



CITY OF WESTPORT

Water Department

PO Box 505 Westport, Washington 98595
360-268-9865 FAX # 360-268-1883

Dear City of Westport Water Customer:

Subject: Thermal Expansion

Our records indicate you have, or soon will be installing, a backflow prevention assembly on your service line. This assembly prevents any non-drinkable water source within your residence/business from entering and contaminating the community drinking water supply.

The installation of the backflow assembly is required in order to comply with the Washington State Administrative Code (WAC) #246-290-490 of the Group A Drinking Water Regulations. This rule requires water purveyors to “undertake programs for controlling and eliminating cross connections.” As operators of your water system, we feel it is necessary to inform you of a potential hazard that exists in relation to this backflow prevention assembly and your hot water heater.

Water heaters are installed with a temperature and pressure valve (T&P) that is designed to relieve excessive water temperature or pressure. Also aiding in the control of excessive heat and pressure is a condition known as thermal expansion which allows extremely hot water to backflow into water main lines, mixing with the cold water and dissipating the heat.

When a backflow prevention assembly is installed on a household water service line, however, the water cannot go back out into the water system. This leaves the T&P valve as the only release route for the overheated water.

If the thermostat in a hot water heater becomes defective and allows the water temperature to increase to more than 212° F, **and** the T&P valve fails, your domestic water can become “superheated”. Superheated water can cause water heaters to explode or can allow scalding steam to be released from faucets upon personal use.

This condition is rare, because the hot water heater thermostat **and** the T&P valve must **both** malfunction **simultaneously**. However, with the backflow prevention assembly in place, the potential hazard exists.

The City of Westport’s Water Department recommends that the T&P valve be inspected periodically. Also, a licensed plumber can inspect, repair or replace the T&P valve to ensure your safety and assist you with other methods of protection such as thermal expansion chambers and pressure relief toilet ball cock assemblies.

Should you have any questions, or desire more information, please feel free to contact our office at 360-268-9865 or your local plumber.

Jason Barnum
Cross-Connection Control Program Manager
City of Westport Water Department