

## BEST PRACTICE

**LOCATION:**  
**ACTIVITY:** Occupational Health  
**SUB ACTIVITY:** Air and dust  
**BEST PRACTICE No:** BP584

**ARTICLE YEAR:** 2008  
**COMPANY:** Hanson  
**COMPANY LOCATION:** Ystrad Meurig Quarry, Ceredigion  
**COMPANY TEL:** 01974 282606

### TITLE

Eliminating exposure to respirable silica dust

### ARTICLE

In 2007, Hanson purchased a Metso Lokotrain mobile crushing and screening plant for the quarry, which extracts a high silica gritstone. The Lokotrain comes with its own water dust suppression sprays supplied from individual water tankers.

However, the system struggled to cope with the amount of dust being produced and maintaining a sufficient supply of water was also extremely difficult as there is no mains water supply.

The assistant unit manager suggested using foam to contain the dust and contacted ,Best Chem™ to arrange a trial.

The results were remarkable; all the dust was contained within minutes of the system being turned on. However, to solve the problem the unit would need to be fully mobile, which had never been done before.

The unit had to supply all three crushers with foam. In addition it had to contain the foaming chemical safely, be able to take power from the mobile crusher generators, contain its own air supply system and be able to monitor the flow of stone through the crushers so that it only operated when stone was being processed.

Hanson and Best Chem spent many hours together designing a suitable unit that was able to meet all these requirements. As a result, a purpose-built mobile foaming unit, which requires no mains power or water was constructed. It has been an unqualified success and has effectively eliminated the generation of airborne dust.

### ARTICLE IMAGES

