

PRECIOUS MINERAL AND SMELTING LTD.

**STANDARD OPERATING PROCEDURES (SOP)
OF
SUPPLY CHAIN RISK ASSESSMENT**

SEMI URBAN INDUSTRIAL ESTATE, FREZERPUR, JAGDALPUR, DIST.-BASTAR, CG, 494001

STANDARD OPERATING PROCEDURE FOR SUPPLY CHAIN RISK ASSESSMENT

1. Objective To identify, assess, and mitigate risks associated with the tin ore supply chain of Precious Minerals and Smelting Limited, Jagdalpur.

2. Scope This SOP covers the entire tin ore supply chain, from mining to final delivery to the Smelting Unit. It includes:

- **Mining operations:** Extraction, processing, and transportation of tin ore from PMASL Owen mines or CMDC mines located in the same area.
- **Smelting and refining:** Convert tin ore into refined tin metal.
- **Transportation and logistics:** Movement of tin ore and refined tin between different stages of the supply chain.
- **Storage and warehousing:** Storage of tin ore and refined tin at various locations.

3. Risk Identification

- **Geopolitical Risks:**
 - Political instability in mining regions
 - Trade restrictions or tariffs
 - Changes in government policies and regulations
- **Operational Risks:**
 - Mining accidents and occupational hazards
 - Supply chain disruptions (e.g., transportation delays, labor strikes)
 - Quality control issues and product defects
 - Cybersecurity threats and data breaches
- **Environmental Risks:**
 - Environmental damage from mining activities
 - Water pollution and soil contamination
 - Climate change impacts (e.g., extreme weather events)
- **Financial Risks:**
 - Price fluctuations in tin ore and refined tin
 - Currency exchange rate risks
 - Credit risks from suppliers and customers

- **Social and Ethical Risks:**
 - Labor rights issues and worker exploitation
 - Child labor and forced labor
 - Community conflicts and social unrest
- **Risks Listed in Annex II of OECD Guidance:**

4. Risk Assessment

- **Risk Assessment Matrix:**
 - Develop a risk assessment matrix to evaluate each identified risk based on its likelihood and impact.
 - Assign a risk rating to each risk based on the matrix.
 - Prioritize high-risk areas for immediate attention.

Risk assessment matrix						
		Consequence				
		Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
Likelihood	Rare (1)	2	3	4	5	6
	Unlikely (2)	3	4	5	6	7
	Possible (3)	4	5	6	7	8
	Likely (4)	5	6	7	8	9
	Almost certain (5)	6	7	8	9	10

- **Risk Mitigation Strategies:**
 - **Diversification:** Source tin ore from multiple suppliers and regions.
 - **Risk Transfer:** Purchase insurance to cover potential losses.
 - **Risk Reduction:** Implement robust quality control measures, improve supply chain visibility, and invest in technology.
 - **Risk Avoidance:** Avoid high-risk suppliers or regions.

5. Risk Monitoring and Review

- **Regular Monitoring:** Continuously monitor the supply chain for emerging risks.
- **Periodic Reviews:** Conduct periodic risk assessments to identify and address new risks.

- **Incident Response Plan:** Develop a plan to respond to incidents and minimize their impact.
- **Data Analytics:** Utilize data analytics to identify trends and potential risks.

6. Documentation and Record-keeping

- Maintain detailed records of risk assessments, mitigation strategies, and incident reports.
- Document all relevant procedures and guidelines.

7. Training and Awareness

- Train employees on risk management principles, emergency procedures, and ethical sourcing.
- Conduct regular awareness campaigns to promote a culture of risk awareness.

8. Continuous Improvement

- Regularly review and update the risk assessment process.
 - Incorporate lessons learned from incidents and near-misses.
- Stay updated on industry best practices and emerging risks

APPROVAL BY SENIOR MANAGEMENT

This SOP has been reviewed and approved by Shree Chand Lunia (Whole Time Director)
on May 12th, 2024

Signed By: _____