Chemical Hygiene Policy

Policy Statement

Adelphi University strongly believes that it is the responsibility of the University and its Faculty and Staff to ensure that our educational programs and other activities protect and promote the health and safety of our students, our employees, and the environment.

Reason for Policy

The purpose of this Chemical Hygiene Plan is to define work practice and procedures to help ensure that laboratory workers, studio personnel, and staff who come into contact with chemicals at Adelphi University are protected from health and safety hazards associated with the chemicals with which they work.

Safety Committee

The Safety Committee is the overall coordinating body for implementing the safety program at the University. It acts as the representative of the President of the University, who has the ultimate responsibility.

The Chemical Hygiene Plan includes:

- A statement of Standard Operating Procedures (SOP);
- Criteria to determine and implement specific control measures, such as engineering controls, and personal protective equipment;
- An ongoing program to ensure that laboratory chemical hoods and other engineering controls are functioning properly;
- Information and training requirements;
- Circumstances under which a particular laboratory function will require “prior approval”;
- Provisions for medical consultation and medical exams;
- Identification of the Principle Investigator/Laboratory Supervisor as a representative of the Chemical Hygiene Officer;
- Additional precautions for work with select carcinogens, reproductive toxins, and extremely toxic substances.
Responsibility

Persons Responsible for Implementation
Department Chairpersons, University Supervisors, and Managers are responsible for implementing the guidelines as set down in this Chemical Hygiene Plan for Adelphi University.

Responsibilities
Educational and research activities that use hazardous materials require cooperation of all parties involved to ensure that activities are conducted safely with regard to workers, students, the community, and the environment. The following outlines specific responsibilities associated with laboratory safety and this Chemical Hygiene Plan.

Faculty and staff in charge of supervising laboratories (referred to as Laboratory Supervisors throughout this document) have the following responsibilities for implementing the Chemical Hygiene Plan:

- Inform and train employees concerning chemical safety as required by this Plan. Retain training records and all documentation;
- Implement and enforce rules and standards of this Plan concerning health and safety for laboratories under the supervisor’s jurisdiction and restrict access to the laboratory;
- Ensure compliance of this Plan by the laboratory worker;
- Ensure the availability and enforce the proper use of appropriate personal protective equipment and relevant health and safety reference materials;
- Remain cognizant of chemicals stored and used in laboratories and their associated hazards;
- Develop and maintain an annual inventory of chemicals present in the laboratory;
- Conduct internal inspections of laboratories for health and safety concerns;
- Request assistance from Chemical Hygiene Officer, as needed;
- Request allocation of funds from superiors for health and safety improvements, as needed, or budget into research grant proposals.
Laboratory Worker responsibilities regarding implementation of the Chemical Hygiene Plan:

- Follow all health and safety standards and rules;
- Report all hazardous conditions to the Laboratory Supervisor;
- Wear and use prescribed protective equipment;
- Report any suspected job-related injuries or illnesses to the Laboratory Supervisor and seek treatment immediately;
- Refrain from the operation of any equipment or instrumentation without proper instruction and authorization;
- Remain aware of the hazards of the chemicals in the laboratory and how to handle hazardous chemicals safely;
- Request information and training when unsure how to handle a hazardous chemical or procedure.

Deans, Directors, and Heads of Academic and Administrative Units have the primary responsibility for the health and safety of their staff and students. Specific responsibilities regarding the implementation of the Chemical Hygiene Plan include:

- Collaborate with faculty and staff to adapt the Chemical Hygiene Plan to include laboratory-specific guidelines and to develop strategies to implement the Plan;
- Consider the idea of developing departmental-wide laboratory safety training programs or committees for shared use facilities;
- Make budget arrangements for health and safety improvements. It is the responsibility of these respective individuals to request the necessary monies in the budget process.

Coordinator of Health and Safety responsibilities include the following:

- Appoint a Chemical Hygiene Officer who will routinely review the Chemical Hygiene Program and suggest modifications as needed;
- Provide technical assistance to laboratory safety training on a regular basis and upon request;
- Conduct exposure assessments and laboratory inspections on a routine basis;
- Provide technical assistance concerning personal protective equipment and laboratory safety equipment;

- Remain current on rules and regulations concerning chemicals used on campus.

**Policy**

Compliance with OSHA standard 29 CFR 1910.1450: Occupational exposure to hazardous chemicals in laboratories. General principles of working with laboratory chemicals; Chemical Hygiene responsibilities; Laboratory facilities; Components of the Chemical Hygiene Plan; Monitoring airborne concentrations; Protective apparel & equipment; Housekeeping and inspections; Spills and accidents; Signs and labels; medical program & Waste disposal.

**Definitions**

**Hazardous Chemical**–OSHA has defined a hazardous chemical as “a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees.”

**Laboratory**–OSHA defines a laboratory as “a workplace where relatively small quantities of hazardous chemicals are used on a non-production basis.”

**Laboratory Workers**–The laboratory workers referred to in the Laboratory Standard are employees. OSHA defines an employee as “an individual employed in a laboratory workplace who may be exposed to hazardous chemicals in the course of his or her assignments.” An example of a laboratory worker would be a university teaching assistant, research assistant, or faculty member instructing an academic laboratory. OSHA would not consider students in an academic laboratory as employees. However, as a matter of university policy, the principles outlined in this Chemical Hygiene Plan will apply to students in our laboratories. Also included, will be visiting professor and volunteers that might be working in the laboratory. Laboratory Supervisors must ensure that these groups that are in their laboratories are adequately instructed in relation to safe laboratory procedures.

**Procedures**

- **STANDARD OPERATING PROCEDURES (SOP)**
The following Standard Operating Procedures apply to all laboratories at the university. Your laboratory may require additional requirements as determined by a hazards evaluation. SOP’s are required for all hazardous chemical process used in the research laboratory.
PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Attire.** At a minimum, all laboratory personnel should be wearing a chemical and fire-resistance laboratory coat and safety glasses when there is active work being done with a hazardous chemical in the laboratory. Also, legs and feet should be covered, i.e. no open toed shoes and shorts, and loose clothing and long hair should be confined. PPE should be left in the laboratories and not worn in public areas.

**Gloves.** Most laboratories will require more than one type of glove material. Latex examination gloves are not meant to provide protection from chemicals and should not be used in laboratories for this purpose. Nitrile is a good all purpose glove material and has less of an issue for allergic reactions. Generic information for proper glove selection can be obtained from glove suppliers. (Refer to Appendix II, pg. 47. in the Chemical Hygiene plan)

When working with highly hazardous chemicals that can be absorbed through the skin, specific glove testing information needs to be provided to all laboratory workers, preferably in the form of an SOP.

Gloves shall not be worn in halls or public areas. Chemicals that need to be transferred through general use areas should be transferred in a secondary containers. If a sample must be carried by hand, glove one hand to hold a protected sample. The ungloved hand shall be used to open doors or push elevator buttons. In a laboratory be aware of using common equipment with gloved hands such as computers and phones.

**Eye Protection.** It is Adelphi University policy that personnel including students, staff, and visitors in laboratories, wear appropriate safety glasses, goggles, or face shields at all times where chemicals are stored and handled.

Eye protection worn when working with chemicals should meet the requirements of the American National Standard Institute (1). Wear goggles such as G, H, or I at all times.

**Face Shields.** Full-face shields must be worn when conducting a procedure where splashing is a potential. Full-face shields with bottom caps to protect under the chin are preferred due to the tendency to raise the chin when a splash occurs.

**Forms**

All forms can be found in the appendix of the full chemical hygiene plan at:

http://operations.adelphi.edu/environmental-health-and-safety/chemical-hygiene-plan/
Related Information

This policy does not have related information at this time. Upon periodic policy review this area will be evaluated to determine if additional information is needed to supplement the policy.

Policy Owner

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Document History

This section must contain the following dates or placeholders for future dates:

- Last Reviewed Date: August, 2017
- Last Revised Date: August, 2017
- Policy Origination Date:

Who Approved This Policy

The safety committee approved this policy.

Tags

Operations and Safety, Faculty, Staff, Students

Additional Information for Policy Library

Who Should Have Access to This Policy?
Should this policy be publicly accessible, or should access be locked down to one or more of the following internal audiences?

- The entire internal community (anyone with an Adelphi account can view)
- Faculty
- Staff and Administration