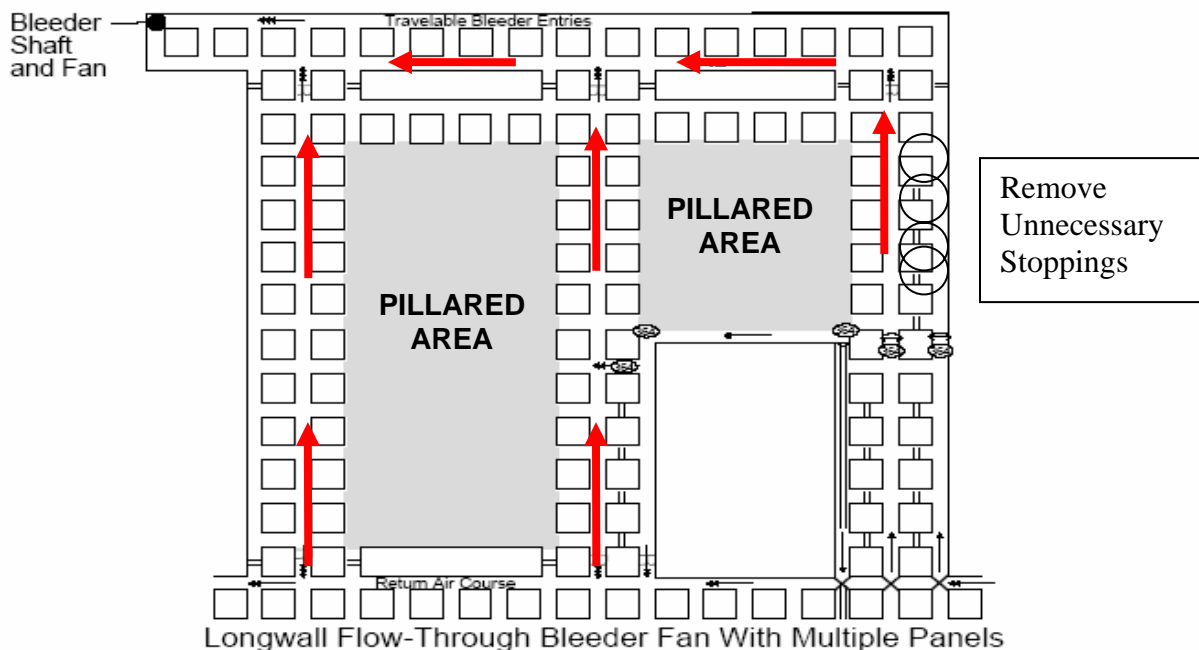


# VENTILATION INFORMATION SAFETY FLYER

Bleeder systems are ventilation networks used to ventilate pillared areas in underground coal mines. Effective bleeder systems protect miners from the hazards associated with methane, oxygen-deficient air, and other gases which may otherwise accumulate in these mined-out areas. Failure to properly examine, maintain, and evaluate the bleeder system has led to accidents, including fires and explosions, resulting in mine closures, injuries, and even death.



## BEST PRACTICES

- Train all examiners, inspectors, and engineers to evaluate ventilation systems and recognize deficiencies.
- Utilize advance planning to mitigate the risk of water accumulation blocking the bleeder entries.
- Install supplemental roof support where necessary to keep the bleeder entries travelable and open to air flow.
- Use properly maintained and calibrated testing instruments.
- Walk slowly through an area that is adjacent to old workings with your gas detector in front of you. **REMEMBER:** “Blackdamp” is heavier than air and will be found closer to the mine floor.
- Assure bleeder air currents are of sufficient volume and proper direction to dilute and remove methane and other harmful gas.
- It is important not only to monitor current methane levels but also consider changes and trends when evaluating bleeder systems.

