



Coffee Break Training - Fire Protection Series

Hazardous Materials: Fire Protection for Bulk Transfer Facilities

No. FP-2009-10 March 10, 2009

Learning Objective: The student shall be able to identify the fire protection requirements for bulk petroleum transfer sites.

This picture could have been taken in practically any community in the United States. Bulk flammable and combustible liquid storage and transfer sites are a common part of the landscape.

Due to the hazards associated with the products, and the large volume of liquids that may be handled at any one time, bulk transfer facilities have special fire protection requirements:

- When Class I liquids are transferred, tank vehicle transfer facilities must be at least 25 ft (7,620 mm) buildings, above ground tanks, combustible materials, lot lines, public streets, public alleys, or public ways measured from the nearest position of any loading or unloading valve. For Class II or III liquids, the distance may be reduced to 15 ft (4,572 mm).
- Weather protection canopies must be noncombustible, and be at least 15 ft (4,572 mm) from buildings or combustible materials, and 25 ft (7,620 mm) from building openings, lot lines, public streets, public alleys, or public ways.
- Transfer areas must be provided with spill control and secondary containment capable of handling the contents of the largest compartment on any tank vehicle, plus at least 24 hours of rainwater accumulation.
- An adequate number of portable fire extinguishers large enough to control a spill fire must be available.
- Static electricity protection must be provided during all transfer operations, and bonding connections must be provided when Class I liquids are top-loaded through open domes, or where Class II or III liquids are transferred into tank vehicles that might contain residual vapors from Class I products.



This bulk transfer site must meet the fire code requirements for flammable liquid safety.

For additional information, refer to NFPA[®] 30, *Flammable and Combustible Liquids Code*, International Fire Code[®], Chapter 34, or NFPA[®] 1, *Uniform Fire Code*[®], Chapter 66.

