Isolation issues identified at coal mines

This safety bulletin provides safety advice for the NSW mining industry.

Issue

Resources Regulator inspectors have identified issues with the implementation, use, and supervision of isolation systems used for the management of risk associated with plant and equipment at coal mines.

Circumstances

During planned inspection activities, inspectors observed activities including maintenance and repair activities of plant. Those maintenance activities require isolation of energy to some extent, whether for part of the plant or the entire plant. For large maintenance tasks, these isolations need to cover multiple workers and are often required to be in place over multiple shifts. This is usually managed through the use of permits.

Observations of the implementation and operation of the permit isolation systems have identified deficiencies at many of the operations where they are in use.

Inspection findings

In circumstances below, sites did not align with their own management systems for the isolation of energy or the management systems for isolation of energy did not document the required expectation for the end user. The following observations were made:

→ It was identified some sites had multiple versions of group isolation permits in service.
→ Isolation lock boxes used were not maintained in fit-for-purpose condition. These boxes were in service even though they were missing permit isolation locks.
→ At many sites, the authorised permit holders and authorised isolators could not indicate when they were trained or authorised to perform the role.
→ It was identified at one site that the permit form being filled out by the permit holder was completed prior to all the relevant isolation steps on the form being completed.
→ At many sites, the permit holder was not aware of their responsibilities with regards to the control of the isolation permit and the ongoing control of the permit holder’s key.
→ Some supervisors were aware of the non-compliance with site systems for isolations but allowed work activities to continue under these isolations.
→ At some sites, the number of people locked onto the lock box did not align with the names and signatures on the permit.
→ At most sites, the individuals fitting their personal danger locks to the lockbox were not aware of what was actually isolated under the isolation permit.
→ At a number of sites, the isolation energy standard did not set out the requirements for what was required to complete a group isolation permit, including detailing the roles and responsibilities of permit holders and authorised isolators.

Recommendations

Mine operators should:

→ ensure the site document control system manages isolation permits to avoid multiple versions of permits being in service

→ ensure isolation devices such as lock boxes are included in site management systems for defect management, pre-use inspections and maintenance of equipment

→ review the management systems for energy isolation to ensure the requirements to complete the group isolation process are correctly detailed and include roles and responsibilities of authorised isolators and permit holders for group isolations

→ ensure that training for authorised isolators and permit holders in the isolation of energy systems includes content and operation of the group isolation permit

→ review the requirements for training to the general workforce and contractors with regards to the requirements and expectations of participating in the group isolation process.

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.

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