

Most plants that burn
PRB coal were not
designed to deal with
the fuel's propensity to
ignite in bunkers, silos,
and hoppers.

A major consideration in minimizing the impact of fire is where to install gas- and/or temperature monitoring devices in bunkers and silos. Each type of instrument has its own application criteria that also must be considered. Both types of monitoring devices have proven effective at early detection of fires at plants burning PRB coal.

Monitoring for the presence of carbon monoxide is the soonest way to find out there is a fire in the making. CO is an odorless, toxic gas that is liberated at the very early stages of incomplete combustion. CO is flammable at 12% to 75% volume in air (OSHA's permissible exposure limit for CO is 35 ppm at an eight-hour time-weighted average). Though it may be normal to experience a rise and fall of background CO levels in bunkers and silos during normal operation, monitoring will provide notification if the gas begins to continually trend upward from background levels. Desired alarm setpoints can be determined after the normal background level of CO is determined for your particular plant. The best way to make use of CO monitoring is to watch for a continuing upward trend of CO rather than to wait for the level of CO to reach a specific setpoint.

- Edward B. Douberly, Utility FPE Group Inc.
As seen in Power, 10/03

CONSPEC Carbon Monoxide Detectors

Since 1968 CONSPEC Controls, Inc. has been supplying coal mining and industrial facilities with superior Gas Detection and Monitoring Equipment. We offer customized manufacturing on each product we produce while maintaining outstanding customer service and support. Our experience is in providing the industry with the most reliable and user-friendly detectors and monitoring systems.

Our Carbon Monoxide Monitors allow for reliable and accurate monitoring measurement of CO levels in critical locations such as reclaim tunnels, silos, and bunkers. The monitoring of background CO concentrations allows for appropriate actions to be taken before a potentially dangerous situation occurs.



Other benefits you can expect from these systems are:

- Robust Design
- Mine-Duty Grade CO detectors
- Early alarming to a potentially dangerous situation
- 24/7 monitoring and alarming
- Scalable
- Easy to install and maintain
- Suitable for dusty and classified locations

We will be in touch to discuss how CONSPEC can ensure your safety and peace of mind, or feel free to call Rob Albinger at 1-800-487-8450 or email rob.albinger@conspec-controls.com.

