

of a type listed, approved and installed in accordance with the recommendations of a nationally recognized testing laboratory approved by the Secretary.

(b) Where applicable, and not inconsistent with these regulations, automatic fire sensors shall be installed in accordance with the recommendations set forth in National Fire Code No. 72A "Local Protective Signaling Systems" (NFPA No. 72A-1967). National Fire Code No. 72A (1967) is hereby incorporated by reference and made a part hereof. National Fire Code No. 72A is available for examination at each MSHA Coal Mine Safety and Health district office, and may be obtained from the National Fire Protection Association, 11 Tracy Drive, Avon, MA 02322; Telephone: 800-344-3555 (toll free); <http://www.nfpa.org>.

[37 FR 16546, Aug. 16, 1972, as amended at 71 FR 16668, Apr. 3, 2006]

**§75.1103-3 Automatic fire sensor and warning device systems; minimum requirements; general.**

Automatic fire sensor and warning device systems installed in belt haulageways of underground coal mines shall be assembled from components which meet the minimum requirements set forth in §§75.1103-4 through 75.1103-7 unless otherwise approved by the Secretary.

[37 FR 16545, Aug. 16, 1972]

**§75.1103-4 Automatic fire sensor and warning device systems; installation; minimum requirements.**

(a) Automatic fire sensor and warning device systems shall provide identification of fire within each belt flight (each belt unit operated by a belt drive).

(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 reg-

ular 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 operating 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