

September 2018 Newsletter

THE *Coca-Cola* STRATEGY

If there is one thing that we've learned to accept, it is that even the best considered plans are likely to change in the course of execution. Human error, mechanical breakdown, delayed delivery, defective parts and even the weather can affect the original plan. Even contingencies may be inadequate. Adjustments must be made—often spontaneously. These deviations can lead to one or more of the four mind states identified as contributing to injury.

Frustration
Rushing
Fatigue
Complacency

A crew performing a task may become frustrated with the slow progress and aggravating delays. Those delays and interruptions can force a sense of urgency to complete the task on schedule. The supervisor's behavior may reinforce that urgency. The delays, shortened breaks and increased work load all contribute to fatigue. At some point someone remarks, "I don't care how we do it, let's just get it done."—a form of complacency.

Enter the Coca-Cola strategy. In 1929, the Coca-Cola bottling company initiated a sales slogan "The Pause that Refreshes". The company used that slogan for nearly 30-years. The concept was simply to encourage folks to take a short break from whatever activity in which they might be engaged to refresh. And how better than enhance that *pause* with a cold soft drink (Coca-Cola).



The Coca-Cola strategy adopts that same concept and applies it to the workplace (or even the home workshop).

While not endorsing any particular beverage (a bottle of cool water may be just as effective), the pause that refreshes can be applied in two steps. You may have already guessed—pause and then refresh. Pause—take a brief break in the task—to refresh yourselves on the new and pre-existing hazards associated with the job and the best methods of controlling those hazards—a risk assessment if you will. Give yourself sufficient time to address the frustration, rushing, fatigue and complacency issues. In most cases, this can be accomplished in the time it may take to consume a soft drink.

You may be thinking that this sounds a lot like "stop work". You may also be right. But consider the effects of language on attitude. The word *stop* has a connotation of finality—you've stopped the job. *Pause* has the clear intent to resume shortly. The fact that you are using that pause productively will likely be seen as valuable even to the supervisor.

Randy Logsdon, State Mine Inspector

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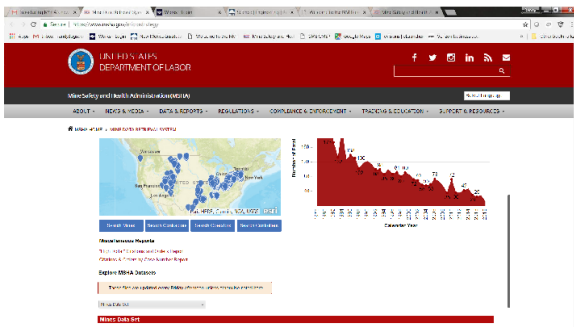
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MSHA Updating Webpage New Format for Data Retrieval



MSHA is well underway in upgrading the Mine Data Retrieval System (MDRS) on the MSHA webpage. On August 22, MSHA distributed an email link to the Beta version for testing by mine personnel and others in order to solicit feedback for additional improvements and to correct possible glitches in the new format.

In addition to an all new look, the new MDRS page will offer mapping capabilities and quick references to mines identities by location on the map. The search function offers new routes to even more data that you just might find useful. In addition to tables containing the data for injuries, inspections, violations and more, MSHA offers graphic representation of national trends associated with the tables.



The new format permits searching for data for a user defined group of locations—great for those operators with multiple ID's. In the end, with a little practice, more data will be easily available to those who need it most.

Mining Safety Board

The Mining Safety Board will meet at 9:00 a.m. at the WIPP offices on National Parks Highway in Carlsbad on Tuesday, October 30

An agenda will be posted on the BMS website when it becomes available. nmminesafety.com



Inquiries can be directed to Board Chair Jeff Gordon at:

jeffgordon.nmmsb@yahoo.com.

Mining - Fatal Injuries

YTD—8/24/2018: 9 M/NM; 5 Coal; 14 Total

M/NM

#8 On Thursday, August 8, a mine employee was fatally injured in a powered haulage incident at Dry Creek Farms LLC. In Marion County TN. This is a dimension stone operation.

#9 On Wednesday, August 22, a 29-year old mine employee was fatally injured in a powered haulage incident at H & K Materials in Bucks County, PA when he became entangled in a conveyor snub roller about 50-feet above the ground at the surface traprock quarry. The victim had deceased before emergency crews arrived on the scene.

*People have the freedom to choose,
however they rarely have the freedom from the consequences of their choices.*

When it comes to your safety choose wisely!

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New Mexico Mining Association Rewards Safety Excellence

The New Mexico Mining Association held its 70th annual convention and trade show at the Ruidoso Convention Center over the course of September 5-7. The highlight of the September 6 Awards Luncheon was the presentation of awards New Mexico mining operations who qualified as the safest operations within six classifications. The Safe Operator of the Year is the operation that operates for the 12-months preceding June 30, 2018 with the lowest incident rate. Three of the six operations (CalMat Baca Pit, Intrepid North Plant and Peabody Lee Ranch) reported an MSHA incident rate of 0.0.

Category	Company Name	Mine Name
UG Coal	No entries	
Surface Coal	El Segundo Coal Company, LLC	El Segundo Mine
UG Metal and Non-Metal	Mosaic Potash Carlsbad, Inc.	Mosaic Potash Carlsbad, Inc
Surface M/NM Mining	Freeport-McMoRan	Tyrone Mine, Inc
Stone Quarries, Sand & Gravel	CalMat Co	Baca Pit
M/NM Mills	Intrepid Potash--New Mexico	North Plant
Non-Producing Operations	Peabody New Mexico Services, LLC	Lee Ranch

In addition, certificates for Zero Frequency were issued for 130 work groups (within the structure of these and other operations) who worked the same period accident free.



Sylvia Teran accepts the Safe Operator of the Year award from SMI Randy Logsdon and NMMA Safety Committee Chairman Cotton Jarrell on behalf of CalMat (Vulcan) Baca Pit.. See more photos on page 9



Bureau of Mine Safety Calendar

September:

13 NMMSHC Planning Committee (call 575-835-5460 for more information or to attend)

October:

9-11 TRAM Conference, Beaver, WV

22-24 National Safety Congress, Houston, TX

22-24 Interstate Mining Compact Commission, midyear meeting, Biloxi, MS

30 Mining Safety Board, Carlsbad

November:

15 Coal Mine Examiner and Foreman exam, Farmington Civic Center

22-23 Thanksgiving Holiday—BMS office closed

December:

24-31 Christmas Holiday—BMS office closed

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

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MSHA PROGRAM POLICY MANUAL—COAL

§75.1101-13 *Dry powder chemical systems; general. Self-contained dry powder chemical systems may be installed to protect main and secondary belt conveyor drives, however, where such systems are employed, they shall be installed and maintained in accordance with the provisions of §§75.1101-14 through 75.1101-22.*

75.1101-13 Dry Powder Chemical Systems; General
Suppression at belt drives by all-purpose dry powder was included to serve primarily where freezing temperatures exist. The dry powder system operates for a short period of time (1 minute) whereas the deluge or sprinkler systems operate for 10 minutes or longer. Therefore, the dry powder system must be carefully designed to be effective. The discharge pattern from the nozzles is critical, and, normally, the locations of the nozzles shall be designed by an expert. Damaged or misaligned nozzles should be replaced promptly. The dry powder system consists of an open pipeline system. In order to prevent moisture and dust from entering pipes, the nozzles should be loosely covered. This can be achieved by tape covering, by waterproof grease or equivalent means. Caps that are tightly fastened should be checked to ensure they will blow off readily; screw caps are unacceptable. If grease or similar materials are used, the orifices should be checked to insure the material has not hardened.

When the dry powder system operates, the mine passageway becomes filled with a dense cloud (ammonium phosphate). This material is nontoxic, but may impair breathing and vision. For this reason, guard rails or equivalent devices must be provided for the safety of miners in the immediate vicinity.

After operation of the system, the pipelines must be cleaned of dust and dried. If dust remains in the pipe, it may absorb moisture and cake. The all-purpose powder is slightly corrosive to metal parts especially when wetted. Thus, metal equipment and components of the fire suppression system should be cleaned.

The yearly test of the suppression system can be made by checking the powder storage compartment, the gas expelling unit, and by blowing the dry air (preferably bottled nitrogen) through the piping. It is important to ensure that the dry powder is not exposed to the humid atmosphere. If so, it will absorb moisture and cake. It is recommended that all dry powder be discharged through the system every 2 years.

§77.1109 *Quantity and location of firefighting equipment. Preparation plants, dryer plants, tipples, drawoff tunnels, shops, and other surface installations shall be equipped with the following firefighting equipment.*

(a) *Each structure presenting a fire hazard shall be provided with portable fire extinguishers commensurate with the potential fire hazard at the structure in accordance with the recommendations of the National Fire Protection Association.*

(b) *Preparation plants shall be equipped with waterlines, with outlet valves on each floor, and with sufficient fire hose to project a water stream to any point in the plant. However, where freezing conditions exist or water is not available, a 125-pound multipurpose dry powder extinguisher may be substituted for the purposes of this paragraph (b) for each 2,500 square feet of floor space in a wooden or other flammable structure, or for each 5,000 square feet of floor space in a metal, concrete-block, or other type of non-flammable construction.*

(c)(1) *Mobile equipment, including trucks, front-end loaders, bulldozers, portable welding units, and augers, shall be equipped with at least one portable fire extinguisher.*

(2) *Power shovels, draglines, and other large equipment shall be equipped with at least one portable fire extinguisher; however, additional fire extinguishers may be required by an authorized representative of the Secretary.*

(3) *(3) Auxiliary equipment such as portable drills, sweepers, and scrapers, when operated more than 600 feet from equipment required to have portable fire extinguishers, shall be equipped with at least one fire extinguisher.*

(d) *Fire extinguishers shall be provided at permanent electrical installations commensurate with the potential fire hazard at such installation in accordance with the recommendations of the National Fire Protection Association.*

(e) *Two portable fire extinguishers, or the equivalent, shall be provided at each of the following combustible liquid storage installations:*

(1) *Near each above ground or unburied combustible liquid storage station; and,*

(2) *Near the transfer pump of each buried combustible liquid storage tank.*

(f) *Vehicles transporting explosives and blasting agents shall be equipped with fire protection as recommended in Code 495, section 20, National Fire Protection Association Handbook, 12th Edition, 1962.*

77.1109 Quantity and Location of Fire fighting Equipment

When questions arise concerning paragraph (a), the standards

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presented in National Fire Protection Code No. 10 shall be used as a guide. Generally, a minimum of one extinguisher having a rating no less than 2A8B or 2A8BC where electrical installations are present shall be provided on each floor or level in the structure. At least one extinguisher shall be provided for each 3,000 square feet of floor space.

Where the floor space exceeds 3,000 square feet, and more than one extinguisher is required, they shall be no more than 75 feet apart. If the area protected contains permanent electrical installations, the maximum distance between extinguishers shall be no more than 50 feet. The purpose of paragraph (b) is to insure that a water stream or dry powder extinguishing agent can be applied at any location in the building. The 125-pound extinguisher can be a single unit or made up of several smaller units, provided the total weight of powder meets the requirement.

A 125-pound dry chemical extinguishing unit shall be provided for each 5,000 square feet of floor area in a building of noncombustible construction, or 2,500 square feet area in a building of combustible construction.

A single 125-pound unit can provide protection for more than a single floor if the system is permanently installed with rigid piping. Thus, a portable 125-pound unit can serve only a single floor, but a permanently installed unit may serve one or more floors, provided the floor area does not exceed 2,500 or 5,000 square feet, depending on the type of construction.

The following portable fire extinguisher ratings will be acceptable as meeting the requirements of paragraph (c) (1). All trucks up to and including those of 20-ton (load) capacity should be equipped with at least one extinguisher having a minimum rating of 5BC. Trucks larger than 20-ton capacity should be equipped with an extinguisher having at least a 10BC rating. Two 5BC extinguishers are acceptable.

Other mobile equipment, such as front-end loaders, bulldozers, portable welding units, and augers of comparable size (to the trucks) should be rated on an equivalent basis, except hydraulically-operated equipment containing flammable and combustible liquids, trucks transporting flammable and combustible liquids, and diesel-powered motor generator sets. Examples are as follows:

1. A front-end loader or portable welding unit no larger in size (weight) than a 20-ton truck should require the same protection as a 20-ton truck or 5BC.
2. A front-end loader, bulldozer, auger, etc., larger than a 20-ton truck should require the same protection as a truck larger than a 20-ton or

Mobile equipment containing flammable and combustible liquids, including trucks transporting flammable and combustible liquids and diesel-powered motor generator sets, should be protected with extinguishers having a minimum rating twice that required for other mobile equipment in examples 1 and 2; except that additional fire protection shall not be required for equipment using hydraulic fluids only for power-steering and power-breaking systems.

Paragraph (c)(2) requires equipment larger in size than that equivalent to a 50-ton truck to be provided with additional fire protection commensurate with the hazard. A minimum of one extinguisher having the proper rating shall be provided on each of all multilevel equipment such as shovels and draglines.

The extinguisher required by paragraph (c)(3) should be rated no less than 5BC.

When implementing paragraph (d), judgment shall be used in the evaluation of the requirements for extinguishers at each permanent electrical installation. One portable extinguisher can serve several adjacent electric motors or transformers. Extinguishers provided and located according to paragraph (a) shall be acceptable as protection for electrical installations within that area, provided such extinguishers are no more than 50 feet from the electrical installation.

Substation - Two extinguishers having a total rating of 20BC shall be provided at permanent substations.

The requirement in paragraph (e) of two portable fire extinguishers at the stated combustible liquid storage depots clarified in NFPA Code No. 30 means that two portable units, each having a rating of not less than 10-B units, shall be provided. Questions will arise as to whether a single extinguisher having a rating of 20-B units can be used instead of two 10-B fire extinguishers. Decisions shall be made for individual circumstances. Two 10-B extinguishers are generally preferred, as a greater chance exists that at least one unit will not be downwind of the fire. Decisions shall be based on the size of liquid storage, location and surrounding conditions. Rock dust in the amount of at least 500 pounds, kept dry and maintained usable, will be acceptable as "equivalent" to two portable extinguishers at remote combustible liquid storage installations, provided a shovel or equivalent means is available for applying the rock dust.

Fire protection referred to in paragraph (f) means two extinguishers having a rating of not less than 5BC each.



MSHA PROGRAM POLICY MANUAL—M/NM

§56/57.4530 Exits.

Buildings or structures in which persons work shall have a sufficient number of exits to permit prompt escape in case of fire.

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56/57.4530 Exits From Buildings or Structures

This standard requires that surface buildings or structures in which persons work shall have a sufficient number of exits to permit prompt escape in case of fire. The standard applies to buildings or structures where persons normally work.

Excluded from the requirements of this standard are those areas where persons work infrequently, e.g., change rooms, surge tunnels, toilet facilities, and cafeterias. "Exits" may be doorways, passageways, windows, or other openings that lead out of the building or structure. While the standard uses the word "exits", a single exit may be acceptable where it permits the prompt escape of persons in case of fire.

When considering what constitutes sufficient exits, the following factors should be considered: (1) the size of the exit(s); (2) the height of the exit(s) from the ground; (3) the size of the building; (4) the number of persons who normally work in the area serviced by the exit(s); (5) the nature of the operations; (6) the presence of potential fire hazards; (7) the type of materials with which the building is constructed, e.g., wood, brick, block, stone, metal, concrete; and (8) the presence of fire suppression devices or

Bureau of Mine Safety Hosts Mine Rescue Wireless Communication Class in Socorro

August 29 and 30 saw the convergence of 11 underground mine rescue team representatives from San Juan Coal, WIPP, Mosaic Potash, and Intrepid Potash at the BMS offices in Socorro. Earlier this year, the BMS purchased a first response set of wireless communication equipment for mine rescue from IWT. This is the same equipment that MSHA Emergency Operations Division maintains in Denver Colorado and Price Utah (as well as at several locations east of the Mississippi).

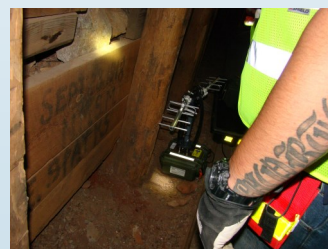
The equipment offers some critical advantages in that both voice and data (gas readings) communication can be transmitted at radio frequencies between a mine rescue team and the fresh air base and/or the command center.

Matt Fisher from IWT conducted the class which included practice using the BMS equipment. Jeff Blain from MSHA EOC in Denver attended and assisted. Randy Logsdon and Terry Walker also attended the class

The purpose of the class was to bring selected team members and trainers up to speed on the capabilities, application and care of the equipment. Armed with that information, these team members can train the individual teams using the BMS equipment.



The participants put their newly learned skills to the test at the Merritt Mine located on the NMT campus. This historic hard rock mine is located on property managed by EMRTC. Charles Gallegos with the EMRTC safety staff assisted with the arrangements.



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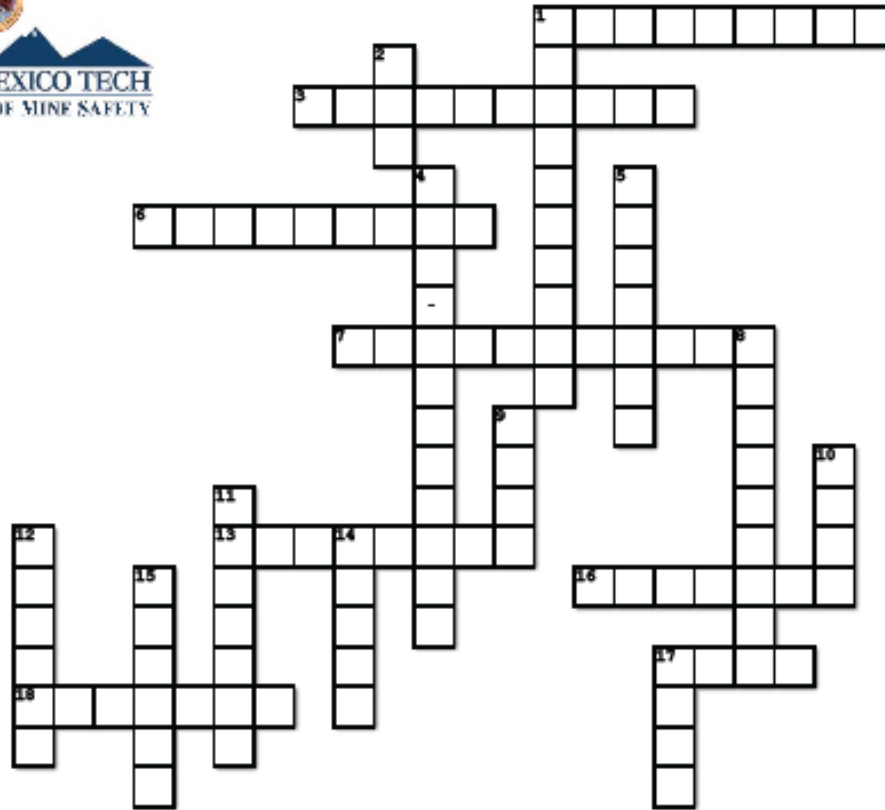
8/23/2018

Blasting & Explosives



Blasting & Explosives

Complete the crossword below



Created with TheTeachersCorner.net [Crossword Puzzle Generator](http://www.theteacherscorner.net)

Across

1. A high explosive device such as a blasting cap
3. The removal of persons from the blast area prior to a blast
6. An employee _____ recognized by ATF is required to perform certain functions concerning explosives.
7. A _____ person is one who manages, develops policy, or has responsibility for blasting activity
13. A structure designed to store explosives
16. complete or partial failure of a planned detonation
17. The zone where flying material, gasses, and other effects of blasting may cause harm is the Blast _____
18. Before permitting persons to re-enter a blast area after a blast, the blaster should _____ the blast area.

Down

1. A _____ cord is a flexible cord containing a center core of a high explosive
2. A _____ box is an example of a type 3 magazine
4. Tools used to handle explosives must be _____
5. Prior to initiating a blast, the blaster must provide a _____
8. A chemical compound or mixture such as dynamite, black powder, and detonating cord
9. A safety _____ is a flexible cord that burns at a continuous and uniform rate
10. The zone where loading explosives including a 50-foot perimeter is called a blast _____ (Part 56)
11. This activity is prohibited within 50-feet of an outdoor magazine
12. Type 1 and Type 2 magazines must be _____ resistant
14. ANFO is an example of a blasting _____
15. A high explosive charge with a detonator attached
17. 94% ammonium nitrate and 6% fuel oil

<https://worksheets.theteacherscorner.net/make-your-own/crossword/crossword.php>

1/1

The correct answers will be attached to the archived
September [Newsletter](#) on the BMS website nmminesafety.com

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Model of Proposed New Mexico Miner's Memorial Unveiled at 2018 NMMA Convention

A scale model of a proposed 12-foot high miner's memorial to be sculpted by renowned Albuquerque sculptor Reynaldo (Sonny) Rivera pictured below was unveiled at the 2018 New Mexico Mining Association Convention and Trade Show in Ruidoso on Thursday, September 6.

The New Mexico Institute of Mining and Technology (also known as New Mexico Tech) is prepared to donate a prime site for the sculpture on campus along Leroy Place near the intersection with School Of Mines Road.

Sonny Rivera's work can be seen at more than 50 public locations throughout the state, the western U.S., and as far east as Missouri. This work depicts miners at various stages of our state's rich mining history in their struggle to mine essential minerals from the New Mexico landscape.

Sculptor Sonny Rivera and Michael Pino are the driving force behind this historic project that relies on donations from individuals organizations and companies to fund the estimated \$420,000 bronze. For more information or to make a donation, contact:

Sonny Rivera (505) 495-8886 or (505) 345-4780 reynaldorivera1851@q.com
Michael Pino (55)670-2363 ancianos69@icloud.com



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More Safe Operator of the Year Awards 2018 NMMA Convention

Underground Metal/Non-Metal Mosaic Potash Carlsbad

- ◇ Oscar Colorado
- ◇ Paul Gill
- ◇ Jim Johnson
- ◇ John Anderson
- ◇ Kevin Cummins



Surface Metal/Non-Metal Freeport McMoRan, Tyrone Mine

- ◇ Patrick Escudero
- ◇ Erich Bower



Surface Coal Peabody El Segundo Mine

Non-Producing Operations Peabody Lee Ranch Mine

- ◇ Mitch Knapton



Metal/Non-metal Mills Intrepid Potash, NM, North Plant

- ◇ Austin Runner
- ◇ Mike Runner

