### **BEST PRACTICE**

LOCATION: ARTICLE YEAR: 2008

ACTIVITY: Occupational Health COMPANY: Aggregate Industries

SUB ACTIVITY: Air and dust COMPANY LOCATION: Cribarth Quarry, Powys

**BEST PRACTICE No:** BP557 **COMPANY TEL:** 01591 620790

#### TITLE

## Cribarth Quarry fogging system

#### ADTICI E

At Cribarth Quarry, crushed stone goes to a screen house for screening into different grades. The screen house uses a Finlay screen and a triple deck Parker screen which both produce a lot of dust. In the past, two people have shovelled this dust out of the screen house, but with the Workplace Exposure Limit (WEL) in place all contact with dust was required to be reduced.

The company recognised that a method of capturing dust out of the air, so it could be contained and then removed, was needed.

After consulting a company in Chester called Renby, it was agreed to follow their suggestion to trial a dry mist system called the Fogco, as used in odour and humidity control. The process works as follows:

- Clean water enters the Fogco;
- Water exits at very high pressure;
- The water passes through a micron filter;
- The water then passes through an ultraviolet lamp and radio frequency water softener; and
- Finally, the water passes through 65 nozzles set at 0.3 mm that atomise the water.

This process produces fog which fills the screen house as the dust particles rise. The fog clings to the dust particles and they fall through the cat-walk onto the ground where the dust can be cleaned out by a digger thereby removing the problem of high dust quantities settling on the floor.

# ARTICLE IMAGES



