University of Delaware Environmental Health and Safety Protocol

Section: General Health and Safety

Protocol Name: Unplanned Ventilation Outage Procedures

Origination Date: April 2019

Revisions:

Protocol Number: G-08

I. SCOPE OF PROTOCOL

This protocol addresses the procedures to follow in the event of an unplanned building ventilation outage and applies to all university departments, faculty, staff and students.

II. **DEFINITIONS**

- A. Unplanned Ventilation Outage: ventilation equipment failure that is not scheduled ahead of time.
- B. Ventilation outage: includes supply air handler and/or exhaust outage

III. PROTOCOL STATEMENT

- A. Unplanned ventilation outages may impact the supply air or the exhaust air or both. Even an outage of the supply air may impact the pressurization of the rest of the space.
- B. 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
- C. If a building is of mixed use (i.e., classroom/office space and laboratory space), the laboratory space procedures will be followed.
- D. For a scheduled ventilation outage, see EHS Protocol Planned Ventilation Outage Procedures.

IV. PROTOCOL STANDARDS AND PROCEDURES

- A. The Building Automation Services (BAS) Shop and Maintenance and Operations (M&O) will notify EHS and the building manager if the ventilation fails in a building.
 - 1. Residence Hall Ventilation Outage
 - i. A supply and/or exhaust outage will not impact the operation of the Residence Hall. It may be occupied as typical for the building.
 - 2. Classroom/office building ventilation outage
 - i. A classroom or office building may be occupied as typical for the building in the event of a ventilation outage.
 - ii. The space may be more uncomfortable for the occupants if there is a lack of ventilation, but they may occupy the space.
 - 3. Laboratory building ventilation outage
 - i. In the event that supply and/or exhaust ventilation fails in a laboratory space, any lab operations in rooms serviced by the air handler must:
 - a. immediately make all operations safe,

- b. seal all chemical bottles and containers,
- c. close all gas cylinder valves and completely close all fume hood sashes,
- d. all users must evacuate the laboratory spaces and desk spaces within the lab, and
- e. Contact Facilities and EHS to advise them of the situation.
- ii. EHS and M&O staff will determine which spaces are impacted by the outage if an air handler goes down.
- iii. If critical tasks must be performed within a lab space affected by an outage, the occupants can contact EHS to determine if it is safe to perform these tasks only. Any routine activities will not be permitted within the affected labs.
- iv. If the building is serviced by multiple air handlers, the areas that are serviced by operational air handlers can continue operations.
- v. Classroom and office space within the building may continue to operate whether they are serviced by the impacted air handler or not, though the spaces may be more uncomfortable for the occupants.
- vi. Certain buildings with higher hazards (i.e., hazardous chemicals or gases) may require the shutdown of the entire building in the event of an air handler outage. EHS and the building managers will determine this.

4. Public Assembly Buildings

- i. Procedures will be based on the venue, event taking place, and situation
 - a. EHS will evaluate the venue to determine if an event must canceled or re-scheduled on a case by case basis.
- ii. Administrative operations and non-public attended (team practice, weight rooms, etc.) events may continue to operate whether they are serviced by the impacted air handler or not, though the spaces may be more uncomfortable for the occupants.

5. Dining Halls

- i. Commercial cooking devices can not be used under hoods that are not operational or if makeup air is not functioning.
- ii. The dining hall may be occupied as typical for the building in the event of a ventilation outage.
- iii. The space may be more uncomfortable for the occupants if there is a lack of ventilation, but they may occupy the space.
- B. If an employee feels unsafe in a building during an outage, they may leave for the duration of the outage after consulting with their supervisor. Refer to the University Policy on Extreme Weather Conditions/Power Outages.
- C. EHS will work with the building managers and M&O to notify occupants and affected departments of the outages. If an outage will impact classroom space the Registrar's Office will be notified in order to relocate classes.

For more information regarding this policy, contact the Environmental Health and Safety office (302)831-8475.