

Lab safety inspection checklist

Building _____ Room _____ Department _____

PI _____ CC on report _____

Inspector _____ Date _____

A. Laboratory documentation

Y	N	N/A	Questions	Comments	
A1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The laboratory safety registration is current (within previous 12 months). B C R	
A2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chemical inventory complete, current, and maintained in local area.	
A3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All SDSs are on file in department and readily accessible to employees.	
A4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Biohazards are present in the lab and is it displayed on the registration.	
A5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Radiation Ionizing/Non-Ionizing work is authorized and registered with ASU EHS.	
A6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An ASU Laboratory Safety Manual was not available or not in use.	
A7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Green Lab Certification	

B. Training

Y	N	N/A	Questions	Comments	
B1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Supervisor/PI has a documented lab-specific training plan for staff including standard operating procedures. B C R	
A4					
B2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Safety training records are current or available (Lab Safety, Fire Safety, Haz Waste Mgmt., and Biosafety). B C R	

C. Contingency planning and emergency procedures

Y	N	N/A	Questions	Comments	
C1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ASU Emergency Response Procedures posted in lab.	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chemical/Bio spill kit/clean-up materials provided (if required by department plan). B C	
C2					
C3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Incidents and accidents properly reported, evaluated or documented. B C R	

D. Exits and width of exits

Y	N	N/A	Questions	Comments	
D1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Exits and aisles have a 28-inch clearance which is clear and free of potential obstructions in case of emergency.	
D2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Exit signs readily visible, when required.	
D3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hallway doors are kept closed while laboratory is vacant.	
D4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are lab entrances properly posted and labeled. B C R	
D5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PI or supervisor limits access to the room. B C R	

E. Hazardous materials labeling

	Y	N	N/A	Questions	Comments
E1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Manufacturer product container label lists full chemical name (or product name) and hazards are clearly identified on manufacturer label.	
E2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers of chemical solutions or synthesized unnamed chemicals are labeled per the CHP by their	
E3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers of non-hazardous substances, e.g., water, labeled explicitly to avoid confusion.	
E4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flammable/combustible liquids not dispensed from gravity-fed or bottom-dispensing containers without self-closing valves.	
E5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Total volume of flammable liquids (NFPA Fire Class 3 or 4) stored outside flammable storage cabinets is less than a total of 10 gallons.	

F. Hazardous materials control

	Y	N	N/A	Questions	Comments
F1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Designated area is established and placarded for the use of regulated and "select" carcinogens (defined in ASU CHP and OSHA).	
F2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Incompatible chemicals are segregated; containment is compatible with the chemical and secondary containment is provided as required.	
F3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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).	
F4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ether and other highly-flammable materials are stored away from sources of heat and ignition. If there is a need for refrigeration, must be stored in a flammable-safe refrigerator.	
F5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Control measures are established and implemented for chemicals identified as extremely or particularly hazardous in CHP.	
F6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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).	

G. Cryogenic materials

	Y	N	N/A	Questions	Comments
G1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PPE available and used for handling cryogenic materials.	
G2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pressurized cryogenic dewars have relief devices between valves or steps are taken to prevent trapping material in the transfer hose or tube between two valves to prevent a hose to rupture out of control.	
G3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Glass dewar is 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.	

H. Laboratory/hazardous waste containment and storage

	Y	N	N/A	Questions	Comments
H1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Specific waste storage containers not used: Chemical, biological, radioactive, and sharps. B C R	
H2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Waste containers are sturdy, compatible with the waste, and kept closed at all times except when adding hazardous waste.	
H3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Waste is segregated by compatibility and stored safely.	
H4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No intentional disposal of chemicals by evaporation into a fume hood.	

H5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No intentional disposal of chemicals into sinks or drains.	
H6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All syringes/needles/sharps are disposed of in rigid, puncture-resistant, leak-proof containers. Written policies for the safe handling of sharps are included in the laboratory-specific biosafety manual. Note: Plastic pipette tips are considered sharps even if they are used for pipetting non-hazardous materials.	
H7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mercury filled thermometers have been replaced with non-mercury type.	

I. Hazardous waste labeling

	Y	N	N/A	Questions	Comments
I1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers are labeled with the words "HAZARDOUS WASTE," with the waste's physical state, hazardous properties, and full product names (not chemical formulations).	
I2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Waste containers ready for pickup do not have a completed ASU Hazardous Waste Tag attached.	
I3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hazardous biological waste is placed into red or orange bags only, and non-hazardous biological waste is put into black or clear bags. Note: Genetically modified plant material is considered biohazardous waste.	

J. Safety showers and eye washes

	Y	N	N/A	Questions	Comments
J1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Approved safety showers and eye washes provided within the work area for immediate use (within 50 feet or 10 seconds of exposure) or access is obstructed.	
J2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Performance tested within the last year (may be an ID sticker on unit).	

K. Laboratory fume hoods and biosafety cabinets

	Y	N	N/A	Questions	Comments
K1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fume hood/Biosafety Cabinet performance tested within the last year (check sticker on front or side of unit) or if the hood/cabinet is not in use it is labeled as such. B C	
K2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Air flow indicator present on fume hood.	
K3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Storage within the hood minimized and containers kept closed. Containers are at least 6 inches inside hood from sash. B C	
K4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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).	

L. Fire prevention and electrical safety

	Y	N	N/A	Questions	Comments
L1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Appropriate fire extinguisher available within 30 feet and inspected within the past 12 months (see tag).	
L2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18-inch vertical clearance maintained from sprinkler heads or 24-inch vertical clearance maintained from ceiling without sprinkler heads.	
L3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Electrical switch panels are unobstructed by at least a 36-inch clearance.	
L4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	High voltage equipment (>600V) labeled, grounded, and insulated.	
L5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Extension cords not used as permanent wiring and equipment has no frayed electrical cords.	

M. Compressed gas cylinder safety

	Y	N	N/A	Questions	Comments
M1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Compressed gas cylinders protected from external heat sources, stored in well-protected, well-ventilated, and dry locations away from highly combustible materials.	
M2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Storage space for compressed gas cylinders will not be damaged by passing or falling objects nor subject to tampering by unauthorized persons.	
M3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Compressed gas cylinders 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.	
M4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Protective caps in place while the cylinders are not in use or connected for use. Regulators are not used while cylinder is in storage.	

N. Personal protective equipment, or PPE, required in lab work

	Y	N	N/A	Questions	Comments
N1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Appropriate safety glasses/goggles, face shields, lab coats, closed-toed footwear, aprons, gloves, respirators, PPE for radiological work or other PPE are available and properly used by employees. B C R	
N2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Social distancing measures were being practiced.	
N3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Respirator use conforms to ASU Respiratory Protection Program.	

O. Biosafety

	Y	N	N/A	Questions	Comments
O1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mouth pipetting is prohibited and mechanical pipetting devices are used.	
O2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All procedures are performed carefully in a manner to minimize the creation of splashes or aerosols.	
O3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Work surfaces are decontaminated with an effective disinfectant on completion of work or at the end of the day and especially after overt spills or splashes of biohazardous materials.	
O4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Personnel wash their hands after handling potentially biohazardous materials, after removing gloves, and before leaving the laboratory.	
O5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vacuum lines are equipped with traps designed specifically to accumulate/filter.	
O6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The room provides an inward flow of air without recirculation to spaces outside the room.	
O7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The PI's recombinant/synthetic nucleic acid research has been reviewed and approved by the Institutional Biosafety Committee.	
O8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The laboratory has 10 or more liters of culture present. (Large Scale Research Fact Sheet)	
O9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The PI is familiar with which section of the NIH Guidelines their research falls under.	
O10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All wastes that are contaminated with biohazardous materials are autoclaved or decontaminated with an effective disinfectant before they are scheduled for pick-up. See Proper Use of Autoclave for reference.	
O11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The PI or supervisor has developed lab-specific biosafety procedures and incorporated them into either a Biosafety Manual or Standard Operating Procedures.	

O12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cultures, tissues and other biohazardous materials are placed in a container with a cover that prevents leakage during collection, handling, processing, storage and/or transport.	
O13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If centrifuges are used, sealed rotor heads or safety cups are used and only opened in an approved biological safety cabinet or other ventilated containment device.	
O14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	When biohazardous materials must be manipulated outside a biological safety cabinet, personnel use eye and face protection.	

P. Animal safety

	Y	N	N/A	Questions	Comments
P1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Animals not involved in the research are prohibited in the room.	
P2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There is an insect and rodent control program in effect.	
P3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Windows that open to the exterior are fitted with screens.	
P4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There is a medical surveillance program in place for the laboratory.	
P5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Proper procedures are being followed when handling toxins in the laboratory.	

Q. Laser safety

	Y	N	N/A	Questions	Comments
Q1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lasers are included in the inventory.	
Q2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Laser user attended appropriate training.	
Q3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Alignment procedures are available.	
Q4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Class designation and appropriate warning label present.	
Q5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Appropriate warning/danger sign at entrance to laser area.	
Q6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Beam is enclosed as much as possible.	
Q7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Beam is not directed toward doors or windows.	
Q8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Controls are located so that the operator is not exposed to beam hazards.	
Q9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Eye protection available and in good condition.	
Q10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interlocks on protective housing.	
Q11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Service access panel present.	
Q12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Limited access to spectators.	
Q13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are curtains present?	

R. X-rays and radioactive material

	Y	N	N/A	Questions	Comments
R1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Survey instruments have been calibrated within the last year.	

R2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	User surveys.	
R3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sources secure.	
R4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	User monitored.	
R5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dedicated room.	
R6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Alignment procedures.	
R7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Monthly safety checks. Logs available.	
R8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Housing labels present on X-ray unit. Such as warning stickers.	

S. Mechanical

	Y	N	N/A	Questions	Comments
S1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Shop: findings related to machine shop safety	
S2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 annually.	
S3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All vacuum pump belts adequately protected by a rigid belt-guard or housing.	
S4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cold rooms with no supply of fresh air (e.g. only recirculating air) do not have volatile toxic gas, flammables, or oxygen depleting materials in use.	

T. Food and drink

	Y	N	N/A	Questions	Comments
T1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Eating, drinking, smoking, gum chewing, applying cosmetics, and taking medication in the lab is strictly prohibited. B C R	
T2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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. B C	

U. Housekeeping

	Y	N	N/A	Questions	Comments
U1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bench tops are clean and organized and workspaces maintained to eliminate harmful exposures or unsafe conditions.	
U2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Laboratory personnel use mechanical means, such as a brush and dustpan, tongs or forceps to clean up broken glassware.	
U3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No findings	
U4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	

Questions? Contact ASU Environmental Health and Safety at 480-965-1823 or email asuehs@asu.edu.

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