University of California Policy

Personal Protective Equipment

Responsible Officer:	Chief Risk Officer
Responsible Office:	RK - Risk / EH&S
Issuance Date:	[Issuance Date]
Effective Date:	3/1/2013
Scope:	This policy and regulatory standards require the supervisor to select Personal Protective Equipment (PPE) for workers under their supervision based on an assessment of hazards in the workplace which those workers are likely to encounter. Supervisors are required to inform such workers of the selection decisions, and to have their workers follow those decisions when obtaining PPE. PPE will be provided to workers at no cost. This policy applies to students enrolled in academic courses in which PPE is required by the instructor and/or indicated in the course syllabus.

Contact:	Erike Young
Email:	eyoung@ucop.edu
Phone #:	(510) 987- 0170

I. POLICY SUMMARY

The University of California is committed to providing a healthy and safe working environment for all members of the campus community. This Personal Protective Equipment (PPE) policy is designed to prevent workplace injuries and illnesses for all academic appointees, staff, students, and visitors.

II. DEFINITIONS

Hazardous Materials: Hazardous materials, for the purposes of this policy, are chemical or biological agents that have been identified as a health or physical hazard. Unsealed radioactive materials are also included as "hazardous materials." Additional guidance is included in Appendix A.

Laboratory/Technical Areas: A laboratory/technical area is a location where the use or storage of hazardous materials occurs or where equipment may present a physical hazard. It includes, but is not limited to:

Research laboratories	Cold rooms
Teaching laboratories	Machine and other Workshops
QA/QC and analytical laboratories	Vivaria
Stock rooms	Surgery/Operating rooms
Storage rooms	Visual/performing arts studios and shops
Waste accumulation areas/locations	

Personal Protective Equipment (PPE): Personal protective equipment is equipment worn to minimize exposure to a variety of hazards. Examples of PPE include such items as lab coats, gloves, foot protection (steel-toed shoes),eye protection (safety glasses or goggles), protective hearing devices (earplugs, muffs), hard hats, respirators, fall protection harnesses, etc.

Physical Hazards: Physical hazards are identified as substances, equipment, or activities that can threaten physical safety. Physical hazards can include but are not limited to: impact (falling objects), fall hazards, extreme pressures, temperature extremes (heat/cold), radiation (ionizing and non-ionizing), noise, vibration, electrical, light (optical), welding, cutting, brazing).

Student: An individual enrolled in an academic class.

Supervisor: An employee who may have authority to hire personnel, evaluate performance, direct work assignments, apply progressive discipline, direct resources to correct identified safety issues. For purposes of this Policy, this includes a Principal Investigator, area manager, unit manager, project manager, superintendent, and foreman/person. Unless specified in writing, the default "supervisor" in laboratory/technical areas is the Principal Investigator.

Use or Storage: For the purposes of this Policy, "use or storage" includes those operations where workers are directly manipulating hazardous materials, adjacent to or in proximity to a hazard or in areas where there is a reasonable risk of exposure. Reasonable risk of exposure includes all activities identified in the hazard assessment that pose an exposure risk to the worker.

Worker: For purposes of this policy, a worker is an individual who actively performs work functions with hazardous materials or equipment in a laboratory/technical area. A "worker" may be faculty, staff, student volunteer assisting in a non-academic class, or visitor/visiting scholar. For the purpose of this definition, "worker" excludes individuals who only passively participate in tours, lectures, conferences, etc.

III. POLICY TEXT

Hazards exist in every University workplace and can take many different forms: sharp edges, falling objects, flying sparks, chemicals, noise, and a myriad of other potentially dangerous situations. This policy requires that the University protect its workers from workplace hazards that can cause injury.

Controlling a hazard at its source is the best way to protect employees. Depending on the hazard or workplace conditions, the preferred solution is the use of engineering or work practice (administrative) controls to manage or eliminate hazards to the greatest extent possible. When engineering or administrative (work practice) controls are not feasible or do not provide sufficient protection, supervisors must provide personal protective equipment (PPE) to their workers and ensure its use.

Failure/refusal to wear required PPE is a basis for discipline, in accordance with locally-established procedures. A student not wearing course required PPE in a laboratory/technical area may not participate in lab activities until such PPE is worn.

This policy sets minimum requirements; each campus may develop policies and procedures that provide equivalent protection.

A. General Program Requirements

1. For workers:

a. Perform Hazard Assessment

Each supervisor shall assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE).

Each supervisor shall verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date(s) of the hazard assessment; and, which identifies the document as a certification of hazard assessment. Hazard assessments that indicate less than the minimum PPE for a laboratory/technical area as stated in section B requires review and approval from campus Environment(al) Health and Safety (EH&S) in accordance with local procedures (See section B3a).

A completed standard operating procedure, job hazard analysis, or other similar document which includes a workplace hazard assessment can be used to satisfy this requirement.

b. Identify Required PPE

Each supervisor, based upon the hazard assessment, shall ensure that the appropriate personal protective equipment has been identified. The PPE must be the proper fit and design for the user and not interfere with the ability of the worker to work safely. The PPE will be provided to the worker at no cost.

c. Training

Each supervisor will assure workers know how to properly wear, adjust and maintain assigned PPE. Workers will demonstrate understanding of the proper use of assigned PPE. Training will be documented.

d. Maintenance and Replacement

Each worker is responsible for properly wearing required PPE. Each worker is responsible for informing their supervisor when worn or damaged PPE needs to be replaced.

e. Evaluating the Appropriateness of Identified PPE

Each supervisor is responsible for periodically re-evaluating the selection and use of PPE in work areas under their control. The hazard assessment should be repeated when new hazards are identified or introduced into the workplace or at least every three (3) years.

2. For students:

Academic courses which include laboratory, shop or field work are required to indicate PPE requirements as part of the course syllabus. These PPE items shall be the responsibility of the student to obtain and wear as part of the class. Common communal PPE such as thermal protective, welding aprons, face shields, etc., will be provided by the sponsoring department. The instructor of record for a course, or designee, is responsible for ensuring that students are familiar with and properly using required protective devices.

B. Minimum Personal Protective Equipment Requirements for Laboratories/Technical Areas

The following minimum PPE requirements pertain to all laboratories/technical areas where use or storage of hazardous materials occurs or a physical hazard exists. (See definitions). This section should be used as the basis for developing the required PPE elements to include in the course syllabus for laboratory classes. The wearing of required

PPE may only be modified as determined by the hazard assessment. (See section III.A.1a).

1. When occupying a Laboratory/Technical Area

a. Full length pants, or equivalent, and closed toe/heel shoe attire must be worn at all times by all workers who are occupying or entering a laboratory/technical area. The area of skin between the shoe and ankle should not be exposed.

b. Protective eyewear must be worn at all times by all workers who are occupying or entering a laboratory/technical area. All protective eyewear must meet American National Standards Institute (ANSI) standards and be appropriate for the work being done. Typical prescription spectacles are not suitable eye protection. Prescription safety glasses are available through individual campus procurement offices.

c. Laboratory coats, or equivalent protective garments, are required to be worn by all workers when occupying a laboratory/technical area.

i. Laboratory coats must be appropriately sized for the worker. Coats should be buttoned to their full length. Laboratory coat sleeves must be of a sufficient length to prevent skin exposure while wearing gloves.

ii. Flame Resistant (FR-rated) laboratory coats must be worn when working with any amount of pyrophoric materials or quantities of flammable liquids as described in the hazard assessment.

iii. Any protective clothing that becomes contaminated with hazardous materials must be decontaminated before it leaves the laboratory or appropriately discarded.

iv. Laboratory coats shall not be laundered at private residences or public laundry facilities. Campuses are responsible for providing suitable laundry services to maintain required laboratory coats.

Exception: Students enrolled in an academic course are responsible for laundering their non-contaminated lab coats according to manufacture instructions.

2. When working directly with or handling hazardous materials

a. Protective gloves must be worn while using any hazardous materials, hot or cold liquids (including cryogenics) or objects that pose a risk of thermal burns, items having physical hazards, or equipment that may cause hand injury. These gloves must be appropriate for the material or process being used and must not interfere with the ability of the worker to work safely. The Safety Data Sheet (SDS) for the material and the manufacturer-specific

glove selection guide should be referenced to determine appropriate glove type.

b. Some operations and procedures may warrant additional PPE, as indicated by the Safety Data Sheet (SDS), the Standard Operating Procedures (SOP), facility policies, regulatory requirements, or the hazard assessment. These might include face shields, aprons, respiratory protection, hearing protection, etc.

3. Exceptions

These requirements will not apply to laboratories/technical areas which have been designated and posted as hazardous materials free areas. In order to qualify as a hazardous materials free area, a laboratory must obtain written approval and from their campus Environment(al) Health and Safety (EH&S). EH&S has the final authority for determining whether any area is classified as non-hazardous.

IV. COMPLIANCE / RESPONSIBILITIES

The Chancellor has overall responsibility for compliance with health and safety requirements at all facilities and programs under her/his control.

Vice Chancellors/Directors/Deans/Departments Chairs are responsible for communicating, promoting and enforcing the Policy in areas under their control.

The Campus or School Laboratory and/or Chemical Safety Committee is responsible for promoting a safe working environment in all research and teaching laboratories on campus.

Supervisors are responsible for complying with this policy and ensuring their staff complies with this policy. Supervisors are responsible for conducting and documenting the hazard assessment. Supervisors are also responsible for ensuring their staff receives both the required PPE identified in the assessment appropriate and documented training on proper use of the PPE. Noncompliance with the policy is handled in accordance with Personnel Policies for Staff Members (PPSM) policies 62-65 pertaining to disciplinary actions and Academic Personnel Manual (APM) policies 015-016 pertaining to the Faculty Code of Conduct and administration of discipline; and APM 140 and 150 pertaining to Non-Senate Academic Appointees.

Workers are responsible for knowing the PPE requirements for areas in which they work or enter, and for properly wearing PPE as established in this policy and in the hazard assessment. All workers are responsible for completing training, for knowing how to use PPE, for knowing how to properly put on and take off required PPE, and for knowing how to care for and maintain PPE. They are responsible for informing others in the area of these requirements and reporting unsafe conditions to their supervisor, or EH&S. Workers are NOT responsible for purchasing their own PPE. As applicable, a staff employee may address issues of noncompliance with this Policy through the

complaint resolution processes described in PPSM 70 and II-70 (Complaint Resolution) and PPSM 71 and II-70 (Resolution of Concerns) or Collective Bargaining Agreement.

Students are responsible for obtaining course required PPE as noted in the course syllabus or indicated by the instructor.

The Office of Environment(al), Health & Safety (EH&S) is responsible for providing interpretation and clarification regarding this Policy. EH&S will also provide consultation and tools to assist supervisors in performing the hazard assessment and with developing training. In cases where work activities pose an immediate danger to life or health, designated EH&S staff have the responsibility and authority to order the temporary cessation of the activity until the hazardous condition is abated.

The Academic Personnel or Staff Human Resources Offices are responsible for all employee and labor relations issues, including interpretation and clarification of Personnel Policies and Collective Bargaining Agreements related to this Policy.

V. PROCEDURES

Not applicable

VI. RELATED INFORMATION

Appendix A – Hazardous Materials

8 CCR 3380 Personal Protective Devices: (See http://www.dir.ca.gov/title8/3380.html)

8 CCR 5191 Laboratory Standard: (See http://www.dir.ca.gov/title8/5191.html)

8 CCR 5194 Hazard Communication: (See http://www.dir.ca.gov/title8/5194.html)

8 CCR 3203 IIPP: (See http://www.dir.ca.gov/title8/3203.html)

8 CCR 5209: Listed Carcinogens (See http://www.dir.ca.gov/title8/5209.html)

VII. FREQUENTLY ASKED QUESTIONS

Not applicable.

VIII. REVISION HISTORY

This is the first version of this policy.

Appendix A
Hazardous Materials

Hazardous materials may be described using the following characteristics or regulatory definitions. This list is to be used as a guideline and allows for some laboratory/ technical areas to be classified as non-hazardous materials areas. It does not supersede Cal/OSHA regulations or accepted safe work practices for specific materials. The container label and the Safety Data Sheet for the material should be consulted to determine the hazard classification(s) of a particular substance.

a) Corrosives are any chemical that causes visible destruction of, or irreversible alterations in, living tissue at the site of contact. *Examples: hydrochloric acid, sulfuric acid, sodium hydroxides, potassium hydroxides.*

b) Materials recognized as readily absorbed through the skin. *Examples: phenol, THF, DMSO, benzene, carbon disulfide, toluene.*

c) Skin or eye irritants are chemicals which are not corrosive, but which cause a reversible inflammatory effect on living tissue by chemical action at the site of contact. *Examples: xylenes, formamide, many amines like triethanolamine, carbon tetrachloride, perchloroethylene, many inorganic salts like cobalt and nickel sulfate*

d) Flammable liquids having a flash point not more than 93°C. *Examples: organic solvents, ethers, alcohols, toluene, pentane, acetone*

e) Violently air-reactive or water-reactive chemicals, including pyrophorics (substances that spontaneously ignite in air). *Examples: sodium or potassium metal, diethyl zinc, lithium aluminum hydride, t-butyl lithium, aluminum alkyls, calcium carbide, phosphine*

f) Carcinogens or Mutagens *Examples: formaldehyde, dichloromethane, benzene, chloroform,*

g) Reproductive Hazards. *Examples: acrylamide, Cd, Pb, Hg, Cr(VI), carbon disulfide, toluene, chloroform, ethylene glycol ethers*

h) Toxic or Highly Toxic Chemicals – a materials likely to be fatal or toxic if inhaled, ingested or if contacted by skin.

i) Oxidizing agents – a material that, generally by yielding oxygen, causes of contributed to the combustion of other material. *Examples: nitric and perchloric acids, chromates, nitrates, nitrites, hydrogen peroxide, chlorates*

j) Any unsealed radioactive material.

k) Biological materials classified as Risk Group 2, or greater.

l) Centers for Disease Control Select Agent Toxins