

(1) Where used, sensors responding to temperature rise at a point (point-type sensors) shall be located at or above the elevation of the top belt, and installed at the beginning and end of each belt flight, at the belt drive, and in increments along each belt flight so that the maximum distance between sensors does not exceed 125 feet, except as provided in paragraph (a) (3) of this section.

(2) Where used, sensors responding to radiation, smoke, gases, or other indications of fire, shall be spaced at regular intervals to provide protection equivalent to point-type sensors, and installed within the time specified in paragraph (a) (3) of this section.

(3) When the distance from the tailpiece at loading points to the first outby sensor reaches 125 feet when point-type sensors are used, such sensors shall be installed and put in operation within 24 production shift hours after the distance of 125 feet is reached. When sensors of the kind described in paragraph (a) (2) of this section are used, such sensor shall be installed and put in operation within 24 production shift hours after the equivalent distance which has been established for the sensor from the tailpiece at loading points to the first outby sensor is first reached.

(b) Automatic fire sensor and warning device systems shall be installed so as to minimize the possibility of damage from roof falls and the moving belt and its load.

(c) Infrared, ultraviolet, and other sensors whose effectiveness is impaired by contamination shall be protected from dust, dirt, and moisture.

(d) The voltage of automatic fire sensor and warning device systems shall not exceed 120 volts.

(e) Except when power must be cut off in the mine under the provisions of § 75.313, automatic fire sensor and warning device systems shall be capable of giving warning of fire for a minimum of 4 hours after the source of power to the belt is removed unless the belt haulageway is examined for hot rollers and fire as provided in paragraph (e) (1) or (2) of this section.

(1) When an unplanned removal of power from the belt occurs an examination for hot rollers and fire in the oper-

ating belts of a conveyor system shall be completed within 2 hours after the belt has stopped.

(2) When a preplanned removal of power from the belt occurs an examination for hot rollers and fire on the operating belts of a conveyor system may commence not more than 30 minutes before the belts are stopped and shall be completed within 2 hours after the examination is commenced, or the examination shall be commenced when the belts are stopped and completed within 2 hours after the belts are stopped.

[37 FR 16545, Aug. 16, 1972, as amended at 57 FR 20928, May 15, 1992]

**§ 75.1103-5 Automatic fire warning devices; manual resetting.**

(a) Automatic fire sensor and warning device systems shall upon activation provide an effective warning signal at either of the following locations:

(1) At all work locations where men may be endangered from a fire at the belt flight; or

(2) At a manned location where personnel have an assigned post of duty and have telephone or equivalent communication with all men who may be endangered.

The automatic fire sensor and warning device system shall be monitored for a period of 4 hours after the belt is stopped, unless an examination for hot rollers and fire is made as prescribed in § 75.1103-4(e).

(b) The fire sensor and warning device system shall include a means for rapid evaluation of electrical short and open circuits, ground faults, pneumatic leaks, or other defect detrimental to its proper operational condition.

(c) Automatic fire sensor and warning devices shall include a manual reset feature.

[37 FR 16545, Aug. 16, 1972]

**§ 75.1103-6 Automatic fire sensors; actuation of fire suppression systems.**

Automatic fire sensor and warning device systems may be used to actuate deluge-type water systems, foam generator systems, multipurpose dry-powder systems, or other equivalent automatic fire suppression systems.

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