Laboratory Safety Inspection Checklist

University of Idaho
Environmental Health and Safety

Principal Investigator/Supervisor:	Department:
Building:	Room Number:

The purpose of this checklist is to provide the Principal Investigator/Supervisor a tool to help perform a self-audit of his or her laboratory. This checklist may also be used by Environmental Health and Safety personnel when performing laboratory inspections.

General	Yes	No	N/A
A telephone is always available.			
Emergency contact numbers posted and current.			
A first aid kit available and properly stocked (see University of Idaho standardized first aid kit guidelines).			
The laboratory is generally clean and uncluttered.			
There are no tripping hazards present.			
Comments:			

Eating/Drinking	Yes	No	N/A
Do users eat or drink in the laboratory?			
Are foods/drinks stored in refrigerators in the laboratory?			
Are foods/drinks prepared in the laboratory?			
Do users chew gum, use smokeless tobacco (including e-cigarettes), or apply cosmetics in the laboratory?			
Comments:			

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Egress and Access Pathways	Yes	No	N/A
Are the exit pathways and doors clear and unobstructed? (36-inch width)			
Are aisles leading to exit pathways within the laboratory clear and unobstructed? (36-inch width)			
Are emergency exit procedures posted near the laboratory exits?			
Comments:			

Emergency Shower, Eye Wash, and Drench Hoses	Yes	No	N/A
Is an **emergency shower** (whether inside or outside of the laboratory) available within 10 seconds travel time?			
Is the path to the **emergency shower** and the area around the **shower** clear and unobstructed?			
Do the laboratory users routinely flush/test the **emergency shower/eyewash** (at least weekly)? Documentation should be on tags or in a log.			
Is an **emergency eye wash/drench hose** available within 10 seconds travel time?			
Is the path to the **emergency eye wash/drench hose** and the area around the **eye wash** clear and unobstructed?			
Do the laboratory users routinely flush/test the **emergency eye wash** (at least weekly)? Documentation should be on tags or a log sheet (see EHS Lab Safety page).			
Comments:			

Chemical Fume Hoods	Yes	No	N/A
Is the equipment inside the fume hood elevated or positioned such that it is not blocking the baffles or air flow?			
Is the fume hood clear from long term chemical storage?			
Is the fume hood free from any garbage or debris (e.g. paper towels, KimWipes, etc.) that might plug up or otherwise interfere with the fume hood ventilation?			
Is there adequate working space in front of and around the fume hood?			
Is the sash operational?			
Is the maximum sash height marked and/or is there a sash stop?			
Is the sash closed when not in use?			

Has the fume hood been checked within the last year for flow and containment? (check the date on the sticker where the maximum sash height is marked)			
Comments:			

Biosafety Cabinets	**Yes**	**No**	**N/A**
Is a biosafety cabinet present?			
Has the cabinet been inspected and certified within the last year? (check for a sticker on the front near the sash)			
Comments:			

Fire Extinguishers	**Yes**	**No**	**N/A**
Are fire extinguishers available within the laboratory?			
Is the fire extinguisher located near the exit?			
Is access to the fire extinguisher clear and unobstructed?			
Are the fire extinguisher type and size appropriate for the laboratory? (Please contact Environmental Health and Safety if in doubt)			
Do the laboratory users have training in using the fire extinguishers?			
Are the fire extinguishers appropriately located?			
Are the fire extinguishers checked monthly? (check the tag)			
List the fire extinguisher type and size:			
Comments:			

Electrical Safety	**Yes**	**No**	**N/A**
Are equipment cords in good condition?			
If extension cords are in use, are they being used on a **temporary** basis only?			
If extension cords/power strips are being used, are they appropriate for the attached equipment?			
Are electrical outlets/power strips used within their capacity (i.e., not overloaded)?			

Is electrical equipment located away from sources of chemical vapors or gases?			
Is there any evidence of "homemade" wiring?			
Are all outlets within six feet of water usage GFCI-protected?			
Comments:			

Chemical Safety and Storage	**Yes**	**No**	**N/A**
Are chemicals stored in acceptable amounts?			
Are chemicals that are not in use stored in approved cabinets that are self-closing and in good condition?			
Are liquid chemicals stored below eye level?			
Are there retaining lips on the shelves used for storing chemicals?			
Are flammable liquids stored in approved cabinets/containers?			
Are there any indications that grounding/bonding is necessary for the transfer of flammable liquids? If so, is grounding/bonding being used?			
Are flammable liquids stored in a flammable rated refrigerator?			
Are acids and bases being stored properly (separated and in secondary containment)?			
Are reactive/oxidizers segregated from other chemicals?			
Comments:			

Peroxide-forming chemicals	**Yes**	**No**	**N/A**
Are the following peroxide-forming chemicals stored or used in the laboratory?			
Cyclohexene			
Cyclooctene			
Decahydronaphthalene			
p-Dioxane			
Ethyl ether			
Isopropyl ether			

Tetrahydrofuran			
Tetrahydronaphthalene			
If there are any peroxide forming chemicals stored or used in the laboratory, are they tested monthly for peroxide concentration?			
Are containers dated when purchased/received?			
Are the storage containers free of crystals, either inside or out?			
Is **perchloric acid** stored or used in the laboratory?			
If so, is it used in an appropriate fume hood?			
Comments:			

Compressed Gases	**Yes**	**No**	**N/A**
Are compressed gas cylinders stored upright and properly secured?			
Are compressed gas cylinders capped when not in use?			
Are highly toxic gases stored in approved cabinets or within fume hoods (if the cylinder is small enough)?			
Does the tubing from the cylinder appear to be adequate, of the proper material, and in good condition?			
Have cylinder connections been leak tested?			
Are the contents of the cylinders clearly labeled?			
Are oxygen cylinders stored separately from other flammable gas cylinders (min 20ft away)?			
Are the cylinders located away from exit doors?			
Comments:			

Cryogenic Liquids	**Yes**	**No**	**N/A**
Is appropriate personal protective equipment available and used during the transfer of material?			
Is the space where the material is stored appropriately ventilated?			

Are the containers being used appropriate for storage?			
Comments:			

Hazardous Waste	Yes	No	N/A
Are waste containers labeled with Waste Accumulation Labels?			
Are waste containers properly closed?			
Are there less than 55 gallons of hazardous waste stored (<1L of acutely hazardous waste)?			
Are the basic hazardous waste management guidelines posted in the laboratory?			
Is waste stored in a Satellite Accumulation Area (SAA)?			
Comments:			

Pressure/Vacuum Operations	Yes	No	N/A
Are the pressure vessels marked with DOT or ASME markings?			
Are the inlets and outlets on the vacuum pump clearly marked?			
Is the vacuum equipment protected by tape or shielding?			
Is the vacuum pump exhausted to a fume hood or other exhaust ventilation?			
Is there a cold trap on the vacuum pump?			
Is there a belt guard on the vacuum pump?			
Is the tubing in good condition and connected properly?			
Is an autoclave present? Date of last inspection: _____			
Comments:			

Spill Response	Yes	No	N/A
Are response/cleanup materials available for small spills?			
Are spill response guidelines or instructions posted?			

Comments:

Labeling	Yes	No	N/A
Are all containers labeled to identify the contents?			
Are all containers dated when they are purchased/received?			
Comments:			

Safety Data Sheets (SDS)	Yes	No	N/A
Are SDSs available for the chemicals used in the laboratory?			
Are the SDSs current?			
Are the SDSs located in a centralized location in the laboratory?			
Comments:			

Laboratory Safety Plan	Yes	No	N/A
Is a copy of the University of Idaho Chemical Hygiene Plan available to laboratory users?			
If so, do laboratory users know how to access it?			
Does the laboratory have a Laboratory Safety Plan?			
If so, do laboratory users know how to access it?			
Comments:			

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Operational Procedures: **Observe and discuss the following procedures with the laboratory users:**	**Check when complete**
General description of how they conduct research in the laboratory	
What type of personal protective equipment (PPE) do they use?	
How do the laboratory users select the personal protective equipment that they use?	
What safety equipment do they use?	
What is their knowledge of the location and use of emergency equipment (fire extinguishers, safety showers, eye washes, building alarm pull stations, telephones, emergency phone numbers, etc.)?	
How do they use a chemical fume hood?	
What is their knowledge of chemical hazards and the use of SDSs?	
How and where do they store their chemicals?	
How do they transport chemicals within the laboratory?	
How do they transport chemicals outside of the laboratory?	
Is secondary containment used wherever chemicals can be released?	
How do they dispose of chemicals, biohazardous waste, and sharps?	
What types of compressed gases do they use and what is their knowledge of compressed gas safety?	
Do they run experiments that are left unattended and, if so, how do they monitor and control them?	
Do they have written procedures for the operation of hazardous equipment or hazardous procedures (SOPs)?	
What is their knowledge of how to respond to a small spill in the laboratory?	
Is there a walk-in cooler/freezer present? See EHS Walk-in Cooler/Freezer Checklist for more details.	
Comments:	