STANDARD OPERATING PROCEDURE

Fume Hood

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<u>Minimum Personal Protective Equipment Required:</u> Skin and body protection (long pants, closed toed shoes, appropriate gloves)

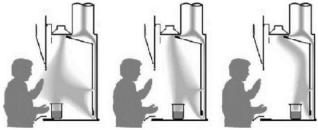
<u>Risks</u>: Exposure to hazardous fumes or vapors if hood is not functioning properly or if air flow is obstructed

Special Handling:

- ✓ The fume hood should be used when working with any hazardous chemicals in the laboratory or if hazardous vapors, mists, aerosols or gases are being created during a procedure
- ✓ The fume hood is the primary control device for protecting laboratory workers when working with flammable and/or toxic chemicals
- ✓ The fume hood must be certified annually. An inspection card is located on the upper left side of the fume hood.
- ✓ In the case of an electrical power outage, do not use the fume hood and keep the sashes closed as the laboratory ventilation will not work properly during an outage.

Protocol/Procedure:

- 1. Verify that the hood is on and that the air gauge (located on the upper right side of the fume hood) indicates that the air flow is at least 100 fpm. Promptly report any hood that is not functioning properly.
- 2. Minimize the number of items placed in the fume hood. The more objects present in a chemical fume hood, the less effective the air flow is in protecting workers against hazardous chemicals. Be sure that nothing is blocking the airflow through the baffles or through the baffle exhaust slots.
- 3. When beginning to work, keep one of the sliding sash panels in front of you, with your arms on either side of the panel.
- 4. Never allow your head to enter the plane of the hood opening.
- 5. Work at least 6 inches inside of the hood. Fumes are not properly contained if working too close the front of the hood.
- 6. After completing work, return chemicals and any supplies to their appropriate location, and make sure hood is clean.
- 7. When not in use, keep the sashes closed.



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Figure 2: Containment of vapors in a chemical fume hood as a function of working distance.