



**MSHA's Accident Prevention Program  
Innovative Products  
" Clearing a Frozen Slurry Pipe"**

**Safety  
and  
Health  
are  
Values!**



During the last four years, two fatalities occurred in the coal industry when miners attempted to free frozen slurry pipes. High pressure cleaning systems are readily applicable to unclog frozen slurry lines. These systems use a 1" nozzle that travel 400' to 700' in the pipe, cleaning and de-icing as it moves. No chemicals or salt are added to the flushing water. Enough heat is generated in the pumping action to penetrate and thaw the clog causing no refreezing before it discharges.

The water is flushed behind the nozzle as it penetrates the pipe in a jetting and cutting action. This jetting action moves the nozzle forward pulling the feed line as it moves. The discharge travels around and past the feed line to the open end of the pipe. Pressure generated at the nozzle is between 3000 to 4000 psi. No pressure is built up from in the pipe because it is open ended.

"Y's" should be strategically placed at 700' intervals within the line to facilitate the process without cutting the pipe. Advanced planning will be necessary in order to have these "Y" connections in place to take care of any water and material that may be flushed from the pipe as it is cleared. Once the system is appropriately configured, this system can quickly and efficiently clear any clogs in the pipeline.

For information on manufacturers that are known to MSHA to have such products available, contact MSHA's Applied Engineering Division at 304-547-0400 or e-mail [zzMSHA-InnovativeProducts@dol.gov](mailto:zzMSHA-InnovativeProducts@dol.gov).

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**Remember "SAFETY and HEALTH are a VALUE" you can live with.**

