LABORATORY INPECTION CRITERIA

What is the Safety Representative asking about…?

Laboratory Door Signs:	What is required of the laboratory?
Do all entrances to the laboratory space have an appropriate caution sign indicating the hazards present in the area?	The Laboratory Safety Manual and the University Hazard Communication Standard require that appropriate hazard signs are visible to all pedestrians prior to entering a hazardous area.
Are appropriate hazard labels on the laboratory door sign?	The signs should indicate the top three hazards in the area in question. If these hazards are no longer present, the label must be removed.
Is the contract information completed, legible, and **current**?	The Principle Investigator responsible for the area in question must have their name and 24-hour emergency contact information written on the Laboratory door sign. It is strongly recommended that one alternative also be written on the laboratory door sign.

Documentation:

Does the laboratory have a **current** Chemical Hygiene Plan (CHP)?	OSHA 29 C.F.R. 1910.1450 requires that all laboratories have a Chemical Hygiene Plan which must be reviewed and updated annually.
Have all members of the laboratory received necessary training and is this documented in the CHP?	OSHA 29 C.F.R. 1910.1450 requires that all laboratory workers are properly trained on the contents of the CHP. This training must be refreshed annually and proper documentation kept showing that the training was completed.
Is a complete and current chemical inventory present in the CHP?	OSHA requires that a complete chemical inventory be present in the CHP.
Does the laboratory use Bloodborne pathogens, other than biohazardous sharps, pathogens? If the answer is "yes", does the laboratory have a current Exposure Control Plan (ECP)?	OSHA 29 CFR 1910.1030 requires that an ECP be present for any laboratory where workers are exposed to or encounter pathogenic microorganisms that is present in human blood and/or can cause disease in humans, animals, or plants. The ECP must be reviewed and updated annually.

Documentation (*continued)*	What is required of the laboratory?
Have all members of the laboratory received necessary training and is this documented in the ECP?	OSHA 29 C.F.R. 1910.1030 requires that all laboratory workers are properly trained on the contents of the ECP. This training must be refreshed annually and proper documentation kept indicating the training was completed.
If a regulated chemical is used, is an appropriate written program present?	OSHA 29 C.R.F. 1910 Subpart Z requires that a written plan be present in laboratories that use certain "regulated" chemicals.
Do all personnel in the laboratory know where to find all safety information?	All personnel must be able to locate the laboratory safety manual, CHP, ECP and any other safety documentation.

Chemical Safety:

Are any chemicals stored on the floor?	Chemicals are not allowed to be stored on the floor of the laboratory because this presents a tripping hazard which could escalate to a chemical spill if the containers break or are knocked over.
Are there any liquid chemicals stored above eye level?	Storing any chemical above eye level so that employees must reach for them can be dangerous. This is especially true for liquid chemicals.
Are chemicals stored according to compatibility?	All chemicals must be stored safely and according to their compatibility. For assistance use the Quick Guide to Chemical Compatibility document located at does.case.edu under Chemical Safety.
Does the laboratory have greater than 2 gallons of flammable material (net volume)? If 'yes' —is appropriate flammable safety cabinets used?	The laboratory safety manual states that if a laboratory has greater than 2 gallons of flammable material, in the entire area, the material in excess of 2 gallons must be store in a certified flammable safety cabinet when not in use.
Are there expired or old chemicals in the laboratory?	Chemicals that are expired or no longer in use must be disposed of through the hazardous waste program.
Does each container of chemistry have an appropriate label? Legible? In English? Full chemical names or IUPAC nomenclature?	The Case laboratory safety manual and Hazard communications program requires that all containers of chemistry be labeled in a specific manner. Labels must include full chemical names, be legible, and be in English. Shorthand or acronyms are not allowed.

Gas Cylinders:

	What is required of the laboratory?
Is the certified flammable cabinet in good working condition?	In order to store flammable material safely, the flammable storage cabinet must be functional and in good shape. All doors should close completely, no visible damage or holes, no liquid spills inside cabinet, etc.
Are compressed gas cylinders used in the laboratory? If 'yes' are these cylinders stored properly and safely?	Compressed gas cylinders must be secured with a wall mounted or bench mounted bracket to prevent falling over. Each gas cylinder should have its own securing device. If the cylinder does not have a regulator attached, the gas cylinder cap should be secured appropriately. Gas cylinders should also be stored according to compatibility.

Chemical Waste:

Is chemical waste properly labeled?	All chemical waste must be labeled with DOES provided Hazardous waste tags. The full chemical name must be written on these tags.
Is the chemical waste stored properly?	Laboratory must store their chemical waste like any other chemical. Flammables must be stored in a flammable safety cabinet, waste should be segregated by compatibility, and no chemical waste should be stored on the floor.
Are the satellite hazardous accumulation bins being used for their intended purpose?	The DOES office distributed plastic bins which are to be used in laboratories for chemical waste storage. Nothing but hazardous waste should be stored in these bins, and it must remain closed when not actively adding chemical waste to the bin.

Chemical Fume Hoods:

Have the hoods been inspected within the last year?	All chemical fume hoods are certified by DOES personnel annually.
Is the hood being used for storage of chemicals or equipment?	Chemical fume hoods should never be used for the storage of chemicals. Also, large pieces of equipment should not be stored in chemical fume hood. Doing either of these may prevent the hood from operating safely.
Is the sash closed when the chemical fume hood is not in use?	Sashes should be closed completely when the hood is not in use to prevent any inhalation hazards escaping.

Biological Safety:

	What is required of the laboratory?
Is a biohazard warning sign posted on the laboratory door sign for areas that used infectious agents and/or bloodborne pathogens?	For laboratories that conduct research with infectious agents or human derived material, a biohazard label must be posted on the laboratory door sign. This label must indicate the agent being used in that area.
Are biological sharps used in the laboratory and if so, are they disposed of properly?	Ohio EPA 3745-27 requires that all needles, syringes, scalpels, razors, and/or microtome blades be disposed of in a hard plastic biohazard labeled container when they are no longer in use. This applies to all of these type of sharps, contaminated or uncontaminated.
Are the all sharps waste containers being stored properly?	Sharps containers should all have an appropriate lid to prevent any material form protruding from the container.

Biological Waste:

Is the biological waste (red or orange containers) properly stored?	These containers must never be put directly on the floor of any room. Secondary containment must always be used when intending to store these on floors.
Are biohazard containers overfilled?	Waste should not be protruding from biohazardous waste containers. The container with its lid on should contain all material.

Biological Safety Cabinets (BSCs)

Have the BSCs been inspected within the last year, if required?	NSF/ANSI - 49 requires that Class II biological safety cabinets be recertified annually. BSCs that are not used for infectious material or material consider to contain a bloodborne pathogen need only be certified every 36 months. This must be noted on the outside of the BSC to avoid confusion.

Personal Protective Equipment:

Are all workers in the laboratory wearing a laboratory coat while in the laboratory?	The laboratory safety manual states that laboratory coats must be worn at all times while in the laboratory.
When chemically resistant gloves are necessary, are they used?	Appropriate gloves must be worn when handling any chemical. It is up to the Principle Investigator and the worker to determine what glove is appropriate?

Personal Protective Equipment (*continued*):	**What is required of the laboratory?**
Is appropriate eye protection being used when necessary?	Depending on the hazards in the laboratory safety glasses, vent less chemical goggles, and/or a face shield may be required.
Are respirators necessary or used in the laboratory? Has the user of the respirator followed DOES procedure?	OSHA 29 C.F.R. 1910.134 requires that respirators be provided to workers in areas where a respiratory hazard exists. In order to wear a respirator the worker must be examined by health services, attended training, and have a respirator fitted to their face.
Are workers wearing appropriate clothing?	Clothing suitable for conducting laboratory work safely must be worn. Appropriate clothing can include long pants *without* holes, closed toe shoes, skirts/shorts extending below the knee, *etc.*

Housekeeping:

Cabinets and drawers closed completely when employees are not retrieving objects from inside.	Cabinets and drawers represent a tripping hazard if left open and should be closed.
Aisles clear of tripping and slipping hazards	Material should not be stored in aisles where workers can easily trip or slip.
Exits from laboratory are not blocked, nor is movement through exit slowed, by equipment or materials.	Exits cannot be blocked due to the need to escape quickly in emergencies.
Benches are relatively clean and free of clutter.	Unused chemicals and material should not be kept on bench tops. Also, all used sharps and glassware should be disposed of immediately.

Safety Showers/Eye wash:

Has the safety shower/eyewash been inspected in the last year?	Safety showers/eye washes must be inspected by facility services annually.
Is the area around the safety shower/eyewash completely clear of all obstructions?	The area around the safety shower must be cleared of all obstructions and electrical devices so the shower and eyewash can be used safely.

Fire Extinguisher:

Is an appropriate fire extinguisher available and easy to access?	Objects must not obstruct access to any fire extinguisher in the laboratory.
Has the extinguisher been inspected and certified within the last year?	An outside contractor certifies all extinguishers on campus, which must be done annually.