

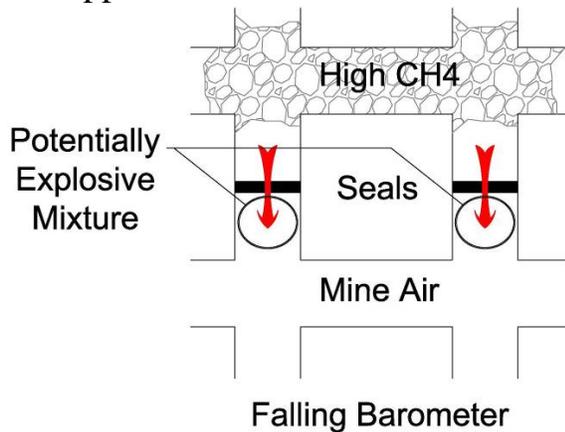


U. S. Department of Labor MSHA's Accident Prevention Safety Idea



Hazards with a Falling Barometer

A falling barometer is an indication of falling atmospheric pressure. The affect of falling atmospheric pressure is significant to a coal mine environment. Methane from the coal seam is liberated into the mine atmosphere at a greater rate and may also appear in areas of the mine not normally prone to methane accumulations.



Seals will begin to “out-gas” at a greater rate. Explosive methane/air mixtures may be present in the area of the seals. The atmospheres from gob areas containing methane and low oxygen concentrations will migrate toward the active areas of the mine. Also see information in a similar safety idea titled [Hazards with a Rising Barometer](#).

Best Practices

- Make frequent checks for methane in work areas when the barometer is falling.
- Maintain adequate ventilation in the face area to prevent accumulations of methane gas.
- Ensure that areas in front of seals are ventilated so that gases liberated from the sealed area are swept away.
- Apply adequate rock dust in all areas of the mine.
- Take extra precautions when traveling in areas near seals or gobs when the barometer is falling since methane and low oxygen levels may be present.
- Maintain a recording barometer at the mine and check the trending of the barometric pressure each shift.
- Obtain a regional barometer forecast that will indicate expected changes and alert miners of the potential hazards associated with the changing barometric pressure.

If you have a tip you would like to pass on, you can e-mail it
to zz-MSHA-MinersTips@dol.gov
If your tip is selected, you will receive credit in this space.

Tag # AP2010-98378