

CONSUMERS OF UNION GROVE WATER

HELP IN REDUCTION OF CHLORIDE DISCHARGE IN WASTEWATER EFFLUENT

EXTREMELY IMPORTANT

The new 5-year permit that allows Union Grove to discharge treated wastewater effluent into the West Branch of the Root River Canal has a chloride discharge limit. Our current wastewater plant does not remove chlorides and the cost to install additional equipment that may remove some of the chloride is complicated and cost prohibitive at this time. The state of Wisconsin limit for chloride discharge is 395 mg/L. However, the United States Environmental Protection Agency has granted a variance for Union Grove that allows a maximum weekly average of 560 mg/L with a target value of 500 mg/L that was also approved by the state under WPDES Permit No. WI-0028291-10-0 that took effect on 07/01/20. From January of 2022 through December of 2022 our lowest weekly average was 313 mg/L and our highest weekly average was 548 mg/L. 2022 we were close to the new permit limits in March (548 mg/L), July (523 mg/L) and December (527 mg/L) and need to look for locations where further source reductions can be made prior to the need for a new permit in 2025. Therefore, it is necessary to reduce chloride discharge at its source, which includes all industrial, commercial, and residential consumers.

A significant contributor to effluent chloride in the wastewater discharge can be salt brine discharge from water softening units being discharged to the sewer system.

The cumulative effects of excessive salt use and brine discharge by all consumers can have negative impacts on stream and lake environments and if the chloride filters down to the water table it could affect the characteristics of a water source.

High chloride levels can also cause plumbing corrosion problems in your own systems by wearing pipes, pumps, hot water heaters and fixtures.

Consider only softening water that needs to be softened. Cold water taps and outside faucets should bypass the softener.

Verify how your existing softener is calibrated, use the minimum salt dosage required for regeneration and please ensure that it is properly maintained and tuned by contacting our local supplier of softeners for tips, advice or servicing as needed. If you are installing a new softener look for a flow controlled/high efficiency unit.

For large water consumers consider an upgrade to your system by adding brine reclaim which can reduce your salt expense and water usage.

Did you know that that the **Union Grove Water System tap water has already been softened** before it gets to your house? Hardness in the village supplied water averages about 6 grains, therefore any softening equipment set above 6 grains can produce unnecessary brine that goes into the sewer system.

So, please make a concerted effort to help reduce chloride in our wastewater effluent by asking yourself what if any portion of the village water supply do I really need to soften.