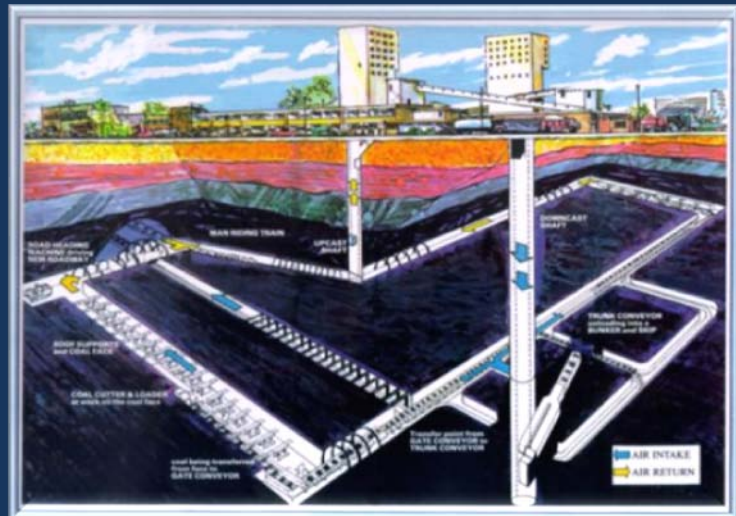**PCSC**

MineSafe™

Fiber Optic, 24/7 Miner Tracking System

MSHA-Approved fiber optic cable continuously tracks the location of up to 1,000 miners, 24 hours a day, 7 days a week.

**Provides a real-time display of the location of all employees inside the mine on a customized map of your mine**

Updates miner location once per second, even in the presence of noisy operating equipment including continuous mining machines, roof bolters, etc.

Features:

- Unaffected by EMI/RFI
- All-optical , no electrical power in cable
- Power-free, bi-directional emergency communications included
- Rapid easy installation using existing J-hooks, S-hooks, cable trays, or makeshift hangars
- Auto-reporting of cable break location
- When configured for redundant operation from both ends of the sensing cable – provides complete sensing on both sides up to any break
- Rugged MSHA-approved sensing cable and inherently safe breakout boxes
- Easy integration of sensing cable with mine lifeline cones
- High reliability for low lifetime cost

Tested at the US National Institute for Occupational Safety and Health Safety Research Coal Mine
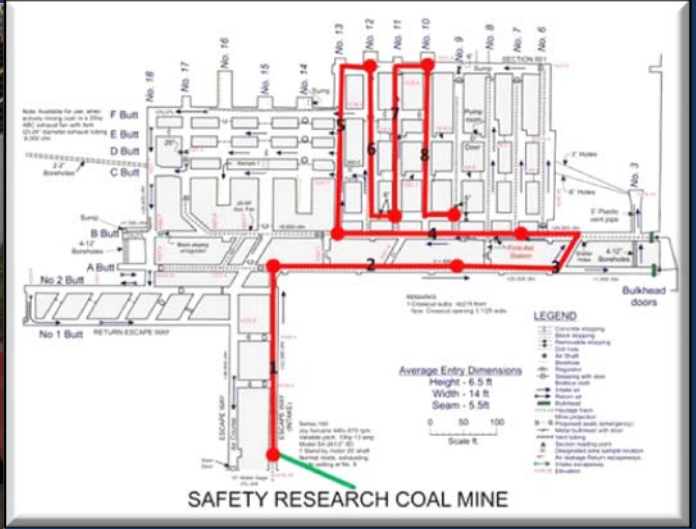
System Specifications:

Sensing: 100% optical (no electrical power needed in the mine)

Typical sensing zone length: 100m

 # miners tracked: Up to 1,000 simultaneously

Miner Tracking: Coded acoustic beacon, belt mounted, battery operated

Beacon battery reserve: 48 hours

Display type: GIS-based GUI

Archived miner tracking: tracking data files stored for 72 hours

'Lost' GUI function: alerts management when a miner is no longer tracked due to catastrophe

 # communications breakout boxes: 8 per system

Control room electronics power: 110/220VAC

Operational temperature range: -40 to +50C