Dan Black Hall
Emergency Procedures for
Fume Hoods/Building Exhaust Failure

Introduction

One hundred thirty fume hoods in Dan Black Hall (DBH) interconnect with sixteen exhaust fans to remove airborne contaminants from the labs. The airstream leads into nine plenums on the roof, then through the roof stack, and into the atmosphere at sufficient velocity (1,700 linear feet per minute) so that the contaminants do not affect the roof or the campus buildings. The system includes HEPA and carbon filters to remove particulates and organic vapor contaminants before they are released to the atmosphere. An alarm rings at Central Plant for each exhaust fan failure and rings locally for each hood failure. Failure of these systems could expose lab and building occupants to the hazardous materials used there.

Fume Hood Failure

A fume hood face velocity drop below 60 fpm will cause a local alarm to sound at the hood.

1. If chemical odors are detected, the instructor should quickly evacuate the room at their discretion.

2. Reduce the fume hood sash to the minimum level for all hoods in alarm which may take the hood out of alarm condition.

3. Press the reset button above the fume hood, located on Variable Air Flow Fume hoods – typically in student class labs. Research labs usually have constant flow hoods and the only button you can push is the “mute alarm” button, which only mutes the alarm for about 15 minutes.

4. If alarms do not clear, close other fume hoods in the area and press reset buttons.

5. Notify Safety (x7233) and Facilities Management Service Center (x3494).

6. EH&IS will respond and assist instructors to determine if evacuations are necessary.

Building Power / Exhaust Fan Failure

1. Close all fume hood sashes to the minimum level.

2. Shut down all equipment.

3. Turn off ignition sources.

4. Secure or isolate reactions that are underway.

5. Close laboratory doors.

6. Evacuate the building. Notify University Police (x2515) and, at their direction, pull the building alarm.

7. University Police will notify EH&IS (x7233) and Physical Plant.

8. EH&IS to respond and determine whether the building is safe for occupancy.

9. DBH occupants must maintain accurate phone numbers lists on their lab doors.

Building Fire Alarm Activation

1. Only if time permits, isolate hazardous reactions and experiments; turn off ignition sources; close fume hoods; and turn off critical equipment.

2. Close laboratory doors.

3. Evacuate to the designated assembly point 150 feet from the building at the lawn area south of DBH and away from breaking glass, smoke, etc.

4. Building Marshals should assist occupants in evacuating the building.

5. Report occupants remaining in the building to University Police.

6. Assist University Police in securing all building entrances.

7. Report all relevant information to University Police.

8. If there is no apparent reason for the alarm's activation, and it can be silenced at the alarm panel, University Police will give the all clear signal after consulting with EHIS.

11/2008, SB