

DEPARTMENT OF MINERALS AND ENERGY WESTERN AUSTRALIA

SIGNIFICANT INCIDENT REPORT NO. 46

CONTACT WITH OVERHEAD POWERLINE – FATAL ACCIDENT

INCIDENT

An electrical contractor was electrocuted when he came into contact with overhead powerline conductors energised at 22000 volts.

The contractor set out to replace a broken cross-arm on a power pole. Using a ladder to access the cross-arm, the contractor commenced work without having isolated the high voltage electricity supply. Emergency services were called by a trades assistant working with the contractor.

CAUSE

The immediate cause of the accident was the failure to isolate the power source and test the equipment prior to commencing work.

COMMENT

A major underlying cause which contributed to this accident was a failure to adhere to a safe system of work, including in particular, procedures for the isolation of a high voltage power supply.

Detailed in the Electricity Act Regulations 1947 are minimum requirements which provide for the isolation, proving 'dead', earthing and short-circuiting of high voltage apparatus prior to commencing work.

Recommended safe working practices which include provisions for access permits may be referenced from AS2467-1981.

The extreme consequences that are likely to result from accidents involving high voltage can not be over-emphasised, and employers in WA are reminded of their duty of care prescribed in Section 30B of the Mines Regulation Act 1946.

RECOMMENDATION

That all mine managers review the procedures and practices being followed on their respective mines by personnel working on power distribution systems and ensure that a safe system of work is in place.

J M Torlach STATE MINING ENGINEER

8 April 1994