

DISTRICT SAFETY & HEALTH NOTES

CONFINED SPACES

By Steve Viles



Have you worked in a confined space? If you are a miner, then chances are that you have worked in a confined space.

In mining, a confined space is generally defined as an area or location that is not designed for continuous worker activity, usually has limited access for entering and exiting, and may have a hazardous atmosphere.

Many miners mistakenly believe there is not a confined space hazard at their small surface operation. Confined spaces on mining property can include, among other places, storage bins, hoppers, silos, storage tanks, kilns, surge piles, draw-off tunnels and processing vats. Some of these areas are entered only for occasional maintenance and cleaning. Even an open-top water tank, which at first would appear totally harmless, could develop a toxic atmosphere of hydrogen sulfide, just from the natural vaporization of contaminated water.

In some cases, miners have been unaware of the potential hazards and the many causes of



injury, illness, and death that are associated with the confined spaces they encounter. In other cases, they had some knowledge that a hazard existed but just

assumed that it was part of the job to accept the risk. Remember the coal mine canaries?

We'll never know how many miners in the past had permanent disabling injuries and illnesses, and in many cases lost their lives, to these hidden hazards. Regrettably, even today confined space injuries and fatalities continue to occur at our mining facilities. These incidents can be prevented by taking just a few precautionary measures such as using a safety belt and line, respirator, or other personal protective equipment.



MSHA does not have regulations that specifically address confined spaces at the mine. However, MSHA standards do address some of the hazards found in confined spaces.

A confined space program at any mining operation should include barricading, signs, and emergency response preparedness, in addition to addressing the following hazards:

- ingress and egress
- lighting and visibility
- oxygen content
- potential asphyxiates
- flammable or explosive fumes and vapors
- toxic vapors
- cramped environment
- slippery surfaces
- temperature and humidity
- noise

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