ECKERD COLLEGE

Safe Operating Procedure
(2/04)

WORKING WITH HAZARDOUS CHEMICALS

Following are general procedures for safely working with hazardous chemicals.

- Review the Material Safety Data Sheets (MSDS) for all chemicals that you are working with to determine specific physical properties and health hazards.

- Wear appropriate personal protection equipment (PPE). At a minimum, this will include eye protection, lab coat or other protective outer garment, and gloves that are suitable for the chemical used. More protection may be required depending on specific chemicals and conditions of use.

- Conduct all processes that may release hazardous vapors or mists inside a functional fume hood or other adequate containment device.

- Review emergency procedures and ensure that the necessary supplies to handle spills are available in the workplace and emergency numbers are posted next to the telephone. Know the location of safety equipment such as the emergency shower, eye wash, spill kit, fire extinguisher, fire alarm, and evacuation routes.

- Avoid working alone in the laboratory. Do not leave potentially dangerous chemical processes unattended (i.e., extractions, digestions, etc.).

- Keep work areas clean and uncluttered. Make sure that chemicals and equipment are properly labeled and stored. Good housekeeping prevents accidents.

- Do not eat, drink, smoke, apply cosmetics, chew gum, or store food, beverages, tobacco, cosmetics, or medications in areas where laboratory chemicals are used or stored.

- Confine long hair and loose clothing when using chemicals. Do not wear sandals or open-toed shoes.

- Do not smell or taste chemicals. Always use mechanical pipettes. Never use mouth suction.

- Handle and store glassware with care. Do not use cracked or chipped glassware. Properly dispose of damaged or broken glassware in broken glass/sharps receptacles, not the trash container.

- Always wash hands and other exposed skin areas after using chemicals, upon exiting the laboratory, and before eating or drinking.