

## Plant used in the hazardous zone

**Issue:** There have been a number of instances where electrical plant manufactured and supplied for use, and in use, at underground coal mines has not complied with the issued certificate of conformity.

Plant used in a hazardous zone in an underground coal mine must comply with the requirements of clause 78 of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014, which requires the plant to be explosion protected.

Plant that is explosion protected must have a valid certificate of conformity issued by an independent certification body that confirms that the item of plant complies with the requirements of the explosion protection level sought against the relevant standard.

Mine operators at an underground coal mine must not purchase explosion-protected plant from a supplier unless the plant has a valid certificate of conformity and sufficient information is provided to verify that the explosion-protected properties of the plant comply with the certificate of conformity.

The failure of explosion-protected properties in an underground coal mine introduces the potential for catastrophic consequences, such as explosion, if exposed to a methane-enriched environment.

## What we did

The Resources Regulator invited plant designers, manufacturers, suppliers and repairers to a workshop to be informed about legislative and regulatory requirements and gave the opportunity to ask questions:

- Relevant parties and industry were invited to attend the workshop through advertising of the workshop in our industry newsletter and website.
- The free workshop was conducted in Penrith on 29 November 2017.
- The Principal Inspector Electrical Engineering and two other electrical inspectors delivered a presentation and answered questions from participants.
- Topics presented included:
  - ex-plant failure statistics in NSW underground mines (2011-2017)
  - current legislative framework and respective duties
  - overview of licence documents and conditions

- summary of recent licensing issues
- notifying a non-compliance
- a summary of recent industry certification issues.

## Attendance

There were 48 representatives from 28 companies at the workshop.

The workshop was well received and participants indicated a desire to have more frequent workshops.

## Outcomes

The industry should have a greater awareness of their legislative obligations, failure statistics and the Resources Regulator's expectations in relation to explosion-protected plant compliance and licensing.

## Next steps

The Resources Regulator will conduct an annual workshop on the topic of requirements in relation to explosion-protected electrical equipment.

The next workshop will be held towards the end of 2018. Industry will be notified of the date and venue by invitation and advertising on our website and regular Mine Safety News publications.

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DOC18/422178