2021 MSHA Fatalities
10/1/21 – 12/13/21

MSHA Stakeholder Meeting
December 14, 2021

Marcus Smith
Chief, Accident Investigations
MSHA Enforcement
Accident Classifications

- Powered Haulage: 5
- Machinery: 3
- Handling Material: 1
- Confined Space: 1
Age

- 25 or younger: 2
- 31-40: 1
- 51-60: 1
- 41-50: 3
- Over 60: 1
Number of Employees

- 50 or more: 4
- 19 or less: 4
Experience at the Mine

- 1 yr or less: 1
- >1 to 2 yrs: 3
- >2 to 4 yrs: 1
- >4 to 6 yrs: 1
- >10 yrs: 2
Experience at the Activity

- >10 yrs: 3
- >1 to 2 yrs: 2
- >2 to 4 yrs: 1
- >4 to 6 yrs: 1
- 1 yr or less: 1
A 25 year-old plant operator was fatally injured when he entered a surge bin used as a feed hopper and was engulfed by material. The hopper was operating when the victim entered the surge bin.
Best Practices

- **Design surge bins and feed hoppers to prevent blockages.** Equip bins and hoppers with mechanical devices or other effective means of freeing material, so miners are not required to enter or work inside bins and hoppers.

- **Lock-out and tag-out the power** before performing work on equipment.

- **Provide a safe means of access** that allows miners to conduct tasks, such as removing large rocks and other material, safely.

- **Ensure handrails and gates are substantially constructed**, properly secured, and free of defects.

- **Don't stand on material stored in bins.** Material stored in a bin can bridge over, creating a hidden void beneath the material’s surface.
A 58 year-old mechanic was fatally injured when an articulated haul truck bed collapsed on him while he performed maintenance on the truck.
Best Practices

- **Securely block from motion** machinery or equipment that has been raised, and properly use mechanical blocking devices. Ensure that blocking material is substantial and adequate to support the load.

- **Position yourself in a safe location.** Observe and follow all warning labels and signs on equipment.

- **Never work under a load that is unsupported or inadequately supported,** and never depend on hydraulics to support a load.

- **Develop and follow** safe work procedures.

- **Always consult and follow the manufacturer’s recommended safe work procedures** for the maintenance task.
Wegenhoft Plant
Richmond, Texas
October 20, 2021

A 50 year-old maintenance welder was fatally injured when he was struck by the bucket of an excavator. The welder was assisting while a hopper was being repositioned.
Best Practices

• **Never position yourself** between mobile equipment and a stationary object.
• **Do not work in pinch points** where inadvertent movement could cause injury.
• **Carefully inspect and secure the pins in an excavator’s bucket** before each use.
• **Before beginning work**, analyze all tasks, establish safe work procedures, train miners, and eliminate hazards.
• **Identify and apply methods** to protect miners from hazards associated with the work performed.
• **Monitor miners** to ensure safe work procedures, including safe positioning, are followed.
Mountaineer II Mine
Sharples, West Virginia
November 1, 2021

A 49 year-old assistant chief electrician was fatally injured while traveling down a mine slope in a four-passenger rubber-tired personnel carrier. He lost control of the personnel carrier. The vehicle crashed, turned over at the bottom of the slope, pinning the victim underneath.
Best Practices

- **Immediately remove equipment** from service when defects affecting safety are found.
- **Conduct preoperational checks** and weekly examinations of mobile electrical equipment. Correct any defects affecting safety before operating equipment.
- **Maintain control** and stay alert when operating equipment.
- **Maintain roadways** free of excessive water, mud, and other conditions that impact an equipment operator’s ability to control mobile equipment.
- **Operate equipment at speeds consistent with the conditions** of roadways, grades, clearance, and visibility.
An 18 year-old customer truck driver was electrocuted after the tarping mechanism on the trailer contacted a high-voltage overhead power line. While exiting the cab of the truck, the victim contacted the energized truck and was shocked. When he tried to reenter the cab of the truck, he was electrocuted.
Best Practices

• **Construct roadways to provide adequate clearance** between mobile equipment and energized high-voltage power lines. Evaluate clearances periodically to account for changing physical and environmental conditions.

• **Provide and maintain a safe location** for truck drivers to tarp their loads; complete tarping procedure before exiting mine.

• **If your vehicle contacts an energized power line:**
  - Stay in your vehicle.
  - Immediately call for help on a mobile phone or radio.
  - If staying in the vehicle is unsafe, jump away from the vehicle without contacting the vehicle and the ground at the same time. Once on the ground, stay at least 40 feet from any power line.

• **Post readily visible warning signs or signals** when overhead hazards exist.
A 62 year-old mechanic was cleaning underneath a portable crusher when he became entangled in a belt conveyor. The mechanic entered the small area below the portable crusher without locking and tagging out.
Best Practices

• Ensure that persons assigned to clean belt conveyors have received adequate training and verify that safe belt conveyor work practices are followed.
• Stay clear of moving equipment and do not reach into any part of a moving conveyor.
• Avoid wearing loose-fitting clothing when working around moving conveyor belt components.
• Prior to working on belt conveyors, lock-out and tag-out the power.
• Provide and maintain safe access to elevated areas where routine maintenance is performed.
A 48 year-old mechanic was performing maintenance duties on a continuous mining machine (CMM) when the raised CMM tail boom lowered resulting in fatal crushing injuries.
Best Practices

• **Securely block equipment** and components against hazardous motion at all times while performing work.

• **Ensure that blocking material is** substantial and adequate to support the load.

• **Require all persons** to be positioned where they will not be exposed to hazards. Do not work in pinch points where inadvertent movement could cause injury.

• **Before beginning work**, analyze all tasks, establish safe work procedures, train miners, and eliminate hazards.
A 39 year-old maintenance lead person entered a pan feeder to remove a piece of angle iron. The angle iron prevented a gate, that was in a chute, from closing. Material from a surge pile above the chute fell through the open gate, into the pan feeder, and engulfed him.
Best Practices

• Do not allow miners to enter confined spaces until all potential hazards are properly addressed and safe work practices and controls are implemented.

• Provide and maintain a safe means of access to all working places.

• Examine work areas and equipment. Report hazards and do not work in unsafe conditions.

• Train miners to assess risks and hazards before beginning work activities.
Whitestone Mine #4
Pickens, Georgia
December 13, 2021

On December 13, 2021, a miner was fatally injured when he became entangled in the drill steel of the roof bolting machine he was operating.
Best Practices

• Lock-out and tag-out the power, and block machinery or equipment against hazardous motion before repairs or maintenance are performed.
• Never hold the drill steel or place hands on the rotating drill.
• Identify and control all hazards. Train miners to recognize potential hazards and understand safe job procedures to eliminate hazards before beginning work.
• Examine work areas and equipment. Report defects and do not work in unsafe conditions.
On December 13, 2021, a customer truck driver was standing in front of his haul truck. His haul truck rolled forward and ran over him.