

Safety Alert

Mines Inspectorate

Safety Alert No. 269
28 June 2011

Potential contamination of underground mine ventilation by blast fumes generated at an open-cut mine

Mine type: All coal mines

Incident: The prevailing wind carried the blast fume cloud from an open-cut coal mine close to nearby ventilation intakes for an underground coal mine.

Equipment: No equipment or machinery involved

Hazard: Contamination of underground coal mine ventilation with noxious gases from open-cut blasting

Cause: Such an incident may occur if blast management at the open-cut mine fails to consider the potential for blast fume cloud contamination of the intake airways of nearby underground coal mines.

Comments: Blast fume sucked into the ventilation system of an underground coal mine can immediately affect the health of large numbers of coal mine workers.

Recommendations

1. That blast plans at open-cut coal mines note the:
 - location of any nearby underground coal mines and associated intake airways
 - distance to the underground mine.
2. That blast plans at open-cut coal mines consider:
 - wind direction and strength
 - blast history and characteristics.
3. That communication and liaison with the underground mine allow for evacuation should the fume not follow predicted direction of travel.
4. That blasting be postponed should conditions indicate likely ill effects at the underground mine.
5. That, where relevant, an underground mine's principal hazard management plan for emergency response include managing a blast fume risk.

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Please ensure all relevant people in your organisation receive a copy of this safety alert. Any such advice supplied to site should reach those who require it, and it should also be placed on the mine noticeboards. See more safety alerts and bulletins at www.dme.qld.gov.au/mines/safety_information__bulletins.cfm