CHAPTER 6 BUILDING SERVICES AND SYSTEMS

SECTION 603.3.2 2009 Edition IFC Interpretation 42-13 Issued 11-26-2013

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603.3.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall comply with Sections 603.3.2.1 through 603.3.2.5 or Chapter 34.

603.3.2.1 Quantity limits. One or more fuel oil storage tanks containing Class II or III combustible liquid shall be permitted in a building. The aggregate capacity of all such tanks shall not exceed 660 gallons (2498 L).

Exception: The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (11 356 L) of Class II or III liquid for storage in protected aboveground tanks complying with Section 3404.2.9.6, when all of the following conditions are met:

- 1. The entire 3,000 gallon (11 356 L) quantity shall be stored in protected above-ground tanks;
- 2. The 3,000 gallon (11 356 L) capacity shall be permitted to be stored in a single tank or multiple smaller tanks; and
- 3. The tanks shall be located in a room protected by an automatic sprinkler system complying with Section 903.3.1.1.
- **603.3.2.2 Restricted use and connection.** Tanks installed in accordance with Section 603.3.2 shall be used only to supply fuel oil to fuel-burning or generator equipment installed in accordance with Section 603.3.2.4. Connections between tanks and equipment supplied by such tanks shall be made using closed piping systems.
- **603.3.2.3 Applicability of maximum allowable quantity and control area requirements.** The quantity of combustible liquid stored in tanks complying with Section 603.3.2 shall not be counted towards the maximum allowable quantity set forth in Table 2703.1.1(1), and such tanks shall not be required to be located in a control area.
- **603.3.2.4 Installation.** Tanks and piping systems shall be installed and separated from other uses in accordance with Section 915 and Chapter 13 both of the International Mechanical Code, as applicable.

Exception: Protected above-ground tanks complying with Section 3404.2.9.6 shall not be required to be separated from surrounding areas.

- **603.3.2.5 Tanks in basements.** Tanks in basements shall be located not more than two stories below grade plane.
- **603.3.3 Underground storage of fuel oil.** The storage of fuel oil in underground storage tanks shall comply with NFPA 31.

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Q: Can the maximum quantity of 3000 gallons of diesel fuel oil be exceeded in a high-rise building?

A: Yes, but the entire quantity of diesel fuel oil storage would warrant a Group H-3 occupancy classification.

The 3,000 gallons of fuel oil permitted by the Exception to Section 603.3.2.1 is intended to be a "special" quantity which is outside the maximum allowable quantity (MAQ) per control area provisions of Chapter 27. Footnote "i" of IFC Table 2703.1.1(1) [Footnote "i" of IBC Table 307.1 (1)] specifies that the maximum allowable quantity for fuel oil storage shall not apply when in compliance with Section 603.3.2. This "special" quantity limitation is meant to be a singular exception for the entire building and not regulated on a control area basis. In addition, Section 603.3.2.3 does not require the quantity of fuel oil to count towards the MAQ established by IFC Table 2703.1.1(1) [IBC Table

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307.1(1)]. As such, a fuel oil storage system complying with the provisions of Section 603.3 would not warrant a Group H-3 occupancy classification.

However, if the fuel oil storage is in excess of 3,000 gallons, it could not comply with the Exception to Section 603.3.2.1 and the provisions of Section 603.3.2 would not be applicable. Therefore, a Group H-3 occupancy classification would be warranted. The overall permitted 3,000 gallon capacity is not meant to be an upper limit on the quantity permitted in building, but rather a "special" threshold condition before warranting a high-hazard occupancy classification.