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Electrical Safety Authority
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Overhead Powerline Fatalities in the Construction Sector: Knowledge and Awareness Can Prevent Tragedy

Three workers were electrocuted in dump truck-related overhead powerline contacts between April and July, 2006. Sadly, these fatalities could have been prevented had the workers known what to do when working near powerlines.

None of the victims in these fatalities understood the hazards of coming too close to a powerline. In one fatality, the dumptruck with his load raised, made contact with a powerline as the vehicle was reversing. Unaware that the truck had become energized, the victim was electrocuted when he touched the rear of the vehicle. In the other two fatalities, each of the dump trucks contacted the powerline and the drivers knew something had gone wrong; however, both were killed by step potential as they stepped off their equipment. They would still be alive had they stayed on their equipment and radioed for help.

As these recent fatalities demonstrate understanding the dangers and knowing what to do when working near overhead powerlines is crucial to worker safety. For that reason, when working in close proximity to powerlines, the Occupational Health and Safety Act and Regulations (OHSA) requires workers and supervisors to:

a) Conduct a hazard assessment of the jobsite; and
b) Use a dedicated signaler to ensure that no equipment or vehicle comes within a dangerous proximity of a powerline.

Follow these key safety steps when working near overhead powerlines:

1. Always assess the hazards at a work location before beginning work, including the location of all overhead powerlines.
2. Be aware of the location of powerlines *at all times*. Moving equipment, raising a load or a vehicle under a powerline creates the potential to come into contact with the energized conductor, and thus the potential for fatalities. OHSA requires the use of a signaler when working in proximity to powerlines.
3. Signs are required to warn workers of the dangers of powerlines if a work location has overhead powerlines running through it.
4. Stay in the vehicle and radio for help if your vehicle or equipment comes into contact with a powerline.

Remember: always conduct a hazard assessment before beginning work; be aware of the location of powerlines at all times; and take steps to ensure that you and your equipment stay a safe distance from powerlines as defined by OHSA below:

Voltage	**Minimum Distance**
Up to 150,000 Volts	3.0 m
More than 150,000 to 250,000 Volts	4.5 m
More than 250,000	6.0 m