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Guidance on Bulk Storage Installations Handling Flammable/Combustible Products

Section H Bulk storage has the basic requirement for setting up a bulk storage and dispensing facility.

If handling flammable/combustible products in bulk, additional National Fire Code regulations apply, and the authority having jurisdiction should be consulted prior to constructing and using the bulk storage system. The following is a summarization of National Fire Code requirements as listed in section 4 of the National Fire Code:

1. The room where the tanks are located must be separated from the remainder of the building by a 2-hour fire wall.
2. The tanks must be located at least 550 mm from the wall and any other tanks.
3. If NFC class 1A or 1B are handled, the tank room must be equipped with explosion venting.
4. Placards must be posted in a conspicuous space outside the storage room.
5. Bonding, grounding and isolation components are in place for the protection against static charges during loading and unloading of railcars.
6. If filling NFC class 1 products, electrical bonding and grounding must be conducted or if the container being filled is non-electrically conducting material, steps must be taken to minimize the potential for static charge to be developed.
7. At least 2 portable fire extinguishers with a rating of at least 80 BC must be located near the hazardous locations.
8. A mechanical ventilation system is deemed to comply with Sentence (3) if it is capable of exhausting at least 18 m³/h/m² of room area, but not less than 250 m³/h.
9. Where *flammable liquids* or *combustible liquids* are present, electrical equipment shall conform to CSA C22.1, "Canadian Electrical Code, Part I," for hazardous locations.

If only non-flammable/combustible and TDG regulated products other than TDG class 3 products are handled these additional requirements are not required.