

LAKE DON PEDRO COMMUNITY SERVICES DISTRICT ORDINANCE 97-01

Contact: BOB KENT General Manager
Phone: (209) 852-2331

All Lake Don Pedro Community Services District water service connections shall be protected from water pressure fluctuations-and high pressure; accomplished by installation of a pressure regulating valve on your water service connection.

FYI

In the valley or on flat terrain; water systems rely on pumps filling elevated storage tanks or air pressure in ground level pneumatic tanks to provide 40-60 psi to the customer. The maximum pressure on the lines in this type of system is governed only by the level of the water in the elevated tank or the air pressure setting in the pneumatic tank; and even a malfunction of a pump or compressor would not provide over 100 psi on the lines, (one figure to commit to memory is that each foot of water elevation in a tank above your home is equal to .433 psi. For example; if the top of the water in your tank was 100 feet, the psi on your lines would be 43).

Here in the foothills, we have a little different water distribution setup because of the mountainous terrain. Water is treated at our Merced Falls Road plant and pumped up to our main 2 million gallon tank on Avenida Central (elev. Top of tank 1215). On the North end of the subdivision, Enebro tank (elev. 1189) is fed by gravity from Central tank. Water is then boosted up to Arbolada tank (elev. 1473), and Sturtevant tank (elev. 1630) On the South side and golf course area, a booster pump at our main tank fills Coronado tank (elev. 1410), which in turn gravity feeds Alamo tank (elev. 1398) and also boosts up to Lazo tank (elev. 1689).

Many of our water customers have existing pressure regulating valves. Should you require assistance in testing the water pressure on your service connection or in determining that you have a regulator installed and it is functioning properly, call the District office. The Customer Service Representative may be able to help over the phone, or we can schedule a service technician to check your water pressure and make recommendations free of charge.

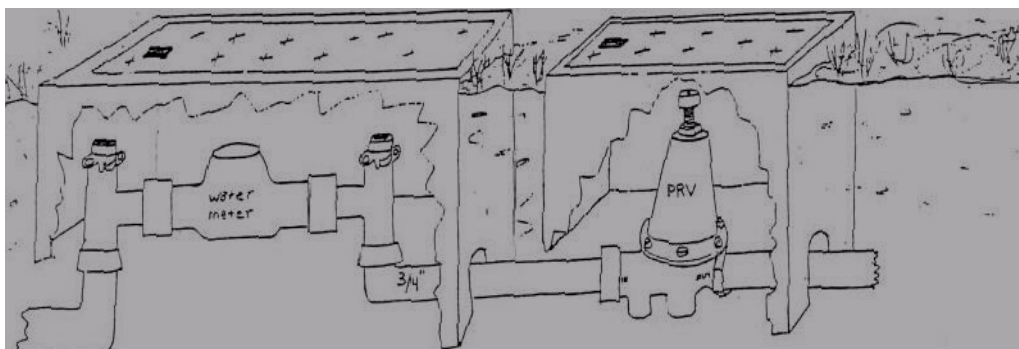
Pressure regulating valves can be installed anywhere on your service line; with the ideal location being near your water meter. These valves are available at most hardware stores and come in either a preset or adjustable pressure setting. Most plumbers are familiar with regulating valve installation.

A water pressure test gage (costing about \$10 -- \$20) is a wise investment to insure the continued satisfactory operation of your pressure regulating valve.

LDPCSD maintains water pressure to your connection through a series of pumping stations, elevated storage tanks, pneumatic (air pressurized) tanks and pressure reducing valves. Under normal conditions, the water pressure in the system ranges from 30 to 135 pounds per square inch (psi)

Water pressure fluctuations occur regularly in our distribution system. These are caused by fire hydrant use, hydrant flushing, pump stops and starts or mainline pressure regulator failure. These fluctuations can promote stress on all of the fixtures within your house, and even cause piping failure. Installation of a water pressure regulating valve will help to protect the plumbing on your property from damage caused by water pressure fluctuations.

Ideal installation location of pressure regulating valve



Your installation may vary

The District does not recommend the use of Galvanized piping in your water system, as the use of Galvanized piping may cause discoloration or foul taste in your drinking water.

IMPORTANT NOTICE

THERMAL EXPANSION occurs when heat is introduced to create hot water. Prior to 1997 expanded water which exceeded the capacity of a customer's water heater could flow back into the District's system and easily dissipate.

Resolution 97-01 was passed and adopted on June 16, 1997 this resolution requires that all customers have a pressure regulator installed to protect the customers plumbing from high pressure coming from the Districts system. In conjunction with this the procedure for installing meters was changed to include the installation of a globe and check valve on the customer's side of the meter. The effect of this creates what is called a "CLOSED SYSTEM" This means no water can flow back into the District's system.

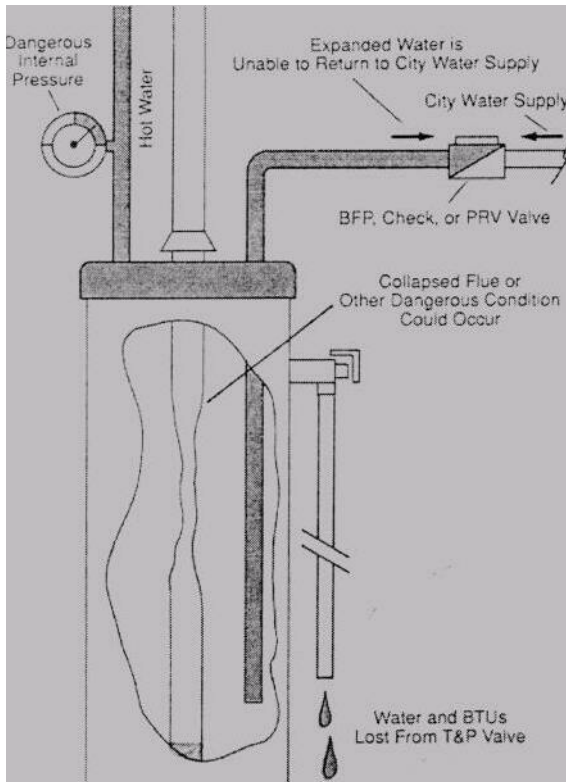
Since water is not compressible, a rapid and dangerous pressure increase is created. Since the 1930s all hot water heaters are fitted from the manufacturer with a Temperature & Pressure Relief Valve which is designed to open and vent water when either the temperature reaches approximately 125° -150° F or the pressure reaches 125 psi. The T & P valve is designed as an emergency control only and not as an operating control. Continuous operation may cause premature failure of the valve.

A dangerous condition can exist during thermal expansion before the relief valve operates. Internal pressures repeatedly occurring during recovery (heating) periods can collapse the center flue of a gas fired water heater, creating a hazardous presence of carbon monoxide gas or even in rare cases water heater explosion.

In order to control thermal expansion simply lowering the temperature of the hot water heater to 115-125 degrees might reduce the possibility of thermal expansion. The best solution is installation of a THERMAL EXPANSION TANK. The tank allows for thermal expansion without causing a dangerous increase in pressure. Another solution is a toilet tank ball cock fill valve, anti-siphon backflow preventer and thermal expansion relief valve. This is an all in one valve and is installed in the tank of you toilet.

IF YOU ARE EXPERANCING INTERMITTEN DISCHARGE FROM THE T&P VALVE ON YOUR HOT WATER HEATER PLEASE CONTACT THE OFFICE AT (209) 852-2331 WE MAY BE ABLE TO TEMPORRALIY REMOVE THE CHECK VALVE UNTIL YOUR PLUMBER CAN INSTALL A DEVICE TO PROTECT YOUR SYSTEM FROM THERMAL EXPANSION.

The Problem

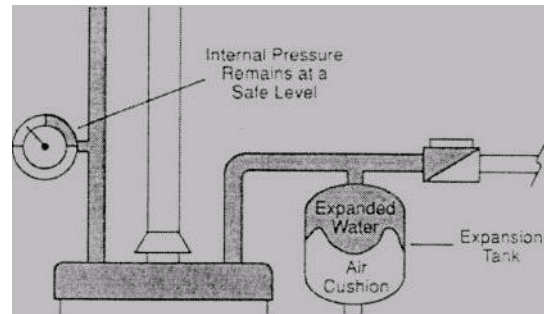


The Problem: In the "Good Old Days", before the advent of cross-connection control, expanded water which exceeded the capacity of the water heater flowed back to the City main where it was easily dissipated. But today, with the backflow preventers, water meters with check valves, and/or pressure reducing valves without bypass being installed, expanded water from a water heater cannot return to the City supply. It is now a closed system, and the expanded water has no place to go.

Since water is not compressible, a rapid and dangerous pressure increase is created in the water heater and piping system-similar to a hydraulic ram. The setting on the safety relief valve is quickly reached and the relief valve opens, losing water from the water heater.

The safety valve may operate once or twice a day, which is not only wasteful, but is also dangerous. A T&P valve is designed as an emergency control only, not as an operating control, and this continuous operation may cause premature failure of the valve. What most people don't realize is that dangerous

The Solution



Excess Pressure
Is controlled by
Expansion Tank

conditions can exist during thermal expansion long before the relief valve operates. Internal pressures repeatedly occurring during recovery periods can collapse the center flue of a gas fired water heater, creating a hazardous presence of deadly carbon monoxide gas or even a water heater explosion.

The Solution: The best solution to thermal expansion is to control the pressure it generates within a normal, safe operating range, well below the emergency setting of the relief valve. This can be accomplished by installing an expansion tank which will allow thermal expansion to occur, but without causing a dangerous increase in pressure.

The expansion tank contains a sealed-in compressible air cushion which will compress as thermal expansion occurs, providing a space to hold and store the additional expanded water volume. When hot water is used in the system, the pressurized air cushion forces hot water back into the system for use...not waste.

The most basic water conservation measure is to understand where the water goes once it leaves your meter!!!

The purpose of this worksheet is to aid you in estimating your monthly water usage, (a nice budgeting tool!), providing you with a basis to figure your *normal* water usage and aid in spotting plumbing leaks.

The key to understanding what is considered your *normal* monthly water usage comes from understanding your meter, observing and recording the amount of water used for individual daily functions (major water using events); for example showering or bathing, running the washing machine or dishwasher, sprinkler systems, etc. As long as most of the variables (watering times, showering times, number of guests) are kept the same throughout the months, water usage amounts should remain fairly constant. Use this sheet to recalculate when the seasons change and / or watering patterns differ.

The most important thing to do is understand your water meter!! On some models there is a dial indicator and a small red double pointer leak indicator (similar to a compass needle); others have a small red triangle or black wheel leak detector, some have only a dial indicator which serves as a leak detector. All of the meters have digital readout in cubic feet (one cubic foot of water = 7 1/2 gallons). The two numbers furthest to the right record from 0-99 cubic feet. Each revolution of the third number from the right = 1 unit (100 cubic feet) or 748 gallons.

STEP 1

Turn *off* all faucets or running water in and outside the house. Observe the leak indicator on your meter for movement (no movement continue to STEP 2). **ANYTIME THERE IS MOVEMENT ON THE LEAK INDICATOR OR DIAL. THERE IS WATER GOING THROUGH THE METER AND INTO YOUR SERVICE LINE.** If a leak is shown, turn the valve off where the service line connects to your house (if available) and see if the indicator stops; signaling a leak inside the house plumbing - most likely a leaky toilet float, stopper, or sink faucet. If the indicator continues to run when the house shutoff valve is off, or if you don't have a valve and have double checked toilets and faucets inside; then the problem is usually a leaky outside faucet, sprinkler system failure or even an underground plumbing problem. *Please note: leaks don't ever get better or fix themselves; they usually completely/oil at the worst times and cause severe headaches!*

STEP 2

Read and record the meter reading.

STEP 3

Read and record the water usage after each "major" water using event. Note: you can always break down the "additional water usage" (non - major water using) category into smaller groups such as brushing teeth, flushing toilets etc. Periodically check your calculated "normal" monthly water usage against your actual usage per the water meter.

WATER USAGE WORKSHEET

1. Meter reading before showers _____

 Reading after shower #1 _____

 Reading after shower #2 _____

 Reading after shower #3 _____

 Reading after shower #4 _____

 Reading after shower #5 _____

 Reading after shower #6 _____

2. Reading after all showers _____

Subtract line 1 from line 2 = total cubic feet used for showering _____ A

3. Meter reading before sprinklers _____

4. Reading after running sprinklers through complete cycle _____

Subtract line 3 from line 4 = total cubic feet used for sprinklers _____ B

5. Meter reading before using hose to water _____

If using a hose to water, open the faucet a certain number of turns each time; for example a trickle at 2 turns or full open- Water everything the way you normally would do. (Record the time it takes to water)

6. Meter reading after hose watering _____

Subtract line 5 from line 6 = total cubic feet used for hose watering _____ C

A helpful hint is to divide the number of cubic feet used for hose watering by (he time it took to water and you will come up with the number of cubic feet of water per minute used at that given setting on the faucet; that way if you have several different areas of the yard that you water, by timing each watering you can calculate cubic feet used. (Multiply the minutes watered times the cubic feet per minute flow)

7. Meter reading before laundry _____

8. Meter reading after laundry _____

Subtract line 7 from line 8 = total cubic feet per laundry cycle _____ D

9. Meter reading before running dishwasher or doing dishes by hand _____

10. Meter reading after dishes _____

Subtract line 9 from line 10 = total cubic feet per load of dishes _____ E

11. Meter reading after last water usage of the day _____

Subtract line 1 from line 11= total cubic feet used for me day _____ F

Subtract me sum total of events A through E from line 11 = "additional daily water usage"

Reading F multiplied by the number of days in the billing cycle = total monthly usage.

Remember, every 100 cubic feet = 1 unit (third number from right on meter) = 748 gallons.

IMPORTANT NOTICE

Bills are due and payable on the last day of each month.

Payments not physically received in our office by the close of business on the last day of each month will be considered delinquent will incur a 10% penalty.

A charge of \$20.00 will be assessed for each returned check.

The District is not responsible for Postal delays.

COLLECTION PROCEDURES

A Shutoff Notice will be mailed if your account becomes 60 Days Delinquent. Accounts that remain delinquent as of the last day of the month following mailing of notices will receive a:

48 hour DISCONTINUANCE OF SERVICE NOTICE.

Should your service be discontinued for non-payment,

A \$75.00 FEE AND ALL PAST DUE CHARGES WILL BE REQUIRED,

To reinstate service.

Service will only be restored during regular business hours.

Accounts that remain Delinquent for 120 days will require collection of;

\$250.00 Deposit and All Past Due Charges.

Accounts that remain Delinquent for more than 150 days will have the meter pulled and revert to

"Water Availability Account".

To reinstate service, the current

Capital Facilities Improvement Fee, Meter Set Fee and All Past Due Charges

Will be required.

At the close of the fiscal year all Availability Accounts are placed on the property tax rolls for collection.

We realize that shutoff procedures do not apply to the vast majority of our customers who pay in a timely manner.

The Service Charge applies whether you use water or not.

If you sell your property, please notify the District several days in advance of the date you plan to move out and want your final meter reading.

The Community Services District will no longer offer a payment plan to customers except in extraordinary circumstances (leaks, breaks etc.) All requests for payment plans must be submitted in writing.

**THE LAKE DON PEDRO COMMUNITY SERVICES DISTRICT IS AN
INDEPENDENT SPECIAL DISTRICT AND IS TOTALLY SUPPORTED
BY OUR CUSTOMERS.
WE RECEIVE NO TAX DOLLARS OF ANY KIND.**

**HOW DOES LAKE DON PEDRO C.S.D. DISTRIBUTE THE
COSTS TO OPERATE THE DISTRICT?**

In order to have a sound financial plan we distribute all of our Fixed Costs among the approximately 1400 metered lots through the monthly Service Charge and the approximately 2000 non-metered lots through an annual Water Availability Charge. We distribute all of our Direct (Variable) Costs through our Water Usage Charge.

WHAT IS THE MONTHLY SERVICE CHARGE USED FOR?

Your monthly service charge is used to cover the Fixed Costs associated with Operating and maintaining the water system. The water system consists of (7 tank sites, 480 fire hydrants, 343 street valves, 6 booster pump stations, 13 pressure reducing valves, 2 intake pumps, 2 float pumps, 11 other distribution pumps, 1 well, over 86 miles of pipeline in the water distribution system, the water treatment plant, and the SCADA (computed control) system. All of these facilities must be operated and maintained by the Plant Operations Staff on an ongoing basis.

**WHAT ARE DIRECT (VARIABLE) COSTS?
WHAT IS THE \$1.75 WATER USAGE CHARGE USED FOR?**

Your water usage charge is used to cover the Direct (Variable) Costs associated with physically delivering water. These include the cost of purchasing the water, treatment cost, pumping cost, etc.

Note: Each unit of water = 748 gallons.

Current Capital Facilities Improvement Fees

5/8" Meter CFI & Meter Set Fee——\$3,000.00

For meters larger than 3/4" the CFI and Meter Installation Fee will be calculated on an individual basis

The Customer will also be billed the appropriate monthly service charge based on the installed meter size.

Standard Meter Consumption Schedule

Customers with a standard 5/8" Domestic Meter with usage average over **50 Units** per month for the period of April thru September will be required to have a larger (3/4") Meter installed.

Consumption of **75 Units** and above within the same time period will require a 1" Meter.

Consumption of **125 Units** and above within the same time period will require a 1 1/2" Meter.

Consumption of **200 Units** and above within the same time period will require a 2" Meter.

Consumption of **300 Units** and above will require other arrangements, with the appropriate CFI and Meter Installation Fees Based on District Engineers calculations.

I hope this answers some of your questions. If you need any further assistance please give us a call at (209) 852-2331, or you can write to us at:

Lake Don Pedro CSD
9751 Merced Falls Road
La Grange, CA. 95329

Sincerely,
L.D.P.C.S.D. Customer Service