### Mine Safety and Health Admin., Labor

(2) Diesel fuel shall not be allowed to enter pipelines, tanks, or containers that have been welded, soldered, brazed, or cut until the metal has cooled to ambient temperature.

# § 75.1904 Underground diesel fuel tanks and safety cans.

- (a) Diesel fuel tanks used underground shall—
- (1) Have steel walls of a minimum \(^{3}\)/16-inch thickness, or walls made of other metal of a thickness that provides equivalent strength;
  - (2) Be protected from corrosion;
- (3) Be of seamless construction or have liquid tight welded seams;
  - (4) Not leak; and
- (5) For stationary tanks in permanent underground diesel fuel storage facilities, be placed on supports constructed of noncombustible material so that the tanks are at least 12 inches above the floor.
- (b) Underground diesel fuel tanks must be provided with—
- (1) Devices for emergency venting designed to open at a pressure not to exceed 2.5 psi according to the following—
- (i) Tanks with a capacity greater than 500 gallons must have an emergency venting device whose area is equivalent to a pipe with a nominal inside diameter of 5 inches or greater; and
- (ii) Tanks with a capacity of 500 gallons or less must have an emergency venting device whose area is equivalent to a pipe with a nominal inside diameter of 4 inches or greater.
- (2) Tethered or self-closing caps for stationary tanks in permanent underground diesel fuel storage facilities and self-closing caps for diesel fuel tanks on diesel fuel transportation units;
- (3) Vents to permit the free discharge of liquid, at least as large as the fill or withdrawal connection, whichever is larger, but not less than 1½ inch nominal inside diameter;
- (4) Liquid tight connections for all tank openings that are—
- (i) Identified by conspicuous markings that specify the function; and
  - (ii) Closed when not in use.
- (5) Vent pipes that drain toward the tank without sagging and are higher than the fill pipe opening;

- (6) Shutoff valves located as close as practicable to the tank shell on each connection through which liquid can normally flow; and
- (7) An automatic closing, heat-actuated valve on each withdrawal connection below the liquid level.
- (c) When tanks are provided with openings for manual gauging, liquid tight, tethered or self-closing caps or covers must be provided and must be kept closed when not open for gauging.
- (d) Surfaces of the tank and its associated components must be protected against damage by collision.
- (e) Before being placed in service, tanks and their associated components must be tested for leakage at a pressure equal to the working pressure, except tanks and components connected directly to piping systems, which must be properly designed for the application.
  - (f) Safety cans must be:
- (1) Limited to a nominal capacity of 5 gallons or less;
- (2) Equipped with a flexible or rigid tubular nozzle attached to a valved spout;
- (3) Provided with a vent valve designed to open and close simultaneously and automatically with the opening and closing of the pouring valve; and
- (4) Designed so that they will safely relieve internal pressure when exposed to fire.

#### §75.1905 Dispensing of diesel fuel.

- (a) Diesel-powered equipment in underground coal mines may be refueled only from safety cans, from tanks on diesel fuel transportation units, or from stationary tanks.
- (b) Fuel that is dispensed from other than safety cans must be dispensed by means of—
- (1) Gravity feed with a hose equipped with a nozzle with a self-closing valve and no latch-open device;
- (2) A manual pump with a hose equipped with a nozzle containing a self-closing valve; or
  - (3) A powered pump with:
- (i) An accessible emergency shutoff switch for each nozzle:
- (ii) A hose equipped with a self-closing valve and no latch-open device; and
  - (iii) An anti-siphoning device.

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- (c) Diesel fuel must not be dispensed using compressed gas.
- (d) Diesel fuel must not be dispensed to the fuel tank of diesel-powered equipment while the equipment engine is running.
- (e) Powered pumps shall be shut off when fuel is not being dispensed.

#### § 75.1905-1 Diesel fuel piping systems.

- (a) Diesel fuel piping systems from the surface must be designed and operated as dry systems, unless an automatic shutdown is incorporated that prevents accidental loss or spillage of fuel and that activates an alarm system.
- (b) All piping, valves and fittings must be—
- (1) Capable of withstanding working pressures and stresses:
- (2) Capable of withstanding four times the static pressures;
  - (3) Compatible with diesel fuel; and
- (4) Maintained in a manner that prevents leakage.
- (c) Pipelines must have manual shutoff valves installed at the surface filling point, and at the underground discharge point.
- (d) If diesel fuel lines are not buried in the ground sufficiently to protect them from damage, shutoff valves must be located every 300 feet.
- (e) Shutoff valves must be installed at each branch line where the branch line joins the main line.
- (f) An automatic means must be provided to prevent unintentional transfer of diesel fuel from the surface into the permanent underground diesel fuel storage facility.
- (g) Diesel fuel piping systems from the surface shall only be used to transport diesel fuel directly to stationary tanks or diesel fuel transportation units in a permanent underground diesel fuel storage facility.
- (h) The diesel fuel piping system must not be located in a borehole with electric power cables.
- (i) Diesel fuel piping systems located in entries must not be located on the same side of the entry as electric cables or power lines. Where it is necessary for piping systems to cross electric cables or power lines, guarding must be provided to prevent severed

- electrical cables or power lines near broken fuel lines.
- (j) Diesel fuel piping systems must be protected and located to prevent physical damage.

## §75.1906 Transport of diesel fuel.

- (a) Diesel fuel shall be transported only by diesel fuel transportation units or in safety cans.
- (b) No more than one safety can shall be transported on a vehicle at any time. The can must be protected from damage during transport. All other safety cans must be stored in permanent underground diesel fuel storage facilities.
- (c) Safety cans that leak must be promptly removed from the mine.
- (d) Diesel fuel transportation unit tanks and safety cans must be conspicuously marked as containing diesel fuel.
- (e) Diesel fuel transportation units must transport no more than 500 gallons of diesel fuel at a time.
- (f) Tanks on diesel fuel transportation units must be permanently fixed to the unit and have a total capacity of no greater than 500 gallons of diesel fuel.
- (g) Non-self-propelled diesel fuel transportation units with electrical components for dispensing fuel that are connected to a source of electrical power must be protected by a fire suppression device that meets the requirements of §§75.1107–3 through 75.1107–6, and §§75.1107–8 through 75.1107–16.
- (h) Diesel fuel transportation units and vehicles transporting safety cans containing diesel fuel must have at least two multipurpose, dry chemical type (ABC) fire extinguishers, listed or approved by a nationally recognized independent testing laboratory and having a 10A:60B:C or higher rating, with one fire extinguisher provided on each side of the vehicle.
- (i) Diesel fuel transportation units shall be parked only in permanent underground diesel fuel storage facilities or temporary underground diesel fuel storage areas when not in use.
- (j) When the distance between a diesel fuel transportation unit and an energized trolley wire at any location is less than 12 inches, the requirements of §75.1003–2 must be followed.