

Laboratory Safety Self-Inspections Reference Guide

Revised: December 7, 2020

As indicated in the <u>Chemical Hygiene Plan</u> under Responsibilities of Principal Investigator, Section 2-3, all labs must perform a laboratory safety selfinspection, annually, at a minimum. This safety self-inspection must be completed every calendar year, by December 31 of each year.

EHS has created several tools to help you complete a self-inspection, including online tools and a brief training video to show you how to use these online tools.

- A) Print a hard copy <u>form</u> containing all self-inspection questionnaire located on the EHS website. Once you've completed the selfinspection, place it in your Laboratory Safety Binder. EHS will check for this completed documentation during the annual lab safety inspection performed by EHS.
- B) An online form [<u>https://forms.gle/GsGnk4rzdhDGCjxv8</u>] is located on the EHS website to complete the self-inspection questions via a google form. Once you've completed the questions, click on "submit" and print the resulting results. Place a copy of the completed selfinspection in your Laboratory Safety Binder.
- C) Using the UC Inspect application available through the app store on your mobile device, select the checklist "UCI Self-Inspection Lab Checklist" and type in the PI/Responsible Person's name. Instructions on how to access the self-inspection application and how to use the checklist are contained in a training video [insert link] located on the EHS website. Once you've completed the self-inspection, click on "submit" to receive a copy of your completed inspection report and print the completed report and place in your Laboratory Safety Binder.

For any questions or assistance with performing a laboratory self-inspection, please contact EHS at <u>safety@uci.edu</u> or your <u>EHS School Coordinator</u>.

Appendix A

Laboratory Self-Inspection Questionnaire

PI and lab name:

Location inspected (building, room number):

Date:

Name of individual completing self-inspection:

Question			No
1.	Has the lab's chemical inventory been completed and updated		
	within the past 12 months?		
2.	Is the lab's Chemical Hygiene Plan available and/or up-to-date?		
3.	Are the following items up-to-date on the lab's LHAT?		
	a. LHAT certified annually by the PI		
	b. LHAT roster has listed all lab members		
	c. Hazard Assessment has been reviewed by all lab		
	members		
	d. PPE training has been completed by all lab members		
4.	Are SOPs up-to-date and/or reviewed based on the SOP-banded		
	report?		
5.	Have laboratory personnel completed training in UC Learning		
	Center?		
	a. Safety Training Self-Assessment (STSA)		
	b. Laboratory Safety Fundamentals/Refresher Training		
6.	The Site Specific Training Checklist has been shared with all new		
	lab employees:		
	New Lab Worker Site Specific Safety Training Checklist		
7.	Have outstanding lab inspection findings been resolved from the		
	last EHS inspection performed?		

Revised: 12/07/20



Appendix B

The following chart has been provided to assist you in following up on the results of your self-inspection. Information listed under the "Suggested Action Plan to Address Non-Compliant Finding" column are the most common solutions that we recommend implementing to resolve findings. Additionally, we have provided the relevant regulatory standard in red that pertains to the inspection question.

Category	Inspection Question and Applicable Regulatory Standard	Suggested Action Plan to Address Non-Compliant Finding
DOCUMENTS, TRAINING, AND HAZARD COMMUNICATION	Chemical Hygiene Plan (CHP) Overview was reviewed and signed by all lab workers and stored in the lab safety binder. CCR Title 8§191, A written Chemical hygiene plan is required for any workplace that uses hazardous chemicals. Access to the current Chemical Hygiene Plan must be available to all members of the lab (SI44)	All lab personnel must review the Chemical Hygiene Plan (CHP) (https://www.ehs.uci.edu/research- safety/chemical-safety/_pdf/uci- chp.pdf) and document understanding by singing the CHP Overview (https://www.ehs.uci.edu/research- safety/chemical-safety/_docs/chp- overview-signature.docx) in the laboratory binder.
DOCUMENTS, TRAINING, AND HAZARD COMMUNICATION	Chemical standard operating procedures (SOPs) are available, approved (signed) by PI, and signed by applicable lab workers. The SOP banded report in CiBR-Trac shows what SOPs are needed. Primary banded chemical and regulated carcinogen SOPs are available with procedures attached. Secondary SOPs do not require procedures, and duplicates do not have to be printed (e.g., if they have acute toxic chemicals, do not need toxic chemicals also). CCR Title 8§5191-Written SOPs for hazardous operations in the laboratory, work with particularly hazardous substances, etc., and documented training are required. Consult manufacturers' Safety Data	Develop written SOPs for chemicals, chemical bands, and processes. SOPs must be approved by the PI (via signature), reviewed, and signed by the lab workers who handle chemicals and/or perform the processes.

DOCUMENTS, TRAINING, AND HAZARD COMMUNICATION	Sheets (SDS) for hazard classification information. (SI58) Current Lab Hazard Assessment Tool (LHAT) is certified, the roster is up to date, and all lab workers have reviewed/acknowledged the LHAT and completed PPE training. UCOP PPE Policy, CCR Title 8§3380 Personal Protective Devices: (http://www.dir.ca.gov/title8/3380.ht ml) UCOP policy requires a hazard assessment to determine the appropriate personal protective equipment. Any completed hazard assessment that indicates less than the minimum PPE described requires review and approval from EH&S. Hazard assessment must be reviewed	Login to LHAT and have the PI certify hazard assessment with appropriately identified hazards and update the "Laboratory Roster" as needed. (https://www.ehs.uci.edu/research- safety/ppe/lab-ppe.php). Guide users through the LHAT during inspection to identify lab workers who have not reviewed hazard assessment or completed PPE training.
DOCUMENTS, TRAINING, AND HAZARD COMMUNICATION	on a three-year basis, and the roster must be kept up-to-date. (SI100) Lab workers know the evacuation assembly location, are trained on how to respond to an emergency and are trained to report incidents, injuries, safety concerns, or near-misses. 29 CFR1910.38 (A) (B)), CCR Title 8§3203 and §5191 -Staff should be provided information on the reporting of incidents and near misses. CCR Title 19 §3.09 -Map of escape route shall be posted near exits. CCR Title 8§3220 -The names of persons who can be contacted for further information or explanations during an emergency should be posted	Train lab workers on evacuation procedures, how to respond to an emergency situation, and how to report incidents, injuries, safety concerns, or near-misses. Submit incidents/injuries/safety concerns at (https://www.ehs.uci.edu/forms/rep ort-injury/index.php). Evacuation assembly areas can be found at: (https://www.police.uci.edu/emerge ncy-mgmt/zone-crew.php).

UCI Environmental Health & Safety

DOCUMENTS, TRAINING, AND HAZARD COMMUNICATION	at the entrances to all laboratories. (SI14) Laboratory chemical inventory is up-to- date and has been completed or updated in the last year. CCR Title 27§15280-An inventory of all hazardous substances known to be present in the workplace must be maintained and updated at least annually. (SI43)	Login to Cibr-Trac or UC Chemicals to update your chemical inventory and update regularly. (https://ucirvine.ecompliance.net/in dex.htm) (https://ehs.ucop.edu/chemicals/)
DOCUMENTS, TRAINING, AND HAZARD COMMUNICATION	Laboratory Safety Fundamentals (LSF) is current for all lab workers (go to "Profile" in the LHAT to check for LSF training for your lab). CCR Title 8 §3203, Injury and Illness Prevention Program; Section 5191 – Occupational Exposure to Hazardous Chemicals in Laboratories; UCOP Policy Lab Safety Training. All laboratory workers are required to complete the UC Laboratory Safety Fundamentals e-Course prior to beginning work in the laboratory and every three years thereafter. Log on to UCLC and complete the required e- Course. (SI1)	If a lab member is not up to date, they need to login to UCLC (www.uclc.uci.edu) and complete the Laboratory Safety Fundamentals (LSF) training within 30 Days. Personnel are not allowed to work un-escorted until completion of LSF training.
DOCUMENTS, TRAINING, AND HAZARD COMMUNICATION	Safety Training Self-Assessment (STSA) and UC Learning Center training are current for all lab workers (go to "Profile" in the LHAT to check training status for your lab). CCR Title 8§3203-Documented training is required for the IIPP. Annual retraining is required. (SI78)	Login to UCLC (www.uclc.uci.edu) and complete the assigned courses.

Personal Protective Equipment (PPE)	Appropriate lab coats, gloves, and eye or face protection are available for lab workers and in good condition. CCR Title 8 §3380(f), UCOP PPE Policy- The employer 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). If such hazards are present or likely to be present, the employer shall select and have each affected employee use the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment. CCR Title 8§3382-Eye protection is required when there is a risk of eye injuries, such as puncture, abrasion, contusion, or burns as a result of contact with flying particles, hazardous substances, projections, or injurious light rays. CCR Title 8§3384-Employer is responsible for providing the required PPE for protection against hazardous materials. CCR Title 8§3384-Gloves are required for employees whose work involved exposure of hands to cuts, burns, harmful physical or chemical agents, or radioactive materials. (SI62)	Obtain and wear lab coats, gloves, and eye or face protection that are appropriate for the laboratory hazards and activities. Information regarding personal protective equipment (PPE) is available at (https://www.ehs.uci.edu/research- safety/ppe/lab-ppe.php). Contact the EH&S-PPE Coordinator for additional information (ehs-ppe@uci.edu, 949- 824-6200).
Personal Protective Equipment (PPE)	Lab workers wear appropriate PPE and attire (closed-toe/heel shoes, long pants or equivalent) when entering the laboratory. UCOP PPE Policy-UCOP PPE policy requires that long pants or equivalent and close-toed/close-heeled shoes be worn in the laboratory unless an exemption to the policy has been granted. (SI63)	Make sure everyone entering the laboratory areas wears minimum appropriate attire (closed-toe/heel shoes, long pants, or equivalent).

UCI Environmental Health & Safety

Personal Protective Equipment (PPE)	Lab workers who wear respiratory protective equipment have been assessed and documented by EH&S. CCR Title 8§5144-Every employee that is required to wear a respirator must participate in the respiratory protection program, which includes a medical evaluation and fit-testing. (SI66)	Complete the Respiratory Hazard Evaluation (RHE), medical evaluation, and EH&S respiratory protection training. Refer to the Respiratory Protection Program website: (https://www.ehs.uci.edu/ih/respirat ory-protection.php)
Personal Protective Equipment (PPE)	Reusable PPE is maintained, in a good sanitary condition, and stored properly. CCR Title 8§3383-Employer is responsible for providing the required PPE for protection against hazardous materials. CCR Title 8§5193 Bloodborne Pathogens - Employers shall ensure that the worksite is maintained in a clean and sanitary condition. (SI64) <u>California Labor Code Section 6400- 6413.5</u>	Store PPE away from clean areas or public spaces. Send soiled PPE for laundering. PPE contaminated with extremely hazardous materials are disposed of as hazardous waste. UCOP Policy: (http://policy.ucop.edu/doc/3500597 /PersonalProtectiveEquip)
Personal Protective Equipment (PPE)	Special PPE (e.g., autoclave gloves, cryogenic gloves, laser safety glasses, face shield, chemical resistant apron) are available as appropriate. CCR Title 8§3384-Gloves that are appropriate for the activity must be available in the laboratory. Chemical resistant gloves are required for handling hazardous materials. (SI62)	Obtain and wear special PPE as appropriate for the hazards and specified in the SOP.