

RESOURCE

No foggy day in Argentine town

Dust, like fog, has the irritating habit of creeping in everywhere.

Which is one reason why Minorco companies tackle dust problems with vigour. In any case, control of dust is environmentally friendly and Minorco's policy is to approach all environmental matters in the most serious of veins. As a matter of course, all mining operations

have to control fine particle matter.

At Cerro Vanguardia, the developing gold/silver mine in Patagonia, southern Argentina, where the winter weather can be foul and where the temperature can plunge to minus 21C, the wind seems to blow incessantly. Winds bring dust. With dust comes breathing problems.

So step forward Advanced Dust Solutions of Portland, Oregon, which manufactures Agglomerative Dust Suppression or dry fogging systems. In

essence, this relatively new technology is said to control dust problems more effectively than conventional methods.

Using water to control dust is arguably the oldest method around. However, typical water spray systems do not eliminate the problem because, stripped of science, the size of the water droplet (irrespective of what type of nozzle is used) is invariably too large to suppress dust effectively i.e. when the water droplet is larger than the dust particle, the airstream created from spraying

the water merely 'transports' the particle around the droplet. Hey ho...the water droplet and the dust particle don't meet, and the dust just flies to another place.

The secret is to make the water droplets micron size so that droplet and particle meet and 'bond', thereby weighing down the particle so that, ideally, it falls back on to a conveyor belt.

The ADS system (please put ALL questions about technical details to website www.nodust.com) uses regular water to produce much smaller droplets (fog). The system also uses less water.

Also, the system avoids the problem of freezing. "The fog droplets do not contain enough mass to freeze. It's all to do with cloud physics", says David Gilroy, sales manager of ADS, whose company has recently installed the equipment at Cerro Vanguardia.

One of the added advantages of correct dust control is that a higher percentage of fine ore remains on the conveyor belt and, therefore, reaches its final destination in the mill.

The moral is simply: Better that "dust" ends up in the mill than in the air.



David Gilroy (centre) with Cerro Vanguardia operations crew