

**MONTGOMERY COUNTY  
FIRE CODE ENFORCEMENT**

**ADMINISTRATIVE POLICY 05-01**

**CODE REFERENCE:**

NFPA 13D (2002). 6.2 (1) Connection to a reliable waterworks system with or without an automatically operated pump.

**BACKGROUND:**

The code does not specify what type of device shall be used to automatically start the sprinkler water pump.

**POLICY:**

The pump shall automatically start by one of the following methods:

(a) Pressure switch

(b) Flow switch with an inspectors test having an orifice equivalent to one sprinkler head flowing. The inspectors test shall be located at the highest level of sprinkler protection.

**JUSTIFICATION:**

A combination of low street pressure and high head pressure in the sprinkler system may not provide sufficient flow to trip the flow switch, thereby not starting the pump.

The test/drain valve in the basement has not always been able to initiate pump start-up. The contractor will drain a significant amount of water from the system with the supply valve closed. The contractor will then open the water supply valve to cause an inrush of water in the system to start the pump. This inrush of water can cause the vane in the flow switch to break, which causes an obstruction in the piping.

NFPA 13 is very clear that such a surge can damage the flow switch and are not allowed on dry sprinkler systems.

(NOTE: The homeowner will be unable to test the pump if the test/drain valve fails to start the sprinkler pump.)

**PREPARED BY:** D. Deckert and R. Merck

DATE

5/3/05

MONTGOMERY COUNTY FIRE MARSHAL

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