

Chlorides Chloride (Salt) Removal In Sewer System

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Chlorides: Affects our impact on environment?

The Wisconsin Department of Natural Resources (DNR) established chloride standards for wastewater treatment plant discharge as part of the Wisconsin Administrative Code Chapter NR106. The Fontana/Walworth Water Pollution Control Facilities (the wastewater treatment plant which serves the Villages of Walworth and Fontana on Geneva Lake) is required to meet these standards. Currently there is no economically feasible method of removing chlorides from the wastewater stream at the treatment plant. Therefore, the sources of chloride introduced into the wastewater stream must be controlled before reaching the wastewater treatment plant.

Clean water is supplied from underground wells, which does contain minimal chloride concentration. Although kitchen waste and snow/ice melt infiltration may account for a portion of the chloride found in the wastewater, the majority of the chlorides appear to be introduced by residential, commercial, and industrial water softeners or operation process. The most common softeners use of the salt (sodium chloride) the solution is to regenerate the softener to allow for continued softening.

Chlorides: What can be done?

Several methods exist which can be implemented by the homeowner and business to assist in reducing the introduction of chloride in to the wastewater stream. Here are some suggestions:

1. Soften only the water that needs to be softened.
2. If you have a timer-based softener, investigate if the timer is correctly set for your particular water use.
3. Contact your softener company to inspect your unit and re-calibrate all settings.
4. Remember to disconnect your softener when you are away for the weekend or any extended period of time.
5. Investigate the possibility of installing a Demand Initiated Regeneration water softener. This type of softener minimizes salt use and results in a cost savings.
6. Recycle the brine from the softeners or removal of brine.

The local water softener companies can provide assistance in assessing your current softener situation. They can analyze your water, provide guidelines for proper settings and use, and provide information on equipment upgrades if you so desire.

Your help in achieving the goal of reducing chlorides in your area is an important environmental concern. The wastewater treatment plant staff has been sampling and testing for chlorides in wastewater since 1994 and will continue sampling to track the progress of this chloride reduction campaign. The Central States (WEA) Conference in Madison, on May 24 2007 was regarding information on how other municipalities and industries are reducing the chloride in the effluent water. This is a state effort to find ways to reduce chloride of water that is returning to the lakes, streams, ponds and creeks.