UF Environmental Health and Safety
UNIVERSITY of FLORIDA

Laboratory Safety Checklist

Contents

Chemical Fume Hoods

- Is fume hood compliant?
    - Is storage of items in chemical fume hoods kept to a minimum?
    - Are the fume hood alarms working properly?
    - Are the side panels in place and sealed properly?
    - Is there sufficient visibility through the fume hood sash?
    - Is the fume hood sash at the proper height and closed if not in use?
    - Is the fume hood velocity within range?

Chemical Safety

- Is an appropriate chemical spill kit available?
- Are proper dating/storage/use/disposal procedures followed for perchloric acid/picric acid?
- Are proper dating/storage/use/disposal procedures followed for peroxide forming compounds?
- Are chemicals stored safely?
    - Are liquid chemicals stored below shoulder height?
    - Are all containers in good condition, no rusted containers or broken bottles?
    - Are all containers properly capped with a tight sealing lid?
    - Are dry and liquid chemicals kept separate?
    - Are flammable solvents only stored in approved fridges or freezers?
    - Are liquids stored in secondary containers (not stored directly on the floor)?
- Are all transfers of liquid nitrogen done in a well-ventilated area?
- Are lab chemicals in use and within expiration dates (not unused or outdated)?
- Is use of Chromic acid for cleaning glassware discouraged?
- Is air quality in the lab acceptable (no particulates or chemical odors)?
- Are all containers of chemicals properly labeled in the lab?
    - Are labels legible and easily read (not deteriorating or falling off)?
    - If the lab is using abbreviations or chemical formulas, do they have an abbreviation sheet posted?
    - Are all chemicals labeled (no unlabeled containers)?
- Are chemicals stored by compatibility?
    - Are organic and inorganic chemicals kept separate?
    - Are acids and bases segregated?
    - Are corrosives separated from metals, flammables, and oxidizers?
    - Are oxidizers separated from metals and flammable chemicals?
    - Are inorganic acids separated by compatibility?
- Are cold rooms being used properly?
    - Is cold room free of excess clutter and cardboard?
    - Is the amount of flammables in the cold room kept to a minimum?

Compressed Gases

- Are gas cylinders securely transported using a hand truck?
- Are the UF Compressed Gas Rules posted in a prominent location?

- Is the regulator connection leak tested after installation and before each use?
- Are cylinders with no regulators capped (even when empty)?
- Are cylinders stored away from heat sources?
- Are contents of cylinders clearly labeled?
- Are hydrostatic tests current (cylinders have not been stored more than 5-10 years)?
- Are compressed gas cylinders adequately secured (even when empty)?
- Are gas cylinders stored by compatibility?
- If the lab has any high hazard gases, is there an emergency plan in place?
- Are highly toxic gasses kept in cabinets vented to the outside (not loose in the open room)?

Controlled Substances

- If controlled substances are used, is the DEA permit current?
- Are controlled substances stored in a secure location?
- Are outdated or unwanted DEA substances disposed of appropriately?
- Does the lab have an inventory of all in-use controlled substances?
- Have all employees using controlled substances or novel compounds (neurotrophic or addicting) filled out an Employee Questionnaire?
- Is the lab completing a biennial (every 2 years) inventory of all controlled substances?
- Is the lab free of any outdated pharmaceutical products?

Documentation

- Is the lab's LATCH complete?
    - Does the lab have an up to date roster?
    - Is a Lab Safety Manager assigned?
    - Is a Hazardous Waste Manager assigned?
    - Is the hazard assessment and PPE determination completed in LATCH?
    - Has the lab specified where SOPs are saved in the Notes section of the risk assessment?
    - Has everyone in the lab or work area read and signed the completed risk assessment?
- Is the lab’s inventory compliant?
    - Does the lab have a chemical inventory?
    - Is the chemical inventory current?
    - Is the inventory accurate as determined by a check/spot check? (include details in the notes section)
- Does the PI have a FL Department of Business and Professional Regulations medical exemption letter if applicable?
- Is the UF Laboratory Safety Manual readily accessible?
- Does everyone in the lab have access to the SDSs for all chemicals used in the lab?
- Does the lab have Voluntary Use forms for lab members using N95 type respirators voluntarily and are they being used correctly?
-
- Does the lab maintain SOPs that incorporate health & safety?
- Do all lab personnel have access to all SOPs?

- Are the SOPs in the required EHS format?

Electrical Safety

- Is access to circuit breaker panel unobstructed?
- Are openings on breaker panel, receptacle boxes, etc. sealed?
- Are Ground Fault Circuit Interrupters (GFCI) used near sinks and wet areas?
- Is the lab only using extension cords temporarily?
- Are extension cords manufactured commercially (not shop made)?
- Are electrical cords undamaged (not frayed)?
- Is the lab free of electrical hazards?
- Do extension cords, power strips, and surge protectors have long enough cords (not inter-connected or Daisy Chained)?
- Are electrical panel covers secure? Are all unused openings in electrical enclosures and fittings appropriately plugged or covered?
- Are power strips UL listed?
- Are all electrical cords routed properly (not running through doors, walls or partitions, under rugs/matts, or above drop ceilings)?
- Are power strips being used only for small electronics?
- Are all power strips either mechanically affixed or resting on a flat surface?

Emergency

- Is a fully stocked First-Aid kit compliant?
    - Is the first aid kit complete and are all contents within their expiration dates (unexpired)?
    - Is a first aid kit in evidence? (check no if they need a new first aid kit)
    - Is the first aid kit easily accessible/unobstructed?
- Is calcium gluconate available where hydrofluoric acid (HF) is stored or handled?
- Is the overhead emergency shower(s) compliant?
    - Is overhead emergency shower(s) working properly?
    - Is overhead emergency shower(s) tested regularly?
    - Is overhead emergency shower(s) unobstructed?
- Is the emergency eye wash station(s) compliant?
    - Is eyewash station working properly?
    - Is eyewash tested regularly?
    - Does eyewash station does have dust covers?
    - Is eyewash unobstructed?
- Is lab staff trained in the lab's emergency procedures?
- Are chemical exposures in the lab being reported appropriately?

Fire Safety

- Are fire extinguishers compliant?
    - Have fire extinguishers been checked monthly by Fire Safety?

    - Is fire extinguisher unobstructed?
- Is a Fire Extinguisher located near or in the lab?
- Are large metal drums of flammable liquids reported in the chemical inventory and risk assessment?
- Are flammable liquids stored in approved containers?
- Is no more than 10 gallons of flammable liquids stored in the open (outside of a flammables cabinet or safety can)?
- Are vents on flammable storage cabinets sealed?
- Are sprinkler heads clear (i.e. at least 18 inch clearance)?
- If the lab has any propane gas, is the quantity less than 2x 1lb cylinders loose in the lab with another 2x 1lb cylinders in a flammables cabinet?
- Is the lab free of any gasoline and/or any gasoline containers?
- Are all ceiling tiles in place in the lab?

General Safety

- Is lab space being utilized safely?
- Are workspaces un-crowded?
- Are benches and shelves never overloaded?
- Are chairs appropriate for laboratory environment?
    - Are chairs non-porous and cleanable?
    - Are chairs undamaged?
    - Do chairs have a 5-star base?
- Are vacuum pumps (with a belt/pulley) equipped with a belt guard?
- Is there no food for human consumption stored in lab fridges/freezers?
- Is food consumption or storage, smoking, drinking, handling of contacts, or applying cosmetics prohibited within the laboratory work area?
- Are walkways clear of obstructions?
- Are work surfaces and benches free of clutter to reduce risk of spills and accidents?
- Are lab rooms all closed and locked when no personnel are in the lab?
- Is mouth pipetting prohibited; Are mechanical pipetting devices used?
- Is water conserved as much as possible?
- Are lab appliances properly labeled?
- Do all older style vacuum pumps have oil traps inline of their exhaust?

Hazardous Waste

- Is the current SAA sheet posted?
- Is the current SAA waste manager listed?
- Are SAA waste totals under the limit?
- Is waste properly segregated?
- Is waste compatible with the container?
- Are waste containers in good condition?
- Is waste stored at or near the point of generation?

- Is waste under the control of the generator?
- Are waste containers closed?
- Is the SAA free of spills and leaks?
- Are hazardous waste containers labeled using the updated format?
    - Are the waste hazards associated with the waste clearly indicated?
    - For waste mixtures: are all contents listed with associated percentages totaling 100%?
    - Are Principal Investigator, Building & Room information entered?
    - Are hazardous waste containers marked with the words “Hazardous Waste”?
- Is all waste identified (no unknown present)?
- Is hazardous waste being properly disposed of through EH&S (not poured down sinks)?
- Is all waste being stored in the SAA (not in additional points throughout the lab)?
- Is the monthly SAA self-audit up to date and available?

Personal Protective Equipment

- Is PPE (e.g. gloves, safety glasses/goggles, lab coats, thermal protection, etc.) available (stored clean and in good repair) and worn for the activity being conducted?
- Is PPE stored in a manner to prevent damage or contamination?
- Are full coverage shoes with good sole grips worn in the lab?
- Are cryogenic materials handled with the proper PPE?
- Are lab personnel aware that contact lenses should not be worn in the labs, and that if contact lenses are worn they must be accompanied by goggles?
- Is lab staff wearing safety glasses or goggles for work that necessitates it?
- Is the lab using the appropriate gloves for their work (have they consulted the glove compatibility reference chart)?
- Are gloves being used and disposed of properly?
    - Are used gloves being disposed of with other contaminated laboratory waste?
    - Are disposable gloves prohibited from being washed or reused?
    - Are gloves being removed and hands being washed when work with hazardous materials has been completed and before leaving the laboratory?
    - Are gloves being changed when contaminated, integrity has been compromised, or when otherwise necessary?
- Is PPE removed before leaving the lab?
- Are respirator wearers trained, fit tested and enrolled in the respiratory protection program and/or Biopath as appropriate?
- Is hearing protection worn for high noise areas (e.g. sonicators, grinders)?
- Has a noise survey been conducted to determine the need for using hearing protection?
- Are laser specific safety glasses or goggles available if the lab is working with lasers?

Sharps

- Are sharps handled and disposed of properly?
    - Are safety devices being chosen for sharps being used with infectious material/rDNA?
    - Are sharps generated in the BSC being collected into sharps containers within (not outside) BSC?

- Are sharps properly segregated (gloves, paper towels or other 'soft' items are never in the sharps containers)?
- Are sharps containers not overfilled?
- Are containers of contaminated needles, sharp equipment, and broken glass decontaminated before disposal, and disposed of according to any local, state, and federal regulations?
- Are non-disposable sharps placed in a hard-walled container for transport to a processing area for decontamination, preferably by autoclaving?
- Are sharps containers conveniently located to the work being performed?
- Is broken glassware being handled properly (removed using mechanical means such as a brush and dustpan, tongs, or forcep)? Is plastic ware substituted for glassware whenever possible?
- Are needles not bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by hand before disposal?

Signs and Postings

- Are the Notice Board (NB) with Emergency Call list and hazard warning labels compliant?
  - Is the Notice Board posted at the lab entrance?
  - Is the notice board legible? (check no if they need a new NB)
  - Are the hazard stickers on the NB complete (none need to be added)?
  - Does the NB have a current emergency call list (ELC)? (check no if they need a new ECL sticker)
  - Does the emergency call list have two names with afterhours phone numbers?
  - If the NB has a privacy ECL, is it updated?
  - Does the lab have signage identifying the lasers present in the lab?
- Is warning signage posted to alert entrants what PPE is required?

Training

- Is Hazardous Waste training complete for all personnel including the in-person training session for the Hazardous Waste Manager?
- Is Lab Safety Actions and Reactions training complete for all personnel?
- If work generated biological waste, is Biomedical Waste Training complete for all personnel?
- If work involves blood or OPIM, is Blood Borne Pathogen/Biomedical Waste Training complete for personnel?
- If lab staff ships biological materials or dangerous goods, is training certification for shipping biological materials/dangerous goods current?