## MNM Fatal 2009-04

- Electrical Accident
- April 7, 2009 (Iowa)
- Sand & Gravel Operation
- Supervisor
- 36 years old
- 15 years of experience

## Overview

The victim was fatally injured when he contacted an energized 4160-volt electrical circuit and was electrocuted.

The accident occurred because policies, procedures, and training did not ensure that the 4160-volt circuit was de-energized, locked out and tagged out prior to performing work on the individual circuit.



## **Root Causes**

- <u>Root Cause:</u> Management policies and procedures failed to ensure that adequate training was provided to the victim to identify high voltage electrical sources.
- <u>Corrective Action:</u> Management established policies and procedures to train persons to identify high voltage electrical sources.
- Root Cause: Management policies and procedures failed to ensure that all high voltage electrical sources were locked out, tagged out, and tested to ensure power was de-energized before work began.
- <u>Corrective Action:</u> Management established policies and procedures to ensure that all persons are trained in the established lock out tag out procedures. Persons were also trained that only qualified and authorized electricians will conduct work on electrical circuits exceeding 480 volts.

## **Best Practices**

- Before YOU perform electrical work:
  - Be trained and knowledgeable in the task.
  - Be trained on all the electrical test and safety equipment necessary to safely test and ground the circuit being worked on.
  - Use properly rated Personal Protective Equipment 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.
  - 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 cabinet are deenergized.
  - Ground ALL phase conductors to the equipment grounding medium with grounding equipment that is properly rated.