CHP APPENDIX 2. LABORATORY INSPECTION CHECKLIST

An electronic laboratory self-inspection tool is available to UH laboratory workers with access to the UH Safety Solutions web application. To begin a self inspection follow these instructions:

1. Login to https://hawaii.risksafety.solutions/, found at https://www.hawaii.edu/ehso/lab-safety/uh-safety-solutions/, and complete authentication.
2. Select the Inspect Application.
3. Select Start Inspection.
4. Select “Lab Safety Checklist-Self Inspection".
5. Enter a party to inspect (if prompted) and select “Let’s go!”

Contact labsafe@hawaii.edu with questions or to request in person training. Questions from UH Safety Solutions - Campus Facilities and Lab Safety-Self Inspection are attached below.

DOCUMENTATION

1. Is the laboratory entrance signage adequate and current? Are emergency notification procedures, contacts with current phone numbers, and hazard warning signs posted at the entrance?

2. Can lab personnel locate and explain the function of the Chemical Hygiene Plan (CHP) and the Hazardous Materials Management Program Manual (HMMP)?

3. Has the laboratory completed an initial and maintain a current Assessment in UH Safety Solutions? Have all personnel acknowledged the current Assessment?

4. Have personnel received appropriate initial and annual safety training (where required)? Are the training document records on file?

5. When necessary, are Standard Operating Procedures (SOPs) reviewed by laboratory personnel with the Principal Investigator or Lab Manager?

6. Does the lab have a chemical inventory (updated annually)?

7. Are Safety Data Sheets (SDS) available for all chemicals in the lab (hard copy or accessible online by all lab members)?

8. DOCUMENTATION-OTHER?

GENERAL SAFETY

1. Is the laboratory locked when not in use?

2. Are lab coats, goggles, face shields, gloves, closed-toe shoes, and other PPE available and used?

3. Are protective goggles or face shields provided and worn where there is any danger of flying particles or corrosive materials?

4. Are emergency eyewashes and showers available and unobstructed (required if corrosive materials are present)?

5. Are all sharp types and broken glass collected, containerized, labeled, and discarded according to the CHP and HMMP?

6. Have all chemical fume hoods passed inspection within the past 12 months?

7. Are chemical fume hood sashes closed when not in use?

8. Are chemical fume hoods free from excessive storage?

9. Is good housekeeping maintained in the laboratory?

10. Are all floors kept clean and dry?

11. Are food and beverages prepared and consumed in areas separate from chemicals?

12. Are glass containers protected when stored on the floor?

13. Are means of egress free of trip hazards or obstructions?

14. Do refrigerators, freezers, microwaves, and ice machines designated for laboratory use have proper “No Food/Drink” signage?

15. Are safety guards in place for equipment with moving parts (belts, blades, fans, etc)?

16. Is there a first aid kit in the lab and is it adequately stocked with items within expiration dates?

17. Are respirators used by any laboratory personnel?

18. Employees are fit tested to their respirators annually and are current in their medical clearance? Respirators are clean and maintained?

19. Users are annually trained in the proper use of respirators and their limitations?

20. GENERAL SAFETY-OTHER

CHEMICAL SAFETY

1. Are all highly flammable and toxic procedures performed in a chemical fume hood?

2. Are incompatible chemicals segregated in storage?

3. Are flammable chemicals stored in a safe manner (e.g. more than 10 gallons stored in an approved flammable storage cabinet)?

4. Are all chemicals properly labeled, including hazard identification, and percentages of mixtures?

5. Are chemical containers kept closed and in good condition?

6. Are approved spark-proof refrigerators used for cold storage of flammable liquids?

7. Are air and water reactive chemicals properly stored?

8. Does the laboratory test and document results for peroxide-forming chemicals?

9. Are chemical storage areas identified with signs (e.g., flammables, corrosives, carcinogens, poisons, etc.)?

10. Is an appropriate chemical spill kit available?

11. Is metallic mercury used in the laboratory? If yes, is a Hg spill kit available?

12. Are only cleaning agents stored under sinks?

13. CHEMICAL SAFETY-OTHER

HAZARDOUS WASTE CHECKLIST

1. Is hazardous waste generated and properly managed?

2. Is non-hazardous chemical waste disposed of properly?

3. Does the satellite accumulation area store less than 55 gallons of all hazardous waste and less than one quart of P waste?

4. Is the satellite accumulation area in the same laboratory where the waste is generated?

5. Is the "Emergency Plans for Spills" document posted at Satellite Accumulation Area?

6. Is the satellite accumulation area kept in good housekeeping condition?

7. Are waste containers separated by hazard class to avoid incompatible storage?

8. Are all the waste containers in good condition (e.g.,not corroded or leaking, and properly sealed or closed)?

9. Are all waste containers properly labeled as to their contents (correct chemical names, readable labels, and percentages of individual components for mixtures)?

10. Are secondary containers used when required (e.g., stored on the floor, waste stored within 4 ft. of a drain, or to segregate incompatibles)?

11. Can the laboratory document the proper disposal of all hazardous waste?

12. Is there at least one person in the facility who has attended the EHSO training for Hazardous Waste Generators?

13. HAZARDOUS WASTE CHECKLIST-OTHER

COMPRESSED GAS CYLINDERS

1. Are cylinders legibly marked to clearly identify the gas contained?

2. Are incompatible gases properly segregated when not in use (e.g. oxygen and flammable gases must be separated by minimum 20 feet)?

3. Are oxygen cylinders stored 20 feet apart from combustible material or acetylene cylinders, or separated by an approved fire wall (at least 5 feet high) having a fire resistant rating of at least ½ hour?

4. Are cylinders secured properly (recommend chains) and protective caps in place when not in use?

5. Are cylinders located or stored in areas where they will not be damaged by passing or falling objects or subject to tampering by unauthorized persons?

6. Are multiple gas cylinders securely stored in a cylinder rack, or chained appropriately?

7. Are cylinders of different heights/sizes chained or strapped appropriately?

8. Cylinders have been hydrotested within the last 5 years to determine their integrity for current and further use?

9. Are cylinders in good condition (no rusting, sidewall indentations, bulging, crack and fissures)?

10. Is the tubing used for gas cylinders in good condition? Any evidence of leakage, pinching, or kinks?

11. Is tubing material appropriate for each type of system (No Tygon used for flammable gases, e.g. hydrogen, since it can cause static electricity)?

12. COMPRESSED GAS CYLINDERS-OTHER

FIRE SAFETY / ELECTRICAL SAFETY

1. Do lab members know how to evacuate from the lab and where to meet (location) in the event of a fire or an emergency? Process to account for personnel?

2. Are exits visibly marked and illuminated?

3. Are fire-rated doors propped open when unoccupied?

4. Are fire extinguishers and fire pull stations readily accessible? Do lab members know the location of the fire extinguishers?

5. Is storage at least 18 inches below the ceiling/sprinkler heads (24 inches for rooms without sprinklers)?

6. Gasoline stored properly? (In portable containers / approved metal safety cans with a spring-closing lid and spout cover)?

7. Is combustible material stored in boiler, mechanical, or electrical rooms?

8. Are the cords of all electrical equipment in good condition?

9. Are cords used properly (e.g., no piggy-backing of surge protectors, clear of burners, sinks, aisles)?

10. Are electrical panels readily accessible and not blocked (3 foot clearance in front & 30 inch working width clearance)?

11. Equipment that draws large amounts of power (e.g. refrigerators, microwaves) plugged directly into an outlet?

12. Equipment with exposed heating elements are unplugged when not in use (space heaters, hot plates, coffee makers, toasters)?

13. Are all unused openings (including conduit knockouts) in electrical enclosures and fittings closed with appropriate covers, plugs, or plates?

14. When lab equipment or electrical lines are to be serviced, maintained, or adjusted, has the system been de-energized, and have necessary components been locked-out and tagged-out?

15. FIRE SAFETY / ELECTRICAL SAFETY-OTHER

RADIATION SAFETY

1. RADIATION SAFETY - OTHER