Effects of Salt on Our Environment

Other than health implications, what are the effects of salt?

- May impair the groundwater quality;
- Negatively impacts some plant and animal life; and
- Increases utility cost to mitigate the salt problem.

Let's Work Together

As a customer of the Lompoc Regional Wastewater Reclamation Plant (LRWRP), the City and Vandenberg Village CSD ask you to be conscientious about your household products that may contain salt.

If you have a self-regenerating water softener, please consider voluntarily disconnecting it. If you are considering a water softener, please give preference to portable exchange water softening units so the salt stays out of our system.

Additional suggestions on how you can help are listed in "How To Do Your Part!"

Contact Information

Please contact Vandenberg Village CSD at the number below for more information on how you can further protect our environment.

(805) 733-2475

How to do Your Part!

- **Conservation is key.** Consider using less salty products and putting less down the drain.
- **Consider choosing liquid** instead of powder laundry soaps and detergents.
- Consider using dryer sheets instead of liquid softeners.
- **Sweep** instead of hosing down an outside area.
- **Avoid overwatering.** If practical, install programmable sprinklers for watering.
- **Use a rain barrel** to capture rain water and use for irrigation.
- **Use environmentally friendly compost** instead of chemicals and fertilizers on your lawn.
- **Live by example.** Teach your children about protecting water quality; everything that goes down the drain must be processed before being returned safely to the environment.
- **Educate others.** Choose pollution prevention. Less is better.
- Disconnect self-regenerating water softening units and/or switch to portable exchange water softening unit in your home or business. Vandenberg Village CSD ordinance currently limits the brine discharge of self-regenerating water softeners and similar devices into the sanitary sewer (Ordinance 2.21.).
- Check the EPA website for environmentally friendly products at http://www.epa.gov/dfe/pubs/projects/formulat/formpart.htm.



SALT. IT CAN AFFECT MORE THAN YOUR HEALTH.



IT CAN AFFECT OUR ENVIRONMENT.

Vandenberg Village Community Services District (805) 733-2475 info@vvcsd.org



Water Supply

Vandenberg Village depends on groundwater for its water supply. The groundwater is treated at the Vandenberg Village Community Services District water treatment plant and meets or exceeds Federal and State water quality standards. To view VVCSD's most recent Consumer Confidence Report (CCR), please visit http://vvcsd.org/publications/waterqual.htm.

Typically, the groundwater going into VVCSD's water treatment plant is high in total dissolved solids, a lot of which are dissolved salts. Most of the dissolved salts occur naturally. However, some are from common household products.

How Salt Is Introduced Into the Environment

Not all salts occur naturally. Some salts are introduced into the environment as a result of adding products to the water during daily household chores which eventually end up down the drain. For example, detergents or soaps, shampoos, and water softeners all contribute to the salt in the environment. Fertilizers also contribute salt when irrigation occurs after fertilizer is applied. Salts may also come from chemicals and disinfectants used in many different industrial processes.

The Lompoc Regional Wastewater Reclamation Plant (LRWRP) is not designed to remove salts from the water. Therefore, salts put into the sanitary sewer are passed through the plant and released into the Santa Ynez River basin.

Common Salt Contributors

Common salt contributors to wastewater are selfregenerating water softeners, soaps, and powder detergents.

Self-Regenerating Water Softeners

The purpose of water softeners is to remove hardness in water by using salt, in most cases sodium. Periodically, the self-regenerating water softener has to "recharge" so it can continue to remove "hardness." During the recharge process a significant amount of salt solution (approximately 40 to 150 gallons one to three times per week) is discharged into the sanitary sewer system. This high concentration of brine exceeds the City of Lompoc's limits for sodium (limit 270 mg/L) and total dissolved solids (limit 1100 mg/L), contrary to the City's Municipal Code (Chapter 13.16). Note: as a user of the Lompoc Regional Wastewater Reclamation Plant (LRWRP), Vandenberg Village customers are bound by the city's discharge requirements.

Please consider using alternative softening methods!

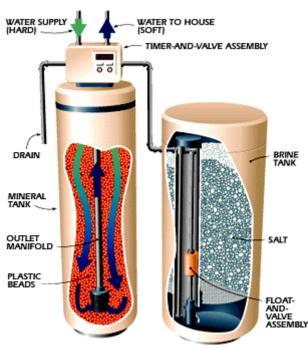
Soaps and Powder Detergents



Soaps and powder detergents contain builders which make up more than half the weight of the box of

detergent. The principal function of builders is to soften hard water and make the wash water alkaline. To do this, salt, sometimes in the form of sodium carbonate, sodium citrate, or sodium borate, is added to the soap and/or powder detergent to assist in the cleaning process.

Products containing borate, commonly called borax or sodium perborate, is doubly "offensive." Sodium



Picture of a self-regenerating water softener (PopularMechanics.com)

perborate is an ingredient in oxygen bleach and adds both sodium and boron, two different kinds of salts, to the sanitary sewer.

According to EnergyStar.com, an average family washes 300 loads of laundry per year, putting approximately 12 pounds of salt into the sewer system (based on the concentrated powder laundry detergent). This may not seem like much but, if every household in the Vandenberg Village (2,707 according to the 2010 Census) used powdered laundry detergent, more than 16 tons of salt would be added to the Santa Ynez River basin annually.

Please consider using alternative products or use only when necessary!