

Cleaner Technology for Stone Crushers

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Abstract : There are about 12000 stone crusher units in India and are located in clusters around urban areas to the stone quarries. These crushers create lot of fugitive dust emissions and noise pollution which is a major health hazard for the people working in the crushers and also living in its vicinity. Ambient air monitoring was carried out near various stone crushers and it has been observed that fugitive emission varied from 300 to 8000 mg/Nm³. A number of stone crushers were thoroughly studied and their existing pollution control devices were examined. Limitations in the existing technology were also studied. A technology consisting of minimal effective spray nozzles to reduce the emissions at source followed by a containment cum control system having modular cyclones as air pollution control device has been conceived. Besides preliminary energy audit has also been carried out in some of the stone crushers which indicates substantial potential for energy saving.

Keywords : stone crushers, spray nozzles, energy audit

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