Introduction

The regard for the well being of everyone in the College of Chemistry and the neighboring community demands that careful attention be given to environment, health and safety practices and procedures. The College of Chemistry Health and Safety Manual has been prepared to assist College faculty, staff and students with their efforts in meeting the EH&S obligations associated with their work. Members of the College of Chemistry’s Environment Health Safety & Security program have worked diligently to assure the manual’s accuracy and completeness at the time of printing. The health and safety field, however, is constantly changing, and new legislation is introduced frequently. For this reason, information will be revised periodically as necessary to ensure that relevant, up to date health and safety information is provided to all College members.

The effectiveness of this manual (and its subsequent editions) will only be as good as the level of conscious effort exercised in complying with its provisions. Therefore, it is expected that everyone working in the College will read the pertinent sections of this manual and understand how they relate to his/her particular work place.

Using the College of Chemistry Health and Safety Manual

The College of Chemistry is a large research and learning institution comprised of many diverse people with diverse professions. This manual attempts to organize all health and safety information that is applicable to every member of the College. Therefore, depending on the type of work one performs (i.e. teaching, lab research, clerical, technical, shops, etc.) different sections and information will apply to different persons or job functions.

The diagram at the end of this section (p. 5) is meant to guide you to those sections of the manual that are most relevant. The major sections of the manual and their relevance to various units in the College are also presented below.

Responsibilities and Policies (Section 2)

The understanding of one’s health and safety responsibilities is the first step in ensuring that those who work and learn in the College can do so in a safe manner and environment. All members of the College should review the responsibilities and policies section of the manual first in order to get a good foundation of what is expected of them and their peers.

Injury and Illness Prevention Program (Section 3)

The College Injury and Illness Prevention Program (IIPP) serves as the principle health and safety program for the College. It is general in scope and establishes mechanisms for identifying, communicating and correcting work place hazards in the College. All members of
the College must review this section and participate in injury and illness prevention efforts regardless of status, job title or job function.

Supervisors, managers and principal investigators need to pay particular attention to their responsibilities under the IIPP. Regular safety meetings, inspections and training must be coordinated by those with supervisory responsibilities.

**Forms and Checklists.** Section 9 of this manual consists of all the forms and checklists which must be completed and retained under the IIPP. Supervisory personnel need to become familiar with these materials and use them in the injury and illness prevention activities.

**Emergency Response Information (Section 10)**

Faculty, staff and students must be intimately aware of emergency evacuation procedures and how to report emergencies and accidents in a timely fashion. We have found that a well informed College staff has greatly benefited emergency response efforts, shortening the response time of outside agencies and reducing the impact of accidents.

The emergency response plan section must be reviewed by all members of the College. This information, known as the Building Emergency Plan, is contained in Section 10 of the Health & Safety Manual. The online version has extensive information in the appendices that is not included in the print version. Please access the site at [http://www.cchem.berkeley.edu/cchasp/Manual/Section%2010/section10.html](http://www.cchem.berkeley.edu/cchasp/Manual/Section%2010/section10.html) to view this additional information.

**Hazard Communication Program (Section 4)**

The College Hazard Communication Program applies to the use of hazardous chemicals in non-laboratory settings. This program establishes a framework for communicating the hazards of chemicals found in College work places.

All employees who work with hazardous chemicals (solvents, paints, adhesives, chemical reagents, etc.) in a non-laboratory environment fall under the program and should review this section carefully. Units typically affected by the Hazard Communication Program include the College Shops, Receiving, Stores, Chemical Reuse Facility and instructional support. However, administrative units may have responsibilities under this plan if hazardous chemicals are used in their work places.

Supervisory personnel have specific responsibilities under the Hazard Communication Program which are essential in ensuring that relevant hazard information is made available to their staff. Procedures for acquiring and managing MSDS sheets and the provision of safety training is detailed in this section.

**Chemical Hygiene Plan (Section 5)**

The Chemical Hygiene Plan provides direction to laboratory researchers in establishing and
maintaining safe laboratory operations in the College. Therefore, principal investigators, graduate students and post-docs and anyone else conducting research in a College lab must be intimately aware of the health and safety provisions presented in this section. Principal investigators have unique responsibilities under the Chemical Hygiene Plan. As research directors for their laboratory groups, they act as the Chemical Hygiene Officer for their group. Chemical Hygiene Officer responsibilities are detailed in this section. Note that the Chemical Hygiene Plan generally applies to research activities involving hazardous chemicals in laboratories. Guidelines for the handling of special hazards in the laboratory, such as radioactive and biohazardous materials and lasers are not covered by the Chemical Hygiene Plan but rather by campus programs specific to these hazards.

Campus/College Safety Guidelines and Safe Operating Procedures (Section 7)

UC Berkeley Campus Fact and Help Sheets, guidelines prepared by the College of Chemistry EHS&S program and other safety information summaries are compiled in this section. Principal Investigators should utilize the relevant safe operating procedures and guidelines in this section to augment the Chemical Hygiene Plan for their laboratories. Staff supervisors should use this section to determine the requirements of various health & safety programs applicable to their work.

Hazardous Materials Recycling and Disposal Programs (Section 6)

It is imperative that all College activities be conducted with concern for the protection of the environment. Procedures for the safe and legal disposal of hazardous materials are detailed in this section of the manual. All persons engaged in the generation of hazardous waste materials must carefully review the procedures outlined in this section.

Additional Information and Resources

Who Does It! Where to Find It! How to Do It Safely!

The Who Does It! Where to Find It! How to Do It Safely! Publication is your resource for all facility related information. It contains contact information and lists instructions on how to get your labs offices and equipment repaired. It also lists important instructions on how to use safety systems such as chemical fume hoods and electrical safety. This booklet is given to all members of the College and should be reviewed by everyone.

www.ohs.berkeley.edu/

This useful website is maintained by the Office of Environment, Health and Safety on campus and is dedicated to providing environment, safety and health information to all UC Berkeley personnel.
Maintaining the College of Chemistry Health and Safety Manual

Every research group and administrative unit within the College of Chemistry must maintain at least one copy of this manual. Supervisors and Principal Investigators are responsible for ensuring that their staff and students are aware of the manual’s location and have access to its information at all times.

Periodically, amendments or updates to the manual will be made by the College of Chemistry EHS&S program. Supervisors and Principal Investigators are responsible for incorporating these amendments into each copy of the manual in their possession. Such changes will be made available electronically. Hard copies will also be available upon request.
All College Faculty, Staff and Students

- Responsibilities/Policies (Section 2)
- College Injury & Illness (Section 3) Prevention Program (IIIP)
- Emergency Response Plan (Section 10) (Who Does It! Where to Find It! How to do It Safely!)

Many College Employees Depending on Scope of Work Performed

Campus/College Safety Guidelines and Safe Operating Procedures
Section 7

Non-laboratory employees (i.e. shops, administration) using hazardous chemicals or working in locations where hazardous chemicals are used

Hazard Communication Program
Section 4

PI's, grad students, post-docs working in laboratories.

Chemical Hygiene Plan
Section 5