

SAFETY BULLETIN

Exposure to dust and gases

BACKGROUND

Recent incidents of exposure to dust and potentially hazardous gases from open cut mine blasting have resulted in hospital treatment for several mine employees. These incidents do not appear to have involved water and excess oxides of nitrogen as there was little, if any, orange fume produced from the associated blasts. The cause of the irritant is still being investigated.

MANAGING BLASTING DUST AND GAS

While it may not be possible to eliminate dust and gas generation from blasting, it is essential to minimise exposure of personnel to these hazards. Site blasting procedures should identify the potential to generate these products of blasting and limit their impact, not only on mine personnel, but also the public. Hot weather and strong wind can provide conditions that promote formation and dispersal of dust from surface blasting. If hazardous blasting gases are produced, these can also be spread significant distances by strong wind and cause potential health hazards.

Blasting related to dust and gas production may consider, but not be limited to, the following:

- Wind speed and direction
- Ground conditions
- Explosives selection
- Evacuation distances
- Gas monitoring
- Communication on the blast site, to surrounding operations and the public

RECOMMENDATIONS

It is recommended that open cut mines that blast review or develop plans and procedures that address exposure to blasting dust and potentially hazardous gases. Recent related incidents have highlighted the importance of such actions to improve safety.

NOTE: Please ensure all relevant people in your organisation receive a copy of this Safety Bulletin, and are informed of its content and recommendations. This Safety Bulletin should be processed in a systematic manner through the mine's information and communication process. It should also be placed on the mine's notice board.

Signed



Rob Regan
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Disclaimer

The information contained in this publication is based on knowledge and understanding at the time of writing (December, 2013). However, because of advances in knowledge, users are reminded of the need to ensure that information on which they rely is up to date and to check the currency of the information with the appropriate officer of the NSW Department of Trade and Investment, Regional Infrastructure and Services or the user's independent advisor.