

MNM Fatal 2016-03

- Explosives and Blasting Agents
- March 22, 2016 (Iowa)
- Limestone Quarry
- Leadman (Contractor)
- 42 years old
- 6 years of experience

Overview

Tracy L. Hockemeier, Leadman, age 42, was fatally injured on March 22, 2016, when he was struck by fly rock during blasting operations in the Winterset section of Plant 862. Hockemeier was sitting in a pickup truck, approximately 1,200 feet from the blast site, preventing others from entering the blast area. When the blast was initiated, fly rock was propelled upward, landing on and penetrating the roof of the truck and striking the victim.

The accident occurred as a result of multiple factors, including geology of the blast area, the condition of and loading of blast holes, and failure to communicate between the mine operator and contractor blasters. The mine operator and contractors failed to ensure that the blast area was cleared, or adequate shelter taken, prior to initiating the shot. The victim was not task trained for evaluating blast area clearance or blasting procedures



Best Practices

- Review and follow site specific blast plan prior to loading any explosives.
- Utilize technology, such as face profilers and borehole probes, to obtain specific geometric details of the material to be blasted.
- Adjust stemming depth and/or decking to maintain adequate burden on all sections of the blast hole.
- Develop a drill pattern by considering geology, face geometry, and surface topography.
- Clear and remove all persons from the blast area unless suitable blasting shelters are provided to protect persons from flyrock. Allow at least 15 seconds after a blast for any flyrock to drop.
- Examine blast site geology, communicate with the driller and review the drill log for angles, voids, competency of rock, loss of air, etc., prior to the loading any explosives. Make appropriate adjustments to ensure that the holes are not overloaded.
- Ensure blasting and fly rock areas are properly calculated to ensure the blast site is clear of all persons.
- Determine the actual burden for all face holes along their length and adjust the explosive power factor along the borehole accordingly.