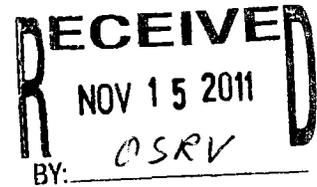


November 14, 2011



**Via Federal E-Rulemaking Comments**

Mine Safety and Health Administration  
Attn: Office of Standards, Regulations, and Variances  
1100 Wilson Blvd., Room 2350  
Arlington, VA 22209-3939

Re: Comments on Proposed Rulemaking  
Proximity Detection Systems for Continuous Mining Machines in Underground Coal Mines  
RIN 1219-AB65

Dear MSHA,

I am an Colorado citizens commenting on the Mine Health and Safety Administration's proposed Rule Making on Proximity Detection Systems for Continuous Mining Machines in Underground Coal Mines. Coal production has a long history in Colorado and throughout the United States. As the need for cleaner and more efficient energy has grown, dueling concerns for mine safety and efficiency have risen to the forefront of our national conversation. I recognize the danger coal production poses to mining employees. However, I do not think that safety and production efficiency needs to be sacrificed for the sake of the other. I believe the proposed rule does that.

In my opinion, the proposed rule does not adequately protect the health and safety of mining employees and unduly burdens coal production capabilities. I think the proposed rule is both overbroad and too narrow. The rule is overbroad because it requires all mining companies to invest in a financially burdensome technology without taking into consideration those mines that have not experienced the crushing and pinning accidents that concern the Administration. It is too narrow because it does not recognize the risks other types of mining accidents pose to our employees, risks that cause substantially more deaths in our industry. I think more time is needed to study the particular risks posed to mining employees by continuous mining machines so as to preserve valuable resources for developing safety systems that adequately protect employees, and preserve the potential for the expansion of the coal production industry. Lastly, am concerned with the time and operational constraints the rule imposes on the machines currently in use.

**I. The Scope of the Proposed Rule is Both Overbroad and Too Narrow**

- A. In the last 26 years, approximately 70 coal-mining related deaths have been caused by crushing or pinning. Of these, 30 were related to continuous mining machines. The proposed rule contends that Proximity Detection Systems would prevent crushing and pinning accidents. I don't believe the evidence supports such a conclusion at this time.

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The few mines that have experience utilizing these systems, as well as those who have studied the systems' applicability to their mines, have produced little evidence suggesting the proposed systems would have prevented the crushing and pinning deaths that concern the Administration. Considering the cost of installing these systems in Colorado mines, I think the proposed rule would burden the mines' production efforts and impede research into safer protective technologies.

1. Although many South African mines have installed proximity detection systems, there are concerns with the long-term capabilities of the alarm systems to prevent crushing and pinning accidents. The proposed systems sound an alarm when an individual miner gets within three feet of a continuous mining machine. Considering the frequency with which this occurs, I think the Administration should give additional consideration to the South Africans' concerns that the alarms are often ignored by individuals on the ground as well as by machine operators. As employees grow accustomed to the proposed systems and their alarms, many worry that employees will grow ambivalent to the systems' alarms, and fail to avoid the harm the systems are intended to prevent.
2. With respect to Section 75.1732(a) "Machines Covered," I question whether the proposed systems achieve the Administration's desired goal. Of the approximately 30 crushing or pinning deaths that have been caused by continuous mining machines over the past 26 years, 11 of the victims have been machine operators and six have been maintenance employees. Maintenance workers and machine operators are often required to be within the protected three foot area while servicing and operating the machines. Considering the frequency with which employees need to be within the three foot protection area, I do not believe the proposed systems strikes the appropriate balance between safety and the need to maintain and service continuous machines.
3. This rule applies to all underground coal mines in the United States. According to MSHA's estimates, there were 424 underground coal mines in operation as of January 2010. Instead of creating an across-the-board rule, requiring all mines to implement proximity detection devices, it would be more cost and time efficient to pinpoint mines where crushing and pinning accidents associated with continuous mining machines take place, and implement measures in these locations.
4. Fatalities and injuries associated with crushing and pinning accidents are a concern in the coal mining industry and I do not discount the danger that continuous mining machines present to mining employees. However, I think many in the mining industry are even more concerned about the threat of explosions and fires. According to MSHA, between 1970 and 2010, 199 miners were killed in a fire or explosions in coal mines. I think the proposed rule would direct resources and time away from the risks associated with this danger.

- B. The White House Office of Management and Budget recently agreed with this opinion, and shares my concern that money spent on the proposed systems diverts resources from the development of more effective safety technologies. I believe more time is needed to test the effectiveness of the proposed systems before the rule imposes burdensome costs on mining companies and their employees.

## II. **The Installation of the Proposed Systems and the Cost Analysis by MSHA is Impractical**

- A. When discussing the installation of proximity detection systems, Anton Lourens, Managing Director for Booyco Electronics (the leading supplier of collision warning systems in South Africa) suggested that mining companies thinking about installing this technology underground for the first time should do extensive research before deciding which system to purchase. “Protecting personnel and equipment is a critical focus area in the industry,” he comments. “Proximity detection technology is also capital intensive, so when investigating which system would be most suitable for a given application, mining companies should look for a system that has a proven track record and which is well supported by the supplier in terms of technical support, spares, stockholding, operator training and change management. Suppliers should also be seen to be reinvesting into continuous product development and enhancement.”
- B. With respect to Section 75.1732(b) “Requirements for Proximity Detection Systems,” I am concerned with the limited information available regarding the system’s interference with a mine’s other electrical systems.
  - 1. While manufacturers of the MSHA approved models have stated that their systems do not have “significant interference issues” the proposed rule requires operators to evaluate the proximity detection system and other electrical systems and to take “adequate steps to prevent adverse interference.” This will take time and could lead to costly shut downs and other unknown problems.
- C. The net benefits analysis presented by MSHA is not complete.
  - 1. The Administration believes that the proposed rule would result in additional savings to mine operators by avoiding the production delays typically associated with mine accidents. The frequency with which mistaken shut downs, technological malfunction, or interference from the system would shut down production, compared to the delays related to pinning and crushing accidents associated with continuous mining machines, is still uncertain.
  - 2. While the proposed rule may save money by avoiding production delays associated with crushing and pinning accidents, the rule imposes yearly expenditures between \$4.1 and \$8.2 million dollars while the system is being phased in, and additional costs are imposed for maintaining the system. These additional expenses pose a significant impediment to expanding coal production efforts and development of more effective safety technologies.

### III. Proposed Proximity Detection Systems are Harmful to Mining Machines

There is a concern about the impact the proposed Proximity Detection Systems will have on the operation of our Continuous Mining Machines.

- A. The systems proposed by the Rule would automatically shut down the machines when a miner comes within a three foot radius of the machine. The system gives the miner the option of overriding the shutdown by keeping his hand on the system's chest plate. Considering the frequency with which mining employees come within the three foot radius for maintenance and operation, and the one-handed burden placed on employees to keep the machine from shutting down, I am concerned about the number of full shutdowns mines will experience. Repeated shutdowns and restarts can cause additional wear and tear on our machines, and I am concerned about the costs such a process will have on continuous mining machines. Therefore, I believe the interests of the coal production industry as a whole, would be better served by studying alternative safety systems. Delaying the adoption of the proposed rule would allow for the development of more effective detection systems – systems that protect employees and allow businesses to efficiently expand.
- B. The National Institute for Occupational Safety and Health (NIOSH) Proximity Detection System is an alternative worth exploring.
  1. **NIOSH's system could be better for mining equipment.** Although development and testing is still in its early stages, NIOSH's systems offer a viable alternative to the proposed proximity detection systems. The proposed systems force a full shutdown of the machine when a worker comes within three feet of the machine. NIOSH's system on the other hand, detects the worker's location with respect to specific machine functions that pose an immediate risk. When the worker gets too close to a specific section of the machine, NIOSH's system will effectuate a functional shutdown instead of a full machine shutdown, temporarily suspending the particular function threatening the miner. Such a system allows the machine to continue operating and reduces the need for full restarts, thereby reducing wear on the machine.
  2. **NIOSH's system could offer a safer alternative for mining employees.** The systems being considered by the proposed rule prevent accidents from occurring when a worker is too close to the machine, but does not address other dangers posed to mine workers. If a worker moves too far from the machine to avoid a full shutdown, they are at risk of crushing or pinning from other mining equipment, like shuttle cars. NIOSH's partial shutdown function could allow workers to safely move inside the three foot radius without causing a full shutdown, thus mitigating the risk of pinning or crushing caused by other mining equipment when a miner moves too far away from a continuous mining machine.

A delayed implementation of the proposed rule will allow alternative systems, like NIOSH's, to be adequately developed and tested to compete in the market. A system like NIOSH's serves all interests of the coal production industry – safety and productivity. As a concerned Colorado citizen, I respectfully request that the Administration give systems like NIOSH's the time needed to develop, instead of forcing mining companies to invest in safety systems that hinders expansion and does not adequately protect mining employees.

Sincerely,

John Feeney-Coyle