

**ADVISORY NO. 8.3: PROCEDURES FOR LABORATORY HOOD
MAINTENANCE WORK**

PROCEDURES FOR FUME HOODS IDENTIFIED AS NON-OPERABLE:

- When a fume hood is suspected of not functioning properly, Facilities Management Work Control should be notified immediately. In order to avoid inadvertent use of the hood, Facilities will immediately lockout the hood. It is the user's responsibility to empty the hood to avoid unnecessary lockout of items needed in routine effort.
- When the hood is locked, a numbered, two-part REPAIR TAG is attached to the lock and a WARNING SIGN will be posted on the closed sash by Facilities Management or EH&S. The posted sign documents the date the hood is locked, the fume hood location, the reason for the lockout, and the corresponding tag (ID) number. A copy of this posting will be sent to the building administrator responsible for the locked fume hood and to Environmental Health & Safety.
- The hood will be scheduled for maintenance as quickly as possible.
- Once the repair is completed the numbered REPAIR TAG is completed with the date. Half of the tag is returned to the building administrator and half returned to EH&S. Facilities personnel will perform a gross airflow check using a portable vaneometer or equivalent air velocity meter. The purpose of this check is simply to confirm that there is airflow into the fume hood. If there is airflow, Facilities will unlock the hood and remove the WARNING SIGN and tags. EH&S will recertify the actual fume hood performance after receiving the completed repair tag.
- If a hood maintenance/repair is determined to be beyond the scope of services available through Facilities Management or if the portable air velocity meter indicates inadequate air flow, the REPAIR TAG is returned marked "Unable to Complete Repair". A new WARNING SIGN and REPAIR TAG will be posted on the affected hood at that time to continue the complete notification of the fume hood status. It is Facilities Management's responsibility to follow-up with the building administrator to make sure the user understands the problem identified and the options available for repair.

PROCEDURES FOR SHUTDOWN:

When hood fan maintenance work is required, it may be necessary to schedule a shutdown of an entire bank of hoods regardless of the number of hoods actually being serviced.

- The Zone Coordinator will send a shutdown request form to the building administrator who will confirm shutdown dates and times and notify the Zone Coordinator and the affected academic departments.
- The Zone Coordinator will send a shutdown verification form to the building administrator and Environmental Health & Safety. EH&S will notify the Radiation Safety Office.
- At least three days prior to scheduled work, zone maintenance personnel will post signs, indicating date and time of hood shut down, on the affected hoods. The affected hoods will be out of service during the period indicated on the sign regardless of whether or not the fans are actually operating. Signs will be consecutively numbered for accurate removal at work's completion.
- Zone maintenance personnel will also check for rooms keyed off the master. If a researcher has room locks, which are keyed off the master, a key for that lock must be furnished to the Zone Manager and/or building administrator.

PROCEDURES FOR LABORATORY HOOD MAINTENANCE:

- Immediately prior to scheduled work (Friday afternoon if the work is done Saturday), trained maintenance personnel, a chemically knowledgeable assigned department representative and an Environmental Health & Safety representative will conduct a visual inspection to ensure that no

experimental operations are ongoing. Chemicals and chemical derivatives should be removed from the hood prior to lockout.

- When a hood passes inspection for maintenance to proceed, the sash will be locked in the fully closed position until scheduled work has been completed. **Any** violation not correctable by the Department representative and users will result in the cancellation of scheduled work.
 - Laboratory storage in chemical fume hoods is inadvisable. The hood should be used for operations, which might result in release of toxic chemical vapors or dust. Keep materials storage in the hood to a minimum and do not allow them to block vents or airflow.
 - **NO** operations/experiments, **including** closed systems, shall be conducted in the hood during maintenance. If an instrument must be left on (standby mode), it is the responsibility of the researcher to contact Environmental Health & Safety (556-4968) who will tag the instrument with a "**DO NOT OPERATE**" tag.
- Removal of locks by lab personnel during this shutdown is a violation of the University of Cincinnati Safety Policy and will result in individual and personal liability.

COMPLETION OF SCHEDULED MAINTENANCE:

- Upon conclusion of scheduled work, zone maintenance personnel will confirm airflow into the hoods using a portable vaneometer or equivalent air velocity meter and will remove the signs, seals and tags. The hoods are then ready for use.
- If the air flow confirmation indicates that there is no air flow into the hood or that air is flowing out of the hood and into the room the hood will remain locked out until the problems can be identified and addressed.
- All hoods that remain locked out after maintenance should be posted with new WARNING SIGNS that state the reason for the continued lockout and the estimated time for repair. Copies of these signs are routed to EH&S and the User's Department in the normal fashion. If the non-functioning hoods were not already identified with a red REPAIR COMPLETION TAG they should be so tagged at that time.
- Any questions should be directed to the zone number (number listed on the posted sign) or the University of Cincinnati Environmental Health & Safety at 556-4968.