### Mine Safety and Health Admin., Labor

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.

[37 FR 16546, Aug. 16, 1972]

## § 75.1103-7 Electrical components; permissibility requirements.

The electrical components of each automatic fire sensor and warning device system shall:

- (a) Remain functional when the power circuits are deenergized as required by §75.706; and
- (b) Be provided with protection against ignition of methane or coal dust when the electrical power is deenergized as required by §75.313, but these

components shall be permissible or intrinsically safe if installed in a return airway.

[37 FR 16546, Aug. 16, 1972, as amended at 57 FR 20929, May 15, 1992]

# § 75.1103-8 Automatic fire sensor and warning device systems; inspection and test requirements.

- (a) Automatic fire sensor and warning device systems shall be inspected weekly, and a functional test of the complete system shall be made at least once annually. Inspection and maintenance of such systems shall be by a qualified person.
- (b) A record of the annual functional test conducted in accordance with paragraph (a) of this section shall be maintained by the operator. A record card of the weekly inspection shall be kept at each belt drive.

[37 FR 16546, Aug. 16, 1972]

#### § 75.1103-9 Minimum requirements; fire suppression materials and location; maintenance of entries and crosscuts; access doors; communications; fire crews; high-expansion foam devices.

- (a) The following materials shall be stored within 300 feet of each belt drive or at a location where the material can be moved to the belt drive within 5 minutes, except that when the ventilating current in the belt haulageway travels in the direction of the normal movement of coal on the belt, the materials shall be stored within 300 feet of the belt tailpiece or at a location where the materials can be moved to the belt tailpiece within 5 minutes.
- (1) 500 feet of fire hose, except that if the belt flight is less than 500 feet in length the fire hose may be equal to the length of the belt flight. A high expansion foam device may be substituted for 300 feet of the 500 feet of the fire hose. Where used, such foam generators shall produce foam sufficient to fill 100 feet of the belt haulageway in not more than 5 minutes. Sufficient power cable and water hose shall be provided so that the foam generator can be installed at any crosscut along the belt by which the generator is located. A 1-hour supply of foam producing chemicals and tools and

#### § 75.1103-10

hardware required for its operation shall be stored at the foam generator.

- (2) Tools to open a stopping between the belt entry and the adjacent intake entry; and
  - (3) 240 pounds of bagged rock dust.
- (b) The entry containing the main waterline and the crosscuts containing water outlets between such entry and the belt haulageway (if the main waterline is in an adjacent entry) shall be maintained accessible and in safe condition for travel and firefighting activities. Each stopping in such crosscuts or adjacent crosscuts shall have an access door.
- (c) Suitable communication lines extending to the surface shall be provided in the belt haulageway or adjacent entry.
- (d) The fire suppression system required at the belt drive shall include the belt discharge head.
- (e) A crew consisting of at least five members for each working shift shall be trained in firefighting operations. Fire drills shall be held at intervals not exceeding 6 months.

[37 FR 16546, Aug. 16, 1972]

### § 75.1103-10 Fire suppression systems; additional requirements.

Where the average air velocity along the belt haulage entry exceeds 100 feet per minute, or the belt is not fire resistant, or both, the fire suppression system in the belt haulageway shall conform with the following additional sensor and cache requirements:

- (a) The maximum distance between sensors along the belt haulageway shall be 40 percent of those distances specified or established in accordance with §75.1103–4(a) (1) or (2), as applicable, and shall be installed and put in operation within the period of time specified in §75.1103–4(a)(3).
- (b) For each conveyor belt flight exceeding 2,000 feet in length, an additional cache of the materials specified in §75.1103–9(a) (1), (2), and (3) shall be provided. The additional cache may be stored at the locations specified in §75.1103–9(a), or at some other strategic location readily accessible to the conveyor belt flight.

[37 FR 16546, Aug. 16, 1972]

### §75.1103-11 Tests of fire hydrants and fire hose; record of tests.

Each fire hydrant shall be tested by opening to insure that it is in operating condition, and each fire hose shall be tested, at intervals not exceeding 1 year. A record of these tests shall be maintained at an appropriate location.

[37 FR 16546, Aug. 16, 1972]

# § 75.1104 Underground storage, lubricating oil and grease.

[STATUTORY PROVISIONS]

Underground storage places for lubricating oil and grease shall be of fire-proof construction. Except for specially prepared materials approved by the Secretary, lubricating oil and grease kept in all underground areas in a coal mine shall be in fireproof, closed metal containers or other no less effective containers approved by the Secretary.

## § 75.1106 Welding, cutting, or soldering with arc or flame underground.

[STATUTORY PROVISIONS]

All welding, cutting, or soldering with arc or flame in all underground areas of a coal mine shall, whenever practicable, be conducted in fireproof enclosures. Welding, cutting, or soldering with arc or flame in other than a fireproof enclosure shall be done under the supervision of a qualified person who shall make a diligent search for fire during and after such operations and shall, immediately before and during such operations, continuously test for methane with means approved by the Secretary for detecting methane. Welding, cutting, or soldering shall not be conducted in air that contains 1.0 volume per centum or more of methane. Rock dust or suitable fire extinguishers shall be immediately available during such welding, cutting or soldering.

### § 75.1106-1 Test for methane.

Until December 31, 1970, a permissible flame safety lamp may be used to make tests for methane required by the regulations in this part. On and after December 31, 1970 a methane detector approved by the Secretary shall be