

LABORATORY SAFETY INSPECTION CHECKLIST

DOCUMENTS, TRAINING AND HAZARD COMMUNICATION	
1	All lab members have completed the Laboratory Site Specific Safety Training Checklist and is stored in the lab safety binder. (https://www.ehs.uci.edu/coordinators/getting-started-at-uci/pdf/new-lab-worker-site-specific-checklist.pdf). (SI78)
2	Chemical Hygiene Plan (CHP) Overview reviewed and signed by all lab workers and stored in lab safety binder. (SI44)
3	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 have acute toxic chemicals, do not need toxic chemicals also). (SI58)
4	Current Lab Hazard Assessment Tool (LHAT) is certified, roster is up to date and all lab workers have reviewed/acknowledged the LHAT and completed PPE training. The LHAT has hazards selected on the assessment that match what is in the lab. (SI100)
5	Designated areas need to be properly labeled when Particularly Hazardous Substances (PHS) are present. PHS includes select and regulated carcinogens, reproductive toxins, and acutely toxic. (SI81)
6	Lab areas, storage cabinets, equipment, and containers for hazardous materials are labeled with the appropriate hazard class labels. (SI45)
7	Lab members know how to access SDS online through chemical manufacturer or on EH&S website: https://ehs.uci.edu/sds/index.php
8	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. (SI14) (29CFR1910.38(A)(B))
9	Laboratory chemical inventory is up-to-date and has been reconciled in the last year (SI43)
10	Laboratory Safety Fundamentals (LSF) is current for all lab workers (go to "Profile" in the LHAT to check for LSF training for your lab). (SI1)
11	Refrigerators, microwaves, and freezers are properly labeled regarding the storage of hazardous materials or items for human consumption. (SI68)
12	Required signage is present and accurate. This includes PPE signage, Emergency Flipchart, door sign, Injuries and Medical Treatment as well as appropriate Hazcom signs/labels (GHS, BSL2, Biohazard, Radiation, Carcinogens, etc.) (SI2)
13	Safety Training Self-Assessment (STSA) and UC Learning Center trainings are current for all lab workers (go to "Profile" in the LHAT to check training status for your lab). (SI78)
14	Self-Inspection Checklist has been completed annually, at a minimum.
15	Lab has active or pending BUA when biohazards are present.
GENERAL AND PHYSICAL SAFETY	
16	Aisles, exit paths, and hallways are free of obstruction. (SI8) (SI17) (CFC 1028.9.1) (CFC 315)
17	Compressed gas cylinders are properly secured with double chains (1/3 from top and 1/3 from bottom) or stored in cages. (SI69)
18	Emergency equipment is present and easily accessible (safety shower, eyewash station, fire extinguisher, ventilation purge button, etc.). (SI22) (29 CFR 1910.38(a) CCR Title 8§5162-)
19	Gas cylinders not in use have regulators removed and valve protection caps in place. (SI70)
20	Heavy items are secured or stored at or below eye level. (SI4) (CFC 5003.2.8)

21	Safety shower and eyewash stations are inspected monthly (look for tag) and are available in areas where hazardous materials are handled. (SI50)
22	Sharp tools (needles, razor blades) are stored in a manner that minimize the risk of puncture and cut injuries. (SI38)
23	Tippable items with a height of more than 3 times the narrowest base dimension, or otherwise top heavy (e.g. Biological Safety Cabinet) need to be secured. Specify the equipment and location needing seismic bracing. (SI3)
24	A chemical spill kit is available and equipped with appropriate supplies. (SI55) (29 CFR 1910.151)
HOUSEKEEPING	
25	All work surfaces (e.g., benchtops, counters, etc.) shall be impervious to the chemicals and materials used in the laboratory.
26	Cabinet doors can be closed and are in good condition. (SI5)
27	Ceiling tiles are in reasonable condition (not missing, substantially damaged or moldy). When submitting a Facilities Management Request (FMR), please add "Lab Safety Inspection" in the description. (SI12) (8 CCR, 3362 Part G)
28	Floor and walls are in good condition. (SI10)
29	Food, drinks, and application of cosmetics are not permitted in areas where hazardous materials are present. (SI67)
30	Lab furniture is not made of porous materials, are cleanable, and can be decontaminated. (SI11)
31	Work areas are not cluttered and work surfaces and equipment are kept clean and routinely decontaminated. No evidence of spills present. (e.g. no residues, powders, stains from uncleaned spills) (SI9)
ELECTRICAL SAFETY	
32	A minimum clearance of 36 inches in front of any electric panels/breaker boxes is maintained. (SI30) (29 CFR 1910.303 (g))
33	All equipment is free of damaged cords, plugs, or other conditions that pose an electrical hazard (No broken, cracked, or frayed wires). (SI24)(CFR 1926.416(e)(1))
34	Electrical cords are secured and do not pose a tripping hazard. (SI30)
35	GFCI protection is installed on any electrical receptacle within 6 feet of a water source. (SI27) (NEC 210.8(B))
36	Mechanical equipment with belts, pulleys, sprockets, chains, shafting or other rotating parts are properly guarded. High voltage equipment is clearly labeled. (SI29) (29 CFR 1910.219(f)(3))
37	Wall electrical receptacles are in good working condition (Not broken or missing cover). When submitting a Facilities Management Request (FMR), please add "Lab Safety Inspection" in the description. (29 CFR 1910.303(h))
38	Wall receptacles and power strips are not overcrowded, extension cords and power strips are not multi-plugged or daisy-chained, and extension cords are not used as permanent wiring. (SI25) (CFR 1926.405)
FIRE SAFETY	
39	Fire doors and doors to hazardous areas self-close, latch properly, and are not propped open. (SI18) (CFC 703.2.3)
40	Fire extinguishers are available and accessible, fully charged, not tampered (pin and tamper ring are in place), and current on regular maintenance. (SI19) (CFR 1910.157(d)4)
41	Storage of combustible materials have a clearance of at least 18" from the ceiling with sprinklers or 24" without sprinklers. (SI7) (CFC 315.3.1)

BIOLOGICAL SAFETY	
42	Biological safety cabinets (BSC) for BSL2 experiments are certified annually. (SI37) (8CCR 5154.2)
43	A hand washing sink with supply of soap and paper towels is available in BSL1 and BSL2 laboratory spaces.
44	Bunsen burners are not being used inside biosafety cabinets (BSC).
45	Aspiration flask/bottle on vacuum line is set up and properly maintained. The vacuum line is protected with a clean in-line HEPA filter. Fresh bleach is added after experiments for disinfection and flask is emptied routinely.
CHEMICAL SAFETY	
46	All chemicals are labeled properly and legibly with chemical full name and hazard class. (SI45)
47	All chemicals are stored properly when not in use (caps closed, chemicals not stored in fume hood, corrosives stored below eye level). (SI47)
48	Chemical containers are in good condition. (Not cracked, leaky, missing lid/cap, spilt content, etc.). (SI46) CCR Title 8 §5164© IDLH
49	Chemical containers are seismically secured and stored safely on shelves with lips or in a closed cabinet to prevent them from falling in the event of an earthquake or building vibrations. (SI84)
50	Chemicals are segregated appropriately based on hazard class. For example: acids from bases, flammables from oxidizers, organic acids from mineral acids, toxics from flammable, oxidizers and corrosives. (SI47)
51	Cryogenic liquids and solids are stored and handled in well ventilated areas. (LBSS7-SI103) (CFR 1910.104)
52	Flammable storage cabinets are self-closing with a 3-point latch system. (SI83)
53	Hydrofluoric acid users have up to date calcium gluconate available.
54	Less than 10 gallons of flammable chemicals are present outside of approved flammable cabinets. (SI82)
55	Peroxide formers properly labeled with the date of receipt and opening. Peroxide formers are disposed of within 1 year after opening date. Unopened containers should be tested for peroxide formation or discarded after 1 year. Common peroxide formers are ethyl ether, THF and 1,4 dioxane. If there are visible crystals in the chemical container, call EH&S immediately and do not handle. (SI49) CCR Title 24§5003 NFPA 13.3.2 IDLH
56	Refrigerators or freezers for flammable or pyrophoric chemicals are UL certified and approved for the storage of flammable materials. (SI80)
57	Secondary containment must be provided for corrosive chemicals, reactive chemicals, and particularly hazardous substances (PHS). All glass bottles on the floor must be stored in secondary containment. (SI88)
PERSONAL PROTECTIVE EQUIPMENT (PPE)	
58	Lab workers wear appropriate PPE and attire (closed-toe/heel shoes, long pants or equivalent) when entering the laboratory. (SI63)
59	Lab workers who wear respiratory protective equipment have been assessed and documented by EH&S. (SI66)
60	Reusable PPE is maintained, in good sanitary condition and stored properly. (SI64)
61	Appropriate lab coats, gloves, and eye or face protection are available for lab workers and in good condition. (SI62) (CCR3380)
62	Special PPE (e.g. autoclave gloves, cryogenic gloves, laser safety glasses, face shield, chemical resistant apron) are available as appropriate. (SI62)

63	The lab is under the maximum allowable quantities (MAQs) allowed for specific hazard classes within a control area.
CONTAINMENT EQUIPMENT	
64	Chemical fume hoods are operational and inspected annually. Yellow sticker on the side of the fume hood has last test date. (SI85)
65	Glove boxes are in good condition and do not show signs of deterioration. Glove boxes are free of waste and not cluttered. (SI87)
66	Proper sash height is indicated by the yellow sticker. The sash is opened within the approved working height when in use and closed when not in use. (SI57)
67	The chemical fume hood is used correctly with items placed at a minimum 6 inches into the hood from the plane of the sash, items are placed such that airflow is not disrupted or blocked, and the hood is not used for storage. (SI57) (SI86) CCR Title 8§5191-
68	Toxic gases are stored in an approved ventilated cabinet or fume hood with restraints in place. (SI71)
HAZARDOUS WASTE DISPOSAL	
69	Clean or chemically contaminated sharps waste including needles, syringes, broken glass, razor blades, glass pipettes are properly disposed.
70	Hazardous chemical waste is stored in a secondary container with the primary container lid closed, properly labeled with the accumulation start date, and disposed of within six months. (SI59-60)
71	Liquid biohazardous waste is treated with an appropriate disinfectant at least daily and waste is disposed of weekly and not allowed to evaporate.
72	Solid biohazardous waste is appropriately disposed in approved biohazard waste container, container has red bag, is not over filled, and lid is closed when not in use.
73	Biohazardous sharps waste including needles, syringes, broken glass, razor blades, glass pipettes are properly disposed.
OTHER	
74	Other: Not documented above