Standard Operating Procedure (SOP)

Routine Laboratory Cleaning and Decontamination Procedures

Purpose:

To detail the **routine laboratory cleaning and decontamination procedures** necessary to maintain a safe and hygienic working environment. This SOP covers guidelines for the cleaning of surfaces, equipment, and work areas, appropriate disinfectant use, handling hazardous materials, and waste disposal. The objective is to prevent contamination, ensure safety of laboratory personnel, and comply with health and safety regulations.

Document Number	[Insert Number]	Effective Date	[Insert Date]
Review Date	[Insert Date]	Prepared By	[Name/Title]

1. Scope

This SOP applies to all laboratory personnel performing cleaning and decontamination in laboratory facilities, including benches, equipment, floors, and waste disposal areas.

2. Responsibilities

- Laboratory staff: Perform cleaning and decontamination tasks as outlined.
- Lab supervisor: Provide training, ensure compliance, monitor activities.
- Health & Safety Officer: Review and update SOP as required.

3. Materials & Equipment

- Appropriate disinfectants (e.g. 70% ethanol, 10% bleach, or as specified)
- Cleaning cloths/wipes (disposable or reusable as specified)
- Personal Protective Equipment (PPE): lab coats, gloves, safety goggles
- Waste disposal containers (biohazard, sharps, chemical waste bins)
- Brushes and mops (dedicated to laboratory use)
- · Detergents and cleaning solutions suitable for laboratory use

4. Procedures

4.1 General Cleaning (Daily)

- Wear appropriate PPE before commencing any cleaning process.
- · Clear work surfaces of unnecessary items.
- Wipe down all work surfaces, benches, and frequently touched areas (e.g., door handles, switch plates) with a suitable disinfectant.
- Clean any spills immediately using spill kits as per SOP on spill response.
- Empty waste bins and replace liners daily. Dispose of waste as per section 4.5.

4.2 Equipment Cleaning (After Use/Weekly)

- Turn off and unplug equipment before cleaning.
- Wipe exterior with appropriate disinfectant.
- Clean internal parts following manufacturer's instructions and lab protocols.
- Log completed equipment cleaning in the maintenance log.

4.3 Decontamination of Biological Areas

- Use a disinfectant effective against the relevant organisms (e.g., 10% bleach for biological spills).
- For biological safety cabinets, follow the decontamination protocol specific to the cabinet type.
- Ensure adequate contact time as per disinfectant guidelines (typically 10 minutes unless specified).

4.4 Handling Hazardous Materials

- Follow all relevant SOPs for handling hazardous chemicals and biohazardous materials.
- Decontaminate spills immediately and report per incident procedures.
- Label and segregate hazardous materials and wastes properly.

4.5 Waste Disposal

- Dispose of contaminated materials (gloves, wipes, etc.) in designated biohazard or chemical waste containers.
- Sharp objects must be disposed of in puncture-resistant sharps containers.
- Do not overfill waste bins. Seal and remove when three-quarters full or at end of each day.
- · Arrange for regular collection and disposal by certified contractors.

4.6 Recordkeeping

- · Document completion of cleaning tasks in the provided logs.
- · Report any deficiencies, spills, or incidents to supervisors immediately.

5. Safety Precautions

- Always wear appropriate PPE.
- Work in well-ventilated areas when using chemicals and disinfectants.
- Never mix incompatible chemicals (e.g., bleach and ammonia).
- Follow MSDS guidelines for all cleaning agents and disinfectants.

6. Training

All laboratory personnel must receive training in cleaning and decontamination procedures upon employment and annually thereafter.

7. References

- [Insert Organization] Laboratory Safety Manual
- CDC Guidelines for Disinfection and Sterilization in Healthcare Facilities
- Manufacturer instructions for equipment and cleaning products

8. Review & Revision History

Version	Date	Description of Changes	Approved By
1.0	[Insert Date]	Initial SOP release	[Name/Title]