University of Delaware Environmental Health and Safety Protocol

Section: General Health and Safety

Protocol Name: Power Outage Procedures

Origination Date: July 2019

Revisions:

Protocol Number: G-10

I. SCOPE OF PROTOCOL

This protocol addresses the procedures to follow in the event of a power outage and applies to all university departments, faculty, staff and students.

II. **DEFINITIONS**

- A. Loss of Power
 - 1. The unplanned loss of normal electrical service to one or a number of buildings or parts of buildings.
- B. Emergency Generators
 - 1. Fuel burning engines driving electrical generators used to supple a limited amount of power to selected circuits during the loss of power. Most emergency generators start from 8 to 10 seconds after the loss of regular power is detected.
- C. Battery Powered Backup Systems
 - 1. Different types of batteries to supply power to sensitive electronics and life safety items such as exit lights.

III. PROTOCOL STATEMENT

When a building loses power, it is no longer considered a controlled environment. Emergency power is supplied to buildings to provide for safe evacuation NOT continued occupancy. Not all buildings have emergency generators and in the buildings that do have emergency generators, they are designed to support only critical services, not the normal building activities. Battery powered emergency lighting and other standby systems are designed to provide temporary power for the safe egress of the building and shutdown of sensitive electronic equipment, and typically have only enough reserve power for no more than 90 minutes of operation. Unless leaving the building would be more hazardous (for instance a power outage during a tornado warning), use the following procedures to evacuate buildings during a loss of power.

- A. Procedures will vary dependent upon the type of building usage.
 - 1. Residence Halls
 - 2. Classroom/office building
 - 3. Laboratory Building (including shops and makerspaces)
 - 4. Public Assemblies
 - 5. Dining Halls
- B. If a building is of mixed use (i.e., classroom/office space and laboratory space), the most stringent procedure should be followed.

IV. PROTOCOL STANDARDS AND PROCEDURES

- A. Report the outage to Facilities Maintenance and Operations (M&O) by calling 302-831-1141.
- B. Anyone in an area with no natural light, such as a basement or offices in the central core of the building, should move to an area with natural light or proceed to a safe area after notifying your supervisor or manager, if applicable. An extended power loss may result in battery powered backup lighting running out of power, leaving the space in total darkness. In case of total darkness, evacuation is encouraged.
- C. Residence Halls
 - 1. Residence Halls may stay occupied in the event of a power loss.
- D. Classroom/office building
 - 1. Classroom buildings and office buildings may stay occupied in the event of a power loss. If an area has no natural light, occupants should move to an area of natural light. All electronic equipment not on dedicated emergency power circuits or an uninterruptible power supply should be shut down to avoid potential damage from electrical surges during restoration of power to the building. Relocation of a class is at the discretion of the instructor unless instructed otherwise by University Police. In case of total darkness, evacuation is encouraged.

E. Laboratory building

1. If a power outage causes the loss of ventilation in a laboratory building, follow the building's Unplanned Ventilation Outage Protocol G-08 to determine what areas of the building must be evacuated. Loss of ventilation due to a power outage could result in the potential for release of harmful substances into other areas of the labs/building. The building cannot be re-occupied until Environmental Health and Safety has surveyed the building and determined that it is safe to re-enter.

F. Public assembly

1. If the outage occurs in a Public Assembly building (i.e., the Bob Carpenter Center), a decision regarding evacuation will be made by the building/emergency manager in charge. Actions may vary depending on the emergency power capabilities of the building and activities taking place. Classes are not considered public assemblies.

G. Dining Halls

- 1. A dining hall may be occupied as typical for the building in the event of a power outage. Cooking operations may need to be suspended if kitchen exhaust systems are not operational.
- H. If a worker feels unsafe in a building during a power outage, they may leave the building for the duration of the outage after consulting with their supervisor. Review the University Policy *Extreme Weather and Emergency Conditions* for more information and procedures.

For more information regarding this policy, contact the Department of Environmental Health and Safety 302-831-8475.