Appendix D: Sample Annual Inspection Checklist

The following checklist is intended to assist school and division staff in ensuring a safe environment in the science areas of the school. The laboratory safety checklist is to be completed by each science teacher annually as part of an overall safety program. It is not exhaustive and only intended to address the needs of science laboratories.

Area	Yes (date)	No	N/A
Layout and Space			
Aisle width is adequate to accommodate equipment and students with physical disabilities (1.2 to 1.5 metres).			
Workspace per student is adequate (1.5 to 2.0 metres width of workspace per student, depending on the activity).			
The teacher can see students in all locations of the room.			
The general light level is sufficient.			
Communication System			
A telephone or intercom is available in case of emergencies.			
Current emergency phone numbers are posted.			
Documentation			
Science safety rules and procedures are posted.			
Emergency procedures are posted.			
Chemical inventory is available and up-to-date.			
MSDSs are up-to-date and available for all controlled products.			
WHMIS and other training records are available.			
Safety Equipment			
Fire Extinguisher			
ABC fire extinguisher is present.			
Fire extinguisher is checked quarterly.			
The safety seal is intact.			
Fire extinguisher is in an easily visible location and unobstructed from view.			
Fire extinguisher is located near escape route of lab.			
Location of a second fire extinguisher is known.			
Teacher is trained in use of fire extinguisher within the last year.			
Alternate plan has been developed if extinguisher malfunctions.			

Area	Yes (date)	No	N/A
Smoke/Fire Detectors			
Smoke/fire detector is installed in each laboratory.			
Smoke/fire detector is installed in each storeroom and/or prep room.			
Where possible, there are two exits from science laboratory to the school corridor.			
Two fire exits are present in each storeroom/prep room.			
Doorway widths are sufficient to accommodate students with physical disabilities, allow movement of equipment carts, and serve as emergency exits.			
Fire exits are unobstructed and unlocked.			
Fire drill procedures are posted and practised.			
General alarm system for entire building is present and functioning.			
Emergency Shower			
An emergency shower is available and accessible.			
Emergency shower is regularly tested and maintained.			
Eyewash			
An emergency eyewash station is available and accessible.			
Eyewash can treat both eyes simultaneously with tempered water.			
Eyewash is regularly tested and maintained.			
Master Utility Controls			
Gas master shut-off valve is accessible and secure.			
Gas is cut off with master control when not in use.			
Water shut-off valve is accessible and secure.			
Electricity shut-off is accessible and secure.			
Protective Clothing			
Laboratory coats or aprons are available.			
Acid-proof apron for staff is available.			
Non-latex disposable gloves are available.			
Heat-resistant and chemical-resistant gloves are available for students.			
Acid-proof gloves are available for staff.			
Safety goggles are available.			
UV goggle sterilizing cabinet is available.			
Face shield for staff is available.			
First Aid Kit			
First aid kit is available in each laboratory and prep room.			
First aid kit is fully stocked.			
First aid kit is easily visible.			

Area	Yes (date)	No	N/A
Storage and Preparation Facilities			
Chemical storage area is adequate in size, well ventilated, secured from student access, and built with material that has a low flame-spread rating. See Chapter 9 for more specific guidelines.			
Quantity of chemicals stored is not excessive.			
Chemicals are labelled properly with the following information included on secure, waterproof labels: ❑ Date of acquisition ❑ Hazard alert ❑ Name of supplier ❑ Chemical's strength or purity			
Chemicals are stored properly (see Chapter 9).			
Shelves are equipped with raised lip edge or doors to prevent bottle roll-off.			
Chemicals are stored off the floor.			
Acids are stored separately in non-metal cabinets.			
Flammables are stored in dedicated and approved cabinets.			
Adequate area is available for the long-term storage of laboratory equipment, supplies, and safety equipment.			
Tall items are stored at back of shelf and heavy glassware is stored on lower shelves.			
Preparation area, including counter space, sink, and fume hood for making solutions and other materials for class use, is available. It allows for storage of MSDS and WHMIS information.			
Area is available for temporary storage of materials for later use, left-over materials from laboratory activities, and chemical waste storage for year-end disposal.			
Adequate refrigeration is available for storing fresh tissue/organs, enzymes, specific biological chemicals, agar plates, ice, and perishables.			
Housekeeping			
Work surfaces and sinks are clean and tidy.			
Aisles are unobstructed.			
Supplies and equipment (cleaned) are returned to proper storage area.			
No food or drink is present in the laboratory.			
Separate disposal bin is available for broken glass.			
Ventilation			
Air in the room is recycled and mixed with outside air at a rate of 4 to 12 complete laboratory air changes per hour, depending on the chemicals used, or a minimum of 15 L per second per occupant.			
The exhaust ventilation system is separate from that of the chemical fume hood.			

Area	Yes (date)	No	N/A
The hood(s) of the exhaust ventilation system is/are located away from doorways, windows, high traffic areas, or areas with disrupted airflow.			
Exhaust (on roof) is ventilated away from air intake.			
Electrical and Plumbing			
There are sufficient electrical outlets (i.e., located at intervals of 2 to 2.5 metres) to make extension cords unnecessary, and all power outlets meet *Manitoba Building Code* standards. Where hot plates will typically be in use, it is recommended that each 15-amp circuit be restricted to two double plug-in outlets to prevent overload and tripping of breakers during times of maximum usage.			
Outlets within 1.5 metres of water are equipped with ground-fault interrupters (GFIs).			
Fume hood controls are located outside the fume hood in an immediately accessible area.			
Laboratory drains are made of chemical-resistant material.			
Construction Materials			
Ceilings are constructed out of a material with a low flame-spread rating (e.g., drywall).			
Floors should be even and have a non-skid surface (sheet flooring is preferable to tiles or carpets; tile floors should be covered with a non-skid wax).			
Laboratory counter surfaces are made of material resistant to acids, alkalis, solvents, and heat.			