

Office of Environmental Health & Safety

#### LABORATORY AND HAZARDOUS MATERIAL STORAGE AREAS

#### TROPICAL WEATHER/HURRICANE PREPARATIONS

Laboratory Supervisors and Principal Investigators along with Managers of hazardous material storage locations are responsible for taking protective actions in their own laboratories and storage locations. On a daily basis, all responsible persons should:

- Keep hazardous materials (chemical, biological, radiological) materials in your inventory to a minimum.
- Dispose of hazardous wastes and old materials routinely to minimize accumulation of hazardous materials in your locations.
- Laboratories and storage locations with exterior windows should identify a secure area for storage of water reactive chemicals, radioactive materials, and biohazardous agents. Ideally, materials with significant, potential hazard should be moved to interior rooms. (e.g. solvents containing reactive metals, glove boxes containing air reactives, etc.)
- If dry ice is needed before or after the incident, document vendor information, payment method, and delivery options.
- Maintain a supply of plastic, waterproof containers to store reactive materials, lab notes, research documentation, electronic data, and other important materials.
- Plan in advance how to ensure the protection of valuable research equipment, samples, and data.
- Plan in advance how long it will take to secure your lab in advance of a storm.
- If back power is critical but not available in your location, contact Campus Services as soon as possible to discuss options. Waiting until a storm is imminent will be too late.
- Maintain a stock of critical supplies to prevent disruptions.
- Train all laboratory personnel in the steps to be taken to secure your location in the event that Tulane suspends operations.
- Keep emergency contact information for TUPD and OEHS in visible locations throughout your space.
- Update your contact information and that of your staff as needed. Ensure contact information on the door to your space is accurate.

When Tulane alerts you that a storm is imminent or normal operations are likely to be suspected, use the checklist below to prepare your space to minimize damage to your work.

This checklist is designed to identify suggested tasks and assignment of responsibilities for preparing each laboratory and hazardous material storage area in advance of a inclement weather event. Not all items are appropriate for all areas. All persons responsible for laboratories or hazardous material storage locations should add applicable actions specific to their individual

# laboratories, if needed. <u>This checklist should be completed as a part of the your larger</u> <u>Departmental Hurricane Management Plan.</u>

When impacts from tropical weather are possible, consider necessary preparations to suspend ongoing experiments involving biological materials, radioactive materials, and hazardous chemicals. When Tulane suspends operations, laboratory personnel will be expected to postpone operations in the laboratory, secure hazardous materials and equipment, and send a completed and signed checklist to <a href="https://ocentrology.org/nc/en/">OEHS@tulane.edu</a>.

# **HURRICAN PREPARATION CHECKLIST**

# <u>LABORATORIES AND HAZARDOUS MATERIAL STORAGE AREAS</u>

ACTION/TASK	COMPLETE
Turn down refrigerators and freezers to the lowest practical settings and plug in	
emergency power where available.	
Place recording maximum/minimum thermometers in refrigerators and freezers	
containing temperature critical supplies and samples.	
Cover and secure or seal vulnerable equipment in plastic.	
Remove or secure equipment from outdoor or rooftop locations.	
In areas subject to flooding, relocate or elevate equipment, chemicals, wastes, and	
other important items to prevent damage.	
Secure radioactive isotopes and hazardous chemical to prevent breakage or release.	
Move these items away from windows as possible.	
Fill dewars and cryogen reservoirs for sample storage and/or critical equipment.	
Over-pack reactive chemicals in plastic, waterproof containers.	
Remove regulators and cap gas cylinders, except for CO2 needed to maintain cell	
cultures. Ensure all cylinders are secure.	
Due to the possibility of power outages, store volatile, toxic materials in tightly	
sealed, break-resistant containers rather than fume hoods or an open room.	
Protect valuable files, research samples, and notebooks in place or move to a safer	
location. This includes items belonging to colleagues unable to reach the lab.	
Close and latch (or secure with tape if needed) filing cabinets and cupboards.	
Back-up electronic data and store in multiple secure locations.	
Follow manufacturer instructions for securing laboratory equipment.	
Follow Technology Services instructions for securing computers.	
Contact OEHS at OEHS@tulane.edu to schedule pickup of waste materials as	
soon as possible and with enough time to have it removed from campus.	
Complete the attached Hazardous Location Registration From and send it to	
OEHS@tulane.edu	
Close and lock all doors and windows before leaving.	

# <u>HAZARDOUS LOCATION REGISTRATION FORM</u> Complete and submit to OEHS@tulane.edu

### LOCATION OF LABORATORY

Room Number:
Department: Principal Investigator (Research Labs Only):
Name of person completing this document: Date:
PRIMARY EMERGENCY CONTACT Contact Name: Contact Mobile Phone Number: Alternate Phone Number: Tulane Email Address: Alternate Email Address:
ALTERNATE EMERGENCY CONTACT Contact Name: Contact Mobile Phone Number: Alternate Phone Number: Tulane Email Address: Alternate Email Address:
Have you connected any equipment to back-up power? Yes No If yes, list the equipment that is connected and the problems that will result if power is disrupted?
Hazardous materials are located in this location: YES NO (If no, stop here and send this form to OEHS@tulane.edu.

#### **HAZARDOUS MATERIAL INVENTORY**

- 1. LIST THE NAME, CAS #, AND APPROXIMATE QUANTITY OF ALL TEMPERATURE SENSITIVE MATERIAL.
- 2. LIST THE NAME, CAS #, AND APPROXIMATE QUANTITY OF ALL PYROPHORIC MATERIAL.
- 3. LIST THE NAME, CAS #, AND APPROXIMATE QUANTITY OF ALL WATER REACTIVE MATERIAL.
- 4. LIST THE NAME, CAS #, AND APPROXIMATE QUANTITY OF ALL MATERIALS THAT BECOME UNSTABLE WHEN EXPIRED.
- 5. LIST THE NAME, CAS #, AND APPROXIMATE QUANTITY OF ALL MATERIALS THAT CONTAIN REACTIVE METALS.
- 6. LIST ANY OTHER CONCERNS THAT FIRST RESPONDERS SHOULD BE AWARE OF SHOULD THEY NEED TO ENTER YOUR LABORATORY.