

**§ 75.320**

**30 CFR Ch. I (7-1-06 Edition)**

(2) Underground electric power circuits shall be deenergized. However, circuits necessary to withdraw persons from the mine need not be deenergized if located in areas or haulageways where methane is not likely to migrate to or accumulate. These circuits shall be deenergized as persons are withdrawn; and

(3) Mechanized equipment not located on working sections shall be shut off. However, mechanized equipment necessary to withdraw persons from the mine need not be shut off if located in areas where methane is not likely to migrate to or accumulate.

(d)(1) When ventilation is restored—

(i) No one other than designated certified examiners shall enter any underground area of the mine until an examination is conducted as described in § 75.360(b) through (e) and the area has been determined to be safe. Designated certified examiners shall enter the underground area of the mine from which miners have been withdrawn only after the fan has operated for at least 15 minutes unless a longer period of time is specified in the approved ventilation plan.

(ii) Underground power circuits shall not be energized and nonpermissible mechanized equipment shall not be started or operated in an area until an examination is conducted as described in § 75.360(b) through (e) and the area has been determined to be safe, except that designated certified examiners may use nonpermissible transportation equipment in intake airways to facilitate the making of the required examination.

(2) If ventilation is restored to the mine before miners reach the surface, the miners may return to underground working areas only after an examination of the areas is made by a certified person and the areas are determined to be safe.

(e) Any atmospheric monitoring system operated during fan stoppages shall be intrinsically safe.

**§ 75.320 Air quality detectors and measurement devices.**

(a) Tests for methane shall be made by a qualified person with MSHA approved detectors that are maintained in permissible and proper operating

condition and calibrated with a known methane-air mixture at least once every 31 days.

(b) Tests for oxygen deficiency shall be made by a qualified person with MSHA approved oxygen detectors that are maintained in permissible and proper operating condition and that can detect 19.5 percent oxygen with an accuracy of  $\pm 0.5$  percent. The oxygen detectors shall be calibrated at the start of each shift that the detectors will be used.

(c) Handheld devices that contain electrical components and that are used for measuring air velocity, carbon monoxide, oxides of nitrogen, and other gases shall be approved and maintained in permissible and proper operating condition.

(d) An oxygen detector approved by MSHA shall be used to make tests for oxygen deficiency required by the regulations in this part. Permissible flame safety lamps may only be used as a supplementary testing device.

(e) Maintenance of instruments required by paragraphs (a) through (d) of this section shall be done by persons trained in such maintenance.

**§ 75.321 Air quality.**

(a)(1) The air in areas where persons work or travel, except as specified in paragraph (a)(2) of this section, shall contain at least 19.5 percent oxygen and not more than 0.5 percent carbon dioxide, and the volume and velocity of the air current in these areas shall be sufficient to dilute, render harmless, and carry away flammable, explosive, noxious, and harmful gases, dusts, smoke, and fumes.

(2) The air in areas of bleeder entries and worked-out areas where persons work or travel shall contain at least 19.5 percent oxygen, and carbon dioxide levels shall not exceed 0.5 percent time weighted average and 3.0 percent short term exposure limit.

(b) Notwithstanding the provisions of § 75.322, for the purpose of preventing explosions from gases other than methane, the following gases shall not be permitted to accumulate in excess of the concentrations listed below:

- (1) Carbon monoxide (CO)—2.5 percent
- (2) Hydrogen (H<sub>2</sub>)—.80 percent