



## THERMAL EXPANSION INFORMATION

ATTN:Customers

The Pleasant View Utility District System installs single check valves on all new meter taps. In some cases reduced pressure backflow prevention assemblies are required to be installed by the owner. These assemblies prevent any non-potable water within your residence or business from entering and contaminating the community drinking water supply. The assembly was required in compliance with the state rule, which requires water purveyors to undertake programs to control and eliminate Cross Connections.

We feel that it is also necessary to inform you of a potential hazard that exists in relation to this backflow prevention assembly and your water heater. Water heaters are installed with a temperature and pressure T/P valve, which 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.

However, when a backflow prevention assembly is installed on a household or business' water service line, 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 a water heater's thermostat becomes defective, allowing the water temperature to increase to more than 212 degrees F, and the T/P valve fails, your domestic water can become "super heated". Super heated water can cause water heaters to explode or can allow scalding steam to be released from faucets upon use. This condition is rare because the water heater thermostat and the T/P valve must malfunction simultaneously. However, with the backflow prevention assembly in place, this potential hazard still exists.

We recommend that you inspect your T/P valve periodically. Also, a licensed plumber can inspect, repair, or replace your T/P valve to ensure your safety. Thermal expansion chambers and pressure-relief toilet ball cock assemblies can provide additional protection. Should you have any questions, or would like more information, do not hesitate to call our office.

Sincerely,

Timothy S. Head  
Cross Connection Coordinator