Environmental Health and Safety
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EMERGENCY LABORATORY SHUTDOWN GUIDANCE

1. PURPOSE

This document serves to provide instructions for emergency situations requiring the temporary shut-down of Georgia Tech (GT) laboratories.

2. SCOPE

This document applies to all Georgia Tech, Georgia Tech Research Institute (GTRI), and affiliated research entities such as ATDC, T3 Laboratories, etc.

3. PROCEDURE

All laboratories should have a laboratory-specific plan in place for emergency situations. All items below are required at a minimum but are not exhaustive:

- Close sash on chemical fume hoods and Biosafety Cabinets
- Store, label, and secure hazardous materials (biological, radioactive, chemical) in the appropriate location(s) including associated wastes. Ensure all radioactive sources are appropriately shielded.
- Ensure caps on all bottles of chemicals are secure and segregated appropriately, including hazardous waste.
- Turn off all non-essential electrical devices. Ensure all refrigerators and freezers are left on and that doors are secure. Check disconnects of large lasers, high-voltage equipment, etc. Ensure that essential equipment is plugged into power receptacles supplied by the emergency generator (usually orange or red).
- Turn off all gas cylinders at the tank valve. Note: If a low flow of an inert gas is being used to "blanket" a reactive compound or mixture, then the lab worker may want to leave the flow of gas on. This should be part of a pre-approved, written, posted standard operating procedure for this material or process. Any gas delivery system or process that is monitored via our Dangerous Gas Monitoring System should be terminated appropriately.
- Ensure all reactions and experimental procedures are appropriately terminated. Including vacuum work, distillations, glove boxes used for air or moisture sensitive reactions, and any other reaction in progress.
- Any reaction that cannot be suspended should be conducted in a fume hood (when possible) and labeled according to the GT procedure outlined here.

- Ensure all containers of cryogenic liquids are vented to prevent the buildup of internal pressure. Check all cryogenic vacuum traps (Nitrogen, Carbon dioxide, and solvent), as the evaporation of trapped materials may cause dangerous conditions.
- It is important to remember that some equipment does not shut down automatically – such as large cryogenic magnets, x-ray diffractometers, and other pieces of equipment. Each laboratory should determine how these types of equipment will be handled based on the nature and duration of the emergency.
- If experimental animals are in use, please coordinate with PRL staff to determine a lab-specific plan.
    - Point of contact: Nic Parnell, Ph.D.

      Nicholas.parnell@biology.gatech.edu
- Ensure the lab contact card is accurate and up to date, that lab lights are turned off, and that exterior doors are locked upon exiting the lab.

4. DOCUMENTATION/NOTIFICATION

Campus-wide emergency: Follow all institute guidance.

Laboratory/Building-specific emergency: Follow the GT Redbook.

Notify department and EHS that the laboratory has been shut-down: lab-chemsafety@gatech.edu

5. ADDITIONAL RESOURCES

www.ehs.gatech.edu