

SAFETY REQUIREMENTS

UCLA

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

On July 25, 2012 the Regents and Chancellor Block signed a Settlement Agreement with the Los Angeles District Attorney that terminated the criminal action against the Regents of the University of California. The agreement lays out many terms for the University, but most are specific to our Department and are presented herein as a list of safety requirements.

The Settlement Agreement calls for a four-year period during which our Department will be under extra scrutiny. All requirements must be met beginning sixty days after the signing of the agreement. In preparation for unannounced Cal/OSHA inspections that are part of the Settlement Agreement, UCLA EH&S will perform additional inspections, both announced and unannounced, with the goal of maintaining strict compliance with the terms of the settlement. Failure to be in full compliance can lead to severe consequences as outlined below.

All laboratories must operate in a safe manner in **every** activity. The following **twenty** specific requirements are contained in the Settlement Agreement and will be inspected by both UCLA EH&S and Cal/OSHA. Absolutely no violations of these requirements will be tolerated. Safety protocols outside this list must always be followed, but this list constitutes the specific agreement with the Los Angeles District Attorney.

Failure to comply with these requirements can lead to serious consequences. Each serious violation will require the Principal Investigator to report in writing and in person to the UCLA Laboratory Safety Committee to explain the violations and the corrective actions taken. Three serious violations within a one year period will cause a shut down of the research laboratories by the UCLA Vice Chancellor for Research for a minimum of fifteen days and until all violations have been corrected. There are also penalties for the University if Principal Investigators fail to meet the requirements outlined in the Settlement Agreement.

Settlement Agreement:

http://newsroom.ucla.edu/portal/ucla/pagedoc/3/6/9/6/3/236963/Settlement_agreement.pdf

I. Lab Safety Manual and Chemical Hygiene Plan

All laboratories must maintain a formal written Laboratory Safety Manual and Chemical Hygiene Plan in full compliance with all applicable California Code of Regulations, Title 8 Sections. Copies of the Laboratory Safety Manual must be provided to all lab personnel. Electronic copies are acceptable, provided such manuals are readily accessible to all lab personnel. Researchers must know the contents and sign an acknowledgement in the manual. The manual must be reviewed and updated annually.

- Laboratory Safety Manual and Chemical Hygiene Plan
<http://www.ehs.ucla.edu/LabSafetyManual.pdf>

II. New/Visiting Principal Investigator Training

All new or visiting Principal Investigators are prohibited from operating any laboratory facility, or directing or supervising any employees within any laboratory facility without first completing 1) a Laboratory Safety Training program for Principal Investigators and 2) Formal training covering University policy concerning the Principal Investigators responsibilities for Laboratory Safety.

- Laboratory Safety Training for PI's and Lab Supervisors:
<http://map.ais.ucla.edu/go/1003938>
- Lab Safety Orientation Fact Sheet:
<http://ehs.ucla.edu/LabSafetyOrientation.pdf>

III. Existing Principal Investigator Training

All existing Principal Investigators are required to complete 1) a Laboratory Safety Training program for Principal Investigators, 2) Formal training covering University policy concerning the Principal Investigators responsibilities for Laboratory Safety and 3) Annual retraining in Laboratory Safety.

- Laboratory Safety Training for PI's and Lab Supervisors:
<http://map.ais.ucla.edu/go/1003938>
- Lab Safety Orientation Fact Sheet:
<http://ehs.ucla.edu/LabSafetyOrientation.pdf>

IV. New Laboratory Personnel Training

Before beginning ANY laboratory work, all new laboratory personnel must complete 1) a Laboratory Safety Training Program, 2) Formal training covering University policy concerning an individual's right and responsibilities relative to lab safety.

- Laboratory Safety Fundamental Concepts and Laboratory Safety Course:
<http://map.ais.ucla.edu/go/1003938>
- Lab Safety Training Matrix:
<http://ehs.ucla.edu/Pub/Lab%20Training%20Matrix.pdf>

V. Existing Laboratory Personnel Training

All existing laboratory personnel must complete 1) a Laboratory Safety Training Program, 2) Formal training covering University policy concerning an individual's right and responsibilities relative to lab safety and 3) Annual retraining in Laboratory Safety.

- Laboratory Safety Fundamental Concepts and Laboratory Safety Online Refresher course:
<http://map.ais.ucla.edu/go/1003938>
- Lab Safety Training Matrix:
<http://ehs.ucla.edu/Pub/Lab%20Training%20Matrix.pdf>

VI. Standard Operating Procedures

All laboratories must ensure compliance with Title 8 requirements for Standard Operating Procedures (SOPs). SOPs shall be written for all chemicals used in the laboratory listed in the Chemical Classification List (**Exhibit 1 below**) (e.g. Acutely Toxic Chemicals, Regulated Carcinogens, Select Carcinogens, Reproductive Toxins, Explosives, Peroxide Forming Chemicals, Strong Corrosives, Strong Oxidizing Agents, Strong Reducing Agents, Pyrophoric Reagents, and Water Reactive Chemicals). All laboratories must modify each SOP template for use in the specific laboratory. The PI and all personnel responsible for performing the procedures detailed by the SOP shall sign the SOP, acknowledge the contents, requirements and responsibilities outlined. Copies of all SOPs relevant to that particular laboratory's operations must be maintained in each Laboratory Safety Manual or a separately designated manual.

- UCLA EH&S SOP Template Library:
<http://www.sop.ehs.ucla.edu/>
- UCLA EH&S Job Safety Analysis (JSA) Template Library:
<http://jsa.ehs.ucla.edu/>
- Chemical Classification List (Exhibit 1):
<http://ehs.ucla.edu/ExhibitAChemList.pdf>
- Lists of Hazardous Compounds
<http://www.chemistry.ucla.edu/pages/safety>
- UCLA EH&S Fact Sheet, Chemical Storage and Segregation:
<http://ehs.ucla.edu/ChemStorage.pdf>

VII. Procedures for Use of Pyrophoric Reagents

UCLA researchers must maintain and follow written procedures for the safe use of pyrophoric reagents. The written procedures shall be made readily available to lab personnel. Lab personnel should read and sign pyrophoric reagents SOP.

- SOP - Procedures for Safe Use of Pyrophoric Liquid Reagents
<http://www.chemistry.ucla.edu/file-storage/publicview/pdfs/SOPLiquidReagents.pdf>
- Pyrophoric Liquids Safety Video:
<http://www.youtube.com/watch?v=RaMXwNBAbxc>
- SOP - Procedures for Safe Use of Pyrophoric Solids
<http://www.chemistry.ucla.edu/file-storage/publicview/pdfs/ProceduresSafeSolids.pdf>

VIII. PPE Assessment

Every Principal Investigator must complete an independent assessment on the adequacy of Personal Protective Equipment afforded to laboratory personnel.

- Lab Hazard Assessment Tool (LHAT) allows for PI's to determine required PPE for their lab.
<https://lsm.ehs.ucla.edu>
- PPE Selection Guide:
http://ehs.ucla.edu/Pub/PPE_Guidance.pdf
- UCLA Policy 905: Research Laboratory Personal Safety and Protective Equipment:
<http://www.adminpolicies.ucla.edu/pdf/905.pdf>
- UCLA Lab Safety Manual and Chemical Hygiene Plan
<http://www.ehs.ucla.edu/LabSafetyManual.pdf>

IX. Minimum PPE Requirements

Full-length pants, or equivalent, and close-toed shoes must be worn at all times by all individuals occupying the laboratory area. The area of skin between the shoe and ankle should not be exposed.

- UCLA PPE Policy 905 (Section IV: Safety Requirements, Subsection A):
<http://www.adminpolicies.ucla.edu/pdf/905.pdf>
- UCLA Lab Safety Manual and Chemical Hygiene Plan
<http://www.ehs.ucla.edu/LabSafetyManual.pdf>

X. PPE Requirements - Lab Coats

Laboratory coats, or equivalent, must to be worn while working on, or adjacent to, all bench top procedures utilizing hazardous chemicals, biological or unsealed radiological materials. These laboratory coats must be appropriately sized for the individual and be buttoned to their full length. Laboratory coat sleeves must be of a sufficient length to prevent skin exposure while wearing gloves.

- UCLA PPE Policy 905 (Section IV: Safety Requirements, Subsection C):
<http://www.adminpolicies.ucla.edu/pdf/905.pdf>
- PPE Selection Guide:
http://ehs.ucla.edu/Pub/PPE_Guidance.pdf

XI. PPE Requirements - Flame Resistant Lab Coats

Flame resistant lab coats must be worn when working with pyrophoric materials or flammable liquids. Cotton (or other non-synthetic material) personal clothing must also be worn during these procedures to minimize injury in the case of a fire emergency.

- UCLA PPE Policy 905 (Section IV: Safety Requirements, Subsection D):
<http://www.adminpolicies.ucla.edu/pdf/905.pdf>
- PPE Selection Guide:
http://ehs.ucla.edu/Pub/PPE_Guidance.pdf
- Lab coat purchasing guide:
http://www.chemistry.ucla.edu/file-storage/publicview/pdfs/safety-website-files/Flame_Resistant_Laboratory_Coats.pdf

XII. PPE Requirements - Lab Coats Outside of Lab Areas

Laboratory coats may not be worn outside of a laboratory unless the individual is traveling directly to an adjacent laboratory work area. Protective gloves must not be worn in any public area outside of the laboratory (i.e. hallways, elevators, offices). Gloves must be removed prior to handling any equipment that could likely result in cross contamination.

- UCLA PPE Policy 905 (Section IV: Safety Requirements, Subsection E):
<http://www.adminpolicies.ucla.edu/pdf/905.pdf>

XIII. PPE Requirements - PPE Cleaning

Professional laundry services must be used to maintain the hygiene of laboratory coats. Coats may not be cleaned by researchers at private residences or public laundry facilities. Any clothing that becomes contaminated with hazardous materials must be decontaminated before it leaves the laboratory.

- UCLA PPE Policy 905 (Section IV: Safety Requirements, Subsection F):
<http://www.adminpolicies.ucla.edu/pdf/905.pdf>

XIV. PPE Requirements - Eye Protection

American National Standards Institute (ANSI) approved eye protection or equivalent engineering controls must be used while handling hazardous chemicals, biological or radiological materials.

- UCLA PPE Policy 905 (Section IV: Safety Requirements, Subsection G):
<http://www.adminpolicies.ucla.edu/pdf/905.pdf>
- PPE Selection Guide:
http://ehs.ucla.edu/Pub/PPE_Guidance.pdf

XV. PPE Requirements - Additional PPE

Any additional PPE required for safe operations or procedures shall be made available to each exposed or effected employee prior to implementation of any operations or procedures.

Examples: face shields, aprons, butyl gloves, booties.

- UCLA PPE Policy 905 (Section IV: Safety Requirements, Subsection H):
<http://www.adminpolicies.ucla.edu/pdf/905.pdf>
- PPE Selection Guide:
http://ehs.ucla.edu/Pub/PPE_Guidance.pdf
- UCLA Lab Safety Manual and Chemical Hygiene Plan
<http://www.ehs.ucla.edu/LabSafetyManual.pdf>

XVI. PPE Requirements – Costs and Documentation

Employees shall not bear the cost of any required PPE. Written records must be maintained by each laboratory verifying the date of issuance and type of PPE issued, or re-issued, to each laboratory personnel.

- Chemistry and Biochemistry provides the following form to document PPE issuance:
<http://www.chemistry.ucla.edu/file-storage/publicview/pdfs/HazardAssessmentPPE.pdf>

XVII. PPE Requirements - Deficiencies

No person shall be permitted to work in or occupy any laboratory area without first being provided the required PPE. The Principal investigator or EH&S personnel shall remove any person found by the PI or EH&S personnel working in or occupying any laboratory area without the required PPE until the required PPE is obtained and utilized.

- Unannounced PPE inspection checklist:
<http://ehs.ucla.edu/PPEComplianceInspection.pdf>

XVIII. EH&S Inspections

EH&S will conduct comprehensive laboratory safety inspections, in accordance with the UCLA Lab Safety Manual, Chemical Hygiene Plan, and California Code of Regulations Title 8. EH&S shall immediately inform the PI or responsible parties of deficiencies. Critical deficiencies, which are immediately dangerous to life and health, noted during the inspection must be corrected immediately.

- UCLA Lab Safety Manual and Chemical Hygiene Plan
<http://www.ehs.ucla.edu/LabSafetyManual.pdf>
- Category A inspection checklist:
<http://ehs.ucla.edu/CatAChemInspectionChecklist.pdf>
- Unannounced PPE inspection checklist:
<http://ehs.ucla.edu/PPEComplianceInspection.pdf>
- Laboratory Safety Inspection Checklist:
<http://ehs.ucla.edu/LabSafetyInspectionChecklist.pdf>

XIX. Enhanced Cal/OSHA Reporting and Investigation

Principal Investigators are required to report within eight hours all reportable occupational injury or illness to UCLA EH&S. EH&S shall immediately inform the Cal/OSHA enforcement unit and the Cal/OSHA Bureau of Investigations. UCLA shall immediately secure the scene and preserve all evidence until the Cal/OSHA enforcement unit and the Cal/OSHA Bureau of Investigations determines that a response is not required.

- EH&S Hotline: (310) 825-9797
- EH&S How to report an injury: <http://map.ais.ucla.edu/go/1002890>
- EH&S Injury Reporting 1,2,3 : http://ehs.ucla.edu/Pub/IPD_EHS%20123%20Poster.pdf

XX. Enhanced Cal/OSHA Inspections

The Cal/OSHA enforcement unit or the Cal/OSHA Bureau of Investigations shall have full access to any UCLA facility for the purposes of conducting inspections to determine compliance with its terms. Inspections shall be limited to three annually, during the four-year term of the agreement. Advance notice of inspections shall not be given. However, upon arrival Cal/OSHA personnel shall contact a UCLA EH&S representative who will be permitted to be present during the inspection, if that representative is available within 1 hour of initial or attempted contact. Cal/OSHA personnel shall not be precluded from documenting any observable conditions or beginning any inspection where the loss of critical information may, at the determination of Cal/OSHA personnel be likely, while waiting for the arrival of a representative.

- UCLA EH&S Fact Sheet, Cal/OSHA Inspections: http://ehs.ucla.edu/OSHA_FS.pdf
- Please contact the EH&S Hotline immediately: (310) 825-9797.
- UCLA PPE Policy 907: <http://www.adminpolicies.ucla.edu/pdf/907.pdf>