

Safety Bulletin

Work Near Overhead Power Lines

Overhead power line contact is one of the biggest causes of fatalities associated with mobile plant and equipment. Forklifts are frequently required to operate in outdoor areas where overhead power lines create significant risks; including electrocution, serious burns, and death. Any voltage that causes sufficient current to pass through the heart is potentially fatal. Other risks include fires and explosions that may immobilise the equipment involved.

The 2006 WorkCover NSW Code of Practice for Work Near Overhead Power Lines, states:

"Before operating a crane or item of mobile plant, the operator or other person in control of the work must take reasonable care to inspect the workplace to identify potential hazards, including any live overhead power lines or other associated electrical apparatus in the vicinity of the workplace. All overhead power lines should be treated as live unless the operator of the crane or mobile plant has received an access authority or other form of written documentation from the network operator."

If overhead power lines have been identified as a hazard, a risk assessment must be completed that considers, but is not limited to the following factors:

- Consulting the network operator regarding the proposed work.
- Can the electricity supply be de-energised?
- The location and voltage of the overhead power lines.
- The nature of work undertaken.
- The safe work practices and procedures in use.
- Site conditions, stability of crane or mobile plant and suspended loads.
- The potential for inadvertent movement of the crane or mobile plant, the load, persons and electrical equipment in the area.
- Foreseeable abnormal conditions that may exist at the worksite.

Having assessed the risks, action must be taken to ensure that the risks are eliminated or controlled. Some steps to consider include:

Elimination - Eliminate the risk of electrocution, electric shock or burns by arranging for the network operator to isolate the electricity supply for the duration of the work.

Separation – If the risk cannot be eliminated, then separate the hazard from the crane or mobile plant and personnel by using alternative equipment, and/or limiting the hoisting, slewing and other movements of the crane or mobile plant.

Information for this article was sourced from WorkCover NSW. For further overhead power line safety information, including a full risk assessment and additional control measures, refer to "Work Near Overhead Power Lines: Code of Practice, 2006."



