

SOP: Hazard Identification and Risk Assessment

Protocols

This SOP describes **hazard identification and risk assessment protocols**, detailing systematic procedures to identify potential hazards, evaluate associated risks, and implement control measures. The objective is to proactively manage workplace safety by recognizing hazards early, assessing their impact, and minimizing risks through effective strategies, ensuring a safe environment for all employees and stakeholders.

1. Purpose

The purpose of this SOP is to establish clear processes for identifying hazards, assessing risks, and implementing control measures to ensure occupational health and safety for all personnel.

2. Scope

This procedure applies to all areas, operations, and personnel within the organization, including contractors and visitors where applicable.

3. Definitions

- **Hazard:** Any source, situation or act with the potential to cause harm.
- **Risk:** Combination of the likelihood of an occurrence and the severity of the consequence.
- **Control Measure:** An action or system put in place to eliminate or reduce hazards.

4. Responsibility

- **Management:** Ensure resources are available and procedures are followed.
- **Supervisors:** Facilitate hazard identification processes and support assessments.
- **Employees:** Participate in identification, reporting, and risk reduction activities.
- **HSE Team:** Oversee, document, and review the implementation of the SOP.

5. Procedure

5.1. Hazard Identification

1. Conduct regular workplace inspections.
2. Consult with employees and review incident/near-miss records.
3. Assess equipment, materials, procedures, and work environment.
4. Identify chemical, physical, biological, ergonomic, and psychosocial hazards.
5. Document identified hazards in the official risk register.

5.2. Risk Assessment

1. For each hazard, determine the **likelihood** of occurrence and the **severity** of consequences.
2. Use a risk matrix, as shown below, to classify risk level.
3. Record findings in the risk assessment form and assign risk ratings (e.g., Low, Medium, High).

Sample Risk Assessment Matrix

Likelihood \ Severity	Minor	Moderate	Major
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Unlikely	Low	Low	Medium
Possible	Low	Medium	High
Likely	Medium	High	High

5.3. Control Measures Implementation

- 1. Apply the hierarchy of controls in the following order:
 - Elimination
 - Substitution
 - Engineering controls
 - Administrative controls
 - Personal Protective Equipment (PPE)
- 2. Assign responsible persons and deadlines for implementation.
- 3. Document all measures and update the risk register accordingly.

5.4. Review and Monitoring

- 1. Review risk assessments routinely (at least annually) or after significant changes/incidents.
- 2. Ensure control measures are effective and update as necessary.
- 3. Maintain documented evidence of all assessments and controls.

6. Documentation & Records

- Hazard Identification Checklists
- Risk Assessment Forms and Risk Register
- Records of Control Measures and Action Plans

7. References

- ISO 45001: Occupational health and safety management systems
- Local and national workplace safety regulations

8. Revision History

Version	Date	Description of Change	Author
1.0	2024-06-xx	Initial release	HSE Department