General Inspection Summary Report

Enter the PI's name in the space provided	
Enter the building name, and the room numbers that were Iispected	
Enter the name of the person performing the inspection	
Enter the date and time the inspection was performed	
PI's signature (note: if the inspection was not performed by the PI, the signature indicates that the PI approves the inspection report).	
Inspection #: (GI- building name- yy/mm/dd)	LEAVE BLANK – To Be filled in by the safety committee as needed.

Inspection # must be included as these will be referred to in the JOHSC meeting minutes for any actionable items. These numbers help provide a quick reference to date and building.

Procedure

1) Please leave this document in Word format.
2) Fill in the information in the section above
3) Fill in '**Table 1 Laboratory Inspection**' as you inspect the lab space, answering the questions as Y/N/NA (putting an X in place of the box is fine).
4) If a hazard is identified, you can try to fill in '**Description of Hazard**' boxes with the item number (column 1 from Table 1), a description of the hazard and the location. If you have questions or are unsure how to describe or categorize the hazard, contact Patrick Tamkee (tamkee@zoology.ubc.ca).
    a. The safety committee will review inspection reports and comment on 'Recommended Actions' as needed.
    b. If there is a serious hazard (e.g. incompatible chemicals stored together), it should be dealt with immediately. If there are urgent questions about how to deal with a specific hazard, please contact SRS (https://srs.ubc.ca/contact-us/). For less urgent concerns contact Patrick Tamkee (tamkee@zoology.ubc.ca).
    c. Priority level for hazards can be assigned based on Table 3. If there are any hazards listed as A (High) or B (Moderate), please flag as "Urgent" when submitting to Isabel so they can be prioritized
5) The PI signs the document electronically (above) and submits to Patrick Tamkee (tamkee@zoology.ubc.ca).

Table 1. – Laboratory Inspection

Note: Laboratory personnel must be notified in advance that an inspection will be performed in their area. A laboratory staff member who is familiar and knowledgeable with the hazards of the research space must be involved in the inspection. Alternatively, this inspection may be performed internally but must be completed and submitted to the LST or JOHSC within one week of notification.

Building, labs inspected:	
Inspector(s):	Date:

Item #	General Laboratory Hazards	Y	N	N/A
M-1	Is appropriate Personal Protective Equipment (PPE), such as lab coats, gloves and protective eyewear, available to all workers and is it being used?	☐	☐	☐
M-2	Is appropriate laboratory attire being worn (i.e. no shorts, skirts or sandals are present)?	☐	☐	☐
M-3	Is the space free of evidence of food, drink, or chewing gum present in the lab, including lab garbage cans?	☐	☐	☐
M-4	Are fire extinguishers adequate for materials used, readily accessible, unobstructed, charged, and inspected within the last year? Is signage present (if not clearly visible)?	☐	☐	☐
M-5	Are fire-alarm pull-stations accessible and are emergency exit doors unobstructed and functional?	☐	☐	☐
M-6	Are illuminated emergency exit signs visible and functional?	☐	☐	☐
M-7	Are emergency eyewashes accessible, unobstructed, functioning properly, and tested at least monthly?	☐	☐	☐
M-8	Are emergency showers accessible, unobstructed and tested at least yearly by operations / facilities personnel?	☐	☐	☐
M-9	Are spill kits accessible, stocked and in working order? Are spill response and clean-up procedures and proper signage present?	☐	☐	☐
M-10	Are aisles, fire exits, sprinklers, stairwells and electrical panels kept clear of materials, equipment, and spills?	☐	☐	☐
M-11	Are occupants aware of how to access first aid when needed?	☐	☐	☐
M-12	Are laboratory emergency contacts clearly posted?	☐	☐	☐
M-13	Are “No Eating/Drinking/Smoking” signs posted?	☐	☐	☐
M-14	Does door signage indicate the hazardous materials present in the lab?	☐	☐	☐
M-15	Are electrical cords in good repair (no exposed wiring) and adequately restrained? No electrical hazards present?	☐	☐	☐
M-16	Have seismic issues been considered i.e. shelving secured, restraints, heavy items stored low?	☐	☐	☐
M-17	Do lab supplies (glassware, tubing, etc.) appear to be in good condition?	☐	☐	☐
M-18	Are lab areas, benchtops, sinks, fumehoods, etc. clean and tidy?	☐	☐	☐

M-19	Do new staff receive workplace and task-specific orientations and are records kept?	☐	☐	☐
M-20	Are supervisors and workers aware of the requirement to have written procedures to ensure the safety of people working alone or in isolation?	☐	☐	☐
Item #	**Physical Hazards**	**Y**	**N**	**N/A**
M-21	Is heating and ventilation adequate? (consider too hot, too cold)	☐	☐	☐
M-22	Is air quality adequate? (consider unfamiliar smells, odours)	☐	☐	☐
M-23	Are lighting levels in the work area adequate? (consider too bright/dim, lights not working)	☐	☐	☐
Item #	**Ergonomic Hazards**	**Y**	**N**	**N/A**
M-24	Are materials stored to prevent overreaching? Boxes on the floor are no more than 3 high? Is a step ladder available for out of reach items?	☐	☐	☐
M-25	Are workstations and seating at proper height?	☐	☐	☐
M-26	Do work areas allow for natural reaching without having to over-extend?	☐	☐	☐
M-27	Is assistive equipment and/or mechanical aid available and used for heavy/awkward items?	☐	☐	☐
M-28	Are there resources, known and available, to help workers address and prevent ergonomic issues such as overexertion, Musculoskeletal Injury (MSIs) etc?	☐	☐	☐
Item #	**Chemical Safety**	**Y**	**N**	**N/A**
M-29	Is the Chemical Safety manual readily available and easily accessible?	☐	☐	☐
M-30	Is there less than 25 L of flammables in the open lab and in containers no larger than 5 L?	☐	☐	☐
M-31	Are fumehoods tidy, functional, and annually certified? Fumehood sashes are at/ below arrow?	☐	☐	☐
M-32	Are gas cylinders properly secured, located away from doors & heat / ignition sources?	☐	☐	☐
M-33	Are there proper supplier and / or workplace labels on all containers (compliant with WHMIS 2015)?	☐	☐	☐
M-34	Are all chemicals stored in proper containers/cabinets (not stored on floor)?	☐	☐	☐
M-35	Are Safety Data Sheets (SDS) readily available, easily accessible and regularly updated (less than 3 years old)?	☐	☐	☐
M-36	Is the Chemical inventory available and dated within the past 12 months?	☐	☐	☐
Item #	**Biological Safety**	**Y**	**N**	**N/A**
M-37	Is the Biological Safety Reference manual readily available and easily accessible?	☐	☐	☐
M-38	Are biosafety cabinets kept tidy, functional, and annually certified?	☐	☐	☐
M-39	Are Biosafety Permits posted in the space?	☐	☐	☐
M-40	Do the biohazardous waste containers have lids and are they labelled?	☐	☐	☐
Item #	**Radiation Safety**	**Y**	**N**	**N/A**

M-41	Is the Radiation Safety Reference Manual readily available and easily accessible?	☐	☐	☐
M-42	Are authorized personnel listed along with their UBC training certificates and lab specific training records in the records binder?	☐	☐	☐
M-43	Are Radioisotope Permits posted in the space? (Each Radioisotope Permit must be accompanied by a CNSC rules poster)	☐	☐	☐
Item #	**Laser Safety**	**Y**	**N**	**N/A**
M-44	Is laser hazard warning signage posted?	☐	☐	☐
M-45	Is the beam enclosed or have other provisions to prevent accidental exposure been implemented?	☐	☐	☐
Item #	**Other**	**Y**	**N**	**N/A**
M-46	Other issues:	☐	☐	☐
Item #	**Peroxide Forming Chemicals**	**Y**	**N**	**N/A**
M-47	Are peroxide forming chemicals present in the lab?[a] If so, on the next page, check any that are present in inventory or in solvents cabinets. DO NOT OPEN OR MOVE OLD CONTAINERS CONTAINING CLASS A or C PEROXIDABLE CHEMICALS. THEY CAN EXPLODE IF HANDLED. CONTACT SRS CHEMICAL SAFETY (https://srs.ubc.ca/contact-us/staff-directory/)	☐	☐	☐
M-48	Are peroxide forming chemicals labelled with date opened and checked for peroxide formation every three months?	☐	☐	☐
Item #	**Old Chemicals Bottes**	**Y**	**N**	**N/A**
M-49	Are there old chemical bottles of solid chemicals where the labels are deteriorating or appear to be in poor condition?	☐	☐	☐
M-50	Are there old solvent bottles? If yes, do not touch contact PI about handling and potential disposal.	☐	☐	☐
Item #	**Perchloric Acid**	**Y**	**N**	**N/A**
M-51	Is perchloric acid present in lab?	☐	☐	☐
M-52	Is the perchloric acid being used in procedures where it is being warmed and is this being done in the fume hood (other than specialized fume hoods for perchloric acid)? If yes, this must be addressed immediately.	☐	☐	☐
Item #	**Nitric and Oxidizing Acids**	**Y**	**N**	**N/A**
M-53	Are nitric or other strong oxidizing acids (e.g. perchloric acid, iodic acid, chromic acid) present in lab?	☐	☐	☐
M-54	Are oxidizing acids stored with incompatible organics (acetic acid, formic acid or organic solvents)? If yes, incompatible chemicals must be segregated immediately.	☐	☐	☐

Item #	Picric Acid	Y	N	N/A
M-55	Is picric acid present in lab either in stocks or as a component of other solutions? DO NOT OPEN OR MOVE OLD CONTAINERS CONTAINING PICRIC ACID. THEY CAN EXPLODE IF HANDLED OR OPENED. CONTACT SRS CHEMICAL SAFETY (https://srs.ubc.ca/contact-us/staff-directory/)	☐	☐	☐
M-56	Picric acid in solutions (e.g. Bouins)?	☐	☐	☐
M-57	Picric acid stock solutions?	☐	☐	☐
Item #	**Lecture Bottles**	**Y**	**N**	**N/A**
M-58	Are lecture bottles (small compressed gas cylinders) present in the lab?	☐	☐	☐
M-59	Are the labels intact?	☐	☐	☐
M-60	Do the valves and regulators appear to be in good condition (no evidence of corrosion)?	☐	☐	☐
Item #	**Other Issues**	**Y**	**N**	**N/A**

[a] Peroxide Forming Chemicals[1]

Class A – Severe Peroxide Hazard Spontaneously decompose and become explosive with exposure to air without concentration.

Butadiene (liquid monomer)	Isopropyl ether	Sodium amide (sodamide)
Chloroprene (liquid monomer)	Potassium amide	Tetrafluoroethylene (liquid monomer)
Divinyl acetylene	Potassium metal	Vinylidene chloride

[1] From UBC Chemical Safety Manual

Class B – Concentration Hazard Require external energy for spontaneous decomposition. Form explosive peroxides when distilled, evaporated or otherwise concentrated. Old containers still pose a risk.

Acetal	Diethylene glycol dimethyl ether (diglyme)	4-Methyl-2-pentanol
Acetaldehyde	Diethyl ether	2-Pentanol (isopropyl alcohol)
Benzyl alcohol	Dioxanes	4-Penten-1-ol
2-Butanol	Ethylene glycol dimethyl ether (glyme)	1-Phenylethanol
Cumene	Furan	2-Phenylethanol
Cyclohexanol	Heptanol	2-Propanol
Cyclohexene	2-Hexanol	Tetrahydrofuran
2-Cyclohexen-1-ol	Methylacetylene	Tetrahydronaphthalene
Decahydronaphthalene	3-Methyl-1-butanol	Vinyl ethers
Diacetylene	Methylcyclopentane	Other secondary alcohols
Dicyclopentadiene	Methyl isobutyl ketone	

Class C – Shock and Heat Sensitive Highly reactive and can auto-polymerize as a result of internal peroxide accumulation. The peroxides formed in these reactions are extremely shock and heat sensitive.

Acrylic acid	Chlorotrifluoroethylene	Vinyl acetate
Acrylonitrile	Methyl methacrylate	Vinylacetylene (gas)
Butadiene (gas)	Styrene Vinylpyridine	Vinyladiene chloride
Chloroprene	Tetrafluoroethylene (gas)	Vinyl chloride (gas)

Item # (From the table Above)	Description of Hazard: *(specific location and/or equipment, nature of hazard- see Table 1)*
Recommended Action: *(detailed action, taking account of hierarchy of controls, two or more options where appropriate)* ***Do not fill in – Will be reviewed by the safety committee***	

Person Responsible:	Priority Level:	Target Date:

Item #	Description of Hazard: *(specific location and/or equipment, nature of hazard - see Table 1)*
Recommended Action: *(detailed action, taking account of hierarchy of controls, two or more options where appropriate)* **<u>Do not fill in – Will be reviewed by the safety committee</u>**	

Person Responsible:	Priority Level:	Target Date:

Item #	Description of Hazard: *(specific location and/or equipment, nature of hazard - see Table 1)*
Recommended Action: *(detailed action, taking account of hierarchy of controls, two or more options where appropriate)* **Do not fill in – Will be reviewed by the safety committee**	

Person Responsible:	Priority Level:	Target Date:

Item #	Description of Hazard: *(specific location and/or equipment, nature of hazard - see Table 1)*
Recommended Action: *(detailed action, taking account of hierarchy of controls, two or more options where appropriate)* **<u>Do not fill in – Will be reviewed by the safety committee</u>**	

Person Responsible:	Priority Level:	Target Date:

Table 1. Hazard Rating Descriptions/ Priority Table:

Priority Level	Timeline for Completion of Corrective Action	Timeline for Follow Up Inspection
A (High Risk)	**Immediately:** A moderate to high potential for serious injury or loss of life and/or extensive property damage or loss (structure, equipment or material).	**Within 1-2 days**
B (Moderate Risk)	**As soon as possible:** A moderate to high potential risk of causing a minor injury, illness or property damage or loss. (structure, equipment or material)	**Within 1 week**
C (Low Risk)	**As soon as possible:** A potential exists for causing a non-disabling injury or non-disruptive property damage.	**Next regular inspection or further investigation required**