

§ 75.342 Methane monitors.

(a)(1) MSHA approved methane monitors shall be installed on all face cutting machines, continuous miners, longwall face equipment, loading machines, and other mechanized equipment used to extract or load coal within the working place.

(2) The sensing device for methane monitors on longwall shearing machines shall be installed at the return air end of the longwall face. An additional sensing device also shall be installed on the longwall shearing machine, downwind and as close to the cutting head as practicable. An alternative location or locations for the sensing device required on the longwall shearing machine may be approved in the ventilation plan.

(3) The sensing devices of methane monitors shall be installed as close to the working face as practicable.

(4) Methane monitors shall be maintained in permissible and proper operating condition and shall be calibrated with a known air-methane mixture at least once every 31 days. To assure that methane monitors are properly maintained and calibrated, the operator shall:

(i) Use persons properly trained in the maintenance, calibration, and permissibility of methane monitors to calibrate and maintain the devices.

(ii) Maintain a record of all calibration tests of methane monitors. Records shall be maintained in a secure book that is not susceptible to alteration or electronically in a computer system so as to be secure and not susceptible to alteration.

(iii) Retain the record of calibration tests for 1 year from the date of the test. Records shall be retained at a surface location at the mine and made available for inspection by authorized representatives of the Secretary and the representative of miners.

(b)(1) When the methane concentration at any methane monitor reaches 1.0 percent the monitor shall give a warning signal.

(2) The warning signal device of the methane monitor shall be visible to a person who can deenergize electric equipment or shut down diesel-powered equipment on which the monitor is mounted.

(c) The methane monitor shall automatically deenergize electric equipment or shut down diesel-powered equipment on which it is mounted when—

(1) The methane concentration at any methane monitor reaches 2.0 percent; or

(2) The monitor is not operating properly.

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§ 75.343 Underground shops.

(a) Underground shops shall be equipped with an automatic fire suppression system meeting the requirements of § 75.1107-3 through § 75.1107-16, or be enclosed in a noncombustible structure or area.

(b) Underground shops shall be ventilated with intake air that is coursed directly into a return air course.

§ 75.344 Compressors.

(a) Except compressors that are components of equipment such as locomotives and rock dusting machines and compressors of less than 5 horsepower, electrical compressors including those that may start automatically shall be:

(1) Continuously attended by a person designated by the operator who can see the compressor at all times during its operation. Any designated person attending the compressor shall be capable of activating the fire suppression system and deenergizing or shutting-off the compressor in the event of a fire; or,

(2) Enclosed in a noncombustible structure or area which is ventilated by intake air coursed directly into a return air course or to the surface and equipped with sensors to monitor for heat and for carbon monoxide or smoke. The sensors shall deenergize power to the compressor, activate a visual and audible alarm located outside of and on the intake side of the enclosure, and activate doors to automatically enclose the noncombustible structure or area when either of the following occurs:

(i) The temperature in the noncombustible structure or area reaches 165 °F.

(ii) The carbon monoxide concentration reaches 10 parts per million above