



St. Mary's College of Maryland

CHEMICAL HYGIENE PLAN

June 2024

St. Mary's College of Maryland

Environmental Health & Safety

18952 E. Fisher Rd.

St. Mary's City, Maryland 20686

1. Introduction

To comply with OSHA 1910.1450, *Occupational Exposure to Hazardous Chemicals*, the Chemical Hygiene Plan (CHP) has been established to protect faculty and students working in laboratories from health and safety hazards associated with hazardous chemicals. The plan includes standard operating procedures, personal protective equipment, engineering controls, training, and emergency procedures.

2. Responsibilities

EH&S Manager and Laboratory Supervisor:

- Ensure the CHP is implemented and followed.
- Provide necessary training and personal protective equipment (PPE) to faculty and students.
- Conduct regular safety audits and inspections.

Faculty and Students:

- Follow the procedures and guidelines outlined in the CHP.
- Use appropriate PPE and engineering controls.
- Report any incidents, spills, or unsafe conditions to the laboratory supervisor.

3. Standard Operating Procedures (SOPs)

Chemical Storage:

- Store chemicals according to their hazard classification.
- Label all containers with the chemical name, concentration, and hazard warnings.
- Keep incompatible chemicals separate.

Chemical Handling:

- Use fume hoods or other engineering controls when working with volatile or hazardous chemicals.
- Wear appropriate PPE, such as gloves, goggles, and lab coats.
- Do not eat, drink, or apply cosmetics in the laboratory.

Chemical Disposal:

- Label waste containers with the contents and date.
- Do not pour chemicals down the drain unless approved.

- Place all hazardous waste in the Hazardous Waste collection room in Schaeffer Hall. Notify the EH&S Manager. Hazardous Waste is properly collected and disposed of on a semi-annual basis.

4. Personal Protective Equipment (PPE)

Eye Protection:

- Wear safety goggles or face shields when handling hazardous chemicals.

Gloves:

- Wear gloves when handling chemicals. Select gloves appropriate for the chemical being handled.
- Inspect gloves for damage before use.

Lab Coats and Clothing:

- Wear lab coats or aprons to protect skin and clothing.
- Avoid wearing open-toed shoes and loose clothing.

5. Engineering Controls

Fume Hoods:

- Use fume hoods when working with volatile or hazardous chemicals.
- Ensure the fume hood is functioning properly before use.
- EH&S Staff will formally inspect fume hoods on an annual basis and organize any needed repairs.

Safety Showers and Eyewash Stations:

- Ensure safety showers and eyewash stations are accessible and functioning.
- Each department should test eyewash stations and safety showers regularly.
- Notify the Physical Plant and EH&S of any eyewash stations or safety showers that are not working properly.

Ventilation:

- Maintain proper ventilation in the laboratory to minimize exposure to airborne contaminants.

6. Training

Initial Training:

- Provide new faculty with training on the CHP, SOPs, and emergency procedures. Training and policies will also be stored on the SMCM EH&S webpage for reference.
- Provide the proper laboratory safety training to all students in lab classes at the beginning of each semester.

Ongoing Training:

- Conduct annual refresher training on laboratory safety and chemical hygiene to all faculty working in a laboratory setting.
- Document attendance for all training sessions.

7. Emergency Procedures

Spill Response:

- Notify the laboratory supervisor and evacuate the area. Alert others in the vicinity.
- Use appropriate spill kits to clean up minor spills.
- For major spills, contact EH&S and Public Safety.

Fire Safety:

- Know the location and proper use of fire extinguishers.
- Evacuate the area in case of a fire and activate the fire alarm.

First Aid:

- Provide first aid for chemical exposure, such as flushing the affected area with water.
- Seek medical attention for serious injuries or exposures.
- Report all injuries to EH&S via the Incident Reporting Form.

8. Record Keeping

Chemical Inventory:

- Maintain an up-to-date inventory of all chemicals in the laboratory.

Incident Reports:

- Document all incidents, spills, and exposures.
- Investigate incidents to identify and correct the root cause.

9. Inspections and Audits

Regular Inspections:

- EH&S will conduct annual safety inspections of the laboratory.

- Address any identified safety hazards promptly.
- Faculty & students should maintain a clean and safe laboratory environment.

Annual Audits:

- EH&S will perform an annual review of the CHP to ensure compliance and effectiveness.
- EH&S will update the CHP as necessary based on findings.

10. Review and Update of CHP

- Review the CHP annually or whenever significant changes occur in laboratory procedures or regulations.
- Update the CHP to reflect changes in laboratory operations, equipment, or personnel.

This Chemical Hygiene Plan serves as a framework for ensuring a safe working environment in the laboratory. Compliance with this plan is essential to minimize risks and protect the health and safety of all laboratory faculty and students.