

FUME HOOD USE AND SAFETY PRACTICES

HVCC Environmental Health and Safety

One of the most important safety devices in a laboratory is a properly functioning fume hood. The fume hood protects users by containing and exhausting airborne hazards; it does this by constantly pulling room air into the hood and exhausting it directly outside the building through fans located at the roof level. Fume hood sashes also provide shielding in the event of an explosion or fire inside the hood.

A fume hood should be used in the following situations:

- When working with chemicals with significant inhalation hazards
- When carrying out procedures that could explode or generate high pressure
- When chemical vapors generated could cause a fire hazard if allowed to accumulate
- When working with chemicals that have an offensive odor
- Special hoods are needed for the use of perchloric acid. Perchloric acid vapors may create explosive perchlorates in the duct work and need to be used in a perchloric acid hood equipped with a water wash-down.

HOOD SET-UP AND USE

- Verify proper hood airflow. All hoods at HVCC are equipped with a flow monitor that alarms if a low flow condition is detected. In case of a low flow alarm, discontinue work and close the sash. Tag the hood out of service and report the issue to your supervisor.

hood.

- When using a large apparatus inside the hood, place the equipment on blocks or stands when safe and practical, to allow air flow beneath it.
- Turn the fume hood light on before working with hazardous materials. If the hood light

- Always wear splash goggles, and use a full face shield if there is possibility of an