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A General Strategy for Noise Assessment in Open Mining Industries

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Abstract: This paper proposes a methodology for the management of noise in open mining industries based on an integral concept, which takes into consideration occupational and environmental noise as a whole. The approach relies on the characterization of sources, the combination of several measurements' techniques and the use of acoustic prediction software. A discussion about the difference between frequently used acoustic indicators such as Leq and LAV is carried out, aiming to establish common ground for homologation. The results show that the correct integration of this data not only allows for a more robust technical analysis but also for a more strategic route of intervention as several departments of the company are working together. Noise control measurements can be designed to provide a healthy acoustic surrounding in which the exposure workers but also the outdoor community is benefited.

Keywords: environmental noise, noise control, occupational noise, open mining

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