MNM Fatal 2011-09

- Electrical Accident
- September 13, 2011 (Washington)
- Sand & Gravel Operation
- Quality Control Person
- 38 years old
- 3 years of experience

Overview

The victim was killed , while working on an energized electrical circuit. He was attempting to reverse the polarity on an energized power cable at a control trailer when he received a fatal electrical shock.

The accident occurred because management procedures failed to ensure that persons de-energize an electrical circuit prior to performing work on it. The system was not locked out, tagged out, or tested to verify it was de-energized.


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Root Cause

Root Cause: Management policies and procedures failed to ensure that persons were specifically trained to verify that electrical circuits were de-energized and locked out prior to performing work on them.

Corrective Action: Mine management implemented a Standard Operating Program including a new lock out, tag out, and verification system for all of their portable operations. All persons have been trained regarding the new policies and procedures. A company electrician will be at the site any time a plant is set-up, taken down, or when electrical work is performed to ensure that all safety procedures are followed.

Best Practices

- Be trained on all the electrical tests and safety equipment necessary to safely test and ground the circuit being worked on.
- Conduct a risk assessment.
- Use properly rated Personal Protective Equipment (PPE) including Arc Flash Protection such as a hood, gloves, shirt, and pants.
- Positively identify the circuit on which work is to be conducted.
- De-energize power and ensure that the circuit is visibly open.

Best Practices

- Place YOUR lock and tag on the disconnecting device.
- Verify the circuit is de-energized by testing for voltage using properly rated test equipment.
- Ensure ALL electrical components in the enclosure are de-energized.
- Ground ALL phase conductors to the equipment grounding medium with grounding equipment that is properly rated.