Fume Hood Work Practices and Procedures

- 1. Make sure your work area is clean and uncluttered before using a fume hood
- 2. Never use the fume hood to store chemicals and equipment between procedures.
- 3. Verify the date on the inspection sticker on the fume hood. The fume hood should be inspected annually. Contact Environmental Health and Safety for inspection.
- 4. The fume hood average face velocity should be between 100-150 feet per minute.
- 5. If the hood is not equipped with an air measuring device, verify adequate inward airflow by using smoke tubes, dry ice in a beaker or tissue paper.
- 6. Do not use the fume hood if it is not working properly. Contact the CO&M (2-6400 or 4-2400) if the fume hood is not working. Contact Environmental Health and Safety to verify that it is working properly.
- 7. Inspect the bypass area, airfoil, sash and access opening to verify that no air passages are blocked. Never remove the sash except during set up and no source of chemical exposure in the fume hood.
- 8. Never put your head inside a fume hood except during set up and no source of chemical exposure in the fume hood.
- 9. Electrical extension cords are not safe to use in a fume hood due to the danger of an explosion or fire.
- 10. Large equipment must be elevated on solid blocks to maintain an airflow space of 1-2 inches above the work surface.
- 11. Make sure equipment does not block the baffles at the rear of the hood.
- 12. Keep all apparatus at least 6 inches inside the fume hood. The best way to maintain this distance is to mark a safety line with tape.
- 13. Avoid opening and closing the sash rapidly, and avoid swift arm and body movements in front of or inside the hood. These actions may increase turbulence and reduce the effectiveness of the fume hood.
- 14. Position the sash so that it acts as a shield. Keep the sash as low as possible. The inspection sticker will indicate the maximum height. Always look through the sash, not under it.
- 15. If you observe defective or overheating equipment, shut off the equipment, disconnect it, close the sash, and report the problem to your supervisor.
- 16. Keep chemical containers closed at all times. Use condensers, traps, or scrubbers to contain and collect waste solvents, vapors or dusts.
- 17. Clean all spills immediately. Do not allow spilled liquid chemicals to evaporate.
- 18. If a fire occurs inside the fume hood, immediately close the sash and activate the fire alarm, exit the room, close the door and from a safe area, contact University Police to report a chemical fire.
- 19. Keep the fume hood exhaust on at all times.
- 20. Keep the sash closed completely when the fume hood is not in use.

Reference Sources: *Prudent Practices in the Laboratory: Handling and Disposal of Chemicals.* 1995. National Research Council. (http://www.nap.edu/catalog/4911.html) and ANSI/AIHA Z9.5-2003 *Laboratory Ventilation*.

For additional safety information, visit the EH&S web page at: http://www.stonybrook.edu/ehs

Environmental Health and Safety Stony Brook University

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