Occupational Safety
Training & Consulting, LLC

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MSHA
Safety
Training

First Aid
CPR/AED
Training

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Powered Haulage
Friend & Foe

METAL/NONMETAL MINE FATALITY – On January 25, 2018, a 38-year old equipment operator with 4 years of mining experience was killed when his articulated haul truck travelled through a berm and into an ice covered pond, submerging the truck's cab. Rescuers utilized divers and tow trucks to pull the submerged truck from the pond and recover the victim.

METAL/NONMETAL MINE FATALITY – On December 30, 2017, an employee in a pickup truck approached the quarry loadout area to get the Front End Loader (FEL) operator for lunch. The FEL backed into the pickup, pushing it sideways and crushing the driver's side of the pickup cab, trapping the victim inside the truck. The pickup truck caught fire and efforts by the FEL operator and a nearby contractor to put the fire out using fire extinguishers were not successful.

METAL/NONMETAL MINE FATALITY – On October 31, 2017, a 340-ton haul truck ran over a passenger van carrying nine miners. The driver of the van and the miner in the front seat were fatally injured. Of the remaining seven miners, one suffered a non-life threatening injury.

METAL/NONMETAL MINE FATALITY – On September 5, 2017, a 20-year old plant operator with 23 weeks of experience was fatally injured at a sand and gravel mine. The victim was performing maintenance on a belt conveyor when he became entangled in the tail pulley.

METAL/NONMETAL MINE FATALITY – On July 27, 2017, a miner was fatally injured when his light-duty truck was run over by a haul truck. The victim was pronounced dead at the scene.

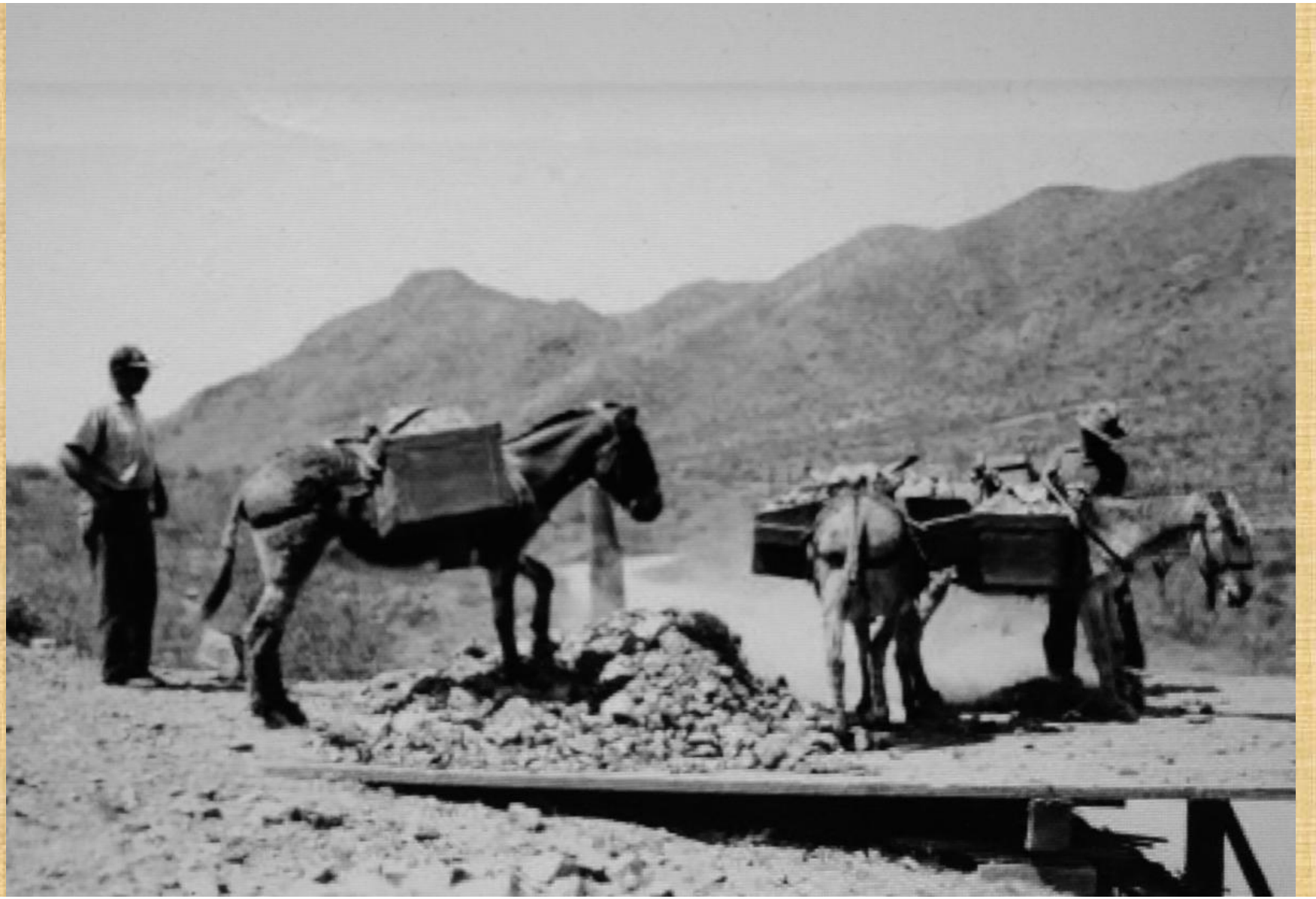
METAL/NONMETAL MINE FATALITY – On June 8, 2017, a truck driver was operating a Caterpillar 777F haul truck, dumping a load of gravel, when the ground at the dump point collapsed. The truck went over the edge of the dump point, overturning and landing on its roof approximately 30 feet below. The victim was transported to the hospital, where he later died of his injuries.

METAL/NONMETAL MINE FATALITY – On March 24, 2017, the victim exited his personal flatbed truck, which was left running in 6th gear, to turn off the genset (diesel generator). Prior to ascending the steps to the diesel generator, it appears the flatbed truck moved forward and pinned him against the genset trailer. The victim was found on Monday, March 27, 2017, and pronounced dead at the scene

Over 50% of the fatalities in 2017 involved Powered Haulage!

What is Powered Haulage?

The transport of ore, supplies and waste.



But...What about TODAY??

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W.H. Heinrich conducted a study and he concluded that unsafe acts caused more accidents than unsafe conditions.

Therefore...If we can eliminate “unsafe acts” we can “dramatically reduce accidents”!

BUT…How do we do THAT??

Well…we can start by conducting an effective Pre-Trip Inspection!!

30 CFR § 56.14100
Safety defects; examination, correction and records.

(a) Self-propelled mobile equipment to be used during a shift shall be inspected by the equipment operator before being placed in operation on that shift.

So, what are we looking for??

30 CFR § 56.14100
Safety defects; examination, correction and records.

(d) Defects on self-propelled mobile equipment affecting safety…

For example!!

30 CFR
56.14130
Roll-over protective structures (ROPS) and seat belts.
(h) Seat belts construction. Seat belts required under this section shall meet the requirement of SAE J386,

56.14131
Seat belts for haulage trucks.

(b) Seat belts shall be maintained in functional condition, and replaced when necessary to assure proper performance.
(c) Seat belts required under this section shall meet the requirements of SAE J386, ``Operator Restraint System for Off-Road Work Machines" (1985, 1993, or 1997), which are incorporated by reference.

Are we required to wear ‘em??

30 CFR § 56.14130
Roll-over protective structures (ROPS) and seat belts.

(g) *Wearing seat belts.* Seat belts shall be worn by the equipment operator

56.14131
Seat belts for haulage trucks.

(a) Seat belts shall be provided and worn in haulage trucks.

What else??

How about “brakes”!!

30 CFR § 56.14101
Brakes.

(a) *Minimum requirements.*
(1) Self-propelled mobile equipment shall be equipped with a service brake system capable of stopping and holding the equipment with its typical load on the maximum grade it travels…
(2) If equipped on self-propelled mobile equipment, parking brakes shall be capable of holding the equipment with its typical load on the maximum grade it travels.

(3) All braking systems installed on the equipment shall be maintained in functional condition.

What else??

56.14132(a)
Horns & other Audible Devices

56.14132(b)
Backup Alarms

56.14103
Windows

56.14230
Fire Fighting Equipment, Self Propelled Mobile Equipment

What about operational requirements??

30 CFR § 56.14200
Warnings prior to starting or moving equipment.

Before starting crushers or moving self-propelled mobile equipment, equipment operators shall sound a warning that is audible above the surrounding noise level or use other effective means to warn all persons who could be exposed to a hazard from the equipment.

30 CFR § 56.14207
Parking procedures for unattended equipment.

Mobile equipment shall not be left unattended unless the controls are placed in the park position and the parking brake, if provided, is set. When parked on a grade, the wheels or tracks of mobile equipment shall be either chocked or turned into a bank.

What about Conveyor Belts??

56.14107 Moving machine parts.

(a) Moving machine parts shall be guarded to protect persons from contacting gears, sprockets, chains, drive, head, tail, and takeup pulleys, flywheels, couplings, shafts, fan blades, and similar moving parts that can cause injury.

(b) Guards shall not be required where the exposed moving parts are at least seven feet away from walking or working surfaces

56.14105 Procedures during repairs or maintenance.

Repairs or maintenance of machinery or equipment shall be performed only after the power is off, and the machinery or equipment blocked against hazardous motion. **Machinery or equipment motion or activation is permitted to the extent that adjustments or testing cannot be performed without motion or activation, provided that persons are effectively protected from hazardous motion.**

Powered Haulage is both Friend & Foe!

If we respect it’s Power, it can be our Friend, more than a Foe!

Any Questions
Or
Comments??

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