

Each month DMME personnel will be conducting monthly safety talks pertaining to Emergency Response and Preparedness. Topic-of-the-Month brochures and safety stickers will be handed out during these talks to help remind you of these critical safety points.



The Virginia Department of Mines, Minerals and Energy has developed several award winning mine safety videos. These videos were made possible thru Grants from the Mine Safety and Health Administration and can be found on our website at: www.dmme.virginia.gov

Mine Safety Videos:

- ◆ **The Right Choice**
- ◆ **Step Up To The Plate**
- ◆ **Lead The Way**
- ◆ **No Way Out**
- ◆ **The Miners' Bond**



Additional Information

For more information on the Virginia Topic-of-the-Month Mine Emergency Campaign, please contact:

Division of Mines
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UNDERGROUND MINE FIRES



Mine Emergency

January 2017
Topic-of-the-Month

MINE SPECIFIC INFORMATION

Violation/Orders

- Fire Prevention and Fire Control Compliance History (45.1-161.200-207).
- Rock Dust and Cleanup Compliance History (45.1-161.234-235)
- Mine Openings and Escapeways (45.1-161.162-170)

A VIRGINIA MINE FIRE

A vigilant underground mine examiner found elevated levels of carbon monoxide while making a supplemental mine examination behind the active gob of a pillar section. The examiner promptly notified the surface and the working section of the mine. All miners located underground were evacuated to the surface.

A subsequent investigation by company officials, Division of Mines personnel, and representatives of the Mine Safety and Health Administration discovered up to 79 parts per million (PPM) of carbon monoxide (CO) and smoke exiting from a small gob area just inby the working section.

The mine remained closed for approximately four months until a re-entry plan could be approved by both the Division of Mines and the Mine Safety and Health Administration.



SAFETY KEYPOINTS

- ⇒ Be cognizant of potential fire hazards in your mine such as mobile equipment, conveyor belts, cutting and welding operations, and storage areas for flammable and combustible liquids.
- ⇒ Maintenance of the appropriate fire protection equipment is vital. It is rendered useless if it is not in proper working order. Fire protection equipment should be inspected regularly and replaced or repaired as necessary.
- ⇒ Cool air has less capacity to contain moisture than warm air. In winter months, cold air from the surface is drawn into the mine and warmed up, lowering the humidity, and causing the mine to dry out. A drier mine has a greater potential for fires.
- ⇒ Keep mobile equipment clean. Identify and fix hydraulic or fuel system leaks. Clean mobile equipment, without leaks, has much less potential for catching on fire.
- ⇒ Take fire drills seriously. All underground coal mines must stage regular fire-fighting drills. The only way to be good at something is to practice it over and over. Firefighting drills will

KEYPOINTS—continued

reduce response time and, in many cases, extinguish the fire before it can become large and seriously endanger lives.

- ⇒ The presence of carbon monoxide is an indicator of a mine fire. Carbon Monoxide (CO) constitutes one of the greatest hazards to life in mining. CO is produced by mine fires and gas explosions. Normal mine air should not contain over 5 to 10 PPM CO. The CO content of the air in which workers are employed for a period of eight hours should not exceed 50 PPM.
- ⇒ One of the most important pieces of firefighting is an adequate supply of water. Always maintain your water supply in good working condition. Know where your firefighting hose and fire valves are located.
- ⇒ The authorized person located on the surface should be informed of the number of miners beginning evacuation, if possible, and the escape route that will be used while exiting the mine.



MINE EMERGENCY SAFETY CHECK

T	F	The absence of carbon monoxide is an indicator of a mine fire?
T	F	Cutting and welding operations have no possibility of starting a mine fire?
T	F	Firefighting equipment must be checked regularly and replaced or repaired as necessary?
T	F	Cold air drawn into the mine during winter months dries out the mine and increases fire hazards?
T	F	Normal mine atmosphere contains 75 to 80 PPM carbon monoxide?
T	F	Gobbed out mining equipment is extremely unlikely to catch fire?
T	F	Every miner should know where firefighting hoses and fire valves are located?
T	F	The allowable limit for CO in an eight hour period is 50 PPM carbon monoxide?
T	F	Air that contains 200 PPM of CO is safe to breath for an extended period of time?
T	F	A fire drill is only something that has to be done to meet regulatory requirements?