

Standard Operating Procedure (SOP): Safe Storage Procedures for Hazardous Materials

This SOP details **safe storage procedures for hazardous materials**, including proper labeling and identification, selection of appropriate storage containers, segregation of incompatible substances, ventilation requirements, temperature and humidity controls, regular inspection and maintenance of storage areas, emergency spill response measures, and compliance with regulatory standards. The goal is to minimize risks associated with hazardous materials by ensuring secure and organized storage, protecting personnel, property, and the environment from potential hazards.

1. Purpose

To establish safe, organized, and compliant storage guidelines for hazardous materials, minimizing risk to personnel, property, and the environment.

2. Scope

This SOP applies to all facilities and personnel involved in the storage of hazardous materials.

3. Responsibilities

- **Supervisors:** Ensure adherence to SOP, provide training, and conduct inspections.
- **Personnel:** Follow procedures and report incidents or unsafe conditions.
- **EHS Staff:** Update procedures as needed and ensure regulatory compliance.

4. Procedures

4.1. Labeling and Identification

- Clearly label all containers with material name, hazard symbols, and date received/opened.
- Use Globally Harmonized System (GHS) labels where applicable.
- Maintain updated inventory of stored hazardous materials.

4.2. Storage Containers

- Use containers specifically designed for the type of hazardous material.
- Check containers for integrity before use; do not use damaged or inappropriate containers.
- Secure lids/tops tightly to prevent leaks or contamination.

4.3. Segregation of Incompatible Substances

- Store incompatible materials in separate areas or cabinets per Material Safety Data Sheets (MSDS/SDS).
- Use physical barriers or distance to separate acids, bases, oxidizers, flammables, and toxics.

4.4. Ventilation Requirements

- Store volatile or odorous materials in well-ventilated areas or approved ventilated cabinets.
- Regularly inspect ventilation systems for proper operation.

4.5. Temperature and Humidity Controls

- Maintain storage conditions as specified by manufacturers and regulations.
- Monitor and record temperature/humidity where required (e.g., for reactive chemicals).

4.6. Inspection and Maintenance

- Conduct routine visual inspections for leaks, corrosion, and container damage.
- Remove expired or obsolete materials following hazardous waste protocols.
- Maintain inspection logs.

4.7. Emergency Spill Response Measures

- Keep spill kits, neutralizers, and PPE accessible near storage areas.
- Train personnel in spill response procedures.
- Report and clean up spills immediately per established protocols.

4.8. Regulatory Compliance

- Follow all local, state, and federal regulations, including OSHA, EPA, and fire codes.
- Maintain current permits and documentation as required.

5. Training

All personnel involved in handling or storing hazardous materials must receive training on this SOP and proper emergency response procedures.

6. Recordkeeping

- Maintain records of training, inspections, inventory, and incident reports for at least three years.

7. References

- OSHA 29 CFR 1910.1200 Hazard Communication Standard
- EPA Resource Conservation and Recovery Act (RCRA)
- NFPA 400: Hazardous Materials Code
- Manufacturer Safety Data Sheets (SDS)

8. Revision History

| Date | Description | Author |
|------------|-----------------|------------------------------------|
| 2024-06-01 | Initial version | Environmental Health & Safety Team |