

§ 75.1107-11

30 CFR Ch. I (7-1-10 Edition)

foot of top surface area of the equipment protected; however, the minimum total rate shall not be less than 3.5 gallons of water per minute.

(d) Where internal injection is employed, the amount of water discharged as high expansion foam into the cable reel compartments of underground equipment regularly operated by a miner shall be approximately 25 percent of the total amount required to be discharged by the system; however, the quantity of water discharged as foam into the cable reel compartment need not exceed 1.5 gallons.

[37 FR 15303, July 29, 1972]

§ 75.1107-11 Extinguishing agents; requirements on mining equipment employed in low coal.

On mining equipment no more than 32 inches high, the quantity of extinguishing agent required under the provisions of §§ 75.1107-7, 75.1107-9, and 75.1107-10 may be reduced by one-fourth if space limitations on the equipment require such reduction.

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§ 75.1107-12 Inerting of mine atmosphere prohibited.

No fire suppression device designed to control fire by total flooding shall be installed to protect unattended underground equipment except in enclosed dead-end entries or enclosed rooms.

[37 FR 15303, July 29, 1972]

§ 75.1107-13 Approval of other fire suppression devices.

Notwithstanding the provisions of §§ 75.1107-1 through 75.1107-12 the District Manager for the District in which the mine is located may approve any other fire suppression system or device which provides substantially equivalent protection as would be achieved through compliance with those sections: *Provided*, That no such system or device shall be approved which does not meet the following minimum criteria:

(a) Components shall be approved by the Secretary, or where appropriate be listed as approved by a nationally recognized agency approved by the Secretary.

(b) The fire suppression equipment shall be designed to withstand the rigors of the mine environment. Where used, pressure vessels shall conform with the requirements of section 3603, 3606, 3607, 3707, and 3708 of National Fire Code No. 22 "Water Tanks for Private Fire Protection" (NFPA No. 22-1971).

(c) The cover of hose of fire suppression devices, if used on the protected equipment, shall meet the flame-resistant requirements of Part 18 of this chapter (Bureau of Mines Schedule 2G).

(d) Extinguishing agents shall not create a serious toxic or other hazard to the miners.

(e) The electrical components of the fire suppression device shall meet the requirements for electrical components of the mining machine.

(f) Where used, manual actuators for initiating the operation of the fire suppression device shall be readily accessible to the machine operator. On unattended equipment, an automatic as well as a manual actuator shall be provided.

(g) 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.

(h) On unattended equipment, the sensor system shall have a means for checking its operative condition.

(i) The fire suppression agent shall be directed at locations where the greatest potential fire hazard exists. Cable reel compartments shall receive approximately twice the quantity of extinguishing agent as each other hazardous location.

(j) The rate of application of the fire suppression agent shall minimize the time for quenching and the total quantity applied shall be sufficient to quench a fire in its incipient stage.

(k) The effectiveness of the quenching agent, together with the total quantity of agent and its rate of application shall provide equivalent protection to the water, dry powder, or foam