Control of ERZ Controller (Deputy) keys

Mines safety alert no. 350

What happened?

Unauthorised coal mine workers (CMWs) have, on occasions, been found with gas monitor bypass keys they were not authorised to hold.

These keys are colloquially known as A9 or 'Deputy keys' in underground coal mines.

As these gas monitors screen for gases including methane, unauthorised bypassing could lead to the risk of a methane gas ignition underground.

Methane monitor system bypass lock on a vehicle.

How did it happen?

Contributing factors included:

- deliberate unauthorised fabrication of bypass keys—Refer to Mines Safety Alert 270 Managing underground coal mine contractors – alarm bells are ringing
- ineffective control and management of bypass key authorisations and distribution
- ineffective security of spare bypass keys
- ineffective procedures for bypassing gas monitoring systems and the associated use of bypass keys.

Comments

Division 3 of the Coal Mining Safety and Health Regulation 2017 details the actions to be taken if methane is detected or a methane detector is non-operational.

The site safety and health management system (SHMS) should cover all likely gas monitor bypassing scenarios, including but not be limited to:

- processes for bypassing in the event of a methane detector activating
- processes for bypassing in the event of a methane detector being non-operational
- what these processes are in an NERZ or ERZ
- processes for maintenance testing and repairs and whether these differ for surface and underground applications.

Recommendations:

Ensure that the SHMS:

1. clearly identifies the CMWs authorised to use gas monitoring bypass keys
2. clearly defines how authorised CMWs access gas monitoring bypass keys, including the permanent issuing of keys to authorised persons, as well as temporary use
3. effectively manages the security of spare gas monitoring bypass keys
4. clearly defines processes to follow in the event of a gas monitor activating in a NERZ or ERZ
5. clearly defines processes to follow if a gas monitor becomes non-operational in a NERZ or ERZ
6. clearly defines processes to follow when maintaining activities are being carried out on gas monitoring systems in both underground and surface applications.

Authorised by the Chief Inspector of Coal Mines | Russell Albury
Further information contact: Neville Atkinson | Inspector of Mines, Electrical | +61 7 4936 0130 Neville.Atkinson@dnrme.qld.gov.au
Version 1, 4 April 2018
Follow our updates on
Place alert on noticeboards and ensure relevant people in your organisation receive a copy.
See more safety alerts and bulletins at http://dnrme.qld.gov.au/
And the hazard database at https://www.business.qld.gov.au/industry/mining/safety-health/mining-safety-health/mining-hazards/hazards