

California Construction and Industrial Materials Association (CalCIMA)

Spring Thaw

MSHA Vacaville District Presentation

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Topics

- Recent Fatality Alerts
- Powered Haulage Best Practices
- Take Time, Save Lives

Recent Fatality Alerts

MINE FATALITY – On November 17, 2021, a 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 received a non-fatal electrical shock. When he tried to re-enter the cab of the truck, he was electrocuted.



Best Practices

- Construct roadways to provide adequate width and clearance between mobile equipment and energized high-voltage power lines, as required by the National Electrical Safety Code. Evaluate clearances periodically to account for changing physical and environmental conditions.
- Provide and maintain a safe location for truck drivers to tarp their loads.
- Check for overhead hazards when raising and lowering truck beds and tarps. 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, hop away from the power line for at least 40 feet.
- Post readily visible warning signs or signals when overhead hazards exist.

MINE FATALITY – On October 20, 2021, a 50-year-old mechanic with 12 years of experience was fatally injured when he was struck by the bucket of an excavator while assisting in repositioning a hopper.



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. Be alert for hazards that may be created while the work is performed.
- Identify and apply methods to protect personnel from hazards associated with the work performed.
- Monitor all employees to ensure safe work procedures, including safe work positioning, are followed

MINE FATALITY – On October 1, 2021, a 25-year-old miner was fatally injured when he entered a surge bin used as a feed hopper and was engulfed by material



Best Practices:

- Design surge bins and feed hoppers to prevent blockages. Equip bins and hoppers with mechanical devices or other effective means of handling material, so miners are not required to enter or work inside bins and hoppers.
- 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 the hopper outlet, creating a hidden void beneath the material's surface.
- Establish policies and procedures to remove blockages in bins and hoppers safely. Train and ensure miners follow these policies and procedures.
- Wear an appropriate safety harness, lanyard, and lifeline, and make sure these are maintained, in good condition, and securely anchored. Assign another miner to constantly monitor and adjust the lifeline, as needed.

Powered Haulage Best Practices

Stop Powered Haulage Accidents:

Fatalities and accidents involving mobile equipment: shuttle cars, scoops, locomotives, front end loaders, haulage equipment, service and pickup trucks continue to occur at a disproportionate high rate.

Best Practices:

- Know where in the workplace others are and communicate with them: use radios, mirrors, cameras, headlights, strobe warning lights, horns, and buggy-whip flags.
- Stay clear of mobile equipment blind spots.
- Set mobile equipment parking brakes and chock the wheels when vehicles are unattended: Don't stand, walk or work directly downhill of parked vehicles.
- Stay clear of moving vehicles.
- Establish safe traffic patterns and rules: post signage, ensure rules are followed, adhere to speed limits and approach intersections with caution.
- Use proximity detection/collision avoidance systems.
- Ensure that seat belts are maintained in good condition and worn at all times.
- Ensure that conveyors are de-energized, locked, tagged and blocked against motion before removing guards or beginning work.
- Make sure miners and mine operators are trained in best practices.

Miners continue to die in rollover accidents.

Fatalities occurred when vehicles flipped over backwards, rolled over, and tipped over on their sides.

Deceased miners were operating haul trucks, excavators, bulldozers, front end loaders, and service trucks while working or traveling near the edge of dump sites, elevated roadways, embankments, ponds, and excavations.

Best Practices:

- Examine and maintain the workplace: dump sites, roadways, ramps and berms. Unload on level, stable ground behind the dump berm or block, well back from the edge or with spotter assistance.
- Maintain control of the vehicle: operate at safe speeds, especially on curves, and when turning or cornering; center the vehicle in the travel lane; avoid distractions.
- Establish traffic rules: post signage where necessary and ensure these rules are followed.
- Maintain vehicles in good condition: brakes; wheels and tires; steering/operating controls; lights; windows; and wipers.
- Ensure that seat belts are maintained in good condition and worn at all times: remain inside the cab; never attempt to jump clear; consider the use of four-point seat belt systems and new technology that provides early warning of tipping.

Conveyor Belt Entanglement Incidents Are Life Altering and Frequently Fatal

Follow These Best Practices:

- Never perform work on a moving conveyor belt. Don't let others do so.
- Never clean or otherwise contact idlers, head, tail, bend or take-up pulleys during conveyor operation.
- Ensure that conveyor power is disconnected before performing maintenance or repairs.
- Follow proper Lock-Out, Tag-Out, Try-Out (LOTOTO) procedures. If you don't know what they are . . .
ASK!
- Never cross under or over a conveyor unless at a designated and protected point.
- Do not touch, climb, walk or ride on a moving conveyor belt.
- Keep tools, clothing, body parts, and long hair away from moving conveyor belts.
- Know the location of emergency shut-off devices for conveyors and how to use them.
- Test emergency shut-off devices frequently

Seat Belt Safety –Best Practices

Promote a Safety Culture:

- Seat belts save lives.
- You expect your loved ones to wear their seat belts. They expect you to do the same.
- Be a buddy. Insist that coworkers also wear their seat belts.

Equipment Operators:

- ALWAYS wear your seat belt.
- Wear your seat belt to the job, at the job, and from the job.
- Buckling up is the single most effective thing you can do to protect yourself in a collision, tip-over, or rollover.
- In the event of a collision, tip-over, or rollover your seat belt will keep you in the protected space of the machine cab or vehicle.
- Never jump from a moving vehicle. Remain in the seat with your seat belt secured.
- Inspect the seat belt and mounting hardware before operating the equipment.
- Replace any damaged or worn parts.
- You are responsible for buckling up. Make the right choice. ALWAYS wear your seat belt

Take Time, Save Lives



The top priority at MSHA is keeping miners safe. This year we have seen an increase in fatalities and injuries, many of which could have been prevented with proper training and attention to tasks. It is up to mine operators to ensure that miners are fully trained and able to take time to follow best safety practices that can prevent deadly accidents.

Please see the link on the MSHA Website for additional information:

[Take Time, Save Lives | Mine Safety and Health Administration \(MSHA\)](#)



Highwall Mining Best Practices:

Obtain geologic information of the pit area from your local Department of Geology and Mineral Industries.

Have an engineer evaluate the area to be mined before mining commences. Have a mining plan to follow.

The include the following;

Foot print of the mining area which the engineer evaluated.

The direction and height of the beaches to be mined.
How it's to be mined safely.

Follow your mining plan.

If it has to be changed consult your engineer.

Questions?