

MNMM Fatal 2011-03

- Powered Haulage Accident
- February 24, 2011 (Utah)
- Sand & Gravel Operation
- Front-end loader operator
- 56 years old
- 10 years of experience

Overview

The victim was killed when he became trapped between a moving belt conveyor and the bottom of a tramp metal magnet. He climbed up the structure of the belt conveyor to access and clean tramp metal off the magnet when the belt conveyor was started.

The accident occurred because management failed to ensure that safe work procedures were followed while persons performed work on the belt conveyor to clean the tramp metal magnet. The belt conveyor was not deenergized, locked and tagged out, and blocked against motion prior to persons removing tramp metal from the magnet.

Additionally, the startup procedures for the belt conveyor did not ensure that persons were protected when it was started. The required audible warning device could not be heard above the plant noise.



Root Causes

Root Cause: Management did not ensure that safe operating procedures were followed while persons removed tramp steel from the magnet located above the belt conveyor. The victim accessed the belt conveyor without ensuring that it had been deenergized, locked and tagged out, and blocked against hazardous motion.

Corrective Action: Management established policies, procedures, and controls to ensure that belt conveyors are deenergized, locked and tagged out, and blocked against hazardous motion before persons work on them. All miners have been trained regarding these new procedures.

Root Cause: Management did not ensure that safe operating procedures were followed prior to starting a belt conveyor. The required audible warning device could not be heard above the plant noise at the location of the accident when the belt conveyor was started.

Corrective Action: Two additional warning horns that are audible above the surrounding noise level were installed at appropriate locations so persons could hear the warnings.

Best Practices

- Establish policies and procedures for conducting specific tasks on belt conveyors.
- Ensure that persons are task trained and understand the hazards associated with the work being performed.
- Deenergize and block belt conveyors against motion before working near a drive, head, tail, take-up pulleys, and magnets.
- Lock-out/tag-out all power sources before working on belt conveyors.
- Maintain communications with all persons performing the task. Before starting belt conveyors, ensure that all persons are clear.
- Provide and maintain a safe means of access to all working places.
- Sound an audible alarm if the entire length of the belt conveyor is not visible from the starting switch.