

**University of Maine Darling Marine Center
Standard Operating Guidelines for
Laboratory Fume Hoods**



The following document outlines the general considerations and procedures to be used when working with a laboratory fume hoods at the DMC. This is not a complete reference and lab workers are encouraged to utilize any and all sources of additional information.

Overview

- Read and follow all manufacturer guidelines for hood use. If manufacturer guidelines conflict with these SOGs, follow the manufacturer's instructions.
- Fume hoods are designed to reduce, not eliminate, exposure to hazardous chemicals. The decision to use a fume hood, and how to do so safely should be part of the planning and hazard assessment for every experiment/ procedure. Each laboratory should establish procedures for fume hood use in the laboratory specific Chemical Hygiene Plan.

Housekeeping

- Fume hoods are designed and tested while empty; anything placed inside the hood has the potential to disturb or alter air flow and hood effectiveness. Keep the hood as clear as possible; using only equipment required for immediate work.
- Provide adequate clearance for air flow near rear baffles, hood sides, and sash. Elevate large equipment 2-3 inches to provide for proper airflow.
- Properly secure any lightweight materials to avoid inadvertently clogging the ventilation system.
- Provide secondary containment for all chemicals whenever possible.
- Clean up all spills immediately and change bench paper frequently to minimize errant vapors.
- Do not store chemicals, or chemical waste in a hood unless it is specifically designated for such use. Do not conduct work inside a hood designated for storage.

Work Procedures

- Do not use perchloric acid in hoods not specifically designed for that use.
- Do not place any part of the body, except hands and arms, inside a hood while working.
- Avoid rapid or erratic movements while working in the hood.
- Reduce exterior influences to airflow by keeping laboratory doors and windows closed.

Sash Height

- Keep the sash as low as possible while conducting work.
- Never work with the sash above the certified height indicated on the certification sticker.
- Close the sash when not working.

Functional Test

- Always check a hood for proper flow direction and velocity prior to beginning work. This can be done with a commercially available flow meter, or with a piece of lightweight paper (i.e. Kim-wipe).
- Contact DMC Facilities Management or SEM immediately if you believe your hood to be malfunctioning.

Maintenance and Certification

- Hoods are serviced annually by UMAINE Facilities Management and by outside contractors.
- Hoods are certified annually by UMAINE Dept. of Safety and Environmental Management.
- Do not use a hood that is past its certification date, or that does not have a certification sticker.
- Do not use a hood with the sash higher than indicated on the certification sticker.
- Contact DMC Facilities Management or SEM immediately if a hood is not certified or appears to be malfunctioning.