Report chemical hood malfunction to Physical Plant
852- 6241 Belknap Campus
852-5695 HSC Campus

SAFE OPERATION OF CHEMICAL HOODS

- **Confirm that the hood is operational**. If fitted with a local on/off switch, make sure the switch is in the "on" position; check the airflow gauge if so equipped. In the absence of a gauge, observe the plastic "flow check ribbon" taped to the lower corner of the sash. Airflow can be visually assessed by noting that the ribbon is pulled gently into the hood. The most recent hood test data and optimum sash height are indicated on the yellow label affixed to the hood face. Never work with a malfunctioning hood; report problem hoods to Physical Plant Work Control. Advise DEHS of chemical hoods that malfunction repeatedly.

- **Maintain operations at least 6" inside the hood face.** Vinyl tape can be attached to the work surface to serve as a visual reminder.

- **Lower sash to optimum height.** Optimum height is the sash height at which airflow is maximized without creating turbulence, generally 100 feet per minute. A yellow label placed on the hood face indicates the most recently recommended sash height. Exception -- variable volume exhaust hoods maintain 100 fpm at any position at or below the sash stop. With unattended or potentially explosive processes, conduct the operation behind a lowered sash or safety shield.

- **Keep head out of hood** except when installing and dismantling equipment.

- **Keep hood storage to an absolute minimum.** Keep only items needed for the ongoing operation inside the hood. Keep the back bottom slot clear at all times as it serves as an exhaust port for chemicals generated near the work surface. Raise large objects at least two inches off the hood surface to minimize air flow disruption.

- **Minimize foot traffic around the chemical hood.** A person walking past a chemical hood can create competing currents at the hood face, causing vapors to flow out. Other sources of competing air currents such as open windows and fans must also be avoided while using a chemical hood.

- **Use extreme caution with ignition** sources inside a chemical hood. Ignition sources such as electrical connections, Variac controllers and open flame can be used inside a chemical hood as long as there are no operations involving flammable or explosive vapors. If possible, ignition sources should remain outside the hood at all times.

- **Replace hood components prior to use.** Every component of a chemical hood, whether airfoil, baffle, utility panel or sash, plays a vital role in preventing the escape of hazardous materials from the hood. Any hood components removed to conduct maintenance or repair activities, or to set up experimental apparatus must be replaced prior to using the hood for contaminant control.

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http://louisville.edu/dehs/ohs/fumehoods/fumehood.html