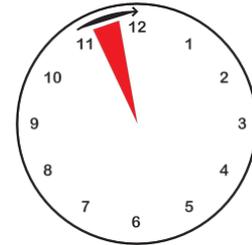
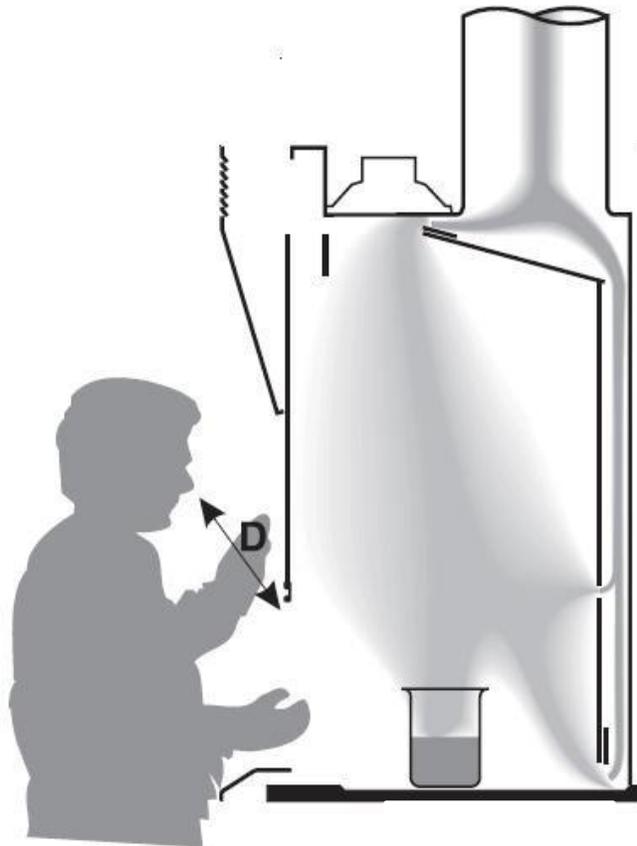


- KEEP SASH AT LOWEST POSSIBLE POSITION AT ALL TIMES
- RAISING SASH ABOVE MECHANICAL STOP (18 INCHES) WILL CAUSE ALARM AND FUME HOOD WILL CHANGE TO EMERGENCY MODE WITHIN MINUTES
- ALL ALARMS ARE MONITORED BY ENERGY MANAGEMENT AND MUST BE ACCOUNTED FOR

- SASH CAN BE RAISED ABOVE STOP ONCE PER HOUR BETWEEN +55 AND +00 MINUTES (AS SHOWN ON CLOCK FACE AT RIGHT)



- IF NECESSARY TO RAISE SASH ABOVE STOP AT OTHER TIMES, NOTIFY MAINTENANCE OR LAB SAFETY OFFICER BEFORE PROCEEDING
- IF HOOD MALFUNCTIONS AND ALARM SOUNDS, NOTIFY MAINTENANCE (7-WORK) OR LABORATORY SAFETY OFFICER IMMEDIATELY



### FUMEHOOD SAFETY CHECKLIST\*

- The hood is the correct type for the work to be performed.
- The flow monitoring device, if present, indicates adequate air flow.
- Hood certification by EH&S is current.
- The baffle setting is correct for the intended use.
- There are no unnecessary chemicals or equipment in the hood.
- All chemicals and equipment is at least six inches behind the plane of the sash.
- All procedures are performed with the laboratory worker's head remaining outside the hood.
- Equipment with large flat surfaces parallel to the plane of the sash is placed on stands with legs.
- The sash is lowered to the minimum possible height.
- All safety equipment is close to the hood in case of fire or explosion.
- All laboratory workers are following the procedures in "SAFE USE OF CHEMICAL FUME HOODS" and other additional fume hood safety guidelines supplied by the hood manufacturer.

*\*Checklist and diagram adapted from Kewaunee fume hood manual.*

## SAFE USE OF CHEMICAL FUME HOOD

The chemical fume hood is the most important engineering control that is designed to contain, capture and eliminate hazardous fumes, mists or particulates that are released from chemicals used in the laboratory. Any procedure that involves the use of hazardous chemicals must be contained inside a fume hood to control the release of contaminants in the work area. If you plan to work with chemicals that are toxic, corrosive, reactive or flammable, you must handle these materials inside a chemical fume hood. It is necessary to follow these guidelines to optimize the performance of the chemical fume hood.

- 1. Before using a fume hood, verify that it is in good working order: certified by EH&S within the last 12 months, air flow is at least 80 feet per minute, light is working and side panels are intact.** If certification is due, call EH&S at 777-5269 to have the fume hood airflow measured.
- 2. Never use a fume hood in alarm mode and never ignore a possible malfunction by muting the alarm.** A fume hood alarm goes off for two main reasons: the sash is at an unsafe height or the airflow is too low to effectively capture and eliminate contaminants. Verify airflow from the fume hood monitor (if available) or by doing the *Kimwipe* test. Sufficient airflow should be able to pull inward a *Kimwipe* taped to the lower edge of the sash. Promptly report any suspected hood malfunctions or power failure to the Facilities Department (777-4217) and EH&S (777-5269).
- 3. Keep the fume hood clean and clear of unnecessary chemicals, glassware or equipment.** Avoiding clutter will provide optimal containment by preventing turbulent currents or reverse air flow. It will reduce the risk of extraneous chemicals being involved in any fire or explosion. Only materials actively in use should be in the fume hood. If the fume hood is dedicated to contain large equipment, the equipment must be placed at least 8 in. behind the plane of the sash, 4 in. from the sidewalls and not blocking the back baffle opening. If safe to do so, place the equipment on a stand to enable air to flow underneath it.
- 4. Work with the fume hood sash in the lowest possible position no higher than 18 inches. Keep the sash clean and clear.** The sash will act as a physical barrier in the event of an accident inside the fume hood. If there is a need to open the sash higher than 18 inches to set-up equipment or experiment, pull the sash down to 18 inches or below as soon as the set-up is completed.
- 5. Keep the sash in closed position when running an unattended experiment or when the fume hood is not in use.** If not in use, the fume hood must remain "ON" if chemicals are inside to continually eliminate contaminated air in the laboratory. Newer buildings are designed so that fume hoods continually runs as part of the building exhaust system.
- 6. Never extend your head inside a fume hood to check on an experiment or for any reason.** Only authorized personnel should access the inside part of the fume hood during maintenance procedures.
- 7. Keep chemicals and other materials at least 6 inches behind the plane of the sash.** This will ensure that no contaminant will enter your breathing zone and that air can flow through the airfoil.
  - 8. Avoid quick movements and unnecessary traffic in front of the hood and keep the doors closed to prevent cross drafts.**
- 9. Never attempt to modify or take any part off of a fume hood.** Any modification or missing parts will affect containment and contaminant capture effectiveness.
- 10. Never use a fume hood for a chemical or procedure that it is not designed for.** Contact EH&S (777-5269) before using fume hoods for: **a) heavy acid digestion; b) perchloric acid; c) hydrofluoric acid; or d) radioisotope.** Infectious materials may not be used inside a chemical fume hood.
- 11. Do not evaporate or store chemical wastes inside the fume hood for long periods of time.**
- 12. Locate sources of spark or ignition (e.g. power strips) outside of the fume hood.**
- 13. If the fume hood malfunctions in the middle of a procedure that releases hazardous fumes, mists or particulates, follow this emergency plan:**
  - a. Terminate all electrical and gas supply.**
  - b. Pull the sash all the way down to the close position.**
  - c. Alert supervisor and neighbors, advising everyone to evacuate the area.**
  - d. Post "DO NOT ENTER, HAZARDOUS FUMES" on the entrance door if doing so will not compromise your safety.**
  - e. Call Facilities Department (777-4217) and EH&S (777-5269) to report the emergency and arrange for repair.**