

(b) All roadways and other openings shall connect with another opening every 100 feet by a passage large enough to accommodate any vehicle in the mine or alternate routes shall provide equivalent escape capabilities; and

(c) No roadway or other opening shall be supported or lined with wood or other combustible materials.

§ 57.4462 Storage of combustible liquids underground.

The requirements of this standard apply to underground areas only.

(a) Combustible liquids, including oil or grease, shall be stored in non-glass containers or storage tanks. The containers or storage tanks shall be—

(1) Capable of withstanding working pressures and stresses and compatible with the type of liquid stored;

(2) Maintained in a manner that prevents leakage;

(3) Located in areas free of combustible materials or in areas where any exposed combustible materials are coated with one inch of shotcrete, one-half inch of gunite, or other non-combustible material with equivalent fire protection characteristics; and

(4) Separated from explosives or blasting agents, shaft stations, and ignition sources including electric equipment that could create sufficient heat or sparks to pose a fire hazard. Separation shall be sufficient to prevent the occurrence or minimize the spread of fire.

(b) Storage tanks shall be vented or otherwise constructed to prevent development of pressure or vacuum as a result of filling, emptying, or atmospheric temperature changes. Vents for storage of Class II or IIIA liquids shall be isolated or separated from ignition sources.

(c) At permanent storage areas for combustible liquids, means shall be provided for confinement or removal of the contents of the largest storage tank in the event of tank rupture.

(d) All piping, valves, and fittings shall be:

(1) Capable of withstanding working pressures and stresses;

(2) Compatible with the type of liquid stored; and

(3) Maintained in a manner which prevents leakage.

§ 57.4463 Liquefied petroleum gas use underground.

Use of liquefied petroleum gases underground shall be limited to maintenance work.

INSTALLATION/CONSTRUCTION/
MAINTENANCE

§ 57.4500 Heat sources.

Heat sources capable of producing combustion shall be separated from combustible materials if a fire hazard could be created.

§ 57.4501 Fuel lines.

Fuel lines shall be equipped with valves capable of stopping the flow of fuel at the source and shall be located and maintained to minimize fire hazards. This standard does not apply to fuel lines on self-propelled equipment.

§ 57.4502 Battery-charging stations.

(a) Battery-charging stations shall be ventilated with a sufficient volume of air to prevent the accumulation of hydrogen gas.

(b) Smoking, use of open flames, or other activities that could create an ignition source shall be prohibited at the battery charging station during battery charging.

(c) Readily visible signs prohibiting smoking or open flames shall be posted at battery-charging stations during battery charging.

§ 57.4503 Conveyor belt slippage.

(a) Surface belt conveyors within confined areas where evacuation would be restricted in the event of a fire resulting from belt-slippage shall be equipped with a detection system capable of automatically stopping the drive pulley.

(b) Underground belt conveyors shall be equipped with a detection system capable of automatically stopping the drive pulley if slippage could cause ignition of the belt.

(c) A person shall attend the belt at the drive pulley when it is necessary to operate the conveyor while temporarily bypassing the automatic function.