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Dust and silica

By its nature quarrying has the potential to create dust. The control measures in place should prevent this reaching levels that will cause harm. Check the control measures in your workplace are identified in the health and safety document and that they work in your workplace. Do the measurements taken to monitor exposure show how effective they are? Is there more that can be done to control dust? Are the extraction units adequate and maintained? Do the people doing the job know what the exposure levels are? Guidance is available in HS(G) 73 Respirable crystalline silica at quarries, and the video Dust in Quarries both available from HSE Books.



Drill rigs should be fitted with appropriate and well maintained dust extraction equipment. Drill rigs with cabs should be fitted with appropriate filtered air systems to prevent dust build up in the cab and the cab should be Kept clean and the air system properly maintained to ensure its effectiveness.



Hand drilling dust can also be controlled using dust collection equipment. It is preferable to drill these holes wet. Hand held powered saws used for cutting

concrete, asphalt and small dimension stone will also create large quantities of dust. They should not be used to cut dry.



Mobile plant creates dust as it moves around and is loaded.



Mobile plant creates dust as it moves around and is loaded.



The cabs should be fitted with filters appropriate to the risk created by the dust.

In quarries with high levels of silica powered filters to separate out the course dust before filtration may be appropriate.



Regular maintenance of the systems is essential and the cabs cleaned regularly with vacuum systems.



Plant control rooms need to be kept clean and have clean air at a positive pressure.



Intakes for air should be in an area of clean air or the intake filtered. This picture shows the inside of a duct feeding air to the pressurised cabin. The quantity of air introduced into the cabin should be known and checked to ensure that the system is working properly. Note the build up of dust in the ducting.



Seating should be capable of being cleaned to prevent build up of dust from overalls.



Seating should be capable of being cleaned to prevent build up of dust from overalls.



Here there is dust and clutter in the cabin.



Areas of spillage such as around bagging plants should be kept clean and vacuumed regularly. Never use a brush as it makes dust airborne.



Related content

Health and safety at quarries. Quarries Regulations 1999^[1]
Competence in health and safety^[2]
RIDDOR^[3]

Link URLs in this page

- 1. **Health and safety at quarries. Quarries Regulations 1999** https://www.hse.gov.uk/pubns/books/l118.htm
- 2. **Competence in health and safety** https://www.hse.gov.uk/competence/index.htm
- 3. **RIDDOR** https://www.hse.gov.uk/riddor/index.htm
- 4. **Explosives** https://www.hse.gov.uk/explosives/ammonium/index.htm

Glossary of abbreviations/acronyms on this page

RIDDOR Reporting of Injuries, Diseases and Dangerous Occurrences Regulations