Mine Safety and Health Admin., Labor

exposed to heat and has a spring-closing lid and spout cover.

[50 FR 4082, Jan. 29, 1985, as amended at 68 FR 32361, May 30, 2003; 69 FR 38842, June 29, 2004]

§57.4011 Abandoned electric circuits.

Abandoned electric circuits shall be deenergized and isolated so that they cannot become energized inadvertently.

§ 57.4057 Underground trailing cables.

Underground trailing cables shall be accepted or approved by MSHA as flame resistant.

[57 FR 61223, Dec. 23, 1992]

PROHIBITIONS/PRECAUTIONS/HOUSEKEEPING

§ 57.4100 Smoking and use of open flames.

No person shall smoke or use an open flame where flammable or combustible liquids, including greases, or flammable gases are—

- (a) Used or transported in a manner that could create a fire hazard: or
 - (b) Stored or handled.

§ 57.4101 Warning signs.

Readily visible signs prohibiting smoking and open flames shall be posted where a fire or explosion hazard exists.

§ 57.4102 Spillage and leakage.

Flammable or combustible liquid spillage or leakage shall be removed in a timely manner or controlled to prevent a fire hazard.

§ 57.4103 Fueling internal combustion engines.

Internal combustion engines shall be switched off before refueling if the fuel tanks are integral parts of the equipment. This standard does not apply to diesel-powered equipment.

§ 57.4104 Combustible waste.

- (a) Waste materials, including liquids, shall not accumulate in quantities that could create a fire hazard.
- (b) Waste or rags containing flammable or combustible liquids that could create a fire hazard shall be

placed in the following containers until disposed of properly:

- (1) Underground—covered metal containers.
- (2) On the surface—covered metal containers or equivalent containers with flame containment characteristics.

§ 57.4130 Surface electric substations and liquid storage facilities.

The requirements of this standard apply to surface areas only.

- (a) If a hazard to persons could be created, no combustible materials shall be stored or allowed to accumulate within 25 feet of the following:
 - (1) Electric substations.
- (2) Unburied, flammable or combustible liquid storage tanks.
- (3) Any group of containers used for storage of more than 60 gallons of flammable or combustible liquids.
- (b) The area within the 25-foot perimeter shall be kept free of dry vegetation.

§ 57.4131 Surface fan installations and mine openings.

- (a) On the surface, no more than one day's supply of combustible materials shall be stored within 100 feet of mine openings or within 100 feet of fan installations used for underground ventilation.
- (b) the one-day supply shall be kept at least 25 feet away from any mine opening except during transit into the mine.
- (c) Dry vegetation shall not be permitted within 25 feet of mine openings.

§ 57.4160 Underground electric substations and liquid storage facilities.

The requirements of this standard apply to underground areas only.

- (a) Areas within 25 feet of the following shall be free of combustible materials:
 - (1) Electric substations.
- (2) Unburied, combustible liquid storage tanks.
- (3) Any group of containers used for storage of more than 60 gallons of combustible liquids.
- (b) This standard does not apply to installed wiring or timber that is coated with at least one inch of shotcrete,

§57.4161

one-half inch of gunite, or other noncombustible materials with equivalent fire protection characteristics.

§ 57.4161 Use of fire underground.

Fires shall not be lit underground, except for open-flame torches. Torches shall be attended at all times while lit.

FIREFIGHTING EQUIPMENT

§ 57.4200 General requirements.

- (a) For fighting fires that could endanger persons, each mine shall have—
- (1) Onsite firefighting equipment for fighting fires in their early stages; and
- (2) Onsite firefighting equipment for fighting fires beyond their early stages, or the mine shall have made prior arrangements with a local fire department to fight such fires.
- (b) This onsite firefighting equipment shall be—
- (1) Of the type, size, and quantity that can extinguish fires of any class which would occur as a result of the hazards present; and
- (2) Strategically located, readily accessible, plainly marked, and maintained in fire-ready condition.

[50 FR 4082, Jan. 29, 1985, as amended at 50 FR 20100, May 14, 1985]

$\S 57.4201$ Inspection.

- (a) Firefighting equipment shall be inspected according to the following schedules:
- (1) Fire extinguishers shall be inspected visually at least once a month to determine that they are fully charged and operable.
- (2) At least once every twelve months, maintenance checks shall be made of mechanical parts, the amount and condition of extinguishing agent and expellant, and the condition of the hose, nozzle, and vessel to determine that the fire extinguishers will operate effectively.
- (3) Fire extinguishers shall be hydrostatically tested according to Table C-1 or a schedule based on the manufacturer's specifications to determine the integrity of extinguishing agent vessels.
- (4) Water pipes, valves, outlets, hydrants, and hoses that are part of the mine's firefighting system shall be visually inspected at least once every

three months for damage or deterioration and use-tested at least once every twelve months to determine that they remain functional.

- (5) Fire suppression systems shall be inspected at least once every twelve months. An inspection schedule based on the manufacturer's specifications or the equivalent shall be established for individual components of a system and followed to determine that the system remains functional. Surface fire suppression systems are exempt from these inspection requirements if the systems are used solely for the protection of property and no persons would be affected by a fire.
- (b) At the completion of each inspection or test required by this standard, the person making the inspection or test shall certify that the inspection or test has been made and the date on which it was made. Certifications of hydrostatic testing shall be retained or permanently removed from service. Other certifications shall be retained for one year.

TABLE C-1—HYDROSTATIC TEST INTERVALS FOR FIRE EXTINGUISHERS

Extinguisher type	Test in- terval (years)
Soda Acid	5
Cartridge-Operated Water and/or Antifreeze	5
Stored-Pressure Water and/or Antifreeze	5
Wetting Agent	5
Foam	5
AFFF (Aqueous Film Forming Foam)	5
Loaded Stream	5
Dry-Chemical with Stainless Steel Shells	5
Carbon Dioxide	5
Dry-Chemical, Stored Pressure, with Mild Steel Shells, Brazed Brass Shells, or Aluminum	
Shells	12
with Mild Steel Shells	12
Bromotrifluoromethane-Halon 1301	12
Bromochlorodifluoromethane-Halon 1211 Dry-Powder, Cartridge or Cylinder-Operated, with	12
Mild Steel Shells 1	12

¹Except for stainless steel and steel used for compressed gas cylinders, all other steel shells are defined as "mild steel" shells.

§ 57.4202 Fire hydrants.

If fire hydrants are part of the mine's firefighting system, the hydrants shall be provided with—

(a) Uniform fittings or readily available adapters for onsite firefighting equipment;