Quarterly Stakeholder Call
April 16, 2020

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

2:00 – Welcome and Introduction
2:05 – Opening Remarks & COVID-19 DOL/MSHA Actions
2:15 – Surface Collision Warning & Underground Proximity
2:25 – Review of 2019 Fatality “Categories”
2:30 – Review of 2020 Fatalities to date
2:35 – Enforcement - Realignment (Map)
2:45 – Education, Policy and Development – Training
2:50 – Regulatory Update
2:55 – Questions
Closing Remarks
Opening Remarks

David G. Zatezalo
Assistant Secretary for Mine Safety & Health
Collision Warning Systems

Collision Warning Systems – provide information to the operator
Collision Avoidance Systems – take control away from the operator

Technologies are available to reduce blind spots around equipment and enhance operator situational awareness.

1. Cameras, including 360 degree and object detection
2. LIDAR, Ultrasound, and RADAR for object detection
3. Tag based using radio frequency or electromagnetic
4. Global Navigation Satellite Systems such as GPS

Consider:

1. Heavy equipment and light vehicles
2. Stationary objects, mine conditions, and surface features
3. Contractors and visitors
4. Pedestrians

msha.gov – search “Proximity” and “Collision Warning”

MSHA Technical Support is available to provide additional information
Proximity Underground

Accidents and other Proximity Detection System (PDS) issues

1. PDS not used properly
   1. Not wearing Miner Wearable Component
   2. Overriding the PDS
   3. Other attempts to intentionally defeat the PDS

2. PDS not maintained properly
   1. Zones not maintained as commissioned
   2. Machine mounted components installed improperly
   3. Static and dynamic testing inadequate
Proximity Underground

**Keep your miners SAFE**

**Set-up zones to prevent contact**
1. Consider conditions and machine speed
2. Allow for machine movement – tail swing and dynamic

**Assure zones remain as commissioned through examinations**
1. Perform static and dynamic testing – compare to zone configurations set by mine management
2. Do not rely on computer diagnostic tools

**Frequently maintain and update**
1. Machine mounted components
2. Software and firmware updates recommended by PDS manufacturers
3. Enhanced features offered by PDS manufacturers

**Educate and train miners**
1. Stay out of Red Zones
2. How the system operates
3. Why the system is in place
4. Be aware of Electromagnetic Interference – manufacturer recommend separation distances
## 2019 Fatal Categories

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<tr>
<td>Machinery</td>
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<td>11%</td>
</tr>
<tr>
<td>Ignition of Gas</td>
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<td>Hoisting</td>
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<td>3%</td>
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<tr>
<td>Other (Lightning)</td>
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<table>
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<th></th>
<th>Surface</th>
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</tr>
<tr>
<td>M/NM</td>
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<td>1</td>
<td>15</td>
</tr>
</tbody>
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Total: 27
On January 8, 2020, a miner fell into a portable load out bin, and died at the scene.
On January 23, 2020, a miner fell from the top of his bulk trailer while opening the bulk trailer lids.
On February 10, 2020, a mine examiner was operating a personnel carrier down a mine intake slope. Evidence indicates that the personnel carrier struck the left rib while traveling down the intake slope. The mine examiner was found unresponsive near the bottom of the slope, lying beside the personnel carrier.
On February 27, 2020, a miner died when an unsecured 20'x8'x1" steel plate standing on edge fell and struck him. The steel plate was being used to cover the end of a feeder to allow an equipment operator to build an earthen ramp to the feeder.
MSHA Fatality
#5 - 2020

On February 27, 2020, a trucking company employee died while helping to position a low-boy trailer. The victim was standing in front of the trailer wheels to assist the driver. The truck driver moved the truck forward causing the wheels of the trailer to strike the victim.
On February 29, 2020, a plant foreman was priming the main suction pump on a dredge when a two-inch coupling on the waterjet pipe failed, knocking the victim into the water. Divers retrieved his body several hours later. The victim was not wearing a life preserver.
Training Extension
Educational Field and Small Mine Services

MSHA wants you to know that the EFSMS Training Specialists are still working. Currently the training specialists are not visiting mine sites but they are available by phone or email to help you with your training needs. Some specialists are in their offices and some are teleworking. You can reach the EFSMS training specialists in one of two ways.

• One way is to call your local MSHA field office or District office and ask for the training specialist in your area. If they are not in the office the field office or district office can give you the specialists email address for you to contact them.
• The best way at this point to reach an EFSMS Training Specialist is to go to the MSHA.gov website>Education and Training Tab>Under Related Links use the Educational Field and Small Mine Services Tab>EFSMS Contact Us Link. The contact list will include the EFSMS manager, regional assistant managers, supervisors, training specialists and the email address for each. Please feel free to contact the EFSMS Training Specialists with your training needs.
Educational Field and Small Mine Services (EFSMS) provides assistance in the development and improvement of the health and safety programs of mine operators and contractors in the mining community. EFSMS specializes in training programs tailored to reduce the number of injuries and illnesses in the mining industry. Additionally, EFSMS evaluates industry instructors to ensure miners receive quality and effective training.

EFSMS staff are located in 38 states and travel to mines and training centers to provide assistance that will strengthen and modernize training.

EFSMS works closely with NSHA District enforcement offices to identify industry needs and provide assistance to miners with safety and health issues. EFSMS provides assistance to the mining community through outreach initiatives, which are developed in collaboration with NSHA and the mining industry to address current or training accidents in the mining community. These programs help mine operators develop or revise training, safety and health programs to address the conditions and hazards specific to their mines. Additionally, EFSMS provides assistance with developing training plans, instructor training (train-the-trainer), evaluating instructors, and training demonstrations using Mobile Safety Training Units.

Services We Provide

- Providing regulatory assistance
- Conducting training program analysis
- Approving Part 46 Training plans
- Providing concentrated assistance to mines with greater need
- Providing training to miners, managers, and other stakeholders
- Evaluating and assisting industry instructors to develop and improve their skills
- Participating in accident investigations and providing expertise on safety and training issues surrounding the accident to determine root causes
- Forming partnerships with associations and other entities to increase focus on safety and health issues in the industry
- Assisting with the development and growth of the Joseph A. Holmax Safety Association
- Providing information at public forums such as health and safety conferences and outreach programs

Weekly Toolbox Talks

A series of weekly Toolbox talks that can be used by small mine operators and others to hold safety and health discussions for their employees at their mining operations. EPSMS hopes these Toolbox talks will help small mine operators and their miners to keep safety and health at the forefront of their daily and weekly activities.

Non-Retaliation Policy

MSHA has a policy that communication with the agency about safety and health regulations or other safety and health related subjects shall not trigger enforcement action. This policy reflects the fact that the agency’s objective is to provide assistance to help operators prevent and reduce workplace fatalities, illnesses and injuries.

MSHA Training Center

MSHA has just announced the allocation of over $8 million in federal health and safety training grants. MSHA will be developing a training resource on this site for Part 46, Part 48 trainers. Click the link above to view more information and join the conversation about the best ways to deliver training that keeps miners safe and healthy.
EFSMS Training Services

- Training Record Reviews
- Instructor Development
- Part 46/48 Training Plan Reviews
- Development and Improvement of Training Materials
- Miners Rights/Representatives
- Education and Training Provider
- Improve Health & Safety Cultures
- Strengthen & Modernize Training
- Assist in the Development or Improvement of Operator/Contractor Comprehensive H&S Programs
Educational Policy and Development

Resource Links
for
Mine Operators
Contractors
Trainers
Training Resource Links

MSHA.gov

Training and Education
- https://www.msha.gov/training-education

Training Programs and Courses
- https://www.msha.gov/training-education/training-programs-courses

Safety and Health Materials

Developing a Training Plan
- https://www.msha.gov/training-education/developing-training-plan

Mine Rescue Training
- https://www.msha.gov/training-education/mine-rescue-training

Instructor Materials
- https://www.msha.gov/training-education/instructor-materials

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

Mine Academy Programs
- https://arlweb.msha.gov/PROGRAMS/MineAcademy/Academy.asp
Training & Education

Training is an essential part of MSHA’s mission to keep miners safe and healthy. Our goal is to help the mining industry develop high-quality training programs, and to strengthen and modernize training through collaboration with industry stakeholders.

Federal law requires that all miners receive basic and annual refresher training, and that all mine operators maintain an effective training plan. MSHA provides materials, guidance, and hands-on assistance to help miners and operators meet their training obligations and more. In the Training & Education section of our website, we have gathered many of our materials for your convenience, and will add to them over time.

Questions? Comments? Materials to share? Please contact us at mshatraining@dol.gov for assistance or to suggest improvements.

Part 48 or Part 46? Learn what it means here

Training Programs and Courses
Find out about MSHA’s wide variety of mine safety and health training programs and courses, offered both in-person and online.

Safety & Health Materials
Browse MSHA’s collection of mine safety and health materials, which can be used to assist trainers and mine operators in promoting a safe and healthy environment at U.S. mines.

Developing a Training Plan
Access resources to assist in the development of training plans for Part 46 and Part 48 mines.

Mine Rescue Training
Learn about mine rescue training requirements and mine rescue contests. Access instructional materials, view the Mine Rescue Hall of Fame, and find out more about the history of mine rescue in the U.S.

Quarterly Training Calls
Access the materials used in MSHA’s quarterly training conference calls as well as audio recordings of the calls (when available).
Training Programs & Courses

MSHA offers a wide variety of mine safety and health training programs and courses both in person and online.

In-person courses are held regularly at the National Mine Health and Safety Academy in Beaver, West Virginia, and can also be scheduled at your workplace upon request. Our online courses can be integrated into your own training programs. Please feel free to get in touch at training@dol.gov with any questions or comments about our training programs and courses.

National Mine Health and Safety Academy Courses

Review the catalog of courses offered by the National Mine Health and Safety Academy in Beaver, West Virginia. Most courses are held at the Academy, and many can be scheduled at your workplace upon request.

Part 50 Training Program

This program is designed to clarify reporting requirements for accidents, injuries, and illnesses in the mining industry. This program will enhance MSHA’s ability to evaluate and develop mine safety and health standards and programs which benefit the industry.

State Grant Programs

MSHA’s State Grants Program distributes federal grants to 49 States and the Navajo Nation. Grants are made to the state agency program responsible for miners’ health and safety. Most grant funds are used to support health and safety training courses and programs designed to reduce mining accidents, injuries, and illnesses.

- Administrative Standards and Provisions
- Form 5000-50, MSHA State Grant Technical Progress Report Form
- Form 5000-50, MSHA State Grant Technical Progress Report Form (Microsoft Excel Version)
- Grants Management System Modernization

Brookwood-Sago Mine Safety Grants

The MINER Act established the Brookwood-Sago Mine Safety Grants Program. This program uses grant funds to establish and implement education and training programs or to create training materials and programs. Funds are used to develop and implement training and related materials for mine emergency preparedness as well as for the prevention of accidents in underground mines.

- Administrative Standards and Provisions

Miners’ Rights and Responsibilities

An online training program to learn specific information about the rights and responsibilities of miners.

Miners’ Representatives Guide

A supplement to the Miners’ Rights and Responsibilities program designed to further understand the roles, rights, and responsibilities of miners’ representatives.
Safety & Health Materials

MSHA offers a wide variety of mine safety and health materials to assist trainers and mine operators in promoting a safe and healthy environment at U.S. mines. We are always looking for new materials to share with the mining community. Please contact us at mshatraining@dol.gov if you have any materials to share, or if you have any questions or suggestions regarding the safety and health materials on our website.

Small Mine Guide
A compliance assistance tool for small mine operators covering health and safety programs, training plan development, reporting practices, and more.

Searchable Database
Find safety and health manuals, hazard alerts, presentations and compliance guides organized by mine type and hazard.

Training Videos
A collection of videos covering health, safety, and other mining-related topics.

ToolBox Talks
A series of discussion topics that can be used by small mine operators and others to hold safety and health discussions for their employees at their mining operations.

Fatality Alerts
Mining fatality summaries with associated best practices to help prevent similar incidents.

Task Training
Concise guidelines for effective task training.

Health and Safety Alerts
Information on current and previous health, safety and equipment hazard alerts.

MSHA Handbook Series
A variety of handbooks describing inspection procedures, education & training procedures and technical support procedures.

NIOSH Training Page
Education and training resources from the National Institute for Occupational Safety and Health.

Industry Shared Safety Material
This section contains material submitted to MSHA by the mining industry that has shown to be effective in reducing accidents and injuries. Please feel free to use any of this material to help prevent accidents and injuries at your mine or facility site.
Developing a Training Plan

The following resources may be useful in developing training plans for Part 46 and Part 48 mines. If this is your first time creating a training plan, we highly recommend getting in touch with Educational Field and Small Mine Services for assistance. You can also review the current regulations set forth in 30 CFR Part 46 and Part 48. The official regulations outline the required components of an approved training plan, the types of training programs that must be included in a plan, and appropriate record-keeping procedures.

Training Plan Advisor & Online Plan Submission
Provides guidance in developing federally required training plans for Part 46 and Part 48 mines, and allows plans to be submitted online.

*The use of the eTPA is voluntary and meant to assist operators with the development of their training plans

Contact information for additional assistance

MSHA Resources: (877) 778-6030

Eduational Field and Small Mine Services

New ECom: User Registration

MSHA Program Policy Manual
Provides assistance in interpreting and clarifying the various training requirements outlined in 30 CFR Part 46 and Part 48.

Part 46 Training Plan Starter Kit
Also in Excel
Provides help in developing an effective, mine-specific training program that meets the provisions of Part 46. This starter kit includes a sample training plan.

Part 46 Training Plan Guide
Outlines the minimum requirements for a Part 46 training plan and answers some of the most common questions regarding Part 46 training plan components.
Mine Rescue Training

When danger strikes, a speedy and safe rescue effort can mean the difference between life and death for trapped miners. Adequate training is essential, as rescuers must be available and ready to respond on a moment’s notice.

The Mine Act requires that every operator of an underground mine assure the availability of mine rescue teams for purposes of emergency rescue and recovery of trapped or injured miners. Rescue teams must receive adequate training in accordance with 30 CFR Part 49.8 for underground metal and nonmetal mines, and 30 CFR Part 49.13 for underground coal mines. Mine rescue contests and simulations are an essential part of the training process, and ensure that teams receive hands-on exposure to a range of potential hazards and mine emergency scenarios.

Mine Rescue Contests
Mine rescue contests are designed to sharpen skills and test the knowledge of team members who would be called on to respond to a mine emergency. The contest requires team members to solve a hypothetical problem while being timed and observed by judges according to complex rules.

Mine Rescue Instruction Guides
MSHA’s Mine Rescue Instruction Guides help mines meet mine rescue team training requirements under 30 CFR Part 49. Instructors and trainers can use the guides to either supplement existing mine rescue training or tailor a program to fit their mine-specific training needs.

Mine Rescue Day
October 20th is Mine Rescue Day – a time to recognize the dedication and sacrifice of volunteers who risk their own lives to save other miners.
Instructor Materials

Instructor materials and reference guides for MSHA approved instructors and competencies:

- OTS4 – Part 46 reference guide, questions and answers, sample training records
- OTS5 – Part 48 reference guide, questions and answers, sample training records
- OTS6 – Part 46 and Part 48 Reference Guide
- IG 24a – Part 48 training requirements for MSHA approved instructors
- IG 24b – Part 46 training requirements for competent persons
Quarterly Training Calls and Stakeholder Meetings

Access the materials used in MSHA's quarterly training conference calls or stakeholder meetings as well as audio recordings of the calls when available.

May 2, 2019

1st Quarter 2018 Conference Call

- Slide show with information covering quarterly fatalities, training grants and more

Listen to a recording of the call on May 2, 2019:

January 24, 2019

4th Quarter 2018 Conference Call

- Slide show with information covering quarterly fatalities and large mobile equipment outreach

Listen to a recording of the call on January 24, 2019:

October 16, 2018

3rd Quarter 2018 Conference Call Materials

- Slide show with information covering quarterly fatalities, vehicle fire safety & conveyor safety outreach

Listen to a recording of the call on October 16, 2018:

August 10, 2018

2nd Quarter 2018 Conference Call Materials

- Slide show with information on conveyor belt safety and fatality review
- More information about the upcoming 2nd Quarter Conference Call

Listen to a recording of the call on August 10, 2018:
Academy Overview

National Mine Health and Safety Academy

1301 Airport Road
Beaver, West Virginia 25813-9426

The mission of the National Mine Health and Safety Academy is to reduce accidents and improve health and safety conditions in the mining industry through education and training. To fulfill this mission, the Academy conducts a variety of education and training programs in health and safety and related subjects for federal mine inspectors and other government mining and industry personnel.

Quick Links

- MSHA Library, Collections and Services
- Courses for MSHA and the Mining Industry
- Student Handbook
- Search Library Catalog
- Catalog of Training Products for the Mining Industry
- Route Map to the Academy

General Information

Overview

The National Mine Health and Safety Academy is one of eight Federal academies operated by the U.S. Government. (more)

Promotional Video

Purpose

The Academy designs, develops and conducts instructional programs to assist in government, industry, and labor efforts to reduce accidents and health hazards in the mineral industries.

Objective

Progress has been made in recent years in the improvement of the health and safety conditions in U.S. mines. However, further improvements must be made before mining can removed from the list of high-risk industries. These improvements can only come about through the establishment of effective accident prevention and industrial hygiene programs. (more)

Organization

The Academy is supported by the Superintendent’s Office with the aid of five major organizational units-- the Department of Instructional Services, Department of Instructional Materials, Facilities Support Services, Department of Mining Technology, and the Technical Information Center and Library. (more)

Academy History

In a five-year period from 1906-1911, 13,328 miners were killed in U.S. coal mines. As a result, the Bureau of Mines was established by Congress on July 1, 1910, “to make diligent investigation of the methods of mining, especially in relation to the safety of miners and the appliances best adapted to prevent accidents.” (more)

Physical Facilities

The Academy complex includes classrooms and laboratories accommodating 800 students, a residence hall of 174 lodging rooms, a cafeteria, library, auditorium, and wellness facilities. (more)

Reservation Policy

The Academy will hold a block of reserved dormitory rooms for an event, for up to fourteen (14) calendar days prior to the beginning date of the event. To confirm blocked dormitory rooms, the names of the persons attending the event must be provided to the Academy within fourteen calendar days of the event. Blocked rooms which are not confirmed within 14 calendar days of the event can be released. (more)

Mine Simulation Laboratory

The Mine Simulation Laboratory is an underground simulated mine that provides hands-on training for MSHA inspectors and mining industry personnel. The 48,000 square foot facility has a simulated coal mine with an indoor burn room on the lower level and a simulated metal/nonmetal mine on the second floor level. The coal mine represents a room-and-pillar setup with four (4) entries and nine (9) crosscuts. (more)
Educational Field and Small Mine Services
EFSMS

https://arlweb.msha.gov/epd/efsms/

mshatraining@dol.gov

Kevin Deel
Deel.kevin@dol.gov
202-693-9585

Syed Hafeez
Hafeez.syed@dol.gov
202-693-9765
Regulatory Update
Regulations and Guidance

Electronic Detonators – Final rule effective on March 16, 2020

Part 18 Approval – NPRM streamlining for electronic product approval process in 2020

Non-Permissible Surveying Equipment – NPRM in 2020

Refuge Alternatives – (limited reopening) Final rule in 2020

Powered Haulage Safety Program – NPRM in 2020

Respirable Quartz – February public meeting and stakeholder workshop partnering w/ NIOSH in the fall
Questions?
Closing Remarks