LABORATORY INSPECTION CHECKLIST

Inspection Team Members: _____

Laboratory Room No: _____ **Laboratory Supervisor:** _____ **Inspection Date:** _____

Instructions:

- Boxes to be marked ticked (□) as items are sighted or with a cross (x) if not present. Otherwise NA indicates the item is not applicable to this laboratory. ***Any question marked with a cross requires a corrective action.***

Part 1 – Basic Requirements for Laboratory Safety

Criteria	YES	NO	NA	Corrective Action
All personnel entering the laboratory participated in safety training	☐	☐	☐	
New laboratory personnel passed the safety examination before working in the laboratory	☐	☐	☐	
The safety information board is posted at the door of the experimental site and should be updated in a timely manner. It includes: • Laboratory classification results, warning signs of safety risk points, safety responsibility persons, danger categories involved, protective measures and emergency contact numbers	☐	☐	☐	
There is an observation window on the laboratory door and the outside door does not block the escape path	☐	☐	☐	
The toxic and harmful experiment area is clearly separated from the office/learning area	☐	☐	☐	
The laboratory should have the following "no occlusions" • The laboratory window is not occluded • The distribution box is not occluded	☐	☐	☐	
The laboratory should be equipped with necessary safety protective articles and appliances as needed, there should be: • Warning signs for dangerous places • Equipment • Facilities • Articles and technical operations	☐	☐	☐	
The laboratory first aid kit is not locked	☐	☐	☐	
• Fire safety access is available • Fire equipment is placed in an obvious and easy to access position and is not damaged	☐	☐	☐	
Eating or smoking is not allowed in the laboratory; Food such as fruits and beverages are not stored in the laboratory refrigerator	☐	☐	☐	

Part 2 – Work Environment

Criteria	YES	NO	NA	Corrective Action
The general area is tidy and free of obstruction and mess	☐	☐	☐	
Walkways/floor areas are clear of obstructions and trip hazards (e.g. electrical cords)	☐	☐	☐	
Floor surfaces/coverings are even, not slippery and are in good condition	☐	☐	☐	
Lighting adequate and operational	☐	☐	☐	
Area is free from odors	☐	☐	☐	
Noise level is acceptable or controlled to an adequate level	☐	☐	☐	
Ventilation is adequate	☐	☐	☐	
Hand basin or alternative means of decontaminating hands is available within the area	☐	☐	☐	

Part 3 – Basic Requirements for Laboratory Fire Safety

Criteria	YES	NO	NA	Corrective Action
The laboratory is equipped with fire extinguishers, sand, fire blankets and other fire protection equipment	☐	☐	☐	
The fire safety access and the fire evacuation plan are available	☐	☐	☐	
The electrical devices have good heat dissipation and are away from heat sources and flammable objects	☐	☐	☐	
The gas cylinder is not placed close to the heat source or open flame and is in good condition	☐	☐	☐	
Flammable gas cylinders are equipped with leakage alarm devices	☐	☐	☐	
Flammable and explosive chemicals are classified and stored according to experimental requirements and are not stored for too long	☐	☐	☐	
Flammable liquid waste is collected in special containers to avoid accidents	☐	☐	☐	

Part 4 – Signage

Criteria	YES	NO	NA	Corrective Action
First aid signage is visible	☐	☐	☐	
An Emergency Evacuation Diagram is located in the near vicinity and is clearly displayed	☐	☐	☐	
Exit signs are in place	☐	☐	☐	
Hazard/safety signage on entrance/s clearly visible and contains information including: • Authorized access only • No food or drink • Type of chemicals • Lab supervisor details	☐	☐	☐	

Part 5 – Emergency Requirements

Criteria	YES	NO	NA	Corrective Action
Exit doors are marked, clearly visible and can be opened	☐	☐	☐	
Exit corridors and stairwells are clear of obstructions	☐	☐	☐	
A first aid kit is located in the near vicinity	☐	☐	☐	
Fire equipment (fire blanket, extinguisher) is accessible and clear of obstruction	☐	☐	☐	
Fire equipment (fire blanket, extinguisher) have been inspected/tagged within 1 month	☐	☐	☐	
Safety shower and emergency eye wash station is functional and easily accessible	☐	☐	☐	

Part 6 – Laboratory Water Safety

Criteria	YES	NO	NA	Corrective Action
Faucets and valves do not drip and do not leak	☐	☐	☐	
The sink and drains are not clogged	☐	☐	☐	

Part 7 – Electrical

Criteria	YES	NO	NA	Corrective Action
Electrical equipment tested, tagged and in date	☐	☐	☐	
All power leads, outlets and switches are in good condition (not broken)	☐	☐	☐	
The power sockets are effectively secured	☐	☐	☐	
No more than one patch board is connected in series to the power supply and the patch board is not placed directly on the floor	☐	☐	☐	
Electrical devices are equipped with leakage protection and should fulfill the requirements for the cable	☐	☐	☐	
High-power devices (including air conditioners, etc.) are connected to special sockets	☐	☐	☐	
Cable connections are isolated with no exposed cables and cables on the ground are properly covered with cover plates or sheaths	☐	☐	☐	
Electrical equipment in special laboratories must use explosion-proof circuits in accordance with the relevant regulations	☐	☐	☐	
Sockets, plugs and connectors meet the national quality requirements	☐	☐	☐	
If electrical devices are not used for a longer time, the power supply should be disconnected	☐	☐	☐	
The distribution box is not covered by objects and is easy to operate	☐	☐	☐	

Part 8 – Chemicals

Criteria	YES	NO	NA	Corrective Action
Chemicals stored in appropriate containers	☐	☐	☐	
The total amount of hazardous chemicals meets the requirements	☐	☐	☐	
Waste reagents are cleaned regularly without accumulation	☐	☐	☐	
Laboratories for hazardous chemicals create a dynamic sds book	☐	☐	☐	
There should be no power sockets or patch boards in the reagent cabinets in which chemicals are stored	☐	☐	☐	
Containers are labelled correctly	☐	☐	☐	
Chemicals are stored according to compatibility	☐	☐	☐	
Refrigerators used to store flammable materials are intrinsically safe	☐	☐	☐	
Segregated waste disposable containers are available and labelled correctly	☐	☐	☐	

Part 9 – Compressed Gases

Criteria	YES	NO	NA	Corrective Action
Compressed gas cylinder contents are appropriately identified	☐	☐	☐	
Gas cylinders are properly secured	☐	☐	☐	
Gas cylinders with flammable gases and combustion gases such as oxygen are not mixed	☐	☐	☐	
Gas cylinders are labeled with the status of use “full, in use, empty”	☐	☐	☐	
Empty gas cylinders are separated from full cylinders	☐	☐	☐	
There are no gas cylinders that exceed the validity period of the inspection and no gas cylinders that exceed their design life	☐	☐	☐	
Oxygen monitoring and alarm devices are required for the use of gases that can cause suffocation in small, enclosed spaces	☐	☐	☐	
Gas lines are labelled and free of leaks, kinks, signs of wear & tear	☐	☐	☐	
Gas use is confined to areas with good local exhaust ventilation	☐	☐	☐	
Cylinders, pipes and valves are protected from mechanical damage	☐	☐	☐	

Part 10 – Biosafety

Criteria	YES	NO	NA	Corrective Action
Experimental activities involving pathogenic biological factors should be conducted in laboratories of the corresponding class	☐	☐	☐	
The laboratory staff is professionally trained and fulfill the entry requirements	☐	☐	☐	
Pathogenic microbial strains (viruses) are stored in a locked refrigerator or cabinet	☐	☐	☐	
Biowaste is separated from other waste and properly protected and decontaminated	☐	☐	☐	
There is appropriate Biosafety signage	☐	☐	☐	
All cultures or biohazardous materials are correctly labelled	☐	☐	☐	
A supply of disinfectant for decontamination purposes is available and is clearly labelled	☐	☐	☐	

Part 11 – Lasers

Criteria	YES	NO	NA	Corrective Action
All warning symbols are fixed, legible and clearly visible on equipment	☐	☐	☐	
Correct warning labels are attached to the equipment according to the class of laser in use	☐	☐	☐	
Guarding on lasers is effective and in good condition	☐	☐	☐	
Protective eyewear is clearly labelled to indicate laser class and wavelength	☐	☐	☐	

Part 12 – Radiation

Criteria	YES	NO	NA	Corrective Action
Access to Designated Radiation Areas is limited only to authorized persons	☐	☐	☐	
Suitable radiation/contamination monitoring equipment is available and in working condition	☐	☐	☐	
X-ray and other radiation producing equipment is kept in a room solely dedicated to it	☐	☐	☐	
Ionizing equipment is contained in appropriate enclosures	☐	☐	☐	
Fail-safe mechanisms are provided to prevent generation of X-rays	☐	☐	☐	
Radiation storage sites are lockable, secured and shielded as required	☐	☐	☐	
The laboratory is secured against unauthorized access	☐	☐	☐	

Part 13 – Special Devices and Conventional Heating and Cooling Devices

Criteria	YES	NO	NA	Corrective Action
Pressure vessels require a certificate for use as special equipment	☐	☐	☐	
Personnel for the handling of pressure vessels are professionally trained and authorized	☐	☐	☐	
Pressure vessels are regularly inspected and scrapped in time if they exceed their lifetime; if they are used beyond their lifetime, they must be inspected and subjected to a safety test	☐	☐	☐	
The items stored in the refrigerator are clearly labeled	☐	☐	☐	
The use of refrigerators, ovens and resistance ovens complies with requirements such as service life and space	☐	☐	☐	
Safe operating procedures and warning signs must be attached to heating equipment such as ovens and resistance ovens	☐	☐	☐	
Safety precautions must be taken when using ovens with an open flame or hair dryers	☐	☐	☐	

Part 14 – Other Comments