

**§ 57.22237 Actions at 2.0 to 2.5 percent methane in bleeder systems (I-A and III mines).**

If methane reaches 2.0 percent in bleeder systems at the point where a bleeder split enters a main return split, mining shall not be permitted on ventilation splits affected by the bleeder system. If methane has not been reduced to less than 2.0 percent within 30 minutes, or if methane levels reach 2.5 percent, all persons other than competent persons necessary to take corrective action shall be withdrawn from affected areas.

**§ 57.22238 Actions at 2.0 percent methane (I-B, II-B, V-B, and VI mines).**

If methane reaches 2.0 percent in the mine atmosphere, all persons other than competent persons necessary to make ventilation changes shall be withdrawn from the mine until methane is reduced to less than 0.5 percent.

**§ 57.22239 Actions at 2.0 percent methane (IV mines).**

If methane reaches 2.0 percent in the mine atmosphere, all persons other than competent persons necessary to make ventilation changes shall be withdrawn from the mine until methane is reduced to less than 0.5 percent. MSHA shall be notified immediately.

[52 FR, 24941, July 1, 1987, as amended at 52 FR 41397, Oct. 27, 1987; 60 FR 33723, June 29, 1995]

**§ 57.22240 Actions at 2.0 percent methane (V-A mines).**

If methane reaches 2.0 percent in the mine atmosphere, all persons other than competent persons necessary to make ventilation changes shall be withdrawn from affected areas until methane is reduced to less than 1.0 percent.

[52 FR 24941, July 1, 1987; 52 FR 27903, July 24, 1987]

**§ 57.22241 Advance face boreholes (I-C mines).**

(a) Boreholes shall be drilled at least 25 feet in advance of a face whenever the work place is within—

(1) 50 feet of a surveyed abandoned mine or abandoned workings which cannot be inspected; or

(2) 200 feet of an unsurveyed abandoned mine or abandoned workings which cannot be inspected.

(b) Boreholes shall be drilled in such a manner to insure that the advancing face will not accidentally break into an abandoned mine or abandoned working.

EQUIPMENT

**§ 57.22301 Atmospheric monitoring systems (I-A, II-A, and V-A mines).**

(a) An atmospheric monitoring system shall be installed to provide surface readings of methane concentrations in the mine atmosphere from underground locations. Components of the system shall be approved by MSHA under the applicable requirements of 30 CFR parts 18, 22, 23, and 27; or be determined by MSHA under 30 CFR part 18 to be intrinsically safe or explosion-proof.

(b) Atmospheric monitoring systems shall—

(1) Give warnings on the surface and underground when methane at any sensor reaches 0.5 percent or more, and when power to a sensor is interrupted. Warning devices shall be located so that they can be seen and heard by a person designated by the mine operator; and

(2) Automatically deenergize power in affected areas, except power to monitoring equipment determined by MSHA to be intrinsically safe under 30 CFR part 18, when methane at any sensor reaches—

(i) 1.0 percent in a Subcategory I-A or V-A mine; or

(ii) 0.5 percent while persons are underground and 1.0 percent during blasting in a Subcategory II-A mine. Timing devices are permitted to avoid nuisance tripping for periods not to exceed 30 seconds, except during blasting or the ventilation time following a blast in a Subcategory II-A mine.

(c) Atmospheric monitoring systems shall be checked with a known mixture of methane, and calibrated if necessary at least once every 30 days. Certification of calibration tests shall be made by signature and date. Certifications of tests shall be retained for at least one year and made available to authorized representatives of the Secretary.