

Safety and health alert

01/94 Stuck by rope under tension

Incident

In May 1993, a 46 year old electrician, supervising the laying of underground high voltage electrical cable along a trench 1.2m deep and approximately 350m long, sustained fatal injuries when a synthetic rope attached to a slow moving tractor used to tow the cable into position was lifted by the electrician over a cast in bollard. The release of tension on the synthetic rope propelled the Electrician backwards and downwards with considerable force, resulting in him striking his head on the concrete floor slab, sustaining fatal injuries.

A similar type incident occurred in December 1993. A 45 year old worker involved in tensioning suspended electrical transmission lines was working in a man cage suspended from a crane. While operating a turner (Rigging Gear used to tension cables) the transmission line snapped at a stress concentration point close to a suspension wire clamp. The subsequent release of tensional force caused the tensioning gear to spring back striking the man cage resulting in the worker falling 15m to the ground sustaining fatal injuries.

Factors

- Proximity of persons to tensioning equipment adjacent to tension line.
- Use of tensioning gear (slip factor, tension, load factor unknown).

Recommendations

- Working in close proximity to cables under tension can be extremely hazardous and should NOT occur without due planning and safeguards.
- Planning should include written procedures which are openly discussed, and then distributed. Monitoring for compliance is essential.
- Know the safe working load of and the applied load to the cable. If the load is not known then effective shielding of adjacent personnel is essential.

Further Information

Further information can be obtained from the WorkSafe internet site www.worksafe.wa.gov.au, or by contacting customer service on 1300 307 877 or email: safety@docep.wa.gov.au.

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