§ 57.22302

§ 57.22302 Approved equipment (I-A and V-A mines).

Equipment used in or beyond the last open crosscut shall be approved by MSHA under the applicable requirements of 30 CFR parts 18 through 36. Equipment shall not be operated in atmospheres containing 1.0 percent or more methane.

§ 57.22303 Approved equipment (I-C mines).

Only electrical equipment that is approved by MSHA under the applicable requirements of 30 CFR parts 18 through 28 or approved under 30 CFR part 29 contained in the 30 CFR, parts 1–199, edition, revised as of July 1, 1999, shall be used underground, except for submersible sump pumps.

[64 FR 43283, Aug. 10, 1999]

§ 57.22304 Approved equipment (II-A mines).

- (a) Cutting and drilling equipment used at a face or bench shall be approved by MSHA under the applicable requirements of 30 CFR parts 18 through 36.
- (b) While cutting or drilling is in progress, equipment not approved by MSHA under the applicable requirements of 30 CFR parts 18 through 36 shall remain at least 100 feet from the face or bench being mined.
- (c) Tests for methane shall be conducted immediately before non-approved equipment is taken to a face or bench after blasting.
- (d) Mine power transformers and stationary equipment not approved by MSHA under the applicable requirements of 30 CFR parts 18 through 36 shall be installed in fresh air or downwind from an atmospheric methane monitor sensor.

§ 57.22305 Approved equipment (III mines).

Equipment used in or beyond the last open crosscut and equipment used in areas where methane may enter the air current, such as pillar recovery workings, longwall faces and shortwall faces, shall be approved by MSHA under the applicable requirements of 30 CFR parts 18 through 36. Equipment shall not be operated in atmospheres

containing 1.0 percent or more methane.

§ 57.22306 Methane monitors (I-A mines).

- (a) Methane monitors shall be installed on continuous mining machines, longwall mining systems, and on loading and haulage equipment used in or beyond the last open crosscut.
 - (b) The monitors shall—
- (1) Give warning at 1.0 percent methane;
- (2) Automatically deenergize electrical equipment, except power to monitoring equipment determined by MSHA to be intrinsically safe under 30 CFR part 18, and prevent starting such equipment when methane levels reach 1.5 percent. Diesel equipment shall be shut off or immediately removed from the affected area; and
- (3) Automatically deenergize electrical equipment when power to a sensor is interrupted. Diesel equipment shall not be operated if the monitor is inoperative.
- (c) Sensing units of monitors shall be positioned at a location which provides for the most effective measurement of methane.

§ 57.22307 Methane monitors (II-A mines).

- (a) Methane monitors shall be installed on continuous mining machines, longwall mining systems, bench and face drills, and undercutting machines used in or beyond the last open crosscut.
 - (b) The monitors shall— $\,$
- (1) Give warning at 0.5 percent methane;
- (2) Automatically deenergize electrical equipment, except power to monitoring equipment determined by MSHA to be intrinsically safe under 30 CFR part 18, and prevent starting such equipment when methane levels reach 1.0 percent; and
- (3) Automatically deenergize the equipment when power to a sensor is interrupted.
- (c) Sensing units of monitors shall be positioned at a location which provides for the most effective measurement of methane.