5.0 SAFETY PROCEDURES FOR PARTICULARLY HAZARDOUS SUBSTANCE

Additional protection is required for work with particularly hazardous substances such as carcinogens, reproductive toxins (mutagens and teratogens), biotoxins and substances with a high degree of acute toxicity. Listings of these materials are contained in Appendix II-A. When working with these particularly hazardous materials the following general procedures must be followed:

- Obtain approval from the principal investigator or his or her designee (i.e., senior member of the lab staff, lab supervisor, and/or chemical hygiene officer) to use these particularly hazardous chemicals.
- Order the smallest quantity of the chemical necessary to perform the procedure or experiment.
- Wear appropriate personal protective equipment, paying close attention to permeation resistance of gloves or protective clothing to be used.
- Work only in a properly functioning, uncluttered chemical fume hood or biological safety cabinet. This area should be posted or labeled as a “Designated Area” for the use of particularly hazardous materials. Permit only authorized personnel to use any Designated Area.
- Determine, in consultation with the principal investigator or his or her designee (i.e., senior member of the lab staff, lab supervisor and/or chemical hygiene officer) and EH&S whether fume hood exhaust air should be filtered prior to discharge.
- Consult the MSDS for exposure and emergency information before beginning work with these materials.
- Label ALL containers with the contents, date, manufacturer’s name and hazardous properties of the material(s) in the containers.
- Transfer particularly hazardous chemicals in tightly closed containers placed within a durable outer container.
- Limit traffic through the immediate area.
- Decontaminate the work surface immediately after working with these materials. To facilitate decontamination, work surfaces may be covered with stainless steel or plastic trays, absorbent paper with moisture-proof lining or other impervious material, which may be cleaned or disposed of as hazardous waste or biological waste after completing the procedure.
- Securely store these materials immediately after use.
- Label all waste materials with the corresponding chemical classification (e.g. Toxic) or as biological waste.

Laboratories that use particularly hazardous chemicals should document specific standard operating procedures for these materials and include them in Part III of this Chemical Hygiene Plan. Additional information about carcinogens, reproductive toxins, biotoxins and acutely toxic substances is contained in Appendix II-A.

6.0 PERSONAL PROTECTIVE EQUIPMENT

The use of personal protective equipment is necessary when feasible engineering and administrative controls are unavailable or if there is a need to supplement those controls. Requirements for the use of PPE are as follows:

6.1 Body and Foot Protection

When working with chemicals, a lab coat or apron and closed-toe shoes should be worn at all times. Hair and loose clothing should be confined.