

SAFETY BULLETIN

Mobile equipment contact with high-voltage overhead powerlines

BACKGROUND

The Western Australian Department of Mining and Petroleum released Safety Bulletin 85 on 4 June 2009 about mobile equipment contact with high-voltage overhead powerlines. In the current year, four cases have been reported to the Western Australian Department of Mining and Petroleum, where mobile equipment has contacted powerlines. Fortunately none were fatal but it is timely to issue reminder to all employers, managers, supervisors, contractors and workers responsible for the use of cranes, excavators, drills, elevating work platforms (EWPs) or similar plant on mine sites.

RECOMMENDATIONS

- Identify and clearly define powerline corridors across the operation
- Install height indicators and adequate signage at road crossings along the powerline corridor to warn plant operators
- Establish a powerline corridor access permit procedure and train all employees, including contractors, in the requirements of the permit procedure and how to recognise the hazards associated with high-voltage overhead powerlines
- Train all employees, including contractors, in the correct techniques to use when rescuing persons or recovering equipment in contact with electrical energy
- Define the areas that cranes and other mobile plant should not enter using rigid barriers, tape barriers with high visibility 'bunting', warning signs or similar to delineate the limits of approach to the powerlines
- Identify permissible routes of travel for mobile equipment based on the location of powerlines. In particular, identify the location and voltage of all overhead powerlines at the site before operating or working with any crane, lifting or elevating device. Many accidents arise when operators deviate from established routes

- Before any work is performed near powerlines, identify all the hazards and set-up appropriate control measures
- Evaluate the job to determine safe areas for material storage, the best placement for machinery during operations, and the size and type of machinery to be used
- Only operate mobile plant if the minimum clearances as prescribed in the Australian Standard 3007.5:2004 *Electrical Installations – Surface mines and associated processing plant-Operating requirements* can be safely maintained
- Where it may be difficult for the plant operator to maintain safe clearance from the powerlines, find an alternative method to perform the task or arrange for the powerlines to be isolated and earthed
- All overhead powerlines must be considered as being energised until the line owner or electric utility provides notification of de-energisation
- Before beginning operations near powerlines, notify the line owner (or authorised representative) and provide relevant information, such as type of equipment (including length of boom for cranes) and date, time and type of work involved.

For further information visit www.dmp.wa.gov.au/ResourcesSafety

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.

Signed



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