MITIGATION OF DUST AND NOISE GENERATED FROM MINERAL PROCESSING PLANTS

J.D.S.U. Jayakodi, L.P.S. Rohitha* and P.G.R. Dharmaratne

Department of Earth Resources Engineering, University of Moratuwa, Katubedda.
rohithasudath@yahoo.com

Mineral processing is an essential activity in the process of value addition to mineral raw materials that are mined from different sources. Most common environmental and sociological issues associated with mineral processing plants are due to extensive dust and noise generation from processing activities. Defending vociferous protests against these sources of environment pollution from the people domiciled in the vicinity of the processing plants is a challenging task at all times.

Therefore, it is mandatory to implement mitigatory measures to settle such disputes enabling the continuation of both the mineral processing industry and peaceful life of the surrounding community.

Several mitigatory measures for dust and noise are currently being used by the mineral processing industry are basically mechanical methods that are quite costly to operate. However, this study proposes an environment friendly and cost effective solution to control dust and noise from leaving the plant premises.

This study reveals that, by constructing a suitable high turf blanketed soil embankment around the processing plant having a wide-foliage fruit tree belt on the flat surface of the embankment can reduce the dust level by 60-70% and the noise level by 50-60%, thus securing a win-win solution.

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