



SAFETY ALERT

MACHINE MOUNTED METHANE MONITORS

INCIDENT:

Departmental officers have found several instances of automatic methane monitors in bypass mode or unlocked.

CIRCUMSTANCES:

- An unlocked methane monitor was found on a continuous miner with the bypass switch held in the bypass position with a piece of string.
- An unlocked methane monitor was found on a mobile roof bolter in a place change unit with a piece of cardboard wedged in the bypass switch.
- A methane monitor was found on a mobile roof bolter in a place change unit with no means available to lock it.
- An unlocked and bypassed methane monitor was found on a mobile roof bolter in a place change unit.

INVESTIGATION

Chapter 2 of the *Occupational Health and Safety Regulation 2001* details requirements for identifying hazards, assessing risks and implementing risk controls. Where automatic methane monitors are installed as risk controls on mobile apparatus, they should meet the requirements of **AS/NZS 4871.4:2002 *Electrical equipment for coal mines for use underground.***

These include:

- automatic isolation of power
- prevention of restoration without a reset
- visual indication of gas level
- an override to allow safe withdrawal of the machine, which also prevents normal operations from occurring
- restricted access to the reset and override mechanism.

RECOMMENDATIONS

- Ensure that the actions required in Chapter 2 of the *Occupational Health and Safety Regulation 2001* have been carried out.
- In particular, in any place where there is a risk that a flammable mixture of methane and air could occur, a risk control equivalent to, or better than, an automatic methane monitor must be implemented on mobile machines operating in the immediate face area.
- All mines review major hazard management plans to determine whether the risk associated with operating mobile machines in a flammable atmosphere has been adequately addressed, and adequately identified the use of automatic methane monitors as a risk control.
- Review existing methane monitors to ensure that the requirements of **AS/NZS 4871.4:2002** have been met.
- Conduct reviews in association with workforce consultation highlighting the necessity to properly inspect, test, maintain and operate automatic methane monitoring equipment.



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