

Frequently Asked Questions (FAQs) Regarding Water & Sewer Service:

Q: As a property owner with village water and sewer service: at what point does my responsibility begin/end?

A: Per Village Code (Chapters 97 - Sewer, and 130 - Water), the property owner is responsible for the water service line and sewer lateral from their connection at the village distribution or collection main to their building or home. This includes maintenance, protection, repair or replacement of either or both line(s).

Q: What can I do to protect my water hoses/fixtures from rupturing, especially during Hydrant Flushes?

A: There are several devices that aid in the protection of household plumbing from excess pressure in the distribution system: Pressure Reducing Valve, Water Hammer Arrestor and Residential Dual Check Valve assembly.

- **Pressure Reducing Valve (PRV):** is a code requirement on new installations and plumbing renovations. It helps protect all plumbing fixtures in a building from excessive wear due to high water pressure. The recommended pressure in a household ranges between 50 and 70 pounds per square inch (psi). Pressure in excess of the recommended range can cause washers, valve seats, and hoses to deteriorate faster, leading to leaking fixtures or the rupture of hoses. In addition there is a potential for environmental and cost benefits. For example:



- *Twice as much water flows through a system at 150 psi pressure than at 50 psi. Much of this additional water is wasted.*
- *Energy Savings: If less water flows through the system, then less energy is needed to heat domestic hot water. Calculations show that a water pressure reducing valve can save as much as 30% on domestic water heating costs.¹*

- **Water Hammer Arrestor:** while it is not a code requirement, it can certainly help protect the plumbing of a building. *Water hammer is usually recognized by a banging or thumping in water lines. The noise can occur when the flow of moving water is instantaneously stopped by a closing valve, or there are loose pipes in*



the wall, or there is a worn out washer on a faucet. The sudden stop of water, or a stutter caused by a loose or bad washer, results in a pressure spike behind the valve which acts like a tiny explosion inside the pipe. This pressure spike will create shock waves in the water that will reverberate throughout the plumbing system, rattling and shaking pipes, especially loose pipes, until it is absorbed.

Normally, a sufficient pocket of air will absorb such a pressure spike, but if no pocket of air is present, expensive fixtures and appliances within the plumbing system will be damaged as they are left to absorb this pressure spike.²

- **Residential Dual Check Valve Assembly:** also a code requirement as a backflow prevention device. This means that if there is a drop in pressure of the distribution system (i.e. – a fire, hydrant flush, or water main break), and there is higher pressure in a building's plumbing – water could flow back into the distribution system piping and potentially contaminate it. The dual check assembly (which is simply two single checks, in one assembly) does not allow this backward flow, thus protecting the building and the water supply.³



All of the devices mentioned above are readily available at plumbing supply and most home supply superstores. *However, there is no one configuration of devices that works in every circumstance. It is highly recommended that you contact a licensed plumber for consultation and installation of them to ensure protection of your plumbing and fixtures.*

¹ <http://www.watts.com/pages/learnAbout/reducingValves.asp?catId=64>

² <http://www.plumbingsupply.com/waterhammerarresters.html>

³ *The installation of a residential dual check valve results in a potential closed plumbing system within a residence. As such, provisions may have to be made to provide for thermal expansion within the closed loop system, i.e. the installation of thermal expansion devices and/or pressure relief valves. Consult with a licensed plumber to ensure proper configuration*

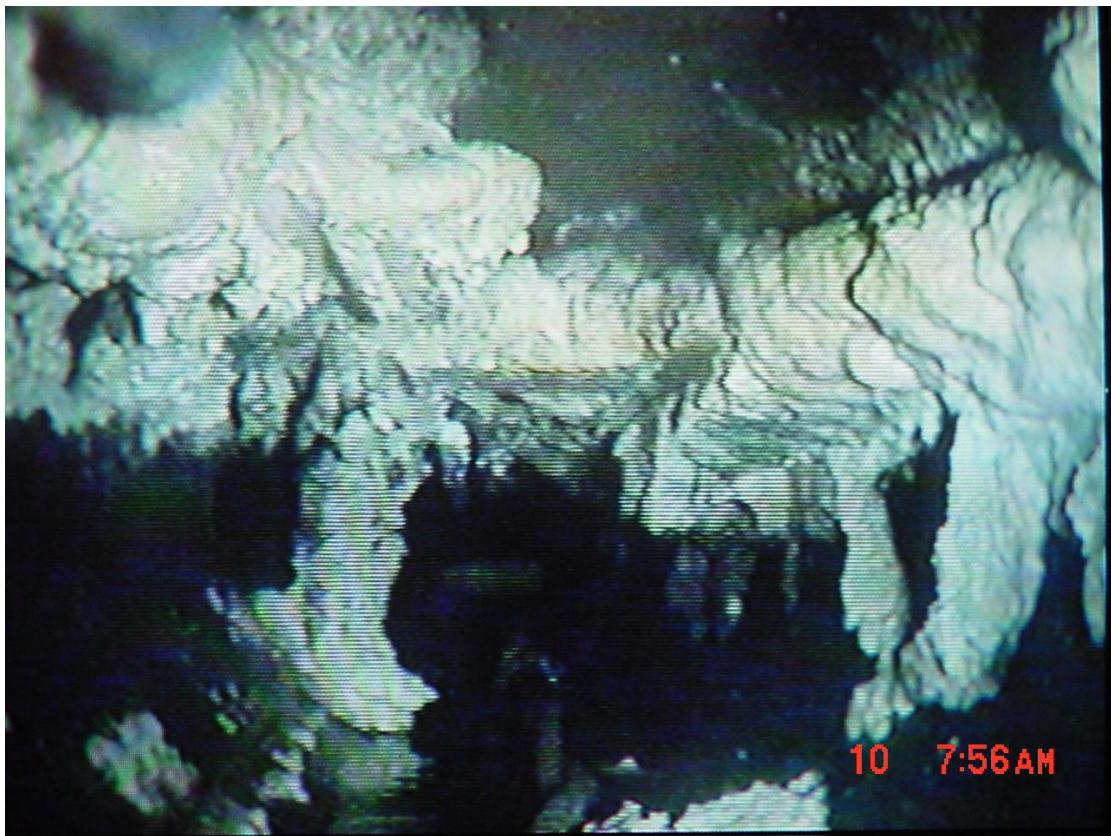
SEWER DEPARTMENT ADVISORY

GREASE

While grease and saturated fats are not considered good for our personal diets, they are not good for the wastewater collection system, or to our municipal wallet, either.

Annually, the Sewer Department spends thousands of dollars to correct problems in the collection mains caused by grease, fats and other materials. Those who flush pan drippings, bacon grease, and dairy products down the drain, or sometimes down the toilet – are causing problems in their own lines and in the collection system.

An '*out of sight out of mind*' idea, sometimes takes over as we rinse or flush things down the drain or toilet.

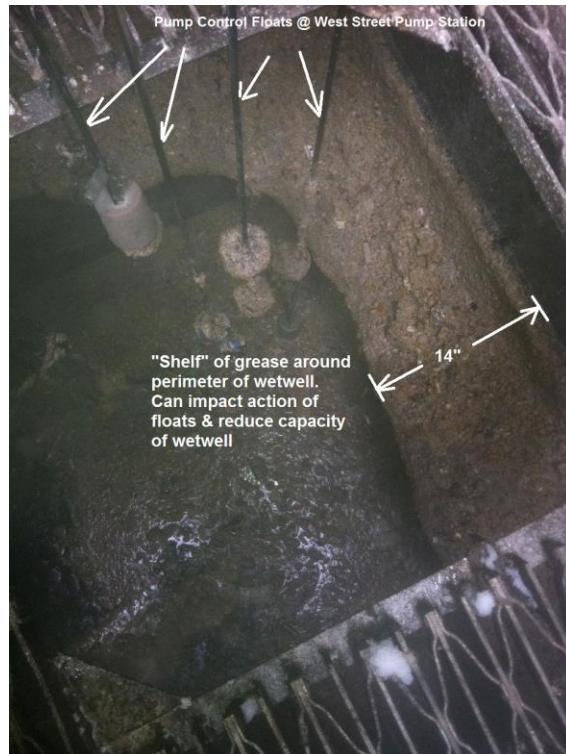


Pictured above is a section of pipe in the collection system. You are looking at a main that is encrusted with grease and fat deposits that have restricted flow to 4 inches from the 8 inch actual diameter of the pipe. The deposits become so dense, that the only means of breaking them free is through the use of specialized equipment with 2,500 pounds per square inch of water pressure. Once they are broken up, the deposits have to be removed and disposed of via a vacuum truck (pictured below) at further expense to the system and ultimately to its' residents.

The cost of getting the Jetter/Vactor rig with manpower and confined space mitigation gear into the Village for this type of service is \$1,800 per day, plus additional costs for disposal of the material.



There are several areas in the collection system, where wastewater needs to be pumped over to the treatment facility on Fair Street, because it cannot flow via gravity. These 'pump stations' become a spot where grease accumulates and can interfere with control floats and pump operation. Again, the only way to handle the problem at that point is to utilize the equipment mentioned above.



A much easier and far less expensive way to avoid the problem is by disposing the grease and fats through garbage pickup. A tin soup can or other metal container can be used to collect the hot grease or fat. When cooled, it will become a solid, and you can dispose of the container and its contents with household garbage.

DISPOSABLES

Another avoidable issue is created when so-called *disposable* items are flushed down the toilet. Baby wipes, dental floss, bathroom wipes and feminine hygiene products are not meant to be sent through municipal sewers. These products are made of woven fabrics, nylon strings, and plastic materials which do not degrade in the system. Their presence can cause problems by clogging small diameter residential lines as well as combining with grease in collection mains and clogging pump impellers needed to move wastewater through pump stations and the wastewater treatment facility itself.

The wastewater treatment facility on Fair Street has had a grinding unit and an auger installed to aid in reducing in size and removing these types of products.



Pictured above is the receptacle for the auger unit. Approximately 3 cubic feet of material is removed from the waste stream every 5 days. If left in the process, the materials reduce the efficiency and lifespan of pumps/motors which can result in higher electrical and repair costs.

Again, a much easier and far less expensive way to avoid the problem is by disposing of these products with household garbage.

Remember these simple phrases:

No Wipes in the Pipes! and *It's a Toilet, Not a Trash Can!*