

Storage Tank Systems Valves Isolation (Block) and Anti-siphon

Block (or isolation) and anti-siphon valves have been a department requirement after Reference Standard PEI/RP200-96 “Recommended Practices for Installation of Aboveground Systems for Motor Vehicle Fueling” was adopted in 1998. These items are found in sections 7.5 and 7.7 respectively of PEI/ RP200-96. PEI/RP200-96 was revised in 2019 and is now known as PEI/RP200-19 (see section 7.4 and 7.5 in the 2019 edition). To make this requirement abundantly clear, the department added specific language in the revised 2017 rules (updated in the currently adopted rules). This language is found in subparagraphs 62-762.501(3)(d)2. and 3., Florida Administrative Code (F.A.C.).* For the underground storage tank rule citation see footnote.†

2. Isolation block valves. Any storage tank system, regardless of the date of installation of the storage tank system, located at an elevation that produces a gravity head on small diameter integral piping positioned below the product level in the tank must be installed and maintained with an isolation block valve in accordance with Chapter 22.13 of NFPA 30, 2021 Edition, *Flammable and Combustible Liquids Code, Tank Openings Other Than Vents*.

3. Anti-siphon valves. For storage tank systems that produce a gravity head on small diameter integral piping positioned below the product level in the tank, anti-siphon valves shall be installed and maintained in accordance with Section 7 of PEI/RP200-19, 2019 Edition, and Section 11.2 of NFPA 30A, *Marine Fueling - Storage*, 2021 Edition. For such storage tank systems installed prior to January 11, 2017, anti-siphon valves shall be installed within one year of January 11, 2017. Integral piping located within an impervious dike field area does not require anti-siphon valves.

Another issue that has been questioned by inspectors is the order of the valves. According to RP200-19 the order shall be:

tank -> block valve -> anti-siphon valve.

This is the same order shown in the 1996 version of PEI/RP200.

Direction for Inspectors discussing this issue with Owners:

All new installs and repairs shall follow the PEI/RP200-19, Section 7 and NFPA 30A, Section 11.2.

Storage tank systems installed prior to January 11, 2017, that have block valves and anti-siphon valves installed with the anti-siphon valve upstream of the block valve may continue to be operated until repairs to either valves or associated piping attached to the valves are necessary.

There are no annual testing requirements in Chapters 62-761, or 62-762, F.A.C., of either block valves or anti-siphon valves, however, manufacturers of these valves may have specific testing requirements or recommendations.

* Nothing herein is intended to modify department rules or guidance documents incorporated within those rules.

†In addition, the Underground Storage Tank System Rule, Chapter 62-761, F.A.C., states in 62-761.500(3)(g) All storage tank systems located at an elevation that produces a gravity head on integral piping positioned below the product level in the storage tank must be installed and maintained with an isolation block valve in accordance with Chapter 22.13 of NFPA 30, 2021 Edition, *Flammable and Combustible Liquids Code, Tank Openings Other Than Vents...* and located as close as practical to the storage tank, regardless of the date of installation of the storage tank system.

In addition, anti-siphon valves shall be installed and maintained in accordance with Section 11.2 of NFPA 30A, 2021 Edition, *Code for Motor Fuel Dispensing Facilities and Repair Garages, Marine Fueling – Storage*, regardless of the date of installation of the storage tank system.