NEW MEXICO TECH

NEW MEXICO BUREAU OF
MINE SAFETY

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May 2018 Newsletter

New Mexico First Quarter 2018

Injury and Illness Reports

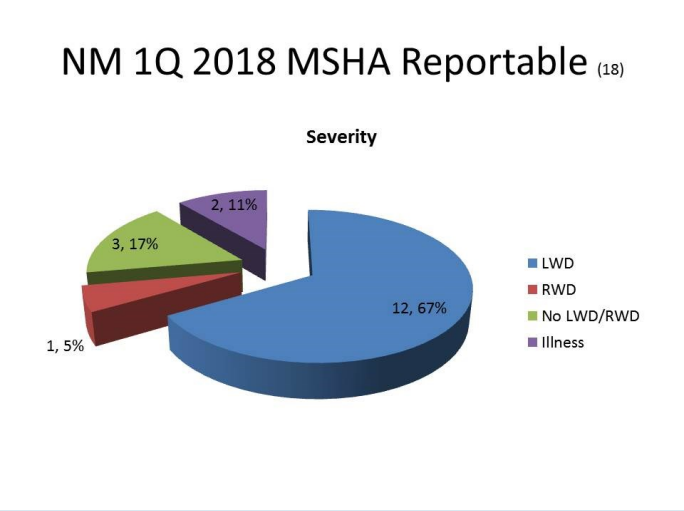
from New Mexico Mining Operations

Improved over 2017

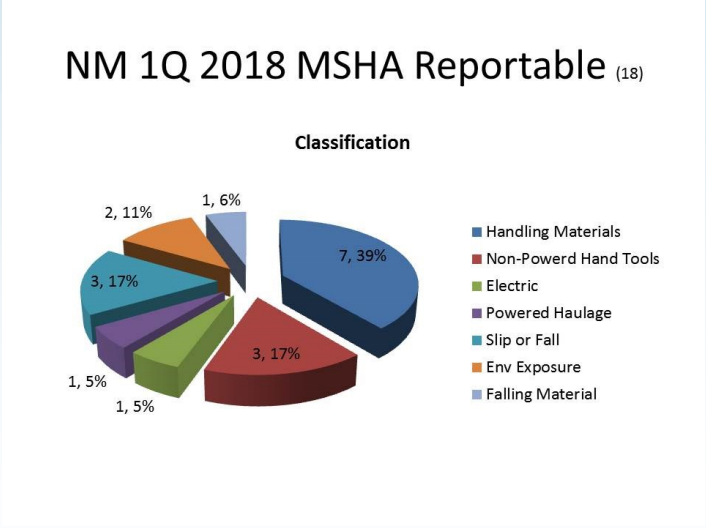
18% fewer Injury and Illness reports were submitted to MSHA from New Mexico operators during the first quarter of 2018 compared to 2017. Twenty-two reports were filed during the same period in 2017. In 2018, only eighteen reports were filed.

- January 8
- February 3
- March 7

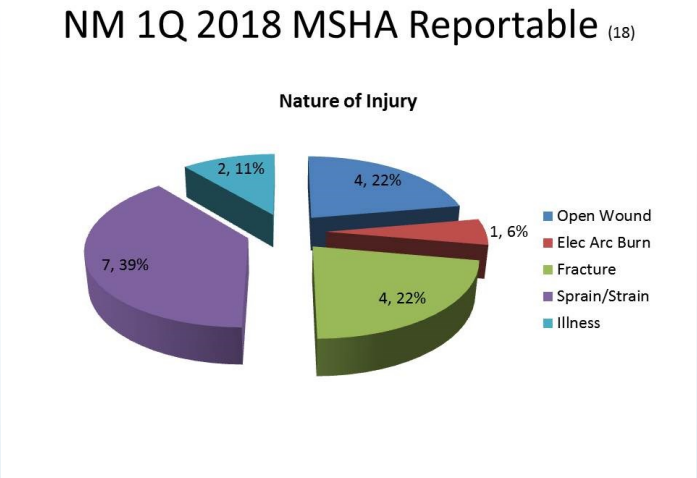
Of the reports filed in 2018, two-thirds involved lost work days or a combination of lost work days and restricted work days. Two reports were filed for occupational illness.



The largest portion of incidents involved handling materials, followed by the use of non-powered hand tools and slip/fall incidents. Two illnesses involved exposure to environmental contaminants (inhalation and absorption).



The combination of open wounds and fractures accounted for eight of the 18 injuries reported in the first quarter. But Sprains and Strains accounted for the largest single classification of the nature of the injury.



Looking into the mechanism of injury, we find that five of the eighteen injuries were caused by overexertion. Four were struck by something, three were caught in or by something, and two injuries were the result of falls.

Continued on page 2

May 2018 Newsletter

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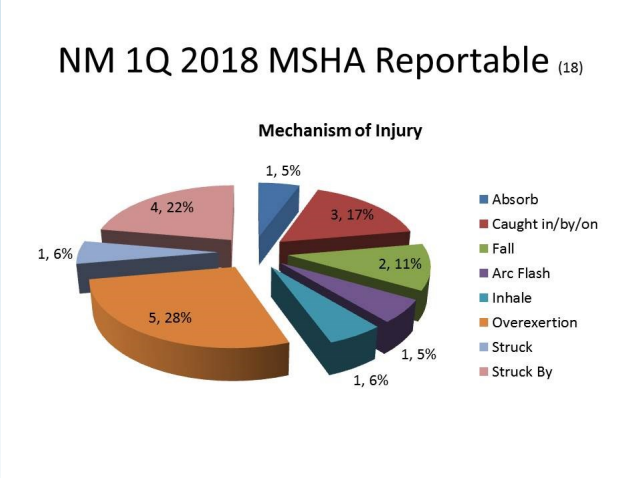
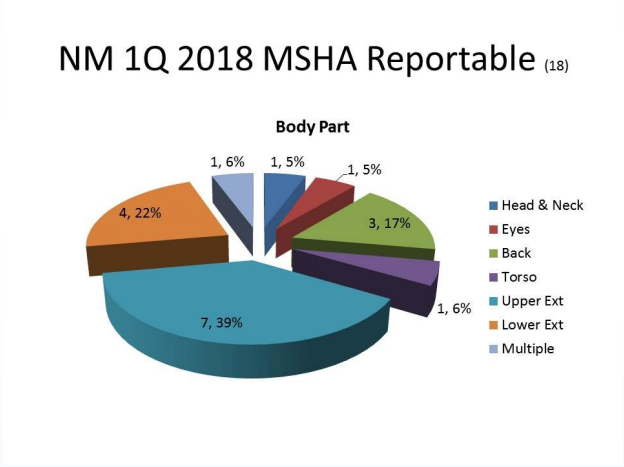


Seven of eighteen incidents involved the upper extremities. Four involved lower extremities and three involved the back. One incident involved multiple injuries.



These types of reports serve as a reminder of the many ways that miners can be injured or develop illness in the workplace. They may trigger a focus resulting in improved awareness of hazardous conditions and risky procedures that can be mitigated sufficiently to prevent the occurrence of an injury at your workplace.

It's also important to remember that these statistics represent real injuries and real pain to real miners. The effects of injuries can be expansive, affecting both family and co-workers. Let's all continue to work toward prevention.

Mining Safety Board

The Mining Safety Board will meet on May 8 in Albuquerque. After hearing comments on proposed amendments to of the rules for certification and recertification of coal mine officials the Board is expected to vote on the amended rules. The new rules (if approved) will become effective after publication in the New Mexico Register nmminesafety.com

For a copy of the draft meeting minutes, contact Deb McVey at Debora.mcvey@nmt.edu or 575-835-5460

The next meeting is scheduled for 1:00 p.m. on May 8, 2018 at the Workman's Compensation Bldg., 2410 Center Ave., Albuquerque.

M/NM Fatal Injury — Texas
April 12, 2018

A 60-year old customer truck driver was killed when he fell from, and was run over by, his truck while scanning into the operator's check-in system. The victim was found underneath the belly dump of the semi-trailer, and the truck was still in gear.

YTD—4/30/2018: 3 M/NM Fatals; 4 Coal Fatals ; 67Total

When you reach for the stars you may not quite get one, but you won't come up with a handful of mud either.

Recognize Safe Behaviors

John Drebinger 04/19/2017

We all know how important it is to look for, spot and point out unsafe conditions or actions. Another way to improve you and your employees' safety awareness is to look for opportunities to point out when safety is done right. You can do this in several ways:

- When someone has created a safe condition by eliminating a hazard. (This can be as simple as observing someone picking up some trash or something someone could slip or trip on)
- When someone chooses to do something safely.
- When someone watches out for the safety of someone else.
- When you deal with a business which has policies and procedures that protect you and others.

Someone Watched Out For My Safety

Just recently, I had such an opportunity. I was sitting at home when I received a phone call from someone doing a poll. They identified themselves as being from the Gallup organization doing a customer survey for Union Bank. They asked if I would be willing to answer a few questions to help Union Bank do a better job of serving their customers. I answered yes and then something great happened. The caller asked if now was a good time to do the survey and asked if I was driving as he didn't want me to do the survey if that was the case.

I answered I was safe and then explained how I appreciated his asking. I explained I am a safety professional and I would be bragging about how he and his organization understood safety was important. I told him my career is traveling around the world teaching people how to watch out for the safety of others. I once again thanked him for caring about my safety and let him continue the survey. When he was done I gave him one final thank you and mentioned I would be talking about him in this week's newsletter. Thanks to the Gallup organization and their leadership for showing safety is a value for them.

Praising Others Improves Your Awareness

Any situation in which you actively pay attention to safety issues around you helps to improve your focus and safety awareness. When you look for people taking actions that support safety on and off the job your awareness is strengthened. In addition, you create a positive association between safety and people. It also lifts your spirits looking for good safety actions instead of only seeing safety problems.

Bureau of Mine Safety Calendar

May:

8 NM Mining Safety Board
Hearing on proposed regulatory amendments
Albuquerque, NM

9-11 New Mexico Mine Health and Safety Conference
Albuquerque, NM

28 Memorial Day-BMS office closed

June:

5-7 Holmes Safety Conference
Denver, CO

July:

4 Independence Day-BMS office closed

23-26 National M/NM Mine Rescue Contest
Lexington, KY

Need New Miner Training, Annual Refresher Training, First Aid Training? The Bureau of Mine Safety is ready to assist. Part 46; Part 48-B

Call 575-835-5460

Coming soon: NSC Certified First Aid & CPR

MSHA PROGRAM POLICY MANUAL—COAL

§75.342 Methane monitors.

(a)(1) MSHA approved methane monitors shall be installed on all face cutting machines, continuous miners, longwall face equipment, loading machines, and other mechanized equipment used to extract or load coal within the working place.

(2) The sensing device for methane monitors on longwall shearing machines shall be installed at the return air end of the longwall face. An additional sensing device also shall be installed on the longwall shearing machine, downwind and as close to the cutting head as practicable. An alternative location or locations for the sensing device required on the longwall shearing machine may be approved in the ventilation plan.

(3) The sensing devices of methane monitors shall be installed as close to the working face as practicable.

(4) Methane monitors shall be maintained in permissible and proper operating condition and shall be calibrated with a known air-methane mixture at least once every 31 days. To assure that methane monitors are properly maintained and calibrated, the operator shall:

(i) Use persons properly trained in the maintenance, calibration, and permissibility of methane monitors to calibrate and maintain the devices.

(ii) Maintain a record of all calibration tests of methane monitors. Records shall be maintained in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.

(iii) Retain the record of calibration tests for 1 year from the date of the test. Records shall be retained at a surface location at the mine and made available for inspection by authorized representatives of the Secretary and the representative of miners.

(b)(1) When the methane concentration at any methane monitor reaches 1.0 percent the monitor shall give a warning signal.

(2) The warning signal device of the methane monitor shall be visible to a person who can deenergize electric equipment or shut down diesel-powered equipment on which the monitor is mounted.

(c) The methane monitor shall automatically deenergize electric equipment or shut down diesel-powered equipment on which it is mounted when—

(1) The methane concentration at any methane monitor reaches 2.0 percent; or

(2) The monitor is not operating properly.

75.342 Methane Monitors

On cutting machines, continuous-mining machines, and loading machines (including scoops and diesel-powered machines used to load coal from inby the last open crosscut but not including clean-up scoops), the methane monitor power-shutoff relay shall be connected into the machine's controls circuitry so that all electric motors on the machine (including auxiliary fan motors), all electric lights on the machine (except headlights that are evaluated by MSHA under Part 18 and are installed on diesel-powered machines), and all power take-off receptacles on the machine (except intrinsically safe receptacles) are automatically deenergized when the methane concentration reaches a maximum of 2.0 percent or the monitor is not operating properly. The methane monitor may remain energized.

When a methane monitor is required on a diesel-powered machine, the methane monitor shall also shut off the diesel engine when the methane concentration reaches a maximum of 2.0 percent or the monitor is not operating properly. The methane monitor power shutoff relay shall be connected into the control circuitry of an electrically-operated machine so that it is not possible to defeat the methane monitor by holding or blocking the machine's reset switch in the start position.

When a machine is operated by remote control, a warning device shall be installed in the remote control unit or on the machine in such a location that the warning device can be readily seen or heard by either the machine operator or by the machine operator helper at all locations from which the machine is operated. This does not, however, permit the machine operator to be positioned under unsupported roof or where he or she could be endangered by a sudden movement of the machine.

The sensing device for methane monitors required at the return air end of the longwall face shall be installed in the air current ventilating the longwall face near the return end of the longwall face where it will not be affected by a secondary intake if one is used. The methane monitor power shutoff relay shall be connected so that all electric motors, lighting circuits, and power take-off receptacles associated with the longwall mining installation are automatically deenergized when the methane concentration reaches a maximum of 2.0 percent or the monitor is not operating properly. The methane monitor and approved permissible telephones, however, may remain energized.

Methane monitor deficiencies should be cited under this section or Section 75.503, as applicable. Checks for operating accuracy shall be conducted with the sensor head filter or screen in place. Handheld methane detectors shall not be used to check the operating accuracy of methane monitors. Enforcement personnel should test methane monitors with a known methane air test mixture when it is suspected that the monitor is defective or improperly calibrated.

Continued on Page 5

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Methane monitor readings shall not be used to meet the requirements for methane examinations. Such examinations are required to be made with approved methane detectors or atmospheric monitoring systems if used as specified in Section 75.351. Enforcement personnel shall not use methane monitor readings as a basis for issuing citations or orders.

77.201 Methane content in surface installations.

The methane content in the air of any structure, enclosure or other facility shall be less than 1.0 volume per centum.

§77.201-1 Tests for methane; qualified person; use of approved device.

Tests for methane in structures, enclosures, or other facilities, in which coal is handled or stored shall be conducted by a qualified person with a device approved by the Secretary at least once during each operating shift, and immediately prior to any repair work in which welding or an open flame is used, or a spark may be produced.

§77.201-2 Methane accumulations; change in ventilation.

If, at any time, the air in any structure, enclosure or other facility contains 1.0 volume per centum or more of methane changes or adjustments in the ventilation of such installation shall be made at once so that the air shall contain less than 1.0 volume per centum of methane.

77.201 Methane Content in Surface Installations
Methane tests are not required where there are no surface structures, enclosures, or other facilities where methane could accumulate; where auger mining is not being conducted; or where tunnels are not located below stockpiles. There may be other conditions that do not require methane tests, in which case the inspector should use good judgment in requiring compliance with this regulation.
77.201-1 Tests for Methane; Qualified Person; Use of Approved Device
These tests are required regardless of any other gas detecting methods used.
77.201-2 Methane Accumulations; Change in Ventilation
This Section may be used to determine if a ventilation fan is needed for various surface facilities. However, it does not provide the authority to require a fan if other satisfactory adjustments in ventilation can be made.

MSHA PROGRAM POLICY MANUAL—M/NM

§56/57.14201 Conveyor start-up warnings.

(a) When the entire length of a conveyor is visible from the starting switch, the conveyor operator shall visually check to make certain that all persons are in the clear before starting the conveyor.

(b) When the entire length of the conveyor is not visible from the starting switch, a system which provides visible or audible warning shall be installed and operated to warn persons that the conveyor will be started. Within 30 seconds after the warning is given, the conveyor shall be started or a second warning shall be given.

56/57.14201 Conveyor Start-Up Warning
This standard requires that no conveyor is started unless the person starting it is certain that all persons are clear. A positive audible or visible warning system is required to provide necessary flexibility to accommodate different mining and milling conditions throughout the nation. This standard has been uniformly interpreted by MSHA, and its predecessor organizations, to include both automatic and manual conveyor alarm systems as long as these systems are effected at each conveyor or series of conveyors within a system. However, MSHA and many mine operators believe that an automatic warning and start-up system is more effective than a manual system and, therefore, should be the system of preference. An automatic conveyor alarm system, or a system designed to first activate a start-up horn before the start-up system of the conveyor, is more effective in eliminating human error at the time of a conveyor start-up than a manual system.

A manual conveyor alarm system is one which actuates an audible alarm by an independent switch and uses a separate switch to actuate the conveyor. It may be considered ƥositive"and in compliance with the standard provided the system is capable of effectively warning persons prior to the time the conveyor will be started. Operators should be instructed to assure that persons are clear before starting the conveyor or conveyor system.

Although the standard specifies either an audible or visible warning system, visual warnings in bright sunlight or other well-lighted places are ineffective. For this reason, it is recommended that an audible warning system (horn) be used throughout a conveyor system located in bright sunlight or other well-lighted places. The duration of the audible warning shall be long enough to allow anyone who is endangered by an activated conveyor system to move to safety.

Particular attention must be given to the scope, or the overall effectiveness of the audible warning system, to be certain that the warning is effective at each and every conveyor in the system. This does not mean that a separate horn or similar device must be installed for each conveyor, but it does mean that the warning must be positive and effective for each conveyor or series of conveyors capable of being shut down or started independently within the system.

This standard specifically exempts those conveyor systems visible from the start-up switch from the requirements of a positive start-up warning system. However, MSHA recommends that all conveyor systems have a positive audible or visible start-up warning even though they are visible from the start-up switch.

MSHA Discusses Comments on Powered Haulage Safety

MSHA holds quarterly stakeholder meetings (typically within a few weeks after the end of a calendar quarter) using conference calling technology and PowerPoint slides that may be downloaded from the MSHA website. The 1Q 2018 meeting was held on April 30. In preparation for the stakeholder meeting, MSHA requested input on powered haulage safety.

Assistant Secretary of Labor for MSHA, David Zatezalo was active in conducting the meeting which focused on M/NM as well as coal issues. In addition to a review of recent accidents involving powered haulage, the comments received from the call for input from the industry were reviewed. The focus was on:

- Large powered haulage vehicles striking smaller vehicles;
- Seatbelt usage in powered haulage vehicles; and
- Conveyor belt safety, including disconnecting power and using crosswalks safely.

MSHA selected these because of the excessive occurrence of preventable injuries and fatalities associated with them.

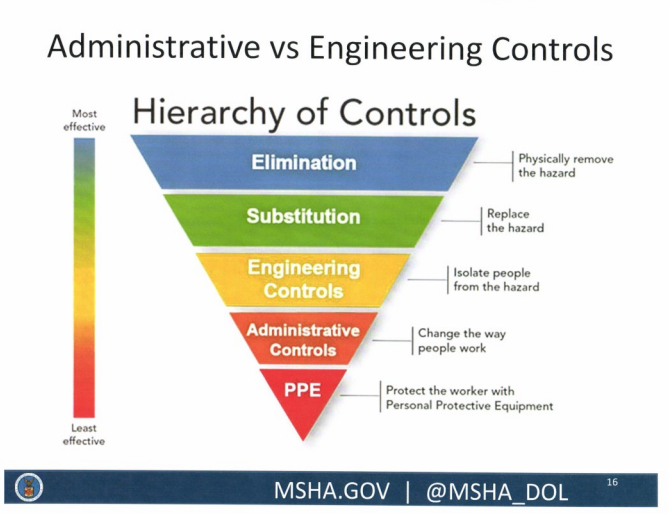
In 2017, three miners were fatally injured after they failed to buckle up. A review of fatalities since 2007 found 35 such fatalities.

50 percent of the 2017 mine fatalities were classified as powered haulage. As of the call, 57 percent of the 2018 fatalities (4 of 7) involved powered haulage.
Four miners were killed in the past 12 months while attempting to perform maintenance on an energized conveyor belt or improperly attempted to cross a conveyor belt.

Powered haulage consistently accounts for the largest share of recordable injuries among MSHA's 21 accident classifications. Reducing powered haulage accidents should reduce overall injuries and fatalities in mining.

Take this opportunity to share with the mining community the technology and strategies that work at your operations to prevent powered haulage incidents. MSHA plans to share those ideas with industry.

MSHA identified distraction as a possible contributing cause to some of the powered haulage incidents. MSHA also reviewed the hierarchy of controls as a reminder of the relative effectiveness of various control measures.



Advanced feedback from the industry included comments classified under these headings:

- Comprehensive strategies
- Training improvements
- Clear communication with operators of large equipment
- Safety flags
- Berms and Dump Points
- Proximity detection, seat belt interlock and other technology
- Drone technology
- Belt conveyors

The MSHA folks recommended that operators review a report produced by MSHA in concert with the Association of Equipment manufacturers on "Seat Belt Use on Mobile Equipment". The report may be found at this website.

https://www.aem.org/AEM/media/docs/Safety/Seat-Belt-Use-Mobile-Equipment.pdf

While Mr. Zatezalo did not rule out the possibility of MSHA initiating rulemaking to require improvements in proximity detection and seatbelt use in mobile equipment, he also expressed hope that operators will step up their role in applying improved safeguards that effectively address powered haulage hazards.

The slide presentation, stakeholder feedback, and audio track on this stakeholder meeting may be downloaded from the MSHA website at:

https://www.msha.gov/training-education/quarterly-training-calls

The visual and audio record from previous stakeholder meetings are also available for download at the same site.

Firefighting

Complete the crossword below

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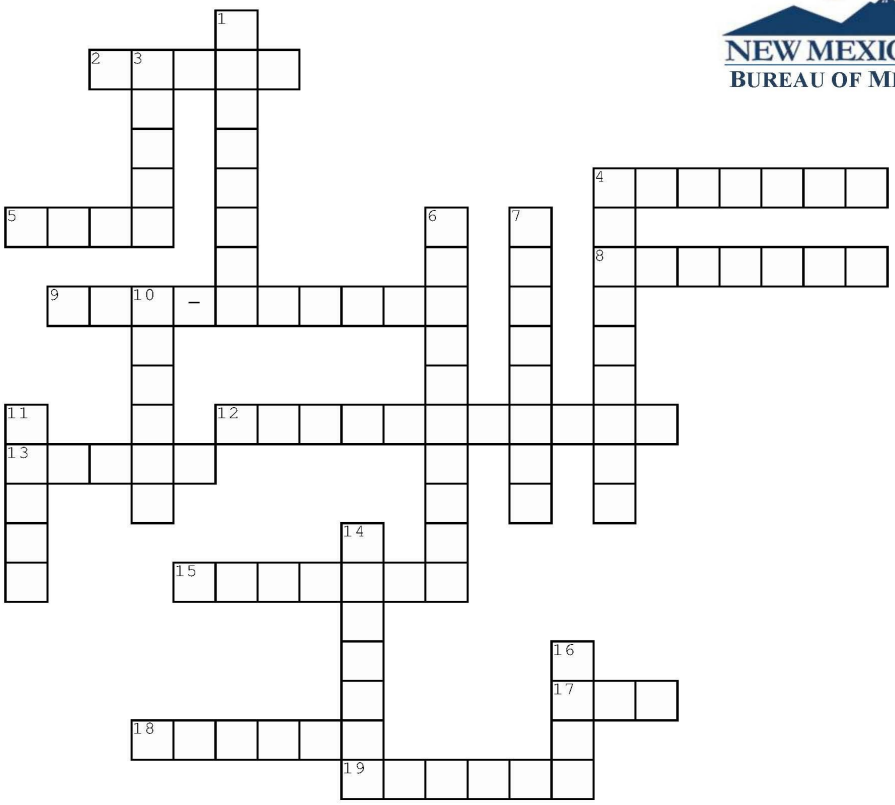

Created with TheTeachersCorner.net Crossword Puzzle Generator

Across

2. _____ fire extinguishers may be found near sensitive electronics
4. fire extinguishers are designed to extinguish fires in the _____ stages
5. Used to fight large oil fires and fires in inaccessible areas
8. The third step in using a fire extinguisher
9. When two persons are fighting a fire, each should cover _____ of the fire
12. Type C fires involve _____
13. Never use _____ on a live electrical fire
15. _____ the pin is the first step in using a fire extinguisher
17. The second step in using a fire extinguisher
18. When fighting a fire approach from this direction
19. Type A fires involve combustible _____

Down

1. For some purposes _____ may be substituted for a fire extinguisher in underground coal mines
3. When a fire _____ sounds, one should move quickly to safety
4. To ensure reliability, fire extinguishers must be _____ periodically
6. After extinguishing a fire, there is still a danger of the fire _____
7. A common ABC fire extinguisher uses a dry _____
10. A carbon dioxide fire extinguisher works by starving the fire of _____
11. The fourth step in using a fire extinguisher
14. Type B fires involve flammible _____
16. An acronym for the steps for using a fire extinguisher

The correct answers will be attached to the archived March Newsletter on the BMS website nmminesafety.com

Examinations of Working Places in Metal and Nonmetal Mines

REVISED FINAL RULE

On April 9, 2018, MSHA published a final rule that amends a rule issued in January 2017. This rule provides mine operators additional flexibility in managing their safety and health programs and reduces regulatory burdens without reducing the protections afforded miners.

The revised rule requires that:

- A competent person examine each working place for conditions that may adversely affect the safety or health of miners. The working place must be examined at least once each shift, before work begins or as miners begin work in that place.
- Promptly initiate appropriate corrective action when adverse conditions are found.
- Promptly notify miners in affected areas if adverse conditions are found and not corrected before miners are potentially exposed.
- Withdraw all persons from affected areas when alerted to any conditions that may present an imminent danger, until the danger is abated.
- Create an examination record before the end of each shift that includes:
  - The name of the person conducting the examination;
  - Date of the examination;
  - Location of all areas examined;
  - A description of each condition found that may adversely affect the safety or health of miners that is not promptly corrected; and
  - The date when the described condition is corrected.
- Make the examination record available to MSHA and miners' representatives, with a copy provided upon request.

A complete list of stakeholder meetings is provided on the following two pages.

§ 56/57.18002 Examination of working places.

(a) A competent person designated by the operator shall examine each working place at least once each shift before work begins or as miners begin work in that place, for conditions that may adversely affect safety or health.

(1) The operator shall promptly notify miners in any affected areas of any conditions found that may adversely affect safety or health and promptly initiate appropriate action to correct such conditions.

(2) Conditions noted by the person conducting the examination that may present an imminent danger shall be brought to the immediate attention of the operator who shall withdraw all persons from the area affected (except persons referred to in section 104(c) of the Federal Mine Safety and Health Act of 1977) until the danger is abated.

(b) A record of each examination shall be made before the end of the shift for which the examination was conducted. The record shall contain the name of the person conducting the examination; date of the examination; location of all areas examined; and description of each condition found that may adversely affect the safety or health of miners and is not corrected promptly.

(c) When a condition that may adversely affect safety or health is not corrected promptly, the examination record shall include, or be supplemented to include, the date of the corrective action.

(d) The operator shall maintain the examination records for at least one year, make the records available for inspection by authorized representatives of the Secretary and the representatives of miners, and provide these representatives a copy on request.

Examinations of Working Places in Metal and Nonmetal Mines

STAKEHOLDER MEETINGS

MSHA will hold public meetings around the country to inform and educate the mining community on the requirements of the final rule. The complete schedule is below.

Date/Time	Location	Contact Number
May 1, 2018 9 a.m. Central time	DoubleTree by Hilton Hotel Bloomington 10 Brickyard Drive Bloomington, Illinois 61701	309-664-6446
May , 2018 9 a.m. Pacific time	Renaissance Seattle Hotel 515 Madison Street Seattle, Washington 98104	206-583-0300
May 10, 2018 11 a.m. Eastern time and work through lunch	VTC	See Table Below
May 15, 2018 9 a.m. Central time	Sheraton Birmingham Hotel 2101 Richard Arrington Jr. Blvd. N, Birmingham, Alabama 35203	205-324-5000
May 17, 2018 9 a.m. Eastern time	Hilton Garden Inn Pittsburgh Downtown 250 Forbes Avenue Pittsburgh, Pennsylvania 15222	412-281-5557
May 22, 2018 9 a.m. Pacific time	Renaissance Reno Downtown Hotel One South Lake Street Reno, Nevada 89501	775-682-3900
May 24, 2018 9 a.m. Central time	DoubleTree by Hilton Hotel Dallas – Market Center 2015 Market Center Blvd Dallas, Texas 75207	214-741-7481
May 31, 2018 9 a.m. Mountain time	Hilton Garden Inn Denver Tech Center 7675 East Union Ave. Denver Colorado 80237	303-770-4200

MSHA extends enforcement of Workplace Exams rule until October

Kerry Clines Aggregates Manager April 26, 2018

According to the National Stone, Sand & Gravel Association (NSSGA), the Mine Safety and Health Administration (MSHA) said it will not issue citations related to the new Workplace Exams rule until Oct. 1, 2018, in order to give operators more time to understand the rule and give the agency time to provide additional compliance assistance. But, MSHA may issue citations in the case of extremely dangerous hazards.

The new final rule on Examinations of Working Places in Metal and Nonmetal Mines, which includes some positive changes that were suggested by stakeholders, was published in the Federal Register on April 9 and will go into effect on June 2. NSSGA still has some concerns about some aspects of the rule, but is pleased that MSHA adjusted the enforcement schedule.

Examinations of Working Places in Metal and Nonmetal Mines

Video Teleconference (VTC) meetings

May 10 and June 6, 2018

To participate by VTC (See table below) send an email to zzMSHAcomments@ dol.gov noting which day/location you will be attending.

VTC Location	Address/Contact Number
Arlington, VA (Host Location)	MSHA Headquarters 201 12th Street South Arlington, VA 22202 Room 4C304 202-693-9450
Beckley, WV	National Mine Health and Safety Academy 1301 Airport Road Beckley, WV 25813 Auditorium 304-256-3100
Birmingham, AL	MSHA District Office 11 1030 London Drive Birmingham, AL 35211 Suite 400 (next to Canon Office Building) 205-290-7294
Denver, CO	MSHA District Office 9 Denver Federal Center 6th & Kipling, 2nd Street Bldg. 25 Denver, CO 80225 Enter through Gate 2-Visitors 303-231-5465
Mesa, AZ	Mesa Field Office 63 East Main Street Suite 402 Mesa, AZ 85201 480-649-5452
Duluth, MN	MSHA North Central District Office Federal Building, U.S. Courthouse 515 W. 1st Street Duluth, MN 55802 Room 327 218-720-5448
Warrendale, PA	MSHA Northeastern District Office 178 Thorn Hill Road, Suite 100 Warrendale, PA 15086 724-772-2334
Vacaville, CA	MSHA Western District Office 991 Nut Tree Road Vacaville, CA 95687 Will be escorted to Conference Room 707-447-7864

MSHA SAFETY ALERT

SPLICING CONVEYOR BELTS

Since January 26, 2017, there have been four miners fatally injured when performing work around conveyor belts in underground coal mines. Two fatalities involved miners crossing the belt and the third fatal occurred when a miner contacted a moving drive roller for the section belt. Most recently, a miner, part of the mine's maintenance crew, was preparing to make a belt splice when the belt started up, resulting in fatal injuries. Below are some best practices to follow when splicing a conveyor belt.

BEST PRACTICES

- Communicate to others in advance that you are planning to de-energize electrical power before splicing a conveyor belt.
- De-energize electrical power and lock and tag the visual disconnect before beginning a belt spice. Carry and use your own lock and tag device.
- Do NOT use the start and stop controls (belt switches). This switch does not de-energize the power.
- Disconnecting devices shall be locked out and suitably tagged by the person performing the work; lock and tags shall only be removed by the person who installed them once the work is completed.
- Block the belt to secure components against motion.
- After the splice has been completed and before removing your lock and tag, ensure everyone is clear of the conveyor belt and communicate to others that you will be restarting the belt.
- Establish policies and procedures for conducting specific task training on belt conveyors such as replacing rollers and splicing belts. Include these policies and procedures in your Part 48 refresher training. All employees must be trained on these policies and procedures.

U.S. Department of Labor
MSHA
Mine Safety & Health Administration

www.msha.gov	Report Accidents &
askmsha@dol.gov	Hazardous Conditions
Twitter: @MSHA_DOL	1-800-746-1553