

SOP: Spill Management and Response Procedures

This SOP details **spill management and response procedures**, covering the identification and assessment of spills, immediate containment and control measures, proper cleanup techniques, disposal of contaminated materials, notification and reporting protocols, use of personal protective equipment (PPE), and post-incident review. The aim is to minimize environmental impact, ensure workplace safety, and comply with regulatory requirements through effective spill response and management strategies.

1. Purpose

To provide standardized procedures for the identification, containment, cleanup, and reporting of spills in order to protect personnel, property, and the environment.

2. Scope

This SOP applies to all employees, contractors, and visitors who may be involved in or respond to chemical, biological, or hazardous material spills on facility premises.

3. Definitions

- **Spill:** The unintended release of hazardous or non-hazardous materials to air, land, or water.
- **PPE:** Personal Protective Equipment, including gloves, goggles, aprons, respirators, etc.
- **Containment:** Measures taken to prevent the spread of a spill.

4. Responsibilities

- **Employees:**
 - Report spills immediately.
 - Participate in spill response training.
- **Supervisors:**
 - Ensure staff are trained and equipped.
 - Lead spill response and reporting.
- **EHS Personnel:**
 - Oversee spill management program.
 - Conduct post-incident reviews.

5. Procedure

1. **Identification and Assessment**
 - Identify the type, quantity, and hazard of the spilled material.
 - Assess associated risks (e.g., toxicity, flammability) and exposure.
 - Initiate emergency shutdown if necessary.
2. **Immediate Containment and Control**
 - Evacuate and restrict access to the affected area.
 - Don appropriate PPE before approaching the spill.
 - Stop source of spill, if safe to do so.
 - Contain spill using absorbent materials, berms, or barriers.
3. **Cleanup Techniques**
 - Use spill kits or suitable absorbents to clean up the material safely.

- Clean surfaces with appropriate agents and decontaminate tools and equipment.
- Ensure no residue remains post-cleanup.
- 4. Disposal of Contaminated Materials**
 - Place collected materials in labeled, sealed containers.
 - Arrange for disposal per governmental and environmental regulations.
- 5. Notification and Reporting**
 - Report the spill to designated internal and external authorities as required.
 - Complete and submit an incident report within 24 hours.
- 6. Use of PPE**
 - Select and wear PPE according to spill nature and size (see hazard assessment).
 - Decontaminate or properly dispose of used PPE after cleanup.
- 7. Post-Incident Review**
 - Conduct debrief with all responders to review actions taken.
 - Update procedures and training if deficiencies were identified.

6. Training

All personnel must receive training specific to handling and responding to spills in their area, including the use and limitations of PPE and spill response equipment.

7. Document Control

This SOP shall be reviewed annually and updated as necessary to reflect changes in regulations, materials, or processes.

8. References

- Occupational Safety and Health Administration (OSHA) Regulations
- Environmental Protection Agency (EPA) Spill Cleanup Guidelines
- Material Safety Data Sheets (MSDS/SDS) for chemicals used