

## §75.1107-5

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

of this section, to activate fire suppression devices on attended equipment purchased on or after the effective date of this §75.1107-4. At least one manual actuator shall be used on equipment purchased prior to the effective date of this §75.1107-4.

(i) Manual actuators installed on attended equipment regularly operated by a miner, as provided in §75.1107-1(c)(1) shall be located at different locations on the equipment, and at least one manual actuator shall be located within easy reach of the operator's normal operating position.

(ii) Manual actuators to activate fire suppression devices on attended equipment not regularly operated by a miner, as provided in §75.1107-1(c)(2), shall be installed at different location, and at least one manual actuator shall be installed so as to be easily reached by the miner at the jobsite or by persons approaching the equipment.

(b) Sensors shall, where practicable, be installed in accordance with the recommendations set forth in National Fire Code No. 72A "Local Protective Signaling Systems" (NFPA No. 72A-1967).

(c) On unattended equipment the fire suppression device shall operate independently of the power to the main motor (or equivalent) so it will remain operative if the circuit breakers (or other protective device) actuates. On attended equipment powered through a trailing cable the fire suppression device shall operate independently of the electrical power provided by the cable.

(d) Point-type sensors (such as thermocouple, bimetallic strip, or rate of temperature rise) located in ventilated passageways shall be installed downwind from the equipment to be protected.

(e) Sensor systems shall include a device or method for determining their operative condition.

[37 FR 15301, July 29, 1972]

### §75.1107-5 Electrical components of fire suppression devices; permissibility requirements.

The electrical components of each fire suppression device used on permissible equipment in by the last open crosscut or on equipment in the return airways of any coal mine shall be per-

missible or intrinsically safe and such components shall be maintained in permissible or intrinsically safe condition.

[37 FR 15302, July 29, 1972]

### §75.1107-6 Capacity of fire suppression devices; location and direction of nozzles.

(a) Each fire suppression device shall be:

(1) Adequate in size and capacity to extinguish potential fires in or on the equipment protected; and

(2) Suitable for the atmospheric conditions surrounding the equipment protected (e.g., air velocity, type, and proximity of adjacent combustible material); and

(3) Rugged enough to withstand rough usage and vibration when installed on mining equipment.

(b) The extinguishant-discharge nozzles of each fire suppression device shall, where practicable, be located so as to take advantage of mine ventilation air currents. The fire suppression device may be of the internal injection, inundating, or combination type. Where fire control is achieved by internal injection, or combination of internal injection and inundation, hazardous locations shall be enclosed to minimize runoff and overshoot of the extinguishing agent and the extinguishing agent shall be directed onto:

(1) Cable reel compartments and electrical cables on the equipment which are subject to flexing or to external damage; and

(2) All hydraulic components on the equipment which are exposed directly to or located in the immediate vicinity of electrical cables which are subject to flexing or to damage.

[37 FR 15302, July 29, 1972]

### §75.1107-7 Water spray devices; capacity; water supply; minimum requirements.

(a) Where water spray devices are used on unattended underground equipment the rate of flow shall be at least 0.25 gallon per minute per square foot over the top surface area of the equipment and the supply of water shall be adequate to provide the required flow of water for 10 minutes.