Mine Safety and Health Admin., Labor

§ 75.1903 Underground diesel fuel storage facilities and areas; construction and safety precautions.

(a) Permanent underground diesel fuel storage facilities must be—

(1) Constructed of noncombustible materials, including floors, roofs, roof supports, doors, and door frames. Exposed coal within fuel storage areas must be covered with noncombustible materials. If bulkheads are used they must be tightly sealed and must be built of or covered with noncombustible materials;

(2) Provided with either either self-closing doors or a means for automatic enclosure;

(3) Provided with a means for personnel to enter and exit the facility after closure;

(4) Ventilated with intake air that is coursed into a return air course or to the surface and that is not used to ventilate working places, using ventilation controls meeting the requirements of §75.333(e);

(5) Equipped with an automatic fire suppression system that meets the requirements of §75.1912. Actuation of the automatic fire suppression system shall initiate the means for automatic enclosure;

(6) Provided with a means of containment capable of holding 150 percent of the maximum capacity of the fuel storage system; and

(7) Provided with a competent concrete floor or equivalent to prevent fuel spills from saturating the mine floor.

(b) Permanent underground diesel fuel storage facilities and temporary underground diesel fuel storage areas must be—

(1) Equipped with at least 240 pounds of rock dust and provided with two portable multipurpose dry chemical type (ABC) fire extinguishers that are listed or approved by a nationally recognized independent testing laboratory and have a 10A:60B:C or higher rating. Both fire extinguishers must be easily accessible to personnel, and at least one fire extinguisher must be located outside of the storage facility or area upwind of the facility, in intake air; or

(2) Provided with three portable multipurpose dry chemical type (ABC) fire extinguishers that are listed or approved by a nationally recognized independent testing laboratory and have a 10A:60B:C or higher rating. All fire extinguishers must be easily accessible to personnel, and at least one fire extinguisher must be located outside of the storage facility or area upwind of the facility, in intake air.

(3) Identified with conspicuous markings designating diesel fuel storage; and

(4) Maintained to prevent the accumulation of water.
(c) Welding or cutting other than that performed in accordance with paragraph (d) of this section shall not be performed within 50 feet of a permanent underground diesel fuel storage facility or a temporary underground diesel fuel storage area.

(d) When it is necessary to weld, cut, or solder pipelines, tanks, or other containers that may have contained diesel fuel, these practices shall be followed:

1. Cutting or welding shall not be performed on or within pipelines, tanks, or other containers that have contained diesel fuel until they have been thoroughly purged and cleaned or inerted and a vent or opening is provided to allow for sufficient release of any buildup pressure before heat is applied.

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 $\frac{3}{16}$-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 $\frac{1}{4}$ 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.