Mansueti Phone Server Room inside the receiving area.

6. ON-CAMPUS RESOURCE – RESPONSIBILITY CHAIN

- All Facilities staff will wear an orange vest during any crisis or disaster event. This vest will help establish authority and identify the essential staff to the responding emergency personnel, the CBL personnel and the public.

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- **Emergency Coordinator** – This contact person is the main source of information to the Director. This person is the information point and coordinator for the Director, emergency response teams, and Facilities staff. This person will act as the CBL Public Relations representative for the Media.

Stacy Maffei, Associate Director cell: 301/481-3669

Alternate: Brian Duke, Operations cell: 301/672-8533

Building Evacuation Coordinator – This person works with emergency response personnel to determine evacuation needs, notify personnel and ensure that areas are effectively evacuated. This person will be responsible in a crisis event (such as death or violence) for establishing a perimeter crisis scene barrier.

Stacy Maffei cell: 301/481-3669

Brian Duke cell: 301/672-8533

- **Utility Shut-off and Mechanical** - This person is responsible for working with the emergency response persons for determining the necessity of, and completion of, shutting off utilities to specific buildings or areas of campus.

Brian Duke cell: 301/672-8533

Alternate: Frank Stebbing cell: 301/672-8436

- **Fire Extinguisher Coordinator** - This position is responsible for gathering fire extinguishers and hoses from buildings or storage; then coordinating the use of the hoses and fire extinguishers to assist in preventing the spread of fire – such as spraying with hoses structures and equipment in proximity of the building fire and using extinguishers to put out spreading or blowing fire debris.

Dale Garner cell: 301/672-8516

Alternate: Joseph Herbert cell: 301/672-8462

7. SUPPLIES AND MATERIALS IN PREPARATION

- The following emergency supplies will be stored in the Mansueti Building and designated for Maintenance/Emergency stock. All Maintenance staff will have a key to access this area.
 - 14 Orange reflective Vest – enough for facilities staff
 - 2 Box of N95 Particle Dust Mask
 - 20 pairs of gloves
 - Foul Weather Gear – rain jacket, boots, pants
 - Sump Pump with 25 foot suction line & 50 foot discharge line
 - Batteries stock of assorted sized for radio, lights, etc
 - 4 sheets of 4X8 - 1/2 inch plywood
 - 6 Rolls of 2inch Duct Tape
 - 3 Rolls of Sheet Plastic
 - 3 Box of Trash Bags Contractor grade
 - Emergency First Aid Kit
 - Tie-Down Straps (ratcheting)
 - Potable water supply –at any given time we have approx. 8 - 10 each of 5 gallon jugs of water for our water cooler dispensers in the Mansuetti receiving cage.
 - Oil containment supplies

8. OUTSIDE CONTACTS AND COMMUNICATIONS

8.1 Emergency Response and County Contacts

- **All Emergency Matters Call 911**
- Calvert County Sherriff's Department --Non-Emergency 410-535-2800
- Solomons VFD – 410-326-6657
- SMECO – 1-888-440-3311 (*Start with account number: 125323001-1*)
- Calvert Cliffs Nuclear Power Plant (security office) – 410-264-9540
- FEMA – 202-646-2500
- US Coast Guard – 800-418-7314
- DNR – Ext 265 or 267 (24 hour Emergency Dispatch #: 410-260-8888)
- Department of Homeland Security – 202-282-8000
- Center for Disease Control – 800-2324636
 - www.cdc.gov
- Maryland Department of Environment – Emergency Number – 866-633-4686
 - Baltimore hazardous waste 410-537-3344

8.2 Key Sub-Contractors - used in recovery and resumption of operations.

- Clean Ventures – Hazardous/chemical spills – 410-368-9170
- Mattingly Electric – 301-373-5422
- SERVPRO – 301-862-9500

9. EVACUATIONS:

- ◆ 9.1 The Communications Coordinator and the Evacuation Coordinator shall work with the Emergency Response Personnel on-site to determine the need for evacuation. The following list of Building Coordinators/Contacts will be used to assist in ensuring the effective and quick evacuations as necessary and to ensure communications of specific events, evacuation needs, and collection points to all persons on campus.

- ◆ Evacuation and Emergency Building Coordinators/Contacts:
 - The following contact persons, established for each occupied building on campus, will assist in ensuring that communications of specific events, evacuation needs, and collection points.

Bldg. #	Building Name	Building Evacuation Monitor	Ext.
<u>450</u>	<u>Beaven Hall</u>	Ms. Stacy Maffei	364
<u>451</u>	<u>Cory Laboratory</u>	Mr. Jerry Frank	252
<u>452</u>	<u>Nice Hall</u>	Mr. Mike Santangelo	345
<u>453</u>	<u>Truitt Laboratory</u>	Dr. Jeremy Testa	295
<u>456</u>	<u>Maintenance Facility</u>	Mr. Dale Garner	397
<u>480</u>	<u>Bernie Fowler Laboratory</u>	Dr. Michael Gonsior	245
<u>458</u>	<u>Research Fleet Operations</u>	Mr. Michael Hulme	350
<u>459</u>	<u>Mansueti Laboratory</u>	Ms. Trish Stebbing	253
<u>463</u>	<u>Kopp House</u>	Dr. Hongsheng Bi	249
<u>470</u>	Swift House	Carlos Lozano	224
<u>483</u>	<u>Coastal Technologies Laboratory</u>	Dr. Mario Tamburri	440
<u>482</u>	<u>Solomons House</u>	Ms. Sarah Brzezinski	460
<u>477</u>	<u>Parish House</u>	Lisa Wainger	401
478	Parish House Garage	Not Occupied	N/A
<u>479</u>	<u>Storage Facility</u>	Not Occupied	N/A
<u>485</u>	Becker House	Not Occupied	N/A
<u>481</u>	<u>Saunders House</u>	Dr. Dong Liang	452
486	Cronin Complex	Dr. David Secor	229
487	Northam Property	Not occupied	n/a

10. Testing of DMP

- The lab will conduct random testing of its DMP. Tabletop exercises will be conducted, including:
 - Fire
 - Weather (snow/hurricane)
 - Chemical Spill
 - Tornado
 - Mass Evacuation
- Minutes/Records of these tests will be maintained by the Facility Manager.

SITUATIONS – IDENTIFIED AS LIKELY

➤ Snow and Winter Weather

- The closing of campus will be announced at the direction of the CBL Director, or his designee.
- All Facilities Staff are identified as Essential Employees.
- A determination of when to report to work will be made and the Directors Office will contact employees via E-2 Campus.
- When to report to campus will be determined by the expected preparations necessary to prepare campus - for staff/students to safely arrive at work. This time will be determined by many factors including: what time campus is expected to open, when staff & students are expected to arrive, the amount of snow expected to fall, length of time it will continue to accumulate, and the safety of the essential staff in getting to the campus.
- The Facilities Manager will notify the Maintenance employees by phone of the time to report to campus. Maintenance staff will report to work to prepare campus for the staff and faculty to arrive to a safe campus.

➤ Blizzard – Major Winter Event (ice storm)

- If a snow or winter event is forecast to be of such a magnitude to cause major disruption of campus and research, the CBL Hurricane Plan will be put in place.
- Adjustments will be made to the Plan, as the preparations for a major winter event are similar to a hurricane; however, the flooding will likely not be an issue.
- Preparations will also be made to secure heating and freeze proofing needs that are not in the Hurricane plan.

➤ Hurricanes - See Appendix A: CBL Hurricane plan

- CBL Hurricane Plan is an extensive plan establishing a detailed protocol to best manage and protect life, research, and property and equipment at CBL.

➤ Building Fires or Explosion With Damage/Injuries

- Reference the Appendix B – **Campus Safe Areas Map** – A thorough map and grid of safe areas for each building to collect in the event of a building evacuation.
- Reference Appendix C – **CBL Fire Emergency Plan**
- Evacuation Coordinator will immediately respond to the building and ensure the evacuation and closing of the building or areas affected.

➤ Mass Fire and Disaster requiring Evacuation

- Evacuation Coordinator and Communications Coordinator shall be responsible for determining which collection point shall be used.
 - Nice Hall Conference area, as it is on high ground and is a central campus point.

- RFO and the Point as the second choice, but this location is not feasible if flooding is occurring or expected, however RFO should be considered the primary point if the disaster or situation has closed all pedestrian and vehicle traffic off the island. The use of the *Rachel Carson* and other watercraft (as a means of evacuation) shall be determined by the Director and the Marine Superintendent.

➤ Plane Crash On or Near Campus –

- Evacuation Coordinator will ensure life safety and evacuation.
 - A perimeter barrier will be established, if its establishment is not harmful or hazardous. This Perimeter Barrier will assist in the rescue & recovery operations and fire control, and ensuring scene analysis and evidence collection.
 - Assist the emergency response personnel as requested.
 - This crisis may involve evacuation and major fire procedures, along with the any number of combinations of crisis and plan procedures.

➤ Chemical Spills or Emergency –

Reference Appendix D – CBL Hazardous Chemical Spill Plan and the SPCC Spill Control Plan.

➤ Tornados

- Due to the immediate nature of a tornado there will be little damage control preparation which is allowed with other disaster warnings.
- All Tornado Warnings will be taken seriously.
- An email, E-2 Campus alert and Cisco phone paging warning will be sent to all personnel if a tornado warning is issued.
- All persons receiving notification will use word-of-mouth to spread the word, and help to clear the buildings to below ground levels.
- Particular attention should be made to the apartments and assisting handicapped and disabled individuals in buildings.
- All persons should seek refuge in the nearest building with a below grade floor.
- After the emergency ALL personnel should meet in the Quad courtyard to account for all persons.

➤ Death or Violence on Campus

- Communications and Evacuation coordinators meet at site.
- Ensure the 911 Emergency Response has been called.
- Establish a perimeter crisis scene barrier; this will protect the scene for analysis, will facilitate access to the scene by emergency response (police and EMT's), and prevent inappropriate access by public and media.
- Assist the emergency response persons as they need.
- Maintain calmness in the crowd and witnesses, control the situation.
- Evacuate area as necessary.

- Collect witness names and statements as necessary.
 - Coordinate counseling services to anyone involved or affected by the crisis situation. This may necessitate involving outside sources and counselors.
- Pandemic Disease
- CBL will follow all guidelines and directives as given by Calvert County and the State of Maryland; along with any applicable USM or UMCES policies.

Recovery and Operations Resumptions

Recovery:

- Damage Assessment – The Facilities Manager will coordinate an assessment of damages to campus facilities and compile a report to deliver to the Director on the status of campus, along with a prioritized list of actions to be taken by facilities (in-house or through outside sources) to re-establish campus operations. The IT Manager will also provide a report to the Director on the status of IT operations and the institution of the IT disaster recovery plan.
- Recovery Actions: Facilities – As determined and set by the Facilities Manager, with the other facilities staff, to restore campus operations:
 - Removal of debris and obstructions
 - Restoring utilities – including potable and research water, electric, sewer systems, telecommunications.
 - Assist PIs and researchers in assessing and restoring research.
- Recovery Actions: Business Operations – Continuity of operations is critical for the administration of the lab. If the functions of the lab are unable to be reestablished within 48 hours from the time of a loss, the following actions will be taken by the lab:
 - Critical business office functions will transfer to the UMCES Center Administration in Cambridge and/or the Annapolis Synthesis Center.
 - Essential business office personnel from CBL will commute to these offices to handle the work flow.
 - These essential functions will remain in place until operations can be successfully reestablished at CBL.
- Recovery Actions: IT –The CBL IT Disaster Recovery Plan (Appendix E) will be instituted as determined by the IT Manager in consultation with the Director.