MSHA's Occupational Illness and Injury Prevention Program
Health Tips
"Working in Confined Spaces"

SAFETY IS A VALUE!

Category : Hygiene and Housekeeping
Mine Type: All

Working in confined spaces can be very dangerous. The following tips are for working safely in these types of work places. These tips are appropriate for surface Coal and Metal and Nonmetal mines. A confined space is an area with poor or no airflow. Examples of confined spaces include:

- Tanks
- Covered Pits
- Bins
- Silos

Because of the poor airflow toxic gases can accumulate in a confined space. Before any miner enters a confined space, the air needs to be checked for adequate oxygen concentration and the accumulation of flammable gases. Many electronic instruments have remote sampling probes so that a miner Can sample the atmosphere in a confined space from a safe location. Only after the atmosphere is judged to be safe should miners enter the confined space.

Whenever welding or burning occurs inside a tank, a fan should be used to bring fresh air into the confined space. Besides bringing in oxygen the fan removes accumulations of harmful gases. Welding and/or burning depletes the oxygen and produces carbon monoxide and other harmful gases, therefore, the air inside the tank needs to be replenished.

Safety Measures

- **Monitor**
- **Lifeline**

A person should be posted outside the confined space to monitor the miner working in the confined space. The miner working in the confined space should have a lifeline attached to himself/herself. The monitor, without being exposed to the atmosphere in the confined space, can use the lifeline to pull the collapsed miner to safety.

The monitor should be ready to summon help if the miner would collapse inside the confined space. The person monitoring should **NEVER ENTER** the confined space without wearing appropriate safety and personal protective equipment to rescue a collapsed miner. The atmosphere in the confined space may have too little oxygen or too much carbon monoxide to sustain life.

Issued:	02/26/2003
Tag #	AP2002-H005

Remember – Safety is a Value that you can LIVE with!