NOTE
This is a precautionary notice to immediately inform the mining industry of a significant hazard.

EVENT
The Department was notified last night that preliminary testing of the intrinsically safe output circuit of the Victor (Austdac / NEI Mining Equipment Limited) ISL 5 lighting system, approval numbers MDA Ex i 14046 and MDA Ex ib 14046, resulted in the ignition of a methane air mixture.

CIRCUMSTANCES
The test was initiated after an apprentice received an electrical shock from the reset circuit of the Victor ISL 5 light system (see Safety Alert SA00-11, dated 26 April 2000). The recommendation at that stage was to urgently remove the reset circuit from service.

INVESTIGATION
Preliminary testing of the intrinsically safe output circuit of the Victor ISL 5 lighting system has been conducted at TestSafe Australia. The test gas was methane (factor of safety = 1). Tests with the converter directly connected to the spark test apparatus have not caused ignition. Tests with the converter connected to one luminair, with the spark test apparatus connected in parallel with the luminair, caused ignition in normal operation and with one fault applied to defeat the output monitoring circuit.

Further testing will be progressing this week and I will endeavour to issue a further notice as this testing concludes. However, this precautionary notice has been issued to provide immediate notification and recommendation from the Department.

Should you wish additional details in the interim please contact the product distributor (Austdac Pty Ltd, phone: 02 8851 5000) or one of the electrical team from the Department: John Waudby on 4942 2300, Stan Maginnis on 6351 3052, Dennis Spruce on 4942 2300, Steve Millington on 6572 1899, Bob Kennedy 4227 1699, or Paul de Gruchy 9646 1644.

RECOMMENDATIONS
As a result of this notification the Department recommends to every colliery that has the above apparatus installed, to:

a) Conduct a risk assessment to ascertain the suitability for continued use of the apparatus.
b) Ensure that electrical supply to this apparatus is removed, when the apparatus or any part of the (intrinsic safety) circuit connected to this apparatus is in an atmosphere that is over 0.5% methane.
c) The Department also draws your attention to the requirements of Clause 51, Coal Mines (General) Regulation 1999.