

# HOW TO CONTROL PARTICULATE MATTER EMISSION FROM DOLOMITE AND METAL CRUSHING PLANT AT DIGANA IN KANDY

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Dolomite quarrying industry in Kandy is a well-established process with eight processing factories and several quarries located around Digana area. Particulate matter generated by these industries exceed the concentration level stipulated in the National Environmental Regulations, raising the concerns over the health and environmental hazard associated with them.

During preliminary investigations it was observed that most of the factories emit suspended particulate matter to the atmosphere from crushers, powder machines, shifters, conveyors and cyclone separator discharge points.

In most of the factories the method adopted for air cleaning is a bag filter unit proceeded by cyclone separator connected to the main process line and to the particulate matter collecting units. Cyclone separator acts as the main units that collect the product in powder form. This method, however, does not reduce the emission of particulates to the atmosphere satisfactorily and is an expensive method because of the fact that the bag filter unit requires more regular maintenance.

Introduction of efficient and cost effective method instead of bag filter unit makes this industry environmentally friendly and solve problems that this industry has faced with the environmental authorities.

This paper describes alternative methods considered for arresting particulate matter along with their cost analysis.