

# Chemical Fume Hood User Guide

**Contact ASU Facilities Management, 965-3633, if-**

- Hood is not operating properly or in alarm mode

**Contact ASU EH&S, 965-1823, if-**

- Hood is without a testing sticker indicating it has been tested within 1 year

**Follow these guidelines to use fume hood safely and avoid compromising their efficiency**

*Additional guidance is listed on back of this fact sheet*

- ✓ Avoid creating air currents or cross-drafts across the hood's open sash
- ✓ Take extra precautions when handling electrical equipment & flammables in a fume hood
- ✓ Perform work with the sash height below the appropriately marked position
- ✓ Do not extend your head inside of the hood while performing experiments
- ✓ Minimize amount of materials & equipment in hood and avoid using as storage
- ✓ Place chemical sources & equipment at least 6 inches inside the hood
- ✓ Handle perchloric acid only in a designated Perchloric Acid Fume Hood
- ✓ Do not use hood to evaporate hazardous chemicals or as a means of chemical disposal
- ✓ Wear appropriate Personal Protective Equipment when working with chemicals
- ✓ Keep hood exhaust baffles unobstructed and appropriately adjusted

Do not work in hood posted with an **"OUT OF SERVICE"** sign on the sash

Confirm hood is operating properly and not in alarm

Do not modify any part of the hood or ductwork

## **Additional information for “Chemical Fume Hood User Guide”**

### **Avoid creating air currents or cross-drafts across the hood face**

Foot traffic, local ventilation systems, windows and doors may cause air currents to form across hood face, which may reduce the hood performance and pull contaminated air out of the hood toward the user. Restrict foot traffic and rapid arm/body movement around the hood face. Keep lab doors and windows closed unless lab ventilation design requires them open.

### **Take extra precautions when handling electrical equipment & flammables in a fume hood**

Do not use spark source when flammable liquids or gases are present inside the hood. Permanent electrical receptacles are not permitted in the hood.

### **Perform work with the sash height below the appropriately marked position**

The appropriate 18 inch closure point should be clearly labeled on the outer frame of the sash. The sash should remain closed and hood exhaust operating when hood unattended. For horizontal sliding panes, position sash all the way down with as small an opening as practical.

### **Minimize amount of materials & equipment in hood and avoid using as storage**

Equipment placed in the hood may restrict adequate exhaust air-flow. If absolutely necessary to have equipment in hood, position equipment toward back of hood and elevate equipment with blocks to maintain airflow gap below and around equipment to maintain air circulation. Only chemicals necessary to perform the experiment should be left in the hood, all other chemicals should be stored in approved safety storage cabinets.

### **Place chemical sources & equipment at least 6 inches inside the hood**

Placing a line of tape across the work surface at this 6 inch mark inside the fume hood from the hood sash will help as a reminder.

### **Handle perchloric acid only in a designated Perchloric Acid Fume Hood**

Water wash-down fume hoods made of noncombustible material must be used for during use of perchloric acid. If there is a doubt to whether the wash-down system is functioning properly, stop all work in the hood and call Facilities Management 965-3633 and EH&S 965-1823 for inspection/repair.

### **Do not use hood to evaporate hazardous chemicals or as a means of chemical disposal**

All chemicals inside hood must remain capped when not in use.

### **Wear appropriate Personal Protective Equipment when working with chemicals**

At a minimum wear the eye protection, gloves, and lab coat when working with hazardous chemicals in the hood. Consult the material's Material Safety Data Sheet (MSDS) for appropriate PPE.

### **Keep hood exhaust baffles unobstructed and appropriately adjusted**

Keep air exhaust baffles located at hood's back wall unobstructed and adjust them accordingly.

For more information visit the ASU EH&S website