

Self-guided Laboratory Inspection

General

- Do you see anything that might be an immediate hazard?
- How does general housekeeping look?
- If there was a fire, could someone crawl out without going around obstacles?
- Did you appoint someone to take care of day-to-day safety in the lab?
- Make sure there is no food, drink in the lab, or stored in the lab.

Sign and labels

- Are all door signs up to date with current emergency contact information?
- Are all areas that require special marking properly marked?
 - Select Carcinogens, Biohazardous....

Training and Documents

- Are all personnel properly trained?
 - Did they complete the EHS required trainings?
 - Did you complete the site-specific training with them?
 - Do you have it documented?
 - Do you have an outline of your site-specific training and a sign-in sheet?
- Have you completed your annual review of your safety documents (CHP/ECP)?
 - Did you make sure all the lab procedures performed are covered in the safety documents?
 - Did you update your chemical/biological/radiological inventories?
 - Did you turn in an updated copy to EHS?
 - What procedure do you follow for operations left over night?
 - What procedure do you follow for working after hours?

Materials Storage

- Have you looked over your research materials to make sure that they are stored properly and compatibly? (Pay particular attention to freezers and refrigerators)
- Have you purged your stocks of materials you no longer need?
- Are all hazardous materials in good condition?
 - Are the labels legible?
 - Are the containers in good condition? (Make sure plastic ones are not degrading)
 - Are they tightly sealed? (If you see crystals on the lid or smell an odor that is a good indication, they are not well sealed)
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- Did you check all materials that have an expiration date and dispose of them?
 - While many materials are fine after the expiration date, OSHA considers them a hazard and they have to go. Use them as quickly as you can.
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- Do you have any materials that require special attention like picric acid, or alkali metals? Make sure to do required service on them such as adding water or oil.
- Did you make sure you do not have more than 10 gallons of flammable liquids stored outside flammable liquids cabinets?
- Are all containers tightly closed when not in use? (No odor should be apparent)
- Are all liquids stored below eye level?
- Ensure that there are no flammable liquids in regular refrigerators
- Are all chemicals and biohazards up off the floor?
- Are spills cleaned up timely?
- Are all compressed gas cylinders properly attached to a wall?
- Are all compressed gas cylinders in use with proper regulators and piping?
- Are compressed gasses properly situated in the lab? (Oxygen away from flammables etc...)

Hierarchy of Control

The requirements for control of hazard in a laboratory run as follows in the order given and are known as the hierarchy of control.

Eliminate/Substitute the hazard

Isolate the hazard

Administrative control/Engineering controls (fumehoods and such)

Personnel protective equipment (gloves, goggles, lab coats..)

- Are you using the least hazardous materials you can to do the work?
- Have you written procedure to minimize exposure in your safety documents?
- Have you checked to make sure personnel are using proper controls?
- Have you checked to make sure personnel are using proper PPE?
- Are your fumehoods working and tested as required?
- Did you check any special equipment you might have for function?

Fire/Emergency Equipment

- Do you have a spill kit for small spills in your lab?
- Is there a fire extinguisher and do you know how to use it?
- Do you have special extinguisher media such as sand for metal fires?
- Does everyone know what to do if there is an emergency?
- Is there a phone or other means of contacting help?
- Does everybody know where the safety shower and eyewash stations are?"

Electrical

- Did you check to make sure all the lab equipment is rated for use in a lab?
- Did you make sure all cords are in good shape? Ensure that cords are not under strain
- Make sure extension cords are not overloaded. In fact, they are not for use on a permanent basis.

Hazardous Waste Containers

Are all hazardous waste containers properly labeled?

Contents clearly marked using SI naming system

Words "Hazardous Waste" on Container

Name of PI on label

Date finished being filled on label

Do you track the solvents used with column material and vacuum pump oil for inclusion in the name of the waste?

Are all containers (waste or not) tightly closed?

Containers must remain closed unless adding or removing material. Funnels are not allowed to be left in the opening even the screw-on cap type.

Did you check the condition of your refrigerators? (Leaking containers-bad odors.)

Are materials stored properly?

Flammable or corrosives in proper cabinet

Properly segregated with respect to chemical compatibility

All materials up off the floor and identified as hazardous waste

No liquids above eye level

Are containers made of compatible material for the material they hold?

Are hazardous wastes and unwanted chemicals removed from the lab regularly?

When a container is full, send it on its way. Keep the documentation.

General Chemical Stocks

Did you check your general chemical stock containers for condition?

Is labeling clear and appropriate?

Are the containers in good condition?

Plastic containers tend to become brittle over time.

Are chemicals starting to change color, state, or grow crystals?

Check your general chemical stocks containers on a regular schedule of maintenance or they could be considered abandoned and result in a fine

"Yeah, I should have gotten rid of that 10 years ago, but my PI won't let me" is an instant fine.

Inspectors equate dust on caps with abandonment. Have a plan and document it in your CHP.