

Responsible Officer:	Vice Chancellor for Research
Responsible Office:	Environment, Health & Safety
Issuance Date:	10/11/2013
Effective Date:	10/11/2013
Scope:	Faculty, Staff, Students, and Visitors

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I. POLICY SUMMARY

The University of California is committed to providing a safe and healthy working environment for the campus community. Faculty, students, and other personnel in laboratories and other academic settings may work with hazardous materials, equipment, and processes. With regard to safety and environmental protection, this teaching and research work is governed by state and federal regulations and University policies.

This policy establishes campus procedures for identifying deficiencies of such regulations and policies, the process used to suspend laboratory and certain shop operations when necessary, and the method used to return the laboratory or shop to normal operations.

II. SCOPE

This policy applies to research and teaching performed in academic settings. It applies to research and teaching laboratories, research fieldwork, shared research support facilities, and machine shops used for teaching and research-related activities. It does not apply to shops operated by Physical Plant - Campus Services (PP-CS), construction sites, and other non-academic operations. Nothing in this policy is intended to supersede related requirements and stop-

work authority detailed in other campus safety policies and manuals (e.g., the campus Radiation Safety Manual).

III. DEFINITIONS

Imminent hazard: A condition or circumstance that creates a reasonable possibility of death or immediate or delayed permanent adverse health effects, or of preventing escape from such a possibility.

Laboratory: As used in this policy, "laboratory" refers to any part of a building used or intended to be used by the University for research or other scientific activities which may be hazardous; this includes teaching laboratories, shared support facilities, and research laboratories. This policy also covers off-campus facilities, on-and off-campus clinical facilities, and fieldwork locations where approved educational or research activities are conducted.

Personal Protective Equipment (PPE): Clothing and other work accessories designed to create a barrier against workplace hazards, such as lab coats, safety goggles, hearing protectors, respirators, aprons, and appropriate footwear.

Principal Investigator (PI): The senior individual with supervisory responsibility for a laboratory or shop.

Shop: As used in this policy, a place where machinery and tools to support the academic mission are used. The term "shop" includes but is not limited to, engineering shops, art workshops, and other sites supporting academic activities, but does not include shops operated by Physical Plant-Campus Services (PP-CS), construction sites, and other non-academic operations.

Standard Operating Procedure (SOP): A written set of instructions that documents how to safely perform work involving hazardous materials or hazardous operations.

IV. POLICY TEXT

As a California employer, the University of California has a general duty to provide a safe work environment under the laws and regulations implemented by the California Division of Occupational Safety and Health (Cal/OSHA). In addition, state law requires the University to maintain an Injury and Illness Prevention Program (IIPP) that includes procedures to investigate occupational injuries or illnesses, and methods for correcting unsafe or unhealthy conditions in a timely manner. Cal/OSHA regulations also contain health and safety standards specifically applicable to laboratory operations. The University of California is committed to providing a healthy and safe environment for all members of the campus community and visiting members of the public, including non-employee students and other visitors.

Safety in a research setting begins with the Principal Investigator (PI). The PI conducts and oversees laboratory and teaching activities and is responsible for managing any associated hazards in compliance with state law and University policy on health and safety standards. The PI ensures that students, employees, and visitors under faculty oversight are properly trained to perform the work overseen by the PI. The PI also maintains written Standard Operating Procedures (SOPs) relevant to laboratory or shop operations and work performed in the laboratory or shop and ensures that training on the SOPs is completed and documented prior to the work being performed.

Any University employee or student has the right and responsibility to inform the PI and/or Office of Environment, Health &Safety (EH&S) immediately upon observing or learning of an unsafe condition or practice. In accordance with the University's Whistleblower Policy (referenced below), no retaliation may be taken against an employee or student for reporting such unsafe conditions or practices. Depending on the nature of the hazard and applying its technical expertise, EH&S will inspect the work area and make preliminary determinations as to the tier and escalation route for the required corrective action. Such inspections may also occur as part of a regularly scheduled program.

EH&S will categorize observed laboratory or shop safety deficiencies or compliance failures into one of two tiers:

- Tier 1 a condition that is an imminent hazard; or
- Tier 2 a condition that does not qualify as Tier 1 and that is under the responsibility of academic leadership to correct as described below, whether this requires resources at the PI, department, or campus level.

Reporting and Addressing Tier 1 Deficiencies

Tier 1 deficiencies will be immediately communicated to the researchers or PI with a requirement for immediate corrective action and/or activity suspension (shutdown) as necessary, and will be immediately referred to the Vice Chancellor for Research (VCR) and the appropriate department chair or dean.

In the case of a laboratory or shop safety deficiency constituting an imminent hazard (a Tier 1 deficiency), the person(s) conducting the activities should be informed of the hazard and asked to address the hazard immediately. EHS or the VCR may order the immediate shutdown of the unsafe operation. EHS will notify the senior individual present in the lab or shop at the time of the shutdown order and will immediately notify the appropriate department chair and dean. The chair, dean, or VCR may take any action necessary to enforce the shutdown order. The VCR will confer with the Executive Vice Chancellor and Provost before taking actions affecting teaching-related facilities.

Reporting and Addressing Tier 2 Deficiencies

EHS assigns to each Tier 2 deficiency a deadline for correction. Tier 2 deficiencies not corrected by the PI within the established timeline will be referred to the relevant department chair or dean for correction. Depending on the resources required, the department chair or dean will either implement the corrective action or escalate the matter to the relevant campus unit. Tier 2 deficiencies involving long-unresolved or repeated violations by the same laboratory or shop personnel will be referred by EH&S to the campus Laboratory Operations and Safety Committee (LOSC)¹ or VCR for resolution.

In the case of a Tier 2 deficiency which remains unresolved beyond the deadline established by EH&S, the LOSC will review and consider the EH&S inspection findings and any response offered by the affected PI. As part of its deliberations, the LOSC will make a determination as to the corrective action required. Such an action may include requirements for the continued operation of the lab or shop, exclusion of personnel from the workplace, or suspension of laboratory or shop operations.

Resuming Normal Laboratory Operations

For either Tier 1 or Tier 2 deficiencies that have resulted in a shutdown of certain or all activities in a lab or shop, the LOSC will review documentation of corrective actions taken and, in the case of corrected deficiencies, will determine when the laboratory or shop under review may resume operations. In the event the LOSC is unavailable for timely action, the VCR may act to lift the suspension of laboratory or shop operations.

¹ Other campus research oversight committees (such as the Radiation Safety Committee, Institutional Biosafety Committee, or others) may act in the place of the LOSC if the issue under consideration falls more appropriately within that committee's jurisdiction.

V. COMPLIANCE / RESPONSIBILITIES

Principal Investigator	Oversees laboratory and teaching work; ensures that students, employees, and visitors under his/her oversight are properly trained; maintains SOPs relevant to work performed in the laboratory or shop; corrects and/or notifies EH&S of safety deficiencies; and works with EH&S, LOSC, or VCR, as applicable, to resolve safety deficiencies that require elevation within an academic unit or shop.
EH&S	Conducts inspections, makes preliminary determinations as to the severity of the safety deficiency, and determines whether to elevate the case to the dean, department chair, LOSC, or VCR. May order immediate shutdowns for safety deficiencies posing an immediate danger to life or health.
Laboratory Operations and Safety Committee	Reviews inspection findings and PI responses, determines appropriate corrective actions and whether to suspend operations, and determines when an affected laboratory or shop may resume operations. LOSC actions may be taken by the LOSC chair or a subcommittee of its members.
Vice Chancellor for Research	May order the suspension of unsafe laboratory or shop operations. Takes action as needed to enforce a shutdown order or lift a suspension.

VI. PROCEDURES

[Reserved.]

VII. RELATED INFORMATION

University Policy on Management of Health, Safety and the Environment

University Whistleblower Policy

VIII. FREQUENTLY ASKED QUESTIONS

Not Applicable.