

## Sustainable and Responsible Mining - Lundin Mining's Subsidiary in Portugal, Sociedade Mineira de Neves-Corvo Case

**Authors :** Jose Daniel Braga Alves, Joaquim Gois, Alexandre Leite

**Abstract :** This abstract presents the responsible and sustainable mining case study of a Portuguese mine operation, highlighting how mine exploitation can sustainably exist in balance with the environment, aligned with all stakeholders. The mining operation is remotely located in a United Nations (UN) biodiversity reserve, away from major industrial centers or logistical ports, and presents an interesting investigation to assess the balanced mine operation in alignment with all key stakeholders, which presents unique opportunities as well as challenges. Based on the sustainable mining framework, it is intended to detail examples of best practices from Sociedade Mineira de Neves-Corvo (SOMINCOR), demonstrating social acceptance by the local community, health, and safety at work, reduction of environmental impacts and management of mining waste, which directly influence the acceptance and recognition of a sustainable operation. The case study aims to present the SOMINCOR approach to sustainable mining, focusing on social responsibility, considering materials provided by Lundin Mining Corporation (LMC) and SOMINCOR and the socially responsible approach of the mining operations., referencing related international guidelines, UN Sustainable Development Goals. The researchers reviewed LMC's annual Sustainability Reports (2019, 2020 and 2021) and updated information regarding material topics of the most significant interest to internal and external stakeholders. These material topics formed the basis of the corporation-wide sustainability strategy. LMC's Responsible Mining Policy (RMP) was reviewed, focusing on the commitment that guides the approach to responsible operation and management of the Company's business. Social performance, compliance, environmental management, governance, human rights, and economic contribution are principles of the RMP. The Human Rights Risk Impact Assessment (HRRIA), based on frameworks including UN Guiding Principles (UNGP), Voluntary Principles on Security and Human Rights, and a community engagement program implemented (SLO index), was part of this research. The program consists of ongoing surveys and perceptions studies using behavioural science insights, data from which was not available within the timeframe of completing this research. LMC stakeholder engagement standards and grievance mechanisms were also reviewed. Stakeholder engagement and the community's perception are key to this operation to ensure social license to operate (SLO). Preliminary surveys with local communities provided input data for the local development strategy. After the implementation of several initiatives, subsequent surveys were performed to assess acceptance and trust from the local communities and changes to the SLO index. SOMINCOR's operation contributes to 12 out of 17 sustainable development goals. From the assessed and available data, local communities and social engagement are priorities to SOMINCOR. Experience to date shows that the continual engagement with local communities and the grievance mechanisms in place are respected and followed for all concerns presented by any stakeholder. It can be concluded that this underground mine in Portugal complies with applicable regulations and goes beyond them with regard to sustainable development and engagement with key stakeholders.

**Keywords :** sustainable mining, development goals, portuguese mining, zinc copper

**Conference Title :** ICSDDMR 2023 : International Conference on Sustainable Development of Mining Mineral Resources

**Conference Location :** Barcelona, Spain

**Conference Dates :** May 22-23, 2023