MNM Fatal 2011-13

Machinery Accident
November 7, 2011 (Iowa)
Crushed Stone Operation
Co-Owner
82 years old
26 years of experience



The victim was killed when he slipped and fell into an operating feed hopper and jaw crusher. He was last seen standing on the bottom edge of a 9-inch by 10-inch observation hole, cut into a protective steel plate on the feed hopper, attempting to dislodge material hung up between the feed hopper and the jaw crusher.

The accident occurred because the victim was not effectively protected when working from the operating crushing equipment. A suitable walkway was not provided along the feed hopper and he fell into the operating equipment. Work was performed on the equipment; however, the power was not de-energized and the equipment was not blocked against hazardous motion.



Root Cause

<u>*Root Cause:*</u> The victim was not effectively protected when working from the operating primary crushing plant. He was working on the equipment and the power was not de-energized and the equipment was not blocked against hazardous motion. A suitable walkway was not provided along the feed hopper.

<u>Corrective Action</u>: After the accident, policies and procedures were established to ensure persons are effectively protected when working from the operating primary crushing plant. The newly established policies and procedures prohibit persons from climbing on the operating equipment. The feed hopper will be accessed by using a ladder. Additionally, all power will be de-energized and locked out. A safety meeting was conducted with all miners to discuss these new policies and procedures. The mine operator is exploring the purchase of a rock breaker to eliminate manually unplugging of material in the jaw crusher.

Best Practices

- Establish policies and procedures for safely clearing plugged material in a feed hopper. Evaluate design modifications or use auxiliary equipment to reduce the risks associated with clearing an obstruction.
- Ensure that persons are task trained and understand the hazards associated with the work being performed.
- Deenergize and Lock-out/tag-out all power sources before working on crushers.
- Provide and maintain a safe means of access to all working places.