

## Emergency Shutdown Guidelines

All laboratory personnel should be trained in their role in shutting down equipment and securing experiments. The following guidance outlines critical factors to consider when developing a plan for shutting down laboratories in an emergency. In the case of an imminent threat such as a fire, the safety of personnel is the priority in determining actions that can be taken prior to evacuation.

### Pre-planning Activities

- Develop procedures for safely shutting down research. This should include securing chemical, biological, and radioactive materials. The procedures should be reviewed with the laboratory staff and readily available.
- Identify freezers, refrigerators, and critical research equipment and ensure the equipment is plugged into emergency electrical outlets. Emergency electrical outlets are red and provide emergency power to equipment during a power outage.
- Identify equipment that requires special procedures to restart after a power outage. Procedures for restarting this equipment should be readily available to the laboratory staff.
- If experimental animals are in use, special precautions may need to be taken into account for disruptions to power, ventilation, care, and feeding.
- Ensure critical research data is backed up periodically.
- Develop a plan for contacting laboratory staff during an emergency or a planned closure.
- Each laboratory should have at least one outlet-mounted or hand-held emergency flashlight.

### Shutting Down the Laboratory for an Emergency Closure

- Close the sash on chemical fume hoods.
- Safely store and secure all hazardous materials.
- Close gas valves and secure gas cylinders.
- Ensure cryogenic liquids are properly vented.
- Check pressure-, temperature-, air-, or moisture-sensitive materials and equipment. Reactions in progress may need to be terminated depending on the type of emergency and the duration expected. Water-reactive materials should be placed in sealed containers and stored in areas that are unlikely to become wet.
- Turn off heat-generating equipment (e.g., hot plates, stir plates, ovens) and nonessential electrical devices.
- Check that refrigerator, freezer, and incubator doors are tightly closed.
- Exit the laboratory, lock the door, and follow the instructions for an evacuation or a planned closure.

### Resuming Laboratory Operations after an Emergency Closure

- If you discover a condition that poses a threat to you or to others, such as a fire or a hazardous material release, isolate the hazard (e.g., close the door to the lab), notify occupants in the area, activate the fire alarm, exit the building, and call the University police. 7-5911
- Do not use laboratory equipment — such as a chemical fume hood or biological safety cabinet — that is alarming or not working properly. Call the Office of Facilities Management 7-4600

- Check equipment that may have been affected by a power disruption. Keep refrigerator and freezer doors closed until temperature levels return to normal.
- If you have any safety or health questions, contact the Department of Environmental Health and Safety 7-2621 or ehs@fiu.edu