Standard Operating Procedure (SOP): Handling of Hazardous or Infectious Materials

This SOP provides comprehensive guidelines for the **handling of hazardous or infectious materials**, including proper identification, safe storage, usage protocols, personal protective equipment requirements, spill response procedures, disposal methods, and employee training. The aim is to minimize health risks, prevent contamination, and ensure compliance with regulatory standards for safe management of dangerous substances in the workplace.

1. Purpose

To establish safe and effective procedures for the handling, storage, usage, and disposal of hazardous or infectious materials.

2. Scope

This SOP applies to all personnel involved in the handling, transport, storage, or disposal of hazardous or infectious materials within the facility.

3. Responsibilities

- Supervisors: Ensure all staff are trained and SOP is followed.
- Employees: Follow procedures and use PPE as required.
- Safety Officer: Oversee compliance and incident reporting.

4. Material Identification

- Label all hazardous/infectious materials clearly with appropriate hazard symbols.
- Reference Safety Data Sheets (SDS) for properties and risks.
- Maintain an updated inventory of all materials on-site.

5. Safe Storage

- Store materials in approved, clearly labeled containers.
- Segregate incompatible materials as per SDS instructions.
- Ensure secure, ventilated storage areas with restricted access.

6. Usage Protocols

- Follow manufacturer and SDS guidelines for usage.
- Minimize quantities in use; return unused materials to storage promptly.
- Maintain work areas in a clean and organized condition.

7. Personal Protective Equipment (PPE) Requirements

Material Type	Recommended PPE	
Chemical Hazards	Lab coat, gloves (nitrile/neoprene), chemical splash goggles, face shield (if required)	
Biological/Infectious Materials	Disposable gown, gloves, surgical/N95 mask, eye protection	
Physical Hazards	Protective clothing, gloves, safety shoes, hearing protection (if required)	

8. Spill Response Procedures

- Evacuate area if necessary and alert supervisor.
- Don appropriate PPE before addressing the spill.
- Confine and absorb spill with compatible materials (spill kits).

- Decontaminate area as per SDS recommendations.
- Report incident and document actions taken.

9. Disposal Methods

- Dispose of hazardous/infectious waste through authorized waste management services.
- Use color-coded, labeled disposal containers (e.g., biohazard bags, chemical waste drums).
- Keep disposal records as per regulatory requirements.

10. Employee Training

- All personnel must undergo initial and annual refresher training on SOP requirements.
- Training records must be maintained by the Safety Officer.

11. References

- OSHA Hazard Communication Standard
- CDC Guidelines for Biosafety in Microbiological and Biomedical Laboratories
- Relevant institutional policies and Safety Data Sheets (SDS)

12. Revision History

Date	Version	Summary of Changes	Prepared By
2024-06-12	1.0	Initial version	Safety Officer