

## APPENDIX IV

### STANDARD OPERATING PROCEDURES

#### SAMPLE SOP

##### FUME HOOD USE

Laboratory use of fume hoods. Use the following general rules as the basis for your standard operating procedure for routine hood use.

1. Use the lab hood as a secondary safety control. Individual standard operating procedures should be the primary method of controlling the escape of toxic chemicals into the lab. For example, use condensers, traps, or scrubbers to contain or collect fugitive toxic chemicals. The hood should never be used as a method to dispose of volatile chemicals.
2. All hoods will be evaluated every 6 months. Do not use a hood unless it operating and the calibration sticker is dated within 6 months. When hoods are functioning properly, the average face velocity should be 100 feet per minute with the sash fully opened. This level will be marked on the hood.
3. Before each use, make sure the ventilation of the lab hood is functioning. Ideally, a continuous monitor, such as a swinging vane velometer, should be obtained for the hood.
4. All work using HEAT SOURCES and VOLATILE MATERIALS will be conducted in an operating hood.
5. Whenever possible, close the vertical or horizontal hoods sash during operation. Reducing the open face area of the hood increases the efficiency of the hood and reduces the effect of the outside environment on the operations inside the hood.
6. Evaluate activities in the lab and the apparatus inside the hood to determine that no excessive turbulence will be created during the procedure.
7. Do not use laboratory hoods for storage of chemicals. Stored chemicals containers can block air movement, create turbulence and make ease of

movement inside the hood difficult. Measure out each chemical needed during a procedure and return the container to its regular storage location. Only containers of chemicals which are used during a particular procedure should be in the hood.

8. Do not leave open containers in the hood.
9. Establish an emergency plan in case of failure of the ventilation system. For example, remove all heat sources, close all containers and reaction vessels, return all chemical containers to their proper storage area, stop all procedures inside the hood and close the sash completely.