§ 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.

(b) Where water spray devices are used for inundating attended underground equipment the rate of flow shall be at least 0.18 gallon per minute per square foot over the top surface area of the equipment (excluding conveyors, cutters, and gathering heads), and the supply of water shall be adequate to provide the required flow of water for 10 minutes.

(c) Where water is used for internal injection on attended equipment the total quantity of water shall be at least 4.5 gallons times the number of hazardous locations; however, the total minimum amount of water shall not be less than the following:

<table>
<thead>
<tr>
<th>Type of equipment</th>
<th>Water in gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Cutting machines</td>
<td>36</td>
</tr>
<tr>
<td>(2) Continuous miners</td>
<td>36</td>
</tr>
<tr>
<td>(3) Haulage vehicles</td>
<td>22.5</td>
</tr>
<tr>
<td>(4) All other attended equipment</td>
<td>18.0</td>
</tr>
</tbody>
</table>

The rate of flow shall be not less than 7 gallons per minute.

(d) Where water is used in a combination internal injection and inundation system on attended equipment the rate of flow shall be at least 0.12 gallon per minute per square foot over the top surface area of the equipment (excluding conveyors, cutters, and gathering heads), and the supply of water shall be adequate to provide the required flow of water for 10 minutes.

(e) On equipment provided with a cable reel and an internal injection or combination-type system, the amount of water discharged into the cable reel compartments shall be approximately 25 percent of the amount required to be discharged by the system, however, such quantity need not exceed 10 gallons.

(f) Liquid chemicals may be used, as approved by the Secretary in self-contained fire suppression devices. Such liquid chemicals shall be nontoxic and when applied to a fire shall not produce excessive toxic compounds. The quantity of liquid chemicals required shall be proportionately less than water as based on equivalency ratings established by the Secretary or equivalency ratings made by a nationally recognized agency approved by the Secretary.

[37 FR 15302, July 29, 1972]

§ 75.1107–8 Fire suppression devices; extinguishant supply systems.

(a) Fire suppression systems using water or liquid chemical to protect attended equipment shall:

1. Be maintained at a pressure consistent with the pipe, fittings, valves, and nozzles used in the system.

2. Be located so as to be protected against damage during operation of the equipment protected.

3. Employ liquid which is free from excessive sediment and noncorrosive to the system.

4. Include strainers equipped with flush-out connections or equivalent protective devices and a rising stem or other visual indicator-type shutoff valve.

(b) Water supplies for fire suppression devices installed on underground equipment may be maintained in mounted water tanks or by connection to water mains. Such water supplies shall be continuously connected to the fire suppression device whenever the equipment is connected to a power source, except for a reasonable time for changing hose connections to hydrants while the machine is stopped in a ventilated passageway.

[37 FR 15302, July 29, 1972]