SAFETY BULLETIN NO: 60

LIGHTNING STRIKES - MANAGING THE RISKS

Safety Bulletin No. 46 – LIGHTNING - HAZARDS AND SAFEGUARDS, issued in February 1999, has previously outlined the mechanism of lightning strikes. This Bulletin also provided guidance on the protection of persons and plant and open pit blasting precautions when thunderstorms are imminent.

Background of Recent Events

In the past week, three persons have been struck by lightning in WA, two of whom were killed.

A mine manager was struck and killed while standing next to a tailings dam. A haul truck driver was struck while sheltering under the wheel arch of the truck during a storm. Fortunately, he escaped with only shock and bruising and was taken to hospital for a medical check.

The second fatality involved a road train driver in the Kimberley who was securing loading ramps on a trailer when lightning struck the prime mover. He died shortly after being briefly revived with CPR. His wife and child were in the prime mover cabin at the time and were not injured.

These tragic events underline the high risk of injury or death from lightning strikes during thunderstorms.

Thunderstorm activity is very prevalent during the summer months in Western Australia, particularly in the inland regions, from the southern wheatbelt through the central and eastern Goldfields and Pilbara to the Kimberley.

The risk to persons is reduced to some extent in built up and developed areas, where buildings and other high structures generally attract lightning strikes.

The risks are much greater for persons exposed in open flat areas.

Risk Management

It is essential that all personnel engaged in mining operations are made fully aware of the risk of lightning strikes, particularly during summer months.
An assessment of the potential for employee injury should also be conducted and each mine adopt appropriate procedures to minimise risk. This should include blasting precautions for open pit operations and a requirement for employees to seek appropriate shelter when thunderstorms occur.

A thorough assessment should also be carried out of the risk potential for lightning strikes to be conducted into underground mines through installed service systems. Blasting should not be carried out in shaft sinking during thunderstorms.

Safety Bulletin 46, attached, is reissued to provide relevant information to assist in this process.

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