UCSB LABORATORY SAFETY MANUAL and CHEMICAL HYGIENE PLAN

Prepared by
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MANUAL DESCRIPTION

MANUAL PURPOSE - this manual serves two basic purposes:

1. It is the basic laboratory safety manual for UCSB

2. Serves as the campus **Chemical Hygiene Plan (CHP***)* as required by the *California Occupational Safety and Health Administration (Cal-OSHA)*. In short, OSHA requires that a written chemical safety plan address the policies and procedures that an employer has in place to minimize the exposure of its lab employees to chemicals.

   For **lab supervisors**, the most important portion of this manual (Section I) contains the templates for developing their **required Lab-specific Chemical Hygiene Plan.** The templates allow the supervisor to **customize** this generic CHP to the specific hazards and control measures of their operations – generally with a focus on **Particularly Hazardous Substances** (human carcinogens, acutely toxic chemicals and reproductive toxins).

   To put this requirement in more practical terms – if there is a significant chemical incident, OSHA will ask the PI/supervisor to provide their CHP and the documentation that their workers have been trained on it (a training documentation form is included at the end of Section I).

MANUAL STRUCTURE

- **Section I: Lab-specific Chemical Hygiene Plan.** Guidelines and templates for customizing your CHP. Templates available via the EH&S website as a file which is down-loadable and editable, with embedded web links to information useful in completing the templates.

- **Section II: Campus policies, procedures and resources.** Summaries of key/core lab safety issues that apply to most/all laboratories.

- **Section III: Regulatory Framework.** An overview of the Cal-OSHA Laboratory Safety Standard and its relationship to this manual; specific University policies relative to the Lab Standard; the liability, roles and responsibilities of University personnel in the program.

How to Use This Laboratory Safety Manual

Principal Investigators and Laboratory Supervisors

1. Review this Manual, particularly those sections that apply to your research operations. Sections of particular importance to all PIs include:
    a. Sec. I (lab-specific Chemical Hygiene Plan)
    b. Sec. II: Personal Protective Equipment; Laboratory Safety Training
    c. Sec. III: subparts B.2b (overall PI responsibilities), B.3, C.1, C.5, C.7
2. Customize the *Chemical Hygiene Plan* to your operations by completing the templates in Sec. I
3. Review, modify as necessary, and sign-off on the Standard Operating Procedures (SOPs) that are provided to you by Environmental Health & Safety. Incorporate these into your CHP – electronically and/or hard copies.
4. Ensure that your workers have reviewed the manual, particularly the lab-specific portions, and have also signed-off on your SOPs
5. Ensure that all your workers have ready-access to your CHP (bookmark and/or place copy on group's website)
6. Document safety training provided on this CHP and any other safety training (EH&S documents the training that they perform).

Laboratory Personnel

1. Understand the department's **Injury & Illness Prevention Program** (OSHA requirement). On this page of the department's website are located:
    a. Summary of the IIPP regulation/program (read this page)
    b. Link to the full department written plan

    You should also know:
    a. The Department Safety Representative (currently Alex Moretto)
    b. Know how to report an unmitigated hazard in your laboratory (inform your supervisor, or Alex, or anonymously report here

c. Know how to report injuries (report these to Alex and use *UCSB Accident Report Form* in department office)

2. Review this **UCSB Laboratory Safety Program and Chemical Hygiene Plan**, with particular attention to
    - your responsibilities listed in Sec. III.B.2.g
    - pages in Sec. II on: use of personal protective equipment, fume hoods and emergency response (find the *Emergency Information Flipchart* in your lab)
3. Review the laboratory-specific **Standard Operating Procedures** with your PI and document your training. All training, whether formal or on-the-job, should be documented and filed per your lab group's procedures.
4. Attend the EH&S **Fundamentals of Laboratory Safety training**
5. Ask for clarification if there are any questions related to your lab work before you begin a new task.

Other UCSB Research Safety Programs/Regulations

Given the great breadth and diversity of research at UCSB, there are other campus safety programs/regulations that can apply to a given research operation. So, in the interests of keeping,this manual to a usable size, some more specialized programs and their associated manuals, are not included herein. . Instead, links to these programs are provided here and affected PIs and individuals should contact these program managers for further information: The programs toward the bottom of this list rarely apply to UCSB lab operations.

Biological Safety Program
Biological Use Authorizations; Aerosol Transmittable Diseases; Bloodborne Pathogens; Medical Waste Management

Radiation Safety Program
Radioactive Materials; Radiation-producing Machines; Lasers

Hazard Communication Standard Program
Safety Data Sheets (formerly MSDS); chemical labeling
(much of the HazCom program is superseded by the Laboratory Safety Standard/CHP program)

Research Diving and Boating Safety Program

Controlled Substance Program

Animal Care and Use

Confined Space Program

Indoor Air Quality Program

Hearing Conservation Program

Heat Illness Program