

SA17-07, June 2017

Non-compliant gas monitors

This safety alert provides information and advice about a gas monitor that is in use with a modification that is not compliant with the design registration. This advice is intended for the NSW mining and extractives industry.

Issue

The Nautitech (NTMS) RapidSense Exia methane gas detection unit has been identified as using a different housing to the unit that was tested and design registered.

Circumstances

The Nautitech RapidSense gas detection units covered by design registration MDR 141807 GD have been identified in use with a modified housing fitted to the detector. The modified design has not been registered.

Work health and safety legislation requires the design of electrically powered hand-held plant, fixed installations and installations on mobile plant used to determine or monitor the presence of gas, to be registered by the Resources Regulator if they are used at an underground coal mine.

Once design registered, the design of an item of plant **cannot** be modified from the registered design, unless the altered plant design is registered. The altered design of the plant cannot be registered if it does not comply with the applicable standard.

A person must not use plant or a substance at a workplace, or direct, or allow a worker to use plant if its design is required to be registered and it is not. This is a requirement under section 42 of the *Work Health and Safety Act 2011*.

The design registration number MDR141807 GD appears on the non-compliant housing on the gas detection unit.

The differences between the registered housing and the non-compliant housing are visible due to changes in the physical construction of the unit. Refer to photos below to assist with identifying the compliant and non-compliant housing units.

The original design registered housing has 12 gas entry holes, drilled at an angle, providing a comparatively short gas path to the inlet of the sensing element shown in Figure 1.

Figure 1: design registered plant



The modified housing (shown in figure 2 below) has six outside gas entry holes and a centre hole with six gas entry holes to the interior. Note also that the modified housing is taller.

Figure 2: modified plant



Recommendations

- Plant fitted with Nautitech RapidSense Exia methane detection systems should be inspected and verified to ensure that the housing covering the detector module conforms to the design registration.
- Non-compliant plant should not be supplied, commissioned or used.
- You should contact the manufacturer and/or supplier to obtain any necessary additional information, including specific advice on how to identify non-compliant plant and the performance of the plant.

NOTE: Please ensure all relevant people in your organisation receive a copy of this safety alert, and are informed of its content and recommendations. This safety alert 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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Disclaimer

The information contained in this publication is based on knowledge and understanding at the time of writing. However, because of advances in knowledge, users are reminded of the need to ensure that information on which they rely is up to date and to check the currency of the information with the appropriate officer of NSW Department of Planning and Environment or the user's independent advisor.

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RM8 reference	PUB17/335
Mine safety reference	SA17-07
ACES Reference	SPP-2017/0085
Date published	23/06/2017
Authorised by	Dave McLean, Chief Inspector of Mines