

# Rules to Live By III

## "Preventing Common Mining Deaths"

### Metal and Nonmetal Priority Standards

**30 CFR § 46.7(a) - New task training** - "You must provide any miner who is reassigned to a new task in which he or she has no previous work experience with training in the health and safety aspects of the task to be assigned, including the safe work procedures of such task, information about the physical and health hazards of chemicals in the miner's work area, the protective measures a miner can take against these hazards, and the contents of the mine's HazCom program. This training must be provided before the miner performs the new task."

During the review period, violations of 30 CFR §46.7(a) contributed to 21 fatalities in 21 fatal accident investigations.

#### **Conditions Leading to Fatalities**

- A miner who had not been task trained was run over after being ejected from the cab of a wheeled loader.
- A miner was fatally burned by a release of steam while cleaning a reaction tank. The mine operator had failed to provide task training.
- A laborer was fatally injured when the forklift he was operating left the roadway and overturned. The victim had not been task trained.
- A contractor was killed when the trench wall collapsed and buried him. He had not been task trained on working in and around trenches.
- A plant laborer was fatally injured when his arm was drawn into a conveyor belt as he attempted to adjust a return idler roller. He had not been task trained.

**30 CFR § 56.3130 - Wall, bank, and slope stability** - "MINING METHODS: Mining methods shall be used that will maintain wall, bank, and slope stability in places where persons work or travel in performing their assigned tasks. When benching is necessary, the width and height shall be based on the type of equipment used for cleaning of benches or for scaling of walls, banks, and slopes."

During the review period violations of 30 CFR §56.3130 contributed to 6 fatalities in 6 fatal accident investigations.

#### **Conditions Leading to Fatalities**

- The highwall failed and buried the mine foreman while he was operating a bulldozer at the toe of the highwall.
- Mining methods were not used that ensured that bank and slope stability was maintained for the type of equipment used, causing an excavator to slide down an embankment, fall on its side, and crush the victim inside.
- Tailings sand was beached, sloping to the water's edge, causing a forklift to fall into the water, drowning the victim.
- A highwall collapsed, fatally injuring the company president inside the cab of a front-end loader as he removed material from the base.

**30 CFR § 56.3200 - Correction of hazardous conditions** - "SCALING AND SUPPORT:

Ground conditions that create a hazard to persons shall be taken down or supported before other work or travel is permitted in the affected area. Until corrective work is completed, the area shall be posted with a warning against entry and, when left unattended, a barrier shall be installed to impede unauthorized entry."

During the review period, violations of 30 CFR §56.3200 contributed to 6 fatalities in 6 fatal accident investigations.

**Conditions Leading to Fatalities**

- Ground conditions that created a hazard were not corrected nor was the area barricaded to prohibit entry to work or travel in the area, causing a front-end loader operator to be buried under material that fell off the highwall.
- The sides of a trench had not been sloped or supported and the victim was engulfed when the trench wall partially collapsed.
- A loader operator was struck by rock at the quarry's east bank due to hazardous ground conditions not being posted or barricaded to impede entry.
- No measures were taken to take down or support unstable material that had been cut from a highwall in preparation for removal.
- An excavation cut into a steep hillside was not taken down, supported or posted with a warning, causing fatal injuries to a grade setter who entered the hazardous area.

**30 CFR § 56.14100(b) - Safety defects; examination, correction and records** - "Defects on any equipment, machinery, and tools that affect safety shall be corrected in a timely manner to prevent the creation of a hazard to persons."

During the review period, violations of the surface standard 30 CFR §56.14100(b) contributed to 5 fatalities in 5 fatal accident investigations.

**Conditions Leading to Fatalities**

- The safety latch (stop) installed on the right moveable beam of a dragline, which would have prevented the hoist from moving to the stationary beam, was stuck in the up position, and safety latches (stops) were not installed on the stationary beam which would have prevented the hoist from falling from the end of the beam.
- The safety monitoring system designed to de-energize the liquid waste fuel pump in the event that flow was not maintained was inoperative.
- Sump pumps were installed in lieu of repairing leaking dredge pontoon shells, allowing the dredge operator to drown after the floating grab "clamshell" dredge he was operating capsized.
- Miners were unable to monitor and limit the hydraulic pressure during the tensioning process due to a non-functioning pressure gauge and improperly set relief valve.
- The mine operator was aware of defects affecting the safety of hydro-blasting equipment and did nothing to correct the hazardous conditions.

**30 CFR § 56.15020 - Life jackets and belts** - "Life jackets or belts shall be worn where there is danger from falling into water."

During the review period, violations of 30 CFR §56.15020 contributed to 6 fatalities in 6 fatal accident investigations.

#### **Conditions Leading to Fatalities**

- A dredge operator was not wearing a life jacket, fell from the work deck, and drowned.
- A worker attempted to help his co-worker who had fallen into the water near the edge of an embankment and drowned.
- A plant operator failed to wear a life jacket and was fatally injured when his workboat capsized.
- Dredge operators were not wearing life jackets or belts where there was a danger of falling into water.

**30 CFR § 57.14100(b) - Safety defects; examination, correction and records** - "Defects on any equipment, machinery, and tools that affect safety shall be corrected in a timely manner to prevent the creation of a hazard to persons."

During the review period, violations of the underground standard 30 CFR §57.14100(b) contributed to 6 fatalities in 5 fatal accident investigations.

#### **Conditions Leading to Fatalities**

- A miner was crushed between the rib and the mucker because there was a wooden wedge forced into the left stop of a track mucker bucket and the right stop was rusted open.
- Free play of one quarter turn in the steering wheel of a tractor and air pressures in the rear tires below safe levels allowed the tractor to overturn during an "S" turn upgrade.
- The right side-view mirror on a front-end loader was broken, preventing the operator from seeing persons standing at the rear of the machine.
- Warning alarms and fault lights were disabled on a front-end loader, preventing the operator from being alerted of defective brakes before the loader struck the victim.