MNM Fatal 2012-17

- Machinery Accident
- November 1, 2012 (New York)
- Common Shale Operation
- Driller
- 30 years old
- 6 years of experience

Overview

The victim was killed while attempting to manually load a threaded drill steel into the mast of a crawler drilling machine by engaging it with the rotating drill head when he became entangled in the rotating drill steel.

The accident occurred due to contract management's failure to implement policies and procedures to ensure that drillers stayed clear of a rotating drill steel, specifically while performing drill steel loading operations. The victim had approximately six months of drilling experience and did not receive effective task training addressing the safe work procedures for loading a drill steel and the potential hazards associated with the task. Additionally, he was assigned to perform work alone where hazardous conditions existed and he could not communicate with others, be heard, or be seen.

Root Causes

Root Cause: The victim did not receive effective task training regarding procedures to safely load drill steels. Contract management policies and procedures failed to ensure that drillers stayed clear of a rotating drill steel, specifically while performing drill steel loading operations.

Corrective Action: Contract management established written policies and safe work procedures to ensure that drillers stayed clear of rotating drill steels during drill steel loading operations. These new procedures incorporate the manufacturer's recommendations for loading drill steels and require a minimum of two properly trained persons to perform the task. All persons were provided task training regarding the new policies.

Root Cause: Contract management required drillers to work alone where hazardous conditions existed and they could communicate with others, could be heard, or be seen while working in the quarry.

Corrective Action: Contract management implemented safe work procedures for loading drill steels which incorporate the manufacturer's recommendations for loading drill steels and require a minimum of two properly trained persons to perform the task. All persons were provided task training regarding the new procedures. In addition, the mine operator has implemented policies and procedures for management personnel to provide increased oversight of contractors working at the site.

Best Practices

- Establish and discuss safe work procedures. Identify and control all hazards. Train all persons to recognize all potential hazards and understand safe job procedures to eliminate all hazards before beginning work.
- Ensure that the manufacturer's procedures are followed when adding drill steels.
- Ensure that emergency stop/shut-off switches, panic bars, dead man devices, tethers, slap bars, rope switches, two handed controls, spring loaded controls, are functional and in easily accessible locations.
- Never manually thread drill steels when the drill head is rotating.
- Drills should be fitted with automated systems for changing rods, or two persons should be present when rods are changed manually.
- Do not wear loose fitting clothing when working around drilling machinery. Avoid using a strap or other objects that could become entangled with or thrown from moving or rotating parts.
- Monitor personnel routinely to ensure procedures are followed.