

# MNM Fatal 2010-11

- Fall of Ground of Accident
- June 18, 2010 (Idaho)
- Underground Silver Mine
- Contract Miner
- 29 years old
- 6 years of experience

# Overview

The victim died when he was struck by falling material while working in a development raise. The victim and a coworker were bolting the ground when he attempted to manually scale loose material from the back. The other miner was not injured.

The accident occurred because management, policies, procedures, and controls were inadequate and did not protect persons working in the raise. Procedures were not implemented to control the ground when conditions changed exposing persons to adverse ground conditions. Additionally, the scaling bar that was provided did not ensure that persons could scale the ground from a location that did not expose them from falling material.



# Root Causes

**Root Cause:** Management policies, procedures, and controls failed to ensure that the scaling bar used by the victim protected him from falling material.

**Corrective Action:** Management established policies, procedures, and controls to ensure that the proper length and design of scaling tools being used protected persons from falling material. Miners received additional training regarding the use of the proper length and design of scaling tools.

**Root Cause:** Management policies, procedures, and controls failed to ensure that persons scaled loose ground from a safe location.

**Corrective Action:** Management established policies, procedures, and controls to ensure that persons scaling loose ground perform the task from a safe location. The miners received additional training regarding proper manual scaling methods.

**Root Cause:** Management policies, procedures, and controls failed to ensure that safe ground conditions were established and maintained where persons work or travel.

**Corrective Action:** Management has established policies, procedures, and controls to ensure that safe ground conditions are established and maintained. When ground conditions are adverse, changes in the ground control plan are required to ensure the installation of adequate ground support. Experienced persons received additional training to evaluate, support, and maintain adverse ground conditions.

# Best Practices

- Examine, sound, and test for loose ground in areas before starting to work, after blasting, and as ground conditions warrant.
- Train all persons to scale loose material safely.
- Communicate unsafe ground conditions to all affected miners.
- Perform manual scaling from a location which will not expose persons to injury from falling material.
- When manually scaling, use scaling bars of a length and design that will allow the removal of loose material without exposing persons to the risk of injury.
- Install ground support where conditions warrant.