

Frequently Asked Questions

Question:

My hot water tank pressure relief valve is opening.

Answer:

The RRID is installing the Muller meter pit, which includes a check valve. The check valve is designed to keep household water from back flowing into the water supply. While this protects the RRID distribution system from potential contamination, it traps thermal expansion inside your home, by creating a closed plumbing system.

Why this happens

- **Thermal Expansion:** When your water heater runs, the cold water inside heats up and expands in volume.
- **Pressure Build-up:** In a system without a check valve, this extra volume back flows into the water distribution system. In a closed system, the water has nowhere to go.
- **Safety Release:** Because water is incompressible, the pressure spikes rapidly until it hits 150 PSI, at which point the hot water tank pressure relief valve opens to bleed off the excess pressure.

Solutions

To fix this, you must reduce the incoming water pressure or give the water pressure a place to go without triggering the hot water pressure relief valve to open.

- **Check Household Pressure:** Use a water pressure gauge on an outside hose bib to ensure your incoming street pressure is not already too high (above 80 psi).
- **Install a Pressure Reducing Valve:** Install the pressure reducing valve on the water supply line coming into the house and set below 80psi.
- **Install a Thermal Expansion Tank:** This is the standard solution. It is a small tank (typically 2 gallons) containing a rubber bladder and air. When water expands, it compresses the air in this tank instead of opening the hot water tank pressure relief valve.

Short term solution

- Call the RRID office. The RRID staff will remove the meter pit check valve.
- Removal of the Check Valve. This will fix the problem, but the removal of the check valve is a short-term solution.

Back flow prevention program

- The Interior Health Authority (IHA) mandates that all water purveyors develop and implement a cross-connection control and back flow prevention program. The program is designed to protect public health.

Long term solution

- The RRID will record all properties which have had the meter pit check valve removed.
- The RRID will be communicating with all effected homeowners to discuss compliance options with the IHA mandated cross-connection control and back flow prevention program.

The Robson Raspberry Improvement District thanks you for your cooperation.