Dan Black Hall Fume Hood Emergency Procedures

The fume hood system in Dan Black Hall (DBH) consists of 16 exhaust fans (EF) interconnected with the 130 fume hoods. The system* provides ventilation for the building as well as the fume hoods. Should there be a catastrophic loss of one or all of the exhaust fans in the fume hood/ventilation systems, there is the potential for hazardous gases, vapors or fumes to expose laboratory and building occupants. ***To ensure DBH occupants can be reached during an emergency, ensure that phone numbers located on lab doors are accurate and updated.***

Fume Hood Failure

When the face velocity of the fume hood falls below 60 fpm, a local alarm will sound at the fume hood. Respond as follows:

1. Lower the fume hood sash to the minimum level. (Lowering the fume hood sash may take the hood out of alarm condition.)
2. Press the RESET button above the fume hood.
3. If the alarm does not clear, fully close or lower the sashes on other fume hoods in the area.
4. Re-press the RESET button.
5. Notify Facilities Management Service Center (x3494) and provide the laboratory room number and the problem.
6. If chemical odors are detected outside of the fume hood, the lab supervisor can contact Environmental Health and Safety (EHS) at x7233 to assist in determining if a health hazard exists and if evacuation of the laboratory is necessary.
7. EHS will perform an assessment of the fume hood(s) in alarm and provide this information of the assessment to:
   a. Facilities Management Service Center at x3494
   b. Central Plant (Manager, Supervisors & Lead Personnel)
   c. Dean/Associate Dean of Natural Sciences and Mathematics

Building Power/Exhaust Fan Failure

1. Close all fume hood sashes to the minimum level.
2. Shut down all equipment.
3. Turn off all ignition sources.
4. Secure or isolate reactions that are underway.
5. Seal all open containers and secure in the appropriate chemical storage locker, not within the fume hood.
6. Close laboratory doors.
7. Notify University Police (UPD) at x2515 and advise them of the situation within the laboratory.

8. UPD may provide additional information and directions to activate the building alarm. ONLY ACTIVATE THE BUILDING ALARM IF THE UPD TELLS YOU TO DO SO OR THERE IS AN EXTREME EMERGENCY SUCH AS FIRE OR EXPLOSION.
9. Evacuate the laboratory/building in a calm manner to minimize panic.
10. UPD will notify EHS and Facilities Management Service Center.
11. EHS will assist in determining if the building is safe for occupancy.

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 the building. Move 150 feet from the building to the lawn south of DBH. Please note: in an actual emergency, the area between DBH and McCarthy Hall is a 'Fire Lane' and may be hazardous due to Fire Department response activities (breaking glass, smoke, etc.).
4. Building Marshals should assist occupants in evacuating the building. Report occupants remaining in the building to UPD. Assist UPD in securing all building entrances.
5. Occupants should report all information relevant to the evacuation to UPD.
6. If there is no apparent reason for the alarms and it can be silenced at the alarm panel, UPD will give the all clear signal.

*The air from the fume hoods, and return air from the laboratories, are exhausted to nine plenum chambers located on the roof of DBH causing the laboratories to be under a slight negative pressure, this helps keep fumes and vapors inside the fume hood as well as within the laboratory and not the building, hallways, or offices.

The exhaust fan system is connected to a computerized control room located in Central Plant. If the exhaust fan should fail, there will be an alarm signal sent to the Control Room and an operator will notify their Supervisor/Lead. Additionally, every fume hood is equipped with an alarm reset button.

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