

FATAL INJURY ACCIDENT: November 2014 Miner Struck By Drill Bit Ejected From Crusher

On November 10, 2014, a miner was seriously injured while using a torch to cut a drill bit that had become wedged in the discharge opening of a jaw crusher. The miner had entered the crusher and started to cut the bit when the bit was ejected due to the pressure exerted on the bit by the crusher components. He was struck in the face and chest sustaining serious injuries and was rendered unconscious for several minutes. Co-workers entered the crusher and, after the injured miner regained consciousness, removed him from the crusher and administered first aid until emergency medical services personnel arrived. When EMS personnel arrived, they performed a tracheotomy on the victim and he was transported by helicopter to a local hospital for treatment. At the hospital, he was treated for two collapsed lungs, a broken jaw, broken teeth, and a fractured C7 vertebra (lower neck). On November 27, 2014, he was transferred to a hospital in Greensboro, North Carolina for further treatment where he remained until he died as a result of his injuries on January 17, 2015.

CONCLUSIONS/RECOMMENDATIONS:

The Virginia Division of Mineral Mining's investigation determined that:

- Training records were not available to show that personnel had received task training in the hazards associated with removing foreign objects lodged or wedged in the crusher.
- Safe work procedures had not been established by the mine operator regarding the extraction of foreign material from the crusher or blocking the crusher against hazardous motion during maintenance or repair. Neither the operator's manual nor the crusher manufacturer were consulted for recommendations in carrying out this task.
- The work and the procedures employed were not adequately supervised.

DMM recommends:

- Task training must be conducted and documented prior to any miner performing a new task.
- The operator should establish procedures for the safe removal of foreign material from the crusher based on recommendations from the manufacturer and mine safety and health laws and regulations.
- Mine management, specifically the certified foreman, should review their responsibility under Virginia's Safety and Health Regulations for Mineral Mining to ensure work is performed safely and in compliance with the safety laws and regulations.
- The accident, the factors that led up to it, and the steps taken to prevent a recurrence should be reviewed with all personnel.



Feeder and crusher opening where accident took place



Portion of bit that struck the miner