

### Science Laboratory Inspection Form 1

This form is to be used for the health and safety inspection for science laboratory teaching spaces and chemical storage areas located within university campuses or leased properties  
 These include laboratory chemical preparation rooms and undergraduate and postgraduate laboratories used for microbiology, physics, biology, chemistry, animal science, plant science, earth and soil science as well as laboratories used for marine sciences and Institute of Applied Sciences

	Fill in Details
<b>Name and Location of Laboratory</b>	
<b>Campus</b>	
<b>Faculty or School</b>	
<b>Date of Inspection</b>	
<b>Inspection Coordinator</b>	
<b>Science Laboratory Technician</b>	
<b>Building OHS Representative</b>	
<b>Building Property Facility Representative</b>	
<b>Building Fire Warden</b>	

General Health and Safety Conditions
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A	<b>ACCESS / ENTRY / CONVENIENCES &amp; SIGNS</b>	Yes	No	Comments
01	Are adjacent corridors free from lab storage and furniture?			
02	Is the outer door to the laboratory closed at all times but can be opened from within the laboratory?			
03	Is <u>Mandatory</u> Personal Protective Equipment Signs placed and visible at entrance doors to laboratory? <i>Verify that the pictogram reflects the hazards actually in the laboratory.</i> <ul style="list-style-type: none"> <li>• Wear Safety Shoes</li> <li>• Use Eye Protection</li> <li>• Wear Lab Coats</li> <li>• Wear Hand Gloves</li> </ul>			
04	Is an updated Lab Room Number posted at the entrance doorway?			
05	Is emergency evacuation plan & procedures placed beside Exit Door and clearly visible?			
06	Is Exit Lights / Sticks clearly visible to occupants on Exit doors			
07	Is the Following <u>Prohibition</u> Signs clearly visible at entrance doors <ul style="list-style-type: none"> <li>• Authorised Entry Only</li> <li>• No Eating or Drinking in the lab</li> <li>• Switch off Mobile Phones</li> </ul>			
09	Is there facilities outside the laboratory for students to keep their personal items prior to entering the laboratory			
10	Is direction signs to toilets visible to see alongside corridor			
11	Is disability access available into the laboratory			
<b>B</b>	<b>HOUSEKEEPING</b>			
12	Who is the housekeeper for this laboratory			
13	Are lab benches free of clutter? Is there clutter behind refrigerators and electrical equipment?			
14	Is housekeeping equipment stored away from lab work area			
15	Is waste collection containers accessible within the laboratory area			
<b>B16</b>	<b>LABORATORY FLOOR &amp; FURNITURE</b>			
16	Is the floor surface safe & clear of spill and trip hazards (i.e. cords)?			
17	Does the lab have three feet of unobstructed aisle space?			
18	Is laboratory table surfaces safe and maintained			
19	Is laboratory Chairs and stools safe and maintained			
20	Is laboratory wash hand basins and sinks maintained and taps working with no leaking of plumbing fittings and drainage			
21	Are Chemical Container Storage Cabinets and platforms protected against falls and capable of supporting weight of these items?			
<b>22</b>	<b>FIRE PROTECTION</b>			
23	Are fire extinguishers present close to Exit doors and accessible to everyone in the lab			
24	Have they all been tested within the last 6 months If not, has the fire extinguisher been reported to P&F?			

25	Does lab have fire sprinkler System, If Yes do all sprinklers have 18" clearance?			
<b>State Location of Chemical Laboratory</b>				
<b>CHEMICAL HANDLING SAFETY</b>		Yes	No	Comments
26	If the researcher is dispensing a flammable liquid from a metal container, is the container grounded? If the researcher is filling a metal container with a flammable liquid, is the container grounded?			
27	Are chemical containers closed when researchers are not actively pouring? Are caps free of cracks?			
28	Do you have high pressure operations such as rotovaps? If so, are glass vessels in high pressure operations taped or constructed of shatter proof glass and/ or do you have a blast shield?			
29	Is an appropriate secondary container available to move chemicals outside the laboratory? Note: Wire carts may not be used. Spill trays should be used in addition to the cart.			
<b>EMERGENCY CHEMICAL SPILL KITS</b>				
30	Chemical Spill Management Protocol is present Chemical Spill Management Protocol accessible for all to read			
31	Chemical Spill Management Kit is accessible for use			
<b>EMERGENCY CHEMICAL DECONTAMINATION</b>				
32	Safety Shower is Present & Functional – check service tag			
33	Is the safety shower present in the laboratory and within 10 seconds travel time or 100 feet of areas from where hazardous chemicals are used?			
34	Safety Eye Wash Present & Functional – check service tag			
35	Is the Safety Eyewash within 10seconds travel time or 100 feet of the area where hazardous chemicals are used?			
36	Is eyewashes flushed weekly by the lab technician and are these tests logged? Inspector-turn the eyewash on and ensure temperate water flows freely.			
<b>FIRST AID</b>				
37	First Aid Box is present with appropriate signage			
38	First Aid Box appropriate stocked with materials			
39	Registered First Aider Details visible to lab occupants			
<b>CHEMICAL STORAGE SAFETY</b>				
40	Are Chemical hazard labels posted on shelves, cabinets, and appliances containing hazardous chemicals?			
41	Are hazardous liquids stored in glass bottles below eye level?			
42	Are flammable liquids in excess of 10 gallons stored in a <b>flammable</b> safety cabinet?			
43	Are oxidizers and flammable chemicals stored in different cabinets with doors?			
44	Are corrosives stored in a separate cabinet than flammables?			
45	Are <b>corrosives</b> in excess of 10 gallons stored in a corrosive safety cabinet?			

46	Are acids and bases stored in separate cabinets or in separate spill trays in a ventilated acid/base cabinet?			
47	Is there bunding or spill trays for the storage of hazardous liquids			
48	Does the laboratory have nitric acid? Is the nitric acid stored away			
49	Are oxidizers, toxics, dangerous when wet and pyrophoric chemicals stored separately from other chemicals? Is each hazard class on a separate shelf or container?			
50	Refrigerators used to store flammable materials are Flame proofed and appropriately labelled : Danger Flammable Liquids Storage " Note: A statement of certification should be listed on a brass or steel plate			
51	Are empty chemical bottles defaced with their caps removed?			
52	Are Class A peroxides dated and less than three months old? Are they stored away from sunlight and heat ?			
53	Are Class B peroxides dated? Do you only have quantities of peroxides which can be consumed within 6 months?			
54	Signage is in place for the transport of dangerous Goods in elevators			
	<b>CHEMICAL FUME CUPBOARDS</b>			
55	Are all fume hoods unobstructed (i.e. no equipment and bottles in the path of the exhaust)? <i>The six inches in the front and back of the fume hood should be clear.</i>			
56	Is all fume hood work performed deeper than 6" in the fume hood? Work should be done in the centre of the hood			
57	Does fume hood appear to work properly? If an alarm exists, is the alarm functional?			
58	Has the fume cupboard been re-certified within the last year? <i>Check for Certification label.</i>			
	<b>COMPRESSED GAS CYLINDER SAFETY</b>			
59	Is the regulator is appropriate for the gas being used (e.g. stainless steel for corrosive gases, brass for non corrosive gases)			
60	Do you perform the "soap test" to detect leaks to check the regulators?			
61	Is Cylinders secured appropriately by bracket or Chain. Is cylinders at least 3m away from ignition sources			
62	Look at the regulator on each gas cylinder. Is the regulator tight and not mangled? Does the regulator seem meant for the cylinder (i.e. not jammed on)? Are the gauges free of cracks?			
64	Are the gas lines for the regulator have PSI compatibility for the gas contained?			
65	Are compressed gas cylinders secured (including lecture bottles)? Are there no more than 2 cylinders per fastener?			
66	Does the toxic gas storage unit have a leak detection system (look for alarm system)			
67	Are all toxic and corrosive gases stored in a gas safety cabinet vented to the fume hood exhaust duct?			

68	Do Bunsen burners have the proper flame retardant tubing? Note-flame retardant tubing is often orange or black with an argyle pattern)		
69	Are hydrogen and oxygen cylinders separated by 20 feet or a 5 foot fire wall?		
70	All toxic and corrosive gases stored in a gas safety cabinet vented to the fume hood exhaust duct?		
	<b>COLD STORAGE</b>		
71	Is all electrical wiring properly insulated against moisture?		
72	Are all flammable liquids not in use removed from the cold room?		
73	Is there no food or drink for human consumption in the cold room?		
74	Are GFIC outlets installed in the cold room? (GFIC outlets usually have red and black restart buttons)		
75	Is there a thermostat, thermometer, or other device to measure the temperature in the cold room?		
	<b>CLOSETS</b>		
76	Is a heat detector present in all closets?		
77	Is a Lab ID Card posted and current on the closet door?		
	<b>BIOSAFETY : AUTOCLAVE HANDLING</b>		
78	Is autoclave indicator tape placed in bag centre before autoclaving?		
79	Are autoclave shutdown procedures readily available and posted near the autoclave		
80	Is autoclave checked monthly with a KILZ spore test?		
81	Are appropriate bio-decontamination materials available?		
82	Are absorbent pads changed daily or when soiled and disposed of as bio hazardous waste?		
83	Have biosafety cabinets been re-certified within the last year? Check for certification label.		
84	Does a log of ultracentrifuge use exist and state when maintenance is required?		
	<b>BIOSAFETY Biological Agent Handling</b>		
85	There is appropriate PC2 signage at laboratory entrance		
86	Biohazard stickers are posted on storage units for microorganisms		
87	Containers for handling infectious materials are available and in use		
88	Appropriate resources are available to transport microorganisms safely		
89	Separate work and storage areas are provided within the laboratory for administration tasks and associated paperwork/reference material		
90	Protective covers are kept on keyboards which are which are housed on workbenches		
91	Windows are closed and sealed.		
92	Laboratory gowns are stored in manner that prevents cross-contamination.		
93	Biological safety cabinets are provided and are in working		

	order.		
94	Instructions for the safe removal of PPE and hand decontamination are visible.		
95	All cultures or bio hazardous material container are correctly labelled.		
96	Diluted bleach is stored away from heat and is kept in light proof containers with the preparation date displayed		
97	A supply of hospital grade antiseptic for washing Hands are available at laboratory exit.		
	<b>ELECTRICAL SAFETY</b>		
98	Are all power switches, sockets and power cords in good condition (i.e. no wiring exposed and no duct tape)?		
99	Is there a separate shut-off for high voltage/high amperage equipment so the electricity can be readily shut off in an emergency? <i>If Yes state its location in the laboratory</i>		
100	Are power boards only used for computers? Are power boards rated for the equipment they are used for? Make sure refrigerators and freezers are not plugged into power boards.		
101	Is power distribution boards in lab clearly labelled		
	<b>ILLUMINATION</b>		
102	Is all lights functioning in lab		
103	Is illumination level appropriate for the work being done		
104	If Lux level meter available take lux measurement		
	<b>VENTILATION</b>		
105	How is the lab ventilated – natural / Fan / air conditioner		
106	Is the lab well ventilated with good air flow		