



Risk Register Template for ISO 14001:2015 EMS

Purpose

The risk register is a tool to document, track, and manage environmental risks and opportunities identified during the risk and opportunity assessment process (ISO 14001:2015, Clause 6.1.1). It helps Champions support the EMS team by organizing risks, assessing their likelihood and impact, proposing mitigation actions, and monitoring progress. The register is particularly useful in manufacturing and oil and gas contexts, where environmental risks (e.g., emissions, spills) and opportunities (e.g., energy savings, sustainable sourcing) are critical.

How to Use the Risk Register

1. **Copy the Table:** Copy the Markdown table below into a text editor (e.g., Notepad, VS Code) or directly into a spreadsheet.
2. **Save as CSV (Optional):** To create a downloadable CSV file, paste the table into a text editor, replace Markdown formatting (e.g., | and ---) with commas and new lines, and save as risk_register.csv. Then import into Excel or Google Sheets.
3. **Populate the Register:** Use the sample entries as a guide. Add risks and opportunities specific to your organization or department, updating fields like likelihood, impact, and actions.
4. **Champion Role:**
 - Provide department-specific insights (e.g., production risks in manufacturing, drilling risks in oil and gas).
 - Collect data to assess risks (e.g., emission logs, incident reports).
 - Propose and promote mitigation actions (e.g., training, equipment upgrades).
 - Monitor progress and update the register during EMS reviews.



5. **Review Regularly:** Update the register quarterly or when new risks emerge (e.g., regulatory changes, process upgrades).

Risk Register Table

ID	Aspect	Risk/Opportunity Description	Type	Likelihood (1–5)	Impact (1–5)	Risk Level (L x I)	Mitigation/Action Plan	Responsible Party	Status	Review Date
R1	Painting Process (Manufacturing)	Risk: High VOC emissions from paints, risking non-compliance with air quality regulations (\$50,000 fine).	Risk	4 (High)	4 (High)	16 (High)	Switch to low-VOC paints; train workers on efficient application.	Production Champion, EMS Team	In Progress	2025-08-01
R2	Welding Process (Manufacturing)	Opportunity: Adopting energy-efficient welding machines could reduce energy use by 15%, saving \$20,000 annually.	Opportunity	3 (Moderate)	4 (High)	12 (Moderate)	Pilot energy-efficient machines; secure budget approval.	Maintenance Champion, Management	Planned	2025-07-15
R3	Drilling Operations (Oil and Gas)	Risk: Oil spill from faulty valve system, risking \$1M in cleanup costs and marine pollution.	Risk	3 (Moderate)	5 (Severe)	15 (High)	Conduct valve inspections; implement spill response training.	Operations Champion, Maintenance	In Progress	2025-09-01
R4	Wastewater Discharge (Oil and Gas)	Opportunity: Upgrading filtration systems	Opportunity	4 (High)	4 (High)	16 (High)	Propose filtration upgrade; partner	Operations Champion, EMS Team	Planned	2025-08-15



		could reduce oil residues by 40%, enhancing compliance and saving \$100,000 in maintenance.					with conservation group for PR.			
R5	Waste Management (Manufacturing)	Risk: Improper hazardous waste storage, risking soil contamination and \$30,000 fine.	Risk	3 (Moderate)	4 (High)	12 (Moderate)	Improve storage labeling; conduct worker training.	Production Champion, EMS Team	Not Started	2025-07-30

Table Explanation

- **ID:** Unique identifier for each risk or opportunity (e.g., R1, R2).
- **Aspect:** The environmental aspect linked to the risk/opportunity (e.g., painting, drilling).
- **Risk/Opportunity Description:** A brief description of the risk (threat) or opportunity (benefit).
- **Type:** Indicates whether it's a risk or opportunity.
- **Likelihood (1-5):** Probability of occurrence (1 = Low, 5 = High).
- **Impact (1-5):** Severity or benefit of the outcome (1 = Low, 5 = High).
- **Risk Level:** Calculated as Likelihood x Impact (1-25 scale; >15 = High, 10-15 = Moderate, <10 = Low).
- **Mitigation/Action Plan:** Actions to reduce risk or capitalize on opportunity.



- **Responsible Party:** Who oversees the action (e.g., Champions, EMS team, management).
- **Status:** Current progress (e.g., Not Started, In Progress, Planned, Completed).
- **Review Date:** When to reassess the risk or opportunity.