SOP Template: Impact Assessment and Risk Analysis

This SOP details the process of **impact assessment and risk analysis**, including the identification of potential hazards, evaluation of their likelihood and consequences, analysis of risks associated with projects or operations, and the development of mitigation strategies. The goal is to systematically assess and manage risks to ensure informed decision-making, enhance safety, and promote sustainable outcomes.

1. Purpose

To provide a structured process for identifying, assessing, and managing risks and impacts related to organizational projects or operations.

2. Scope

This SOP applies to all personnel involved in project planning, implementation, and operational management within the organization.

3. Definitions

- **Hazard:** A source or situation with the potential to cause harm.
- **Risk:** The combination of the likelihood of an occurrence and its consequence.
- **Impact Assessment:** The evaluation of potential effects caused by project activities.
- **Mitigation:** Measures to minimize the severity or likelihood of risks.

4. Responsibilities

- **Project Manager:** Oversees the risk assessment process and ensures implementation of mitigation strategies.
- **Team Members:** Participate in hazard identification and data collection.
- **Risk Officer:** Facilitates the analysis and reporting of risks.
- **Stakeholders:** Consulted as required for expert input and review.

5. Procedure

1. **Preparation**
    - Define assessment objectives and scope.
    - Assemble a risk assessment team.
    - Collect relevant project, operational, and historical data.
2. **Hazard Identification**
    - Review processes, activities, and environments for possible hazards.
    - Document identified hazards and potential sources of impact.
3. **Risk Analysis**
    - For each identified hazard, evaluate:
        - **Likelihood** of occurrence (e.g., rare, unlikely, possible, likely, almost certain).
        - **Consequences** if the hazard occurs (e.g., negligible, minor, moderate, major, catastrophic).
    - Assign a risk rating based on likelihood and consequence.
4. **Impact Assessment**
    - Assess potential positive and negative impacts on people, environment, assets, and reputation.
5. **Risk Evaluation & Prioritization**
    - Compare risk ratings with risk criteria to determine acceptability.
    - Prioritize risks for treatment based on severity.
6. **Mitigation Planning**
    - Develop mitigation/control strategies for unacceptable risks.
    - Assign responsibilities and timelines for implementation.
7. **Documentation & Reporting**
    - Record all findings, risk ratings, and mitigation plans in the risk register.
    - Prepare and distribute risk assessment report to relevant parties.
8. **Review & Monitoring**

- Regularly review risks and mitigation effectiveness.
- Update risk assessments as projects or environments change.

6. Risk Rating Matrix (Example)

Likelihood \ Consequence	Negligible	Minor	Moderate	Major	Catastrophic
Rare	Low	Low	Low	Medium	Medium
Unlikely	Low	Low	Medium	Medium	High
Possible	Low	Medium	Medium	High	High
Likely	Medium	Medium	High	High	Extreme
Almost Certain	Medium	High	High	Extreme	Extreme

7. Documentation

- Risk Register
- Impact Assessment Report
- Mitigation Plans
- Review Records

8. References

- ISO 31000: Risk Management Guidelines
- Relevant organizational policies and procedures

9. Revision History

Version	Date	Description of Changes	Approved By
1.0	2024-06-10	Initial release	[Name/Title]