Appendix 9
LABORATORY EMERGENCY PROCEDURES DURING POWER OUTAGES

It is important to remember that some equipment cannot be turned off and certain other pieces of equipment do not shut themselves off when there is a power outage. Plan specific procedures for your laboratory while adhering to the following:

- Fully close chemical fume hood sashes. No work is allowed in fume hoods during a power outage.
- Ensure that all chemical containers are secured with caps, parafilm, etc. and returned to their proper storage location.
- All non-essential electrical devices should be turned off, especially computers, printers, and other devices with sensitive circuitry (including autoclaves and laminar flow hoods).
- Keep the doors of refrigerators and freezers closed.
- Ensure that no flammable chemicals are stored in domestic refrigerators and freezers. When power returns to these appliances, a reaction may be ignited by the refrigerator light or other electrical source.
- Check to ensure that lasers, radio frequency generators, etc. have been turned off. These are generally not used in Biology and Wildlife laboratories.
- Turn off all gas cylinders at the tank valves. However, if a low flow of an inert gas is being used to blanket a reactive compound or mixture, it may be appropriate to leave the flow of gas on. These are not generally used in Biology and Wildlife teaching labs; if used, the procedure to be followed during a power outage should be part of the written Standard Operating Procedure for using the compound or mixture.
- Check all cryogenic vacuum traps (\(\text{N}_2\), \(\text{CO}_2\) and solvent). The evaporation of trapped materials may cause dangerous conditions. These are not generally used in Biology and Wildlife teaching labs.
- Check all pressure, temperature, air or moisture sensitive materials and equipment. This includes vacuum work, distillations, glove boxes used for airless or moistureless reactions, etc. These are not generally used in Biology and Wildlife labs; you should know if you are using them and have procedures for dealing with power outages as part of your Standard Operating Procedure.