

## Laboratory Fume Hood Annual Certification Procedure

### Applicable Regulations

CCR Title 8, §5154.1. Ventilation Requirements for Laboratory-Type Hood Operations  
([www.dir.ca.gov/Title8/5154\\_1.html](http://www.dir.ca.gov/Title8/5154_1.html))

### Testing Procedure

1. Position the sash to match the arrows (for a recertification).
  - a. If never before certified, the preferred sash certification height is fully-open, if it will not pass at fully open, lower the sash to 20 to 24 inches. If it will not pass, lower the sash to 18 inches
2. Puff smoke around the opening of the hood by using the Ventilation Smoke Tubes, or  $TiCl_4$  or the Wizard stick. No smoke should come out of the hood.
3. Turn on the Shortridge Instruments Meter. Change the mode to VELGRID by depressing the MODE key twice. Press the STORE key.
4. Measure the velocity of the air by placing the velgrid of the Shortridge at bottom of the sash, top of the hood opening and in line with the sash.
  - a. Measure across the length of the entire opening.
  - b. Depress the READ button between each measurement.
  - c. The Shortridge will store each reading.
  - d. To obtain the average of the readings, push the STORE button. Push the RCL button to see the individual stored readings.

### Paperwork

1. Fill out the information asked for on the top of the UCR EH&S Exhaust Ventilation Performance Survey form. Write in the Room no, Hood no. and TSS number.
2. Fill in the readings in the appropriate squares on the form and write in the average reading.
3. If a fume hood does not pass, tape a Warning sign<sup>1</sup> onto the sash.
4. If a fume hood does pass, fill out the yellow inspection sticker with date, flow rate and initials of the inspector.
5. If there is not a yellow sticker on the hood, affix an arrow to the sash and a certification sticker to the side of the hood. The height of the sash should be no less than 18 inches.
6. Enter the data in the ESHOOD data base.

### Determining Whether to Pass a Hood

The following four conditions must all be met in order for the hood to pass:

1. The average face velocity with the sash at an opening of 18 inches (or greater) must be a minimum of 100 fpm. (The preferred sash certification height is fully-open)
2. No individual measurement can be less than 70 feet per minute (fpm) (excluding within 1 inch of the perimeter face of the hood.
3. The average face velocity, with the sash fully open, can not be greater than 300 fpm.
4. Smoke can not come out of the hood.

**WARNING**

**THIS HOOD IS NOT ABLE TO BE USED UNDER CURRENT CONDITIONS DUE TO PERFORMANCE FAILURES**

**DO NOT ATTEMPT TO USE THIS HOOD TO HANDLE AND/OR STORE ANY HAZARDOUS MATERIALS OR WASTE.**

Please direct any questions to UCR EH&S at 827-5528

EH&S Representative: \_\_\_\_\_  
Posting Date: \_\_\_\_\_

**CAUTION**

THIS CHEMICAL FUME HOOD IS CURRENTLY NOT ABLE TO BE CERTIFIED DUE TO INSUFFICIENT FACE VELOCITY. CAL OSHA REQUIRES AIR FLOW TO BE AT LEAST 100 FEET PER MINUTE INWARD FACE VELOCITY. THIS FUME HOOD IS OPERATING WITH A FACE VELOCITY OF AT LEAST 80 FEET PER MINUTE. DUE TO REDUCED AIR FLOW.....

**USE CAUTION WHILE USING THIS FUME HOOD TO HANDLE ANY HAZARDOUS MATERIALS OR TO STORE ANY CONTAINERS OF HAZARDOUS MATERIALS OR HAZARDOUS WASTE**

THIS NOTICE WILL BE REMOVED WHEN HOOD IS ABLE TO MEET CERTIFICATION REQUIREMENTS.

For further assistance regarding this notice, please call UCR Environmental Health and Safety at: 827-5528

**OUT OF SERVICE NOTICE**

**THIS CHEMICAL FUME HOOD HAS BEEN TAKEN OUT OF SERVICE**

**DO NOT ATTEMPT TO USE THIS FUME HOOD TO HANDLE ANY HAZARDOUS MATERIALS OR TO STORE ANY OPEN CONTAINERS OF HAZARDOUS MATERIALS OR HAZARDOUS WASTE**

For further assistance regarding this notice, please call UCR Environmental Health and Safety at: 827-5528

**OUT OF SERVICE NOTICE**

THIS CHEMICAL FUME HOOD IS TEMPORALLY OUT OF SERVICE DUE TO MECHANICAL AND/OR ELECTRICAL MALFUNCTIONS

**DO NOT ATTEMPT TO USE THIS FUME HOOD TO HANDLE ANY HAZARDOUS MATERIALS OR TO STORE ANY OPEN CONTAINERS OF HAZARDOUS MATERIALS OR HAZARDOUS WASTE**

For further assistance regarding this notice, please call UCR Environmental Health and Safety at: 827-5528

**OUT OF SERVICE NOTICE**

**THIS HOOD IS TEMPORALLY OUT OF SERVICE DUE TO SYSTEM MECHANICAL MALFUNCTIONS**

**DO NOT USE THIS HOOD TO HANDLE OR STORE ANY HAZARDOUS MATERIALS OR WASTE THAT REQUIRE THE USE OF A CERTIFIED LABORATORY CHEMICAL HOOD TO PROVIDE VENTILATION PROTECTION.**

THIS NOTICE WILL BE REMOVED WHEN ALL NECESSARY REPAIRS AND HOOD FUNCTION CHECKS HAVE BEEN SUCCESSFULLY COMPLETED

For further assistance regarding this notice, please call UCR Environmental Health and Safety at: 827-5528

**OUT OF SERVICE NOTICE**

THIS HOOD IS TEMPORALLY OUT OF SERVICE DUE TO SYSTEM MECHANICAL MALFUNCTIONS. CAL OSHA REQUIRES THE AIR FLOW THROUGH THE SASH PLANE, TO BE AT LEAST 100 FEET PER MINUTE INWARD FACE VELOCITY. THIS HOOD IS OPERATING WITH A FACE VELOCITY OF AT LEAST 70 FEET PER MINUTE. DUE TO REDUCED AIR FLOW.....

**DO NOT USE THIS HOOD TO HANDLE OR STORE ANY HAZARDOUS MATERIALS OR WASTE THAT REQUIRE THE USE OF A CERTIFIED LABORATORY CHEMICAL HOOD TO PROVIDE VENTILATION PROTECTION.**

THIS NOTICE WILL BE REMOVED WHEN ALL NECESSARY REPAIRS AND HOOD FUNCTION CHECKS HAVE BEEN SUCCESSFULLY COMPLETED

For further assistance regarding this notice, please call UCR Environmental Health and Safety at: 827-5528

**OUT OF SERVICE NOTICE**

THIS HOOD IS OUT OF SERVICE DUE TO EXHAUST SYSTEM AND/OR MECHANICAL MALFUNCTIONS. CAL OSHA REQUIRES THE AIR FLOW THROUGH THE SASH PLANE, TO BE AT LEAST 100 FEET PER MINUTE INWARD FACE VELOCITY. THIS HOOD IS OPERATING WITH A FACE VELOCITY LESS THAN 100 FEET PER MINUTE. DUE TO REDUCED AIR FLOW.....

**DO NOT USE THIS HOOD TO HANDLE OR STORE ANY HAZARDOUS MATERIALS OR WASTE THAT REQUIRE THE USE OF A CERTIFIED LABORATORY CHEMICAL HOOD TO PROVIDE VENTILATION PROTECTION.**

THIS NOTICE WILL BE REMOVED WHEN ALL NECESSARY REPAIRS AND HOOD FUNCTION CHECKS HAVE BEEN SUCCESSFULLY COMPLETED

For further assistance regarding this notice, please call UCR Environmental Health and Safety at: 827-5528

**OUT OF SERVICE NOTICE**

This hood is not able to be certified. All the contents of the hood need to be removed as they are blocking the airflow preventing us from certifying the hood

**Once this hood is emptied, please contact Environmental Health and Safety at 827-5528**

**OUT OF SERVICE NOTICE**

This hood is not able to be certified. All the equipment blocking the hood needs to be removed before the hood can be certified.

**Once this hood is unblocked, please contact Environmental Health and Safety at 827-5528**