SEATTLE / KING COUNTY PUBLIC HEALTH

Community Environmental Health Plumbing / Gas Piping Inspections

DECISIONS / INTERPRETATIONSof the Chief Plumbing Inspector

Date: October 5, 2010 Decision No. 10-002

REVISED

Subject: Chemical Dispenser Installation and Backflow Protection

Code / Section: 2009 UPC Chapter 14, Section

Decision. Potable water outlets with hose attachments shall be protected in accordance with Section 603.4.7. There shall be no shutoff downstream of the backflow preventer, except (1) where a chemical dispenser conforming to ASSE 1055 B is installed in accordance with the manufacturer's installation instructions, or (2) where a water wasting tee (also referred to as a pressure indicating tee) is installed on the hose threads of the faucet.

Background. Chemical dispensers conforming to ASSE 1055 meet the backflow requirements of the UPC. This standard applies to those devices classified as chemical dispensing systems having a self-contained means of backflow protection. The devices are classified as follows:

Type A. These devices have the chemical(s) pressurized above atmospheric pressure and connect directly to the water system.

Type B. These devices connect to the hose threads of a faucet and do not pressurize the chemical(s) above atmospheric pressure. The only source of back pressure comes from an elevated hose.

Either of these types can include shutoff valves. Since the unit itself contains the appropriate backflow protection, the outlet it connects to would not require additional protection. However, because Type B chemical dispensers connect to hose-threaded outlets and can easily be removed and replaced, backflow protection of the hose-threaded outlet shall be provided in accordance with the plumbing code, typically by means of a vacuum breaker equipped faucet, or by means of either an ASSE 1011 hose-connection vacuum breaker or an ASSE 1052 hose-connection backflow preventer installed on the hose-thread outlet of the faucet.

Where a non-listed/approved chemical dispenser is installed downstream of the protected hose-threaded outlet, there shall not be a shutoff downstream of the backflow prevention device, except where a *water wasting tee* (also referred to as a pressure indicating tee) can be properly installed on the hose threads of the faucet. This device acts the same as a

kitchen faucet with a hose spray attachment where the faucet must be in the "on" position in order to use the hose spray, and when the hose spray lever is released the faucet will discharge from the spout. In this way the hose spray can never cause a pressure build-up into the potable water system and would break any siphoning action in the event of a loss of pressure in the water distribution system.

Effective Date: October 5, 2010

Dave W Cantrell

Chief Plumbing Inspector