



# Quarterly Stakeholder Call

**October 16, 2018**

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



# Agenda

- Introductory Remarks by Assistant Secretary David G. Zatezalo
- Education & Training
- Quarterly Fatality Review
- Fire Suppression Initiative
- Powered Haulage Safety Outreach
- Open Comments and Questions



# Introductory Remarks

David Zatezalo

Assistant Secretary for Mine Safety & Health



# Mines and Employment: Coal, M/NM

<b>Total # of Mines</b>	<b>13,102</b>	<b>12,257*</b>
<b>-Coal Mines Only</b>	<b>1,216</b>	<b>1,099*</b>
<b>-Metal/Nonmetal Mines Only</b>	<b>11,886</b>	<b>11,158*</b>
<b>Total Mine Employment</b>	<b>312,372</b>	<b>321,414*</b>
<b>-Coal Mines Only</b>	<b>82,920</b>	<b>79,769*</b>
<b>-Metal/Nonmetal Mines Only</b>	<b>238,452</b>	<b>241,645*</b>

\* Q1-Q2 only, employment data for Q3 not available until late October

Cross training inspectors and updating systems to blur the distinction between Coal and Metal/Nonmetal Enforcement where it makes sense; expertise still required for certain mines



# Education & Training

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# MSHA Training Grants

Recently distributed:

- \$10.5 million in state grants for mine safety
- \$250,000 in Brookwood-Sago grants for underground mine safety

2019 budget is approved - flat funding – expect smoother award process this year



# 2018 Training Resources Applied to Mining Conference Summary

- 2018 Theme - Tune Up Your Training: Expand Your Toolbox!
- 300 registrants
- Over 40 presentations
- Nearly two dozen exhibitors



# Metal and Nonmetal Third Quarter 2018 Fatalities Review

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# Metal and Nonmetal Fatal Accident # 5 - 2018

On July 31, 2018, a 62-year old foreman with 40 years of experience, was fatally injured while dismantling a portable crusher. The front-end loader was placing a 20-foot long steel tube onto the screen feed conveyor. The front-end loader operator lowered the bucket and crushed the victim against the conveyor structure.



# Metal and Nonmetal Fatal Accident # 8 - 2018

On August 22, 2018, a 29-year old miner with 1 year of experience was fatally injured while cleaning a snub pulley. The victim was working from an aerial lift located under the belt conveyor when he became entangled in the conveyor pulley.



# Coal

## Third Quarter 2018

### Fatalities Review

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# Coal Fatal Accident September 7, 2018

On Friday, September 7, 2018, a 60-year-old haul truck operator with 1 year of total mining experience received burn injuries while attempting to escape from the cab of the burning haul truck he was operating. Due to complications associated with his injuries, the victim died five days later.



# Coal Fatal Accident September 11, 2018

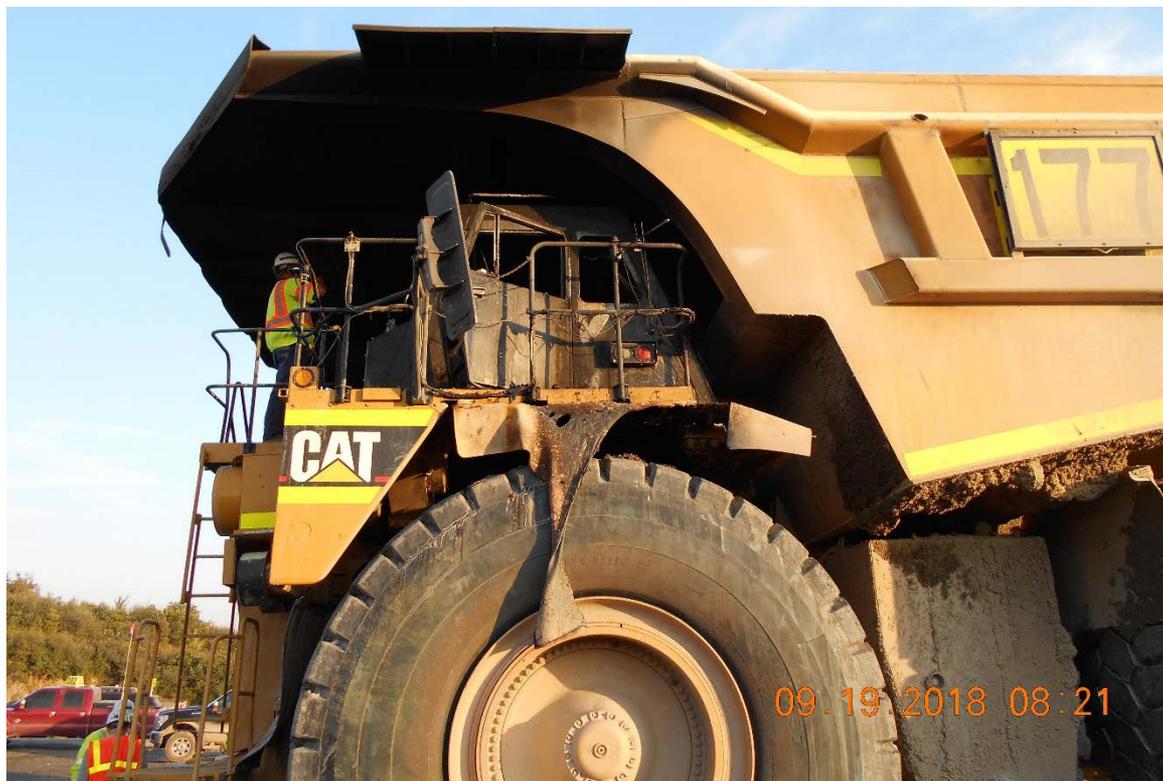
On Tuesday, September 11, 2018, a mobile bridge conveyor (MBC) operator, with 8 weeks of mining experience, was fatally injured during the mining process. The continuous mining machine (CMM) and attached MBCs had been backed out of a completed cut. While the CMM was being repositioned, it moved the attached MBCs and crushed the victim between his MBC and the coal rib.



# Fires With No Injuries



On September 19, 2018, a miner operating a 793 Cat rock truck saw smoke first, and then fire, on the truck. The miner attempted to activate the manual fire suppression system prior to exiting the truck, but the system did not discharge any dry chemical. Another miner (mechanic) activated the fire suppression system by hitting a manual actuator on the front of the truck, but again, no dry chemical was discharged. It appeared the lines leading from the actuators to the chemical tanks were damaged by the fire before the system was activated.



On September 20, 2018, a Hitachi shovel caught fire between shifts while the shovel was not operating. A miner travelling to perform maintenance on the shovel saw a fire and hit a manual actuator. No dry chemical was discharged. While the miner was traveling to another manual actuator in the cab, he heard a warning signal which meant the automatic system was going to activate the fire suppression system. He began to dismount the excavator, and while doing so, the automatic system caused dry chemical to be discharged. The fire suppression system did not extinguish the fire. Fire fighting crews attempted to extinguish the fire but were unsuccessful and the mine operator made the decision to let the shovel burn.



On September 29, 2018, a Hitachi excavator caught fire. The operator escaped without injury. Investigators found a hydraulic hose clamp that had broken. Because of the broken clamp, hydraulic oil discharged and air current transported oil droplets onto the engine where it ignited. The excavator was not equipped with a fire suppression system.



# Fire Suppression Initiative

- MSHA personnel will look at fire suppression systems (FSS) on surface mining vehicles.
- MSHA wants operators to contact FSS manufacturers and check FSS to ensure they will operate in case of a fire.
- MSHA will look at evacuation methods on surface mining vehicles.
- MSHA will look for fire hazards related to combustible fluids, brake systems, electrical cables and connections.
- Thorough pre-operational examinations and required maintenance are critical.
- Adequate task training for equipment operators and mechanics is critical.
- [Presentation online](#)
- [Checklist online](#)



# Fire Suppression System Inspection

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# Fire Suppression System Owner's Manual

- Review the FSS owner's manuals system checks
- Ensure the most recent inspection of the system was within last 6 months
- Inspectors will do a visual exam for installation and maintenance problems
- Inspectors will look for conditions noted in the recent fires



# Basic System Components

- Actuator Button
- Ring pin and chain with taper indicator
- Maintenance tag
- Actuator bottles
- Actuator hose
- Check valves



# Basic System Components

- Expellant gas bottle(s)
- Expellant gas hose
- Chemical agent tank(s)
- Chemical distribution hoses
- Nozzles and caps
- Automatic systems



# Fire Hazards

- Machine hydraulic hose failure and spray of fluid on turbochargers is the leading cause of fires
- Hoses with exposed steel braid must be replaced
- Accumulations of hydraulic oil, engine oil, fuel, and coal must be removed



# Escape

**Egress** – Ensure miners are trained to understand and use the primary, secondary, and alternate (emergency) means of egress. Fire shielding may be needed in areas where persons must travel during escape.



# Powered Haulage Safety Outreach

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# Conveyor Safety Outreach

- Inspectors and EFSMS personnel are emphasizing conveyor safety in visits to mines
- Distributing materials including brochures and stickers
- Part of Powered Haulage Safety Initiative – targeting source of 50% of mining fatalities
- More at [www.msha.gov/powerdhaulage](http://www.msha.gov/powerdhaulage)



# Discussion

