

# MNMM Fatal 2013-02

- Machinery Accident
- January 21, 2012 (Nevada)
- Lime Operation
- Mechanic
- 54 years old
- 6 years of experience

# Overview

The victim was killed when he was caught between a push rod connecting plate for a ram and a kiln hood on the kiln preheat deck. He was attempting to repair a leaking hydraulic cylinder that activated a pusher arm on the kiln. The victim was working on energized hydraulic equipment near moving machine parts when he was caught in a pinch point.

The accident occurred due to management's lack of safe work procedures that ensured the victim could safely perform work on the kiln deck. He was positioned between the push rod connecting plate and the kiln hood; however, the energy source was not deenergized and the ram was not blocked against hazardous motion. The kiln had three lock-out features but none of them were being used when the accident occurred.



**Victim caught here**

# Root Cause

*Root Cause: Management did not ensure that the mine had appropriate established safe work procedures and that miners were trained in the procedures and the procedures were followed during maintenance activities on the Kiln #2 preheater, ram #4 unit. The energy source was not deenergized and the ram was not blocked against hazardous motion.*

*Corrective Action: Management revised the lockout, tag out, and blocking procedures and established policies to ensure that safe work procedures are followed when maintenance work is performed. Persons performing the task were trained in the new procedures and policies. Management will monitor maintenance work to ensure the procedures are being followed.*

# Best Practices

- Establish and discuss safe work procedures. Identify and control all hazards associated with the work to be performed along with the methods to properly protect persons.
- Always follow the equipment manufacturer's recommended maintenance procedures when conducting repairs to machinery.
- Task train all persons to recognize all potential hazardous conditions and understand safe job procedures to eliminate all hazards before beginning work.
- Before working on or near equipment, ensure that the equipment power circuits are locked out/tagged out and that the equipment is blocked against hazardous motion.
- Require all persons to be positioned to prevent them from being exposed to any hazards.
- Monitor personnel to ensure safe work procedures, including lock out/ tag out and safe work positioning, are followed.
- Ensure guarding is in place to cover potential pinch points and moving parts in areas routinely accessed by personnel.