

MNM Fatal 2013-10

- Machinery Accident
- August 5, 2013 (New York)
- Crushed Stone Mine
- Plant Operator
- 55 years old
- 5 years of experience

Overview

The victim was killed while standing near an operating cone crusher. When he looked into the cone crusher, a tooth, that had broken free from an excavator bucket, was ejected from the cone crusher and struck him.

The accident occurred due to management's failure to establish and implement policies and procedures to safely clear a cone crusher. There were no policies or procedures which should have included provisions to deenergize and lock out the power source; and block the cone crusher against hazardous motion. The cone crusher was not equipped with a guard, shield, or other device to protect miners from flying/falling materials created by its operation. Additionally, the victim did not receive task training addressing safe work procedures for clearing or dislodging material in a cone crusher and the potential hazards associated with the task.



Root Causes

- **Root Cause:** Management failed to establish and implement proper work procedures to ensure the cone crushing plant was locked out, tagged out, and blocked against motion prior to persons entering, viewing, or performing work inside the crusher and to train miners in these new procedures.
- **Corrective Action:** Management has established written policies and safe work procedures to lock out, tag out, and block equipment against motion prior to any work being performed. The miners were trained in the new policies and procedures.
- **Root Cause:** Management failed to install a shield/guard at the cone crusher feed hopper to protect miners from falling/flying material generated by the operating crusher.
- **Corrective Action:** Management installed guarding around the crusher feed hopper to protect miners and established policies and procedures to maintain the guarding.
- **Root Cause:** The victim did not receive task training regarding procedures to clear or dislodge material from the cone crusher. Existing policies and procedures failed to ensure that miners stayed clear of an operating cone crusher, specifically during clearing and dislodging material.
- **Corrective Action:** Management established written policies and safe work procedures for safely clearing and dislodging material to ensure that miners stayed clear of the operating cone crusher. The new procedures incorporate the manufacturer's recommendations for cleaning/dislodging material. Miners were trained in the new policies and procedures.

Best Practices

- Establish and discuss policies and procedures for safely clearing a cone crusher.
- Consider a mechanical method for clearing material to minimize exposure to persons performing the work.
- Task train persons to recognize all potential hazardous conditions and to
- Before working on or near equipment, ensure the equipment power is off and locked out/tagged out. Ensure the equipment has been securely blocked against hazardous motion to ensure energy cannot be released while performing work.
- Always maintain equipment in a safe operating condition.
- Provide a safe means of access for persons required to maintain a cone crusher.
- Provide guards, shields, or other devices to protect persons from the hazard of flying or falling materials generated from the operation of screens, crushers, or conveyors.
- Implement measures to ensure persons are properly positioned and protected from hazards while performing a task.