

SAFETY ALERT



TRUCK DRIVER RAISES TRAY UNDER POWERLINES

INCIDENT

A truck driver narrowly escaped death when he raised the tray of his on-road haulage truck into 11,000 volt overhead power lines.

CIRCUMSTANCES

The driver was employed by a contractor to haul concentrate from a mine site. His truck was parked at the unloading bay, situated under power lines that are eight (8) metres off the ground. The driver was outside the vehicle, watching the movement of the tray while leaning into the cabin through the open driver-side, operating the tray lever control and the accelerator pedal by hand. The driver was raising the tray when suddenly he saw sparks flying from the front of the tray and out of the tyres directly beneath. He realised the tray had made contact with the overhead power lines. He immediately operated the control lever to lower the tray away from the power lines. The power was tripped out by the protection mounted on the power pole.

INVESTIGATION

- The truck unloading bay was situated under the lowest section of the power lines, which were eight metres off the ground. When the tray made contact with the power lines, the current travelled to earth through the truck.
- The protection which tripped out the high voltage power supply is in fact designed for automatic resetting and reclosing. The power system did have earth leakage protection, but is not designed to safeguard against personal electrocution. The driver was lucky to escape electrocution.
- After the incident, it was found that two of the three power lines were half melted through. There were burn marks on the tray and tarpaulin, and burn marks on the driver's-side front inner and rear outer tyres.
- Past experience has shown that brief contact with power lines can cause one or more truck tyres to explode immediately, or hours after the event. The heat generated in the tyre creates an explosive gas which may ignite. The truck should have been isolated immediately and left for 24 hours.

RECOMMENDATIONS

A risk assessment should be conducted at all sites to identify all potential hazards associated with overhead power lines at each location. The assessment should examine :

- Exclusion of any loading, unloading or maintenance operations under power lines,
- Safe clearance distances in accordance with Australian Standards,
- Traffic rules and travel routes,
- Training of operators and drivers, and management of contractors,
- Adequate signage on sites and reminder signage in vehicle cabins,
- Isolation of equipment for 24 hours immediately after such an event.

R Regan
ASSISTANT DIRECTOR, SAFETY OPERATIONS