Winter 2005

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United States Department of Labor
Mine Safety and Health Administration

Metal and Nonmetal Quarterly

Winter Hazards

In this Metal and Nonmetal Quarterly

ARLINGTON, Va.-The U.S. Department of Labor's Mine Safety and Health Administration (MSHA) wants to take this opportunity to warn operators and miners at surface and underground mines of the hazards that may be brought on in the work environment due to the onset of cold weather. Records indicate that a large number of fatal mining accidents have occurred during the winter months.

During winter, low barometric pressures and low humidity, coupled with the seasonal drying of many areas in metal and nonmetal mines, have contributed to conditions that have become hazardous to miners.

Limited visibility during inclement weather, slippery walkways and road ways, vehicle fumes in enclosed cabs, confined spaces, and the freezing and thawing of high walls all contribute to hazardous conditions that should be addressed during winter months.

Mine operators and miners are encouraged to conduct frequent mine examinations, and equipment inspections, especially during the freezing and thawing cycles, when unexpected changes can occur during a shift.

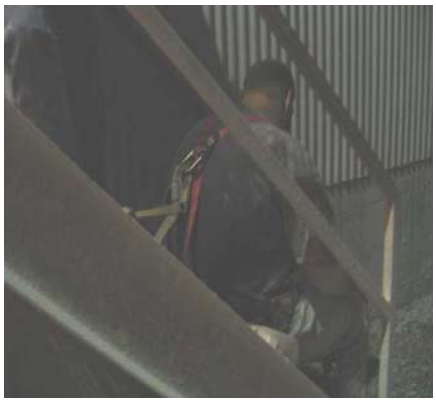
MSHA wants to remind miners and operators in the winter months to be alert to the hazards that cold weather brings with it. Winter Hazards Best Practices include:

- Remove snow and apply sand to roads
- Keep walkways free of snow, mud, and ice
- Apply paint/sand mix to walkways, handrails and equipment ladders
- Thoroughly examine highwalls
- Examine exhaust systems for leaks
- Insure ventilation is adequate
- Wear appropriate PPE and dress warm
- Stay indoors as much as possible
- Keep water and food with you
- If you have to go outside, tell someone where you are going, and when you should be back

Personal Protective Equipment (PPE) Saves Lives

On 10/14/04 at 7:25 pm, the Black River Mine in Black River, KY, experienced a fall related accident. A bulk transit truck driver fell off the tank trailer while he was trying to sweep lime off the top of the trailer. The truck driver was using a harness and nylon lanyard which was attached to an overhead arresting system. According to the driver, his left ankle buckled causing him to lose his balance . When he lost his balance, he fell over the side of the tank trailer head first towards the ground below. Appropriately three to four minutes later he was found by a miner, and brought back up to the top of the trailer, and eventually to ground level. Further investigation revealed the driver weighed in excess of 425 pounds, and wore his own harness, **which did not fail when force was exerted.**

Mine Officials at the Black River Mine said "Once again, *this clearly proves personal protective equipment prevents accidents and needless pain and suffering*. Had this driver not been using a fall restraint device, he would have fallen 12' head first, to the ground below, which may have resulted in a fatality or serious injury."



Action taken by the mine operator as a result of the accident.

1. The shock absorber lanyard in this area of the mine site was immediately replaced.
2. The arresting system in this area of the mine was inspected and determined to be safe to use.
3. Fall retrieval procedures were reviewed and additional fall retrieval rescue procedures were developed.
4. They reviewed the various options available for the use of a retractable lanyard, rather than a 6' nylon lanyard, to limit fall dis-

MSHA Metal and Nonmetal Mines statistics documented that

FALL RELATED Accidents were the leading cause of fatalities in 2004 .

Tom, Loyd, Chief of Safety at MSHA in Arlington, VA said, "15 of the 24 fatal accidents that occurred this year were fall related. They account for 63% of the fatalities. Fall related accidents include items that fall on miners and miners that fall from elevated work areas." MSHA wants to remind miners that when it comes to fall PPE

SLAM Risks

Risk Assessment Can save Lives!!

Risk assessment is a simple process, with a big effect, that identifies and controls hazards. Most fatal accidents occur when hazards are not identified or controlled.

The four steps for conducting a risk assessment are:

Step I STOP - *consider*

Make Risk Assessment a part of your everyday activities.

Step *2* LOOK - *identify hazards*

This step begins before starting and during the job. Determine the essential job steps required to accomplish the work or address any change. Identify hazards for each job step.

Step 3 ANALYZE - *what is the outcome?*

Miners can identify potential hazards, based on their experience associated with each required job step. What will be results if certain things occur? Assessment should continue throughout the work shift as an integral part of job tasks. Talk with someone and share identified hazards with others. "Remember two heads are better than one". Experience and research has shown that when you include other employees in the risk assessment, especially those impacted by the job, you significantly improve the quality of the analysis. When you can; work as a team.

***Step 4* MANAGE -** *develop and implement controls*

Eliminate hazards where possible or isolate miner's exposure to the risk (Personal Protective Equipment, Isolate the Hazard, Reduce Exposure, Change The Work Procedure, Etc.).

What gets Measured Gets Done

Workplace Examinations & Equipment Inspections Prevent Accidents

Stop . . . . . Not so fast! Take a look around. Think through the task.

Look . . . . . Identify the hazards for each job step.

Analyze . . . Assess whether you have the knowledge, training, and tools to do the job safely, and determine what else you need.

Manage . . . Remove or control the hazards and use proper equipment.

Remember . Always make risk assessment part of your activities.

Identify . . . All potential risks and hazards and how to correct them.

Share . . . . . What you find with others impacted by the task.

Know . . . . . What others on your jobsite are doing.

Safety . . . . . Commit to working safely.

Every Job – Every Day – Every Time

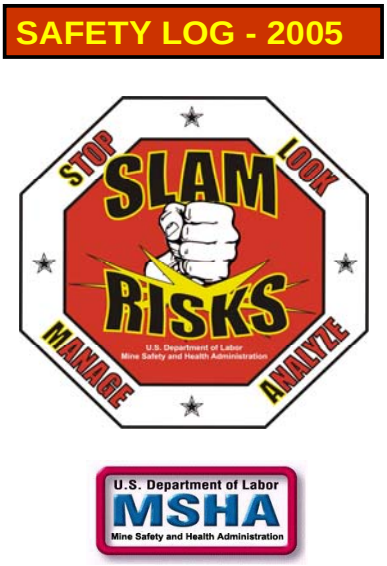
2005 Safety Calendar Log

The 2005 Safety Log Calendar is now available. This calendar was developed to assist miners, and mine operators with their workplace examinations, and their equipment inspections. Employees can use the day to day calendar to record their work place, equipment, and fire extinguisher inspections. The calendar includes checklists that employees can use to remind them of what they need to inspect. The day to day section of the calendar contains safety and health topics that can be used for monthly safety meetings. These calendars are provided to mine operators and miners at no cost. Contact your local field office for a calendar.

The calendar contains a heavy equipment, work place, and fire extinguisher log. Miners can use these to record any defects they find.

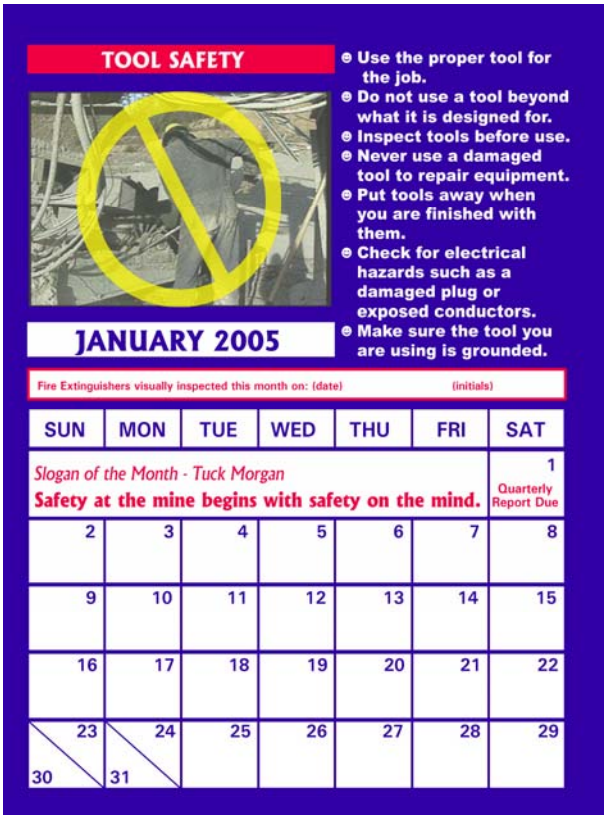
A little protection goes a long way!

Monthly topics address safety and/or health hazards that affect miners. These topics can be used for safety and health meetings to remind employees of some of the hazards that could be present in their work areas.



The monthly safety slogans used in the calendar were submitted by miners from across the nation.

Heavy Equipment Defects Log Heavy Equipment ID	Date	Initial	Date	Initial	Date	Initial	Date	Initial	Date	Initial	Date	Initial



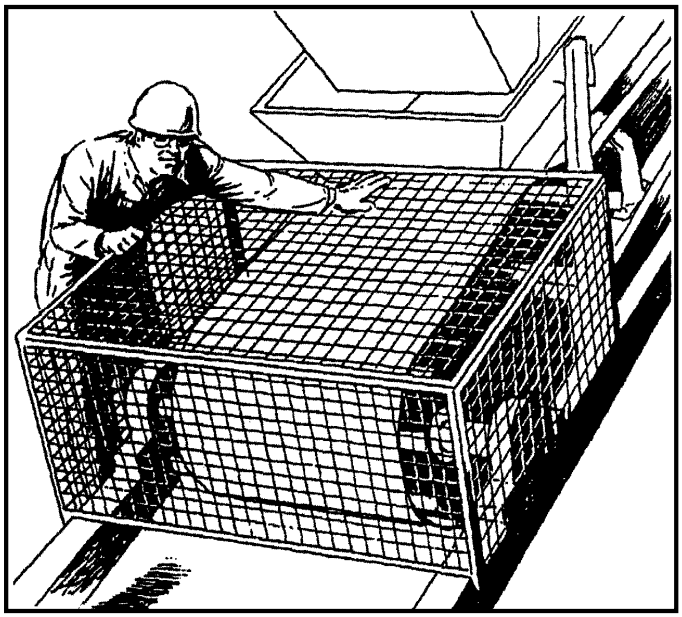
2004 Guide to Equipment Guarding

MSHA's Guide to Equipment Guarding

U.S. Department of Labor
Mine Safety and Health Administration

Other Training Material
OT3

Revised 2004



(NEW) This guide has been revised to address guarding concerns expressed by the mining industry. It is provided to assist the mining community with designing, installing and maintaining equipment guards to prevent miners from contacting hazardous moving machine parts. Contact with machine parts may result in serious accidents or death. Proper equipment guarding is essential to reduce this risk of injury.

This guide provides examples of commonly used point-of-contact guards which are guards for individual hazards, as well as area guards which are guards for multiple hazards. These examples are intended for guidance only and alternate designs may be acceptable if the relevant MSHA guarding standards are met.

(NEW) Equipment Guarding (C/ MNM) Training DVD

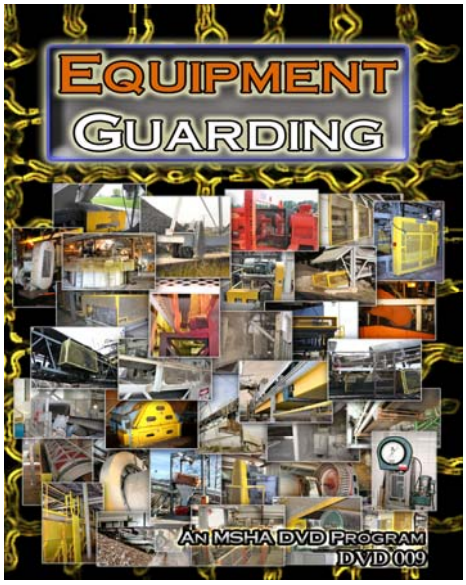
Catalog Number DVD 009

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. A variety of mining equipment is shown with guards of all types and qualities. Also included are PowerPoint presentations with photographs illustrating guarding principles and practices. The focus is on training and improving guards toward "best practice" quality. This training DVD can be purchased through the National Mine Safety and Health Academy for $8.00. Contact information to order this training DVD is:

Telephone Number (304) 256-3257

Fax Number (304) 256-3368

Email MSHADistributionCenter@dol.gov



Previous issues of the Metal and Nonmetal Quarterly are available on

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