MNM Fatal 2009-02

- Falling Material Accident
- January 17, 2009 (Kentucky)
- Crushed Stone Mill Operation
- Mill Operator
- 48 years old
- 15 weeks of experience

Overview

The victim was fatally injured when he was engulfed in a in a crushed limestone mill feed hopper (hopper). He had placed material into the hopper with a front-end loader and entered the top of the hopper to dislodge bridged material that would not feed onto the belt conveyor below.

The accident occurred because management failed to establish safe work procedures that prevented persons from being exposed to the hazard of falling material. Management was aware that the hopper frequently experienced blockages of material. They had not trained miners how to remove such blockages or provided a safe means to clear the blockages.

Miners were not familiar with the hazards at the mine. Persons performing the tasks were not provided with required new miner training.

Root Causes

- Root Cause: Management failed to establish procedures to unclog bridged material in the hopper. Management was aware of the problems with the material bridging but did not have procedures in place to protect persons working at the hopper.
- Corrective Action: Management established policies, procedures, and controls to unclog the bridged hopper and to prevent persons from entering the hopper. The top of the hopper was modified and a grizzly was added to prevent anyone from entering the hopper. All persons working at the hopper were trained regarding the procedures.
- Root Cause: Management did not ensure that all miners were given new miner training or task training in the hazards at the mine.
- Corrective Action: Management provided the required 24 hours of new miner training to all miners and new task training when miners are assigned a new task.

Best Practices

- Establish and review procedures to ensure all possible hazards have been identified and appropriate controls are in place to protect persons before beginning work.
- Train miners in safe work procedures and hazard recognition, specifically when clearing blocked hoppers.
- Lock out discharge operating controls.
- Ensure a safety harness properly secured to a lanyard is worn and a second person is positioned outside to adjust the lanyard.
- Management should routinely monitor these activities to ensure miners are protected from possible hazards.
- Provide vibrating shakers to maintain material flow or mechanical means of safely removing material if hoppers experience recurring flow problems.