A review on environmental impact assessment of limestone mining operations ♀

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+ Author & Article Information *AIP Conf. Proc.* 2690, 020006 (2023) https://doi.org/10.1063/5.0119833

Environmental Impact Assessment (EIA) is a superior tool use for assessing environmental changes in the opencast limestone mining region. In mining and its development, there is currently pervasive global concern focused on the need to move the mining sector to a more sustainable environment. In limestone mining, the waste deposit ratio is too high. To minimize waste extraction activities, hyperspectral remote sensing imagery utilized to identify the purest form of calcite in the examination area. This report reviewed papers on the possible impacts of the mining region's limestone quarrying activities on the atmosphere and climate change. Results on the impact of limestone mineral spectra identification for the Indian condition are summarized and discussed. According to the effect of limestone mining in the region, it is proposed that all stakeholders, in particular the owners of mines and cement plants, should pay the requisite attention to the environmental issues prevailing throughout the area. It leads to perform the necessary actions to maintain the ecosystem environmental clearness, reforestation, implement the water treatment on the region and sanitary landfill waste disposal, create awareness about the pollution levels.

Topics

<u>Biomass energy sources, Remote sensing, Water treatment, Climate change,</u> <u>Environmental impacts, Minerals, Educational assessment, Ecology, Outreach,</u> <u>Review</u>

REFERENCES

 S. M. Kim, Y. Choi, J. Suh, S. Oh, H. D. Park, S. H. Yoon, ArcMine: A GIS extension to support mine reclamation planning, *Computers & Geosciences*, 46 (2012) 84–95. https://doi.org/10.1016/j.cageo.2012.04.007 Google Scholar Crossref

 S. Avirneni, and D. Bandlamudi, Environmental impact of thermal power plant in India and its mitigation measure, *International Journal of Modern Engineering Research*, 3.2 (2013) 1026–1031.
Google Scholar

3. M. K. Singh, D. Jha, and J. Jadoun, Assessment of physico-chemical status of groundwater samples of Dholpur district, Rajasthan, India, *International Journal of Chemistry*, 4(4) (2012) 96. https://doi.org/10.5539/ijc.v4n4p96 Google Scholar Crossref