EH&S Lab Safety Inspection Checklist

Building		Date	Department
Room		Inspector	
PI		Cc on report:	

A. COMMUNICATION & EMERGENCY PREPAREDNESS

Chemical Inventory

	Y	N	NA		Comments
A1				The laboratory safety registration is current (within previous 12 months).	
A2				Chemical inventory complete, current, and maintained in local area.	
A3				All MSDSs are on file in department and readily accessible to employees.	
Training					
A4				Supervisor/PI has a specialized written safety training plan for staff including standard operating procedures for the use of hazardous materials. *Note: Lab-specific training must be documented. SOP's for highly hazardous substances such as: pyrophorics, flammable solids, toxic gases, toxins, carcinogens, teratogens, mutagens etc. are required.*	
Record Keeping					
A5				Safety training records are current and complete *(Lab Safety, Fire Safety, Haz Waste Mgmt., Biosafety)*	
Contingency Planning and Emergency Procedures					
A6				ASU Emergency Response Procedures posted in lab.	
A7				Chemical spill kit/clean-up materials provided (if required by department plan).	
Exits and Width of Exits					
A8				Exits and aisles have a 28-inch clearance which is clear and free of potential obstructions in case of emergency.	
A9				Exit signs readily visible, when required.	

B. HAZARDOUS MATERIALS

Labeling

	Y	N	NA		
B1				Manufacturer product container label lists full chemical name (or product name) and hazards are clearly identified on manufacturer label.	
B2				Containers of chemical solutions or synthesized unnamed chemicals are labeled per the CHP by their reactants and possible products as well as their possible hazards. Containers labeled with abbreviations (e.g. EtOH) have a legend including full chemical names and hazards posted for interpretation in the near vicinity.	
B3				Containers of non-hazardous substances, e.g., water, labeled explicitly to avoid confusion.	
B4				Flammable/combustible liquids not dispensed from gravity-fed or bottom-dispensing containers without self-closing valves.	
B5				Total volume of flammable liquids (NFPA Fire Class 3 or 4) stored outside flammable storage cabinets is less than a total of 10 gallons.	
Control					
B6				Designated area is established and placarded for the use of regulated and "select" carcinogens (defined in ASU CHP and OSHA).	
B7				Incompatible chemicals are segregated; containment is compatible with the chemical and secondary containment is provided as required.	
B8				Containers of peroxide-forming chemicals are dated upon receipt and disposed of when six-month shelf life is exceeded (see container for expiration dates or CHP for shelf life details).	
B9				Ether and other highly-flammable materials are stored away from sources of heat and ignition. If there is a need for refridgeration, must be stored in a flammables-safe refrigerator.	
B10				Control measures are established and implemented for chemicals identified as extremely or particularly hazardous in CHP.	
B11				All chemical containers are closed except when actively adding or removing materials from container (i.e. no funnels sticking out of the top of containers for days).	
Cryogenic Materials					
B12				Is PPE available and used for handling cryogenic materials.	
B13				Do pressurized cryogenic dewars have relief devices between valves and are steps taken to prevent trapping material in the transfer hose or tube between two valves to prevent a hose to rupture out of control.	
B14				Is glass dewar in a protective covering to prevent injury if dewar bursts and produces flying glass. *Note: A rated fume hood sash can be a protective shield.*	

C. LABORATORY / HAZARDOUS WASTE

Containment and Storage

	Y	N	NA		
C1				Specific waste storage containers are used: Chemical, biological, radioactive, and sharps.	
C2				Waste containers are sturdy, compatible with the waste, and kept closed at all times except when adding hazardous waste.	
C3				Waste is segregated by compatibility and stored safely.	
C4				No intentional disposal of chemicals by evaporation into a fume hood.	
C5				No intentional disposal of chemicals into sinks or drains.	
C6				All syringes/needles/sharps are disposed of in rigid, puncture-resistant, leak-proof containers. *Note: Plastic pipette tips are considered sharps even if they are used for pipetting non-hazardous materials.*	

Labeling

C7				Containers are labeled with the words "HAZARDOUS WASTE," with the waste's physical state, hazardous properties, and full product names (not chemical formulations).	
C8				Waste containers ready for pickup have a legible and completed ASU Hazardous Waste Tag attached.	
C9				Hazardous biological waste is placed into red or orange bags only, and non-hazardous biological waste is put in black or clear bags. Note: Genetically modified plant material is considered biohazardous waste.	

D. HEALTH & SAFETY EQUIPMENT

Safety Showers and Eye Washes

	Y	N	NA		
D1				Approved safety showers and eye washes provided within the work area for immediate use (within 50 feet or 10 seconds of exposure) and access is unobstructed. *Note: Eyewash install required (any chemical use < or equal to 1pH OR > than or equal to 12pH in a quantity of at least 1 gallon). Shower or drench hose install required (when possibility of splashing hazardous material on skin). Keep in mind, flushing facilities do not replace required PPE use.*	
D2				Performance tested within the last year (may be an ID sticker on unit).	

Laboratory Fume Hoods

D3				Performance tested within the last year (check sticker on front or side of unit) or if the hood is not in use it is labeled as such.	
D4				Air flow indicator present on fume hood.	
D5				Storage within the hood minimized and containers kept closed. Containers are at least 6 inch inside hood from sash.	
D6				Front sash is positioned below maximum level when hood is in use (typically 18 inch). *Note: Sash should be in down position when not in use (Green Labs Program).*	

Fire Prevention and Electrical Safety

D7				Appropriate fire extinguisher available within 30 feet and inspected within the past 12 months (see tag).	
D8				18 inch vertical clearance maintained from sprinkler heads or 24 inch vertical clearance maintained from ceiling without sprinkler heads.	
D9				Electrical switch panels unobstructed by at least a 36 inch clearance.	
D10				High voltage equipment (>600V) labeled, grounded, and insulated.	
D11				Extension cords not used as permanent wiring and equipment has no frayed electrical cords.	

Compressed Gas Cylinder Safety

D12				Cylinders protected from external heat sources and stored in well-protected, well-ventilated, and dry locations away from highly combustible materials.	
D13				Storage space will not be damaged by passing or falling objects nor subject to tampering by unauthorized persons.	
D14				Secured to a structural component of the building with chains at 2/3 the cylinder height. *Note: Cylinders must not be strapped together. Carts for transporting cylinders are not to be used for their permanent storage.*	
D15				Protective caps in place while the cylinders are not in use or connected for use. Regulators are not used while cylindar is in storage.	

Personal Protective Equipment (PPE) required in lab work

D16				Appropriate safety glasses/goggles, face shields, lab coats, closed-toed footwear, aprons, gloves, respirators, PPE for radiological work or other PPE are available and in use by employees.	
D17				Respirator use conforms to ASU Respiratory Protection Program.	

E. HOUSEKEEPING & MISCELLANEOUS LABORATORY SAFETY

Food and Drink

	Y	N	NA		
E1				Eating, drinking, smoking, gum chewing, applying cosmetics, and taking medication in the lab where possible contamination by toxic, radioactive, or infectious materials is strictly prohibited. *Note: Laboratory employees must perform these activities outside the laboratory. Each Departmental Dean, Director, Chair or their designee may designate areas within laboratory facilities where these activities are permitted. See ASU Chemical Hygiene Plan for details.*	
E2				Refrigerators, freezers, microwaves, ovens, and so forth used for research are not used for edible food storage or preparation. This equipment must be labeled with appropriate placards for the type of material stored or used in them, such as "NOT FOR USE OF FOOD"- for research materials and "FOR FOOD USE ONLY"- for edible food. *Note: These signs are available from EH&S*	
E3				Cold rooms with no supply fresh air (e.g. only recirculating air) does not have volatile, toxic gas, or oxygen depleting materials in use.	

Housekeeping and Miscellaneous Laboratory Safety

E4				Bench tops clean and organized and workspaces maintained to eliminate harmful exposures or unsafe conditions.	
E5				Vacuum lines equipped with traps designed specifically to accumulate/filter the	
E6				All vacuum pump belts adequately protected by a rigid belt-guard or housing.	
E7				Cranes and hoists are posted with load limit, maintained and appear to be in good working condition. Cranes and hoists have current inspection logs and are certified	
E8				Mercury filled thermometers have been replaced with non-mercury type.	
E9				Other	
E10				No Findings	