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## Memorandum

**To:** All Interested Parties

**From:** G.J. Garrow, Chief Plumbing Inspector, Division of Fire Safety

**Re:** Backflow Preventers to be installed on Automatic Fire Sprinkler System with Outside Connection (*2015 IPC § 608.16.4 Connections to Automatic Fire Sprinkler Systems And Stand Pipe Systems*)

**Date:** January 25, 2016

This memorandum provides guidance regarding the installation of Backflow Preventers on Automatic Sprinkler Systems. On December 17, 2015 a meeting was held in the Berlin Central Office with a wide range of stakeholders including division of fire safety personnel, sprinkler contractors, sprinkler system designers, fire departments, backflow specialists, water system operators, and members of the Health- Environmental Health Division, Agency of Natural Resources- the Drinking Water and Groundwater Protection Division.

1. If a municipality has an ordinance/program requiring (backflow prevention and cross-connection) the municipality's ordinance/program would be in effect. If no local rules are in place, the rules set forth by the Division of Fire Safety (*2015 – Vermont Plumbing Rules and Regulations*) and the Agency of natural resources (Water supply Rules- Chapter 21) shall be followed. The more stringent of rules shall apply.
2. The minimum standard for backflow protection on a potable water feed to a wet sprinkler system with an outside connection used in case of an emergency fed by the same potable water source shall be protected by a testable double check valve assembly. (IPC 2015- 608.16.4, 608.13.7).
3. A potable water system supplying water to a wet sprinkler system with an outside connection that may be supplied from a lake, pond or stream thru this outside connection, must be carefully evaluated and by code would require the installation of a (RPZ) testable reduced pressure principle backflow preventer. (IPC-2015- 608.16.4, 608.13.2).Discharge from ( RPZ) shall be directed to a safe point of discharge. (608.14.2.1).



4. All potable water system connections shall be protected by a (RPZ) testable reduced pressure principle backflow preventer or air gap when any chemical is to be introduced into the fire sprinkler system or to be injected into an automatic fire protected system through a stand pipe. (IPC-2015 - 608.16.4.1, 608.13.2). Discharge from RPZ will also need to direct to a safe point or discharge. (608.14.2.1).
5. Testing needed on all Backflow prevention devices with testing ports, shall be tested at the time of installation, immediately after repairs or relocation and at least annually. (IPC 2015- 312.10.2). Report back to water purveyor.

If you have any questions pertaining to this issue or if you feel additional clarification is needed please contact me directly at (802) 770-8473 or email me at [Gerald.garrow@vermont.gov](mailto:Gerald.garrow@vermont.gov)