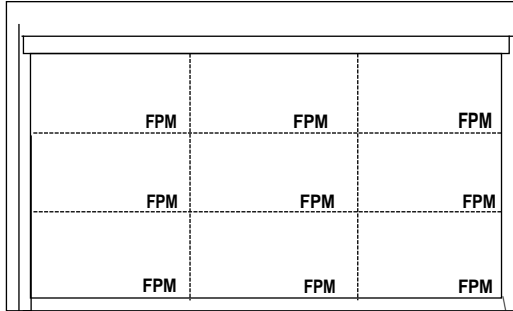


<b>LABORATORY CHEMICAL FUME HOOD INSPECTION</b>	DATE OF PREVIOUS INSPECTION	DATE
	THIS INSPECTION PERFORMED BY (Name)	
LOCATION OF HOOD	TYPE OF HOOD <input type="checkbox"/> Standard <input type="checkbox"/> Auxiliary Air supply <input type="checkbox"/> Other (specify)	
GENERAL TOXICITY RATING OF MATERIAL USED IN HOOD <input type="checkbox"/> Low (STEL > 1,000 PPM) <input type="checkbox"/> Medium <input type="checkbox"/> High (STEL < 10 PPM)	CROSS SECTIONAL AREA AT FACE Height: _____ feet x Width: _____ feet = _____ feet <sup>2</sup>	

**AIR VELOCITY READINGS**

Mfr/Model: \_\_\_\_\_

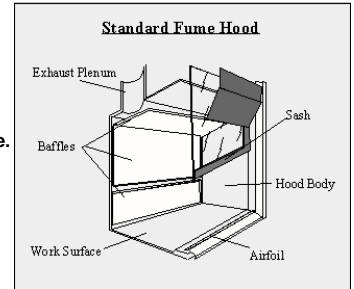
Ser. #: \_\_\_\_\_



Exhaust on, sash fully raised.

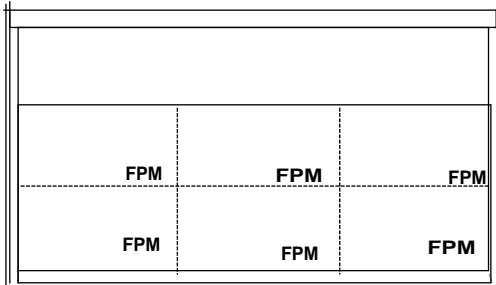
$$\frac{\text{FPM} + \text{FPM} + \text{FPM} + \dots + \text{FPM}}{9} = \text{FPM average.}$$

Average value \_\_\_\_\_ FPM.



Exhaust on, sash raised 18 inches.

(Readings may not vary more than ± 20 FPM from average value.)



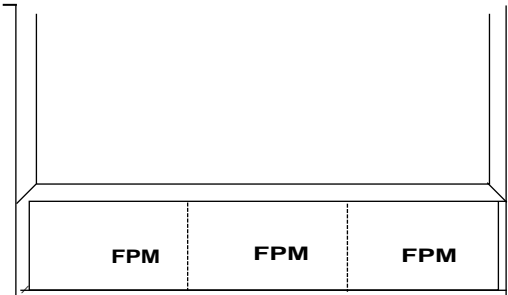
Average value \_\_\_\_\_ FPM.

(Value should be 80-120 FPM.)

Exhaust flow value \_\_\_\_\_ CFPM.

Exhaust on, sash 6 inches above work surface.

(Readings shall be at least 2 but not more than 3 times the face velocity when sash was fully raised)



Average value \_\_\_\_\_ FPM.

Exhaust flow value \_\_\_\_\_ CFPM

**EXHAUST READING WITH SASH CLOSED**

Exhaust flow value \_\_\_\_\_ CFPM.

**TITANIUM TETRACHLORIDE INDICATION OF FLOW PATTERNS AT HOOD FACE.**

- Satisfactory flow patterns evident.
- Unsatisfactory (describe): \_\_\_\_\_

**ONE-MINUTE SMOKE BOMB DISCHARGE**

- Effective smoke removal with sash fully raised.
- Effective smoke removal with sash 6 inches above work surface.
- Effective smoke removal with sash closed.
- If unsatisfactory, describe: \_\_\_\_\_

**APPROVAL**

- This hood is found to be acceptable for use with materials of the general toxicity rating as specified above.
- This hood has been found UNACCEPTABLE.

SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

## Chemical Fume Hood Testing Procedures

### Testing Procedures:

1. Position the sash fully raised.
2. Puff smoke around the opening of the hood by using Ventilation Smoke Tubes (or other visible smoke device). All smoke should be captured by the hood exhaust and not be blown into the room.
3. Divide the fume hood opening into equal grids with sides measuring no more than 12-inches (approximately 9 grids).
4. The tip of the Thermoanemometer probe shall be positioned in the plane of the sash opening and fixed (**NOT HANDHELD**).
5. Each grid velocity shall be the average of at least 10 measurements made over at least 10 seconds.
6. Record each reading in the applicable square on the form.
7. Continue taking readings until all grids are completed.
8. Position the sash so that the fume hood raised opening is 18-inches.
9. Divide the fume hood opening into equal grids with sides measuring no more than 12-inches (approximately 6 grids).
10. Follow steps 4, 5 and 6 for measuring and recording.
11. Position the sash so that the fume hood raised opening is 6-inches.
12. Divide the fume hood opening into equal grids with sides measuring no more than 12-inches (approximately 3 grids).
13. Follow steps 4, 5 and 6 for measuring and recording.

### Paper Work:

1. Fill out the required information on the "Laboratory Chemical Fume Hood Inspection" (Form S&E-283).
2. If a Fume Hood does not pass, tape a "Warning Do Not Use/Out of Service" sign onto the sash, and remove or cross out any earlier inspection stickers.
3. If a Fume Hood does pass, fill out an inspection sticker and affix it to the front of the hood. The metal sash frame, because of it's visibility, is an ideal location for the sticker.

Determining Whether to Pass a Hood. The following three conditions shall be met in order for a hood to pass:

1. The average face velocity with the sash opening of 18-inches shall be between 80-120 FPM.
2. The average face velocity with the sash opening of 6-inches shall not be greater than 300 FPM.
3. Smoke shall not escape into the room during the smoke test.

WORKING  
----->  
HEIGHT  
APPROVED FOR:  
 Storage Only  
 General Chemistry  
 Radioisotopes  
 Carcinogen/Toxic  
Chemical Work  
FACE VELOCITY:  
\_\_\_\_\_ FPM  
Date of Re-Inspection:  
\_\_\_\_\_  
Inspector (Signature)  
\_\_\_\_\_

Inspection Sticker