



Metal and Nonmetal Quarterly

In this Metal and Nonmetal Quarterly

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Return Idler Hazards



Return Idler Best Practices



Examine work areas and take precautions before the work begins.

Prohibit travel and work in areas miners may be exposed to moving machine parts.

ARLINGTON, Va.-On January 24th, 2005, a contract laborer was performing clean up work at a cement manufacturing facility when he was caught in an unguarded conveyor return roller. The conveyor return roller was located approximately 40 inches above the floor. The conveyor was started and stopped repeatedly throughout the shift and used for loading trucks in a product load out area. An audible start up alarm was provided. The victim's father was working in the area. He discovered his son's left arm

along with the push broom, caught in the operating return roller assembly. Mine personnel summoned to the scene rescued the worker from the conveyor and performed CPR . The victim was transported to an area hospital and was released approximately four weeks later. He sustained disabling injuries.

Previous issues are available on the MSHA website at www.msha.gov.

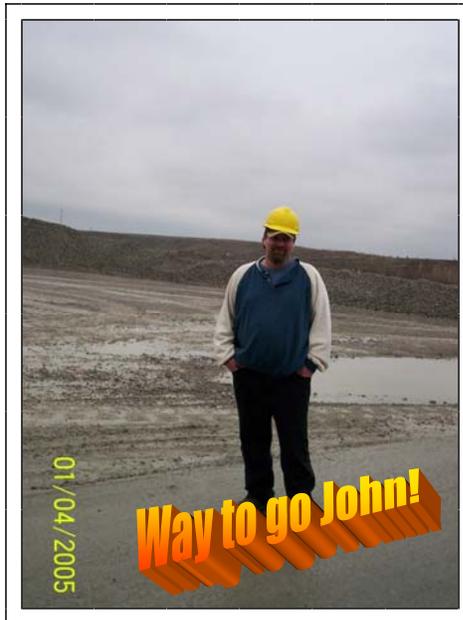
Spring
Showers
Bring
May
Flowers



U.S. Department of Labor
Mine Safety and Health Administration
1100 Wilson Boulevard
Arlington, Virginia 22209-3939

Personal Protective Equipment (PPE) Saves Lives

On October 8, 2004, John P. Morris, foreman, Stoneco, Inc. (victim) was helping Rick Tallini, blaster, Northern Ohio Explosives, lay out a blasting shot pattern at the east extraction limit on the number 2 bench. Tallini asked Morris to help him measure the width of the bench. Morris stood approximately 10 feet from the high wall (48 feet high) and tossed the weighted end of the tape measure to the face. As Tallini walked away with the other end of the tape, material fell from the face striking Morris in the head. Tallini heard the material falling and turned to see a cloud of dust. Tallini found Morris face down and unconscious. Tallini left to call for help and returned to find Morris conscious. Morris refused any medical attention. He suffered a laceration to back of his head, exposing the skull. The mine operator insisted on him being transported to town for medical treatment. Morris had been



wearing a hard hat, safety glasses and steel toe work boots. A small nick was found on the back of his hard hat. He was treated and released from an area hospital the following day. Morris returned to work on October 29, 2004.



"That's why we wear Hard-hats!"

A Fresh Set of Eyes

There have been five fatalities this year. A best practice that has been identified in every fatality is the importance of workplace examinations and pre-operational inspections on equipment. They are an opportunity for mine operators and miners to identify



potential safety and health hazards. Often, hazards are not identified because the miner is too familiar with the work place. One way to help is to have miners from other areas inspect a work area that they do not routinely work in. A new set of eyes will often see something that others have not.

History of the Hard Hat

Hard-Boiled Hat



A hundred years ago, the hard hat did not exist. Fifty years ago, head protection wasn't widely required for workers. But, thanks to advances in safety, the hard hat has evolved over the decades. Established in San Francisco in 1898, the Bullard Company sold carbide lamps and mining equipment to gold and copper miners. Miners used to wear a soft derby, similar to a baseball cap. It had a small, hard-leather and shellac brim. In 1915, the Bullard Company began work on a helmet that could protect miners from falling objects. They based it on the doughboy, a helmet worn by the soldiers in World War I.

The "Hard-Boiled Hat", patented in 1919, was called this because of the steam used in the manufacturing process. The original "Hard-Boiled hat" was manufactured out of steamed canvas, glue and black paint. It had a suspension device in it and this became the worlds' first, commercially-available, industrial head-protection device.

America's first designated Hard Hat Area



San Francisco Golden Gate Bridge

The project's chief engineer, Joseph B. Strauss, and the Bullard Company wanted to make the work place safer for the worker. One problem the bridge project faced was falling rivets, which could cause serious injury. The Bullard Company transformed the mining helmet into a durable industrial hard hat. In 1938, Bullard designed and manufactured the first aluminum hard hat, which was considered very durable and reasonably light weight for the time. It had one drawback, the aluminum conducted electricity.



Junkyard Guards

MSHA Sends a BIG Thank You to IMA-NA, NSSGA, U.S. Silica, and Vulcan Materials for making this training DVD possible!



The Junkyard Guards training DVD is based on two separate guarding challenges that were solved by miners using materials found in laydown, scrap, and junk yards. It shows innovative guarding designs that mines can use which make guards easier to handle. Catalog number DVD513.



Health Respirable Dust Sampling

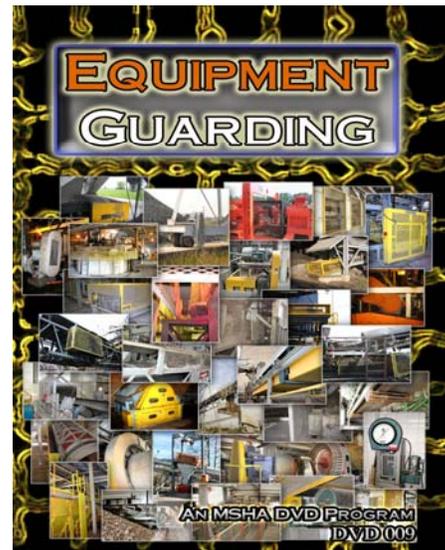


This training video was developed in partnership with the Industrial Minerals Association-North America (IMA-NA). It was filmed at Unimin's construction sand and gravel facility in Lugoff, SC. It explains the purpose of dust sampling and demonstrates how to correctly collect dust samples. Viewers will learn calibration procedures and the components of the sampling train. This video shows the pitfalls of not sampling correctly, and points out common errors.

Catalog number VC982.



Guarding DVD



This is a two-disc, inter-related series of video segments on DVD that explores equipment guarding in-depth. It discusses types of guards, guard construction, qualities, materials, attachment, and applications of new technology, with an emphasis on hazard analysis and risk assessment. The focus is on training and improving guards toward "best practice" quality.

Catalog number DVD009.

Order these training products from the Mine Academy by calling (304) 256-3257.