



Santa Clarita Valley Sanitation District

Meeting the State-Mandated Chloride (Salt) Limit for Santa Clarita Valley: Approved Chloride Compliance Project

To comply with the State-mandated chloride (salt) limit for the Santa Clarita Valley's wastewater (sewage) the Santa Clarita Valley has spent nearly two years of extensive public input and public hearings

The project combines advanced treatment methods and brine disposal to reduce chloride the Valley's treated sewage, and complies with the State's chloride (salt) limit for the

Project Components

The chloride compliance project will provide advanced treatment to wastewater (sewage) SC Valley's two wastewater treatment plants. The project includes the following components treatment steps, illustrated on the following pages:

Microfiltration:

Microscopic strainers provide pretreatment of wastewater (sewage)

Reverse Osmosis:

Pressure forces salty water (brine) through a semi-permeable membrane to remove salts

Second Pass Reverse Osmosis:

Concentrates and reduces brine volume by forcing the Reverse Osmosis brine waste through the semi-permeable membrane a second time

Ultraviolet (UV) Disinfection:

Uses UV lights to kill harmful microorganisms, replacing use of chlorine

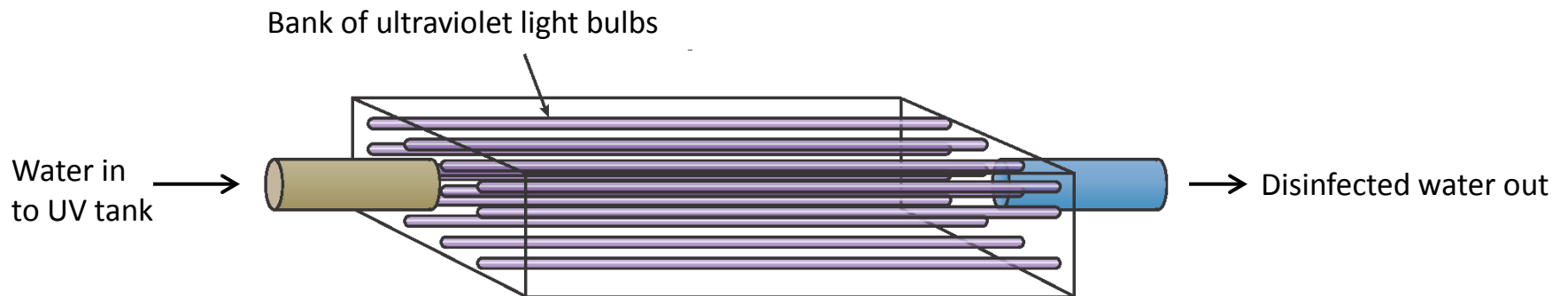
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Microfiltration, Ultraviolet Disinfection, Brine Concentration and Limited Trucking

Complies with California Regional Water Quality Control Board's Salt Limit

This alternative complies with the State-mandated chloride (salt) limit through a combination of advanced treatment methods and brine disposal.

Ultraviolet Disinfection



Water in tank is exposed to UV lights which kill harmful microorganisms

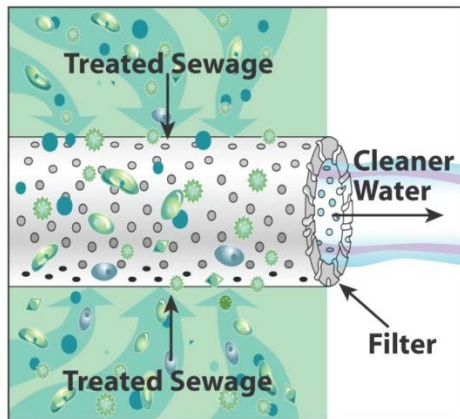
- Replaces use of chlorine to kill harmful microorganisms in wastewater
- Eliminates chlorination by-products
- Does not add chloride (salt)

Microfiltration, Ultraviolet Disinfection, Brine Concentration and Limited Trucking

Complies with California Regional Water Quality Control Board's Salt Limit

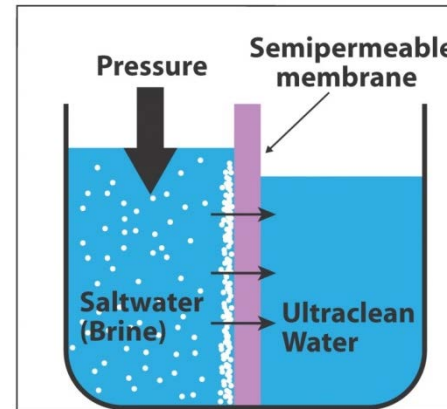
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Microfiltration/Reverse Osmosis (MF/RO) Second Pass Reverse Osmosis



Microfiltration

- Microscopic strainers, 300 times smaller than a human hair, provide efficient pretreatment before reverse osmosis (RO)



Reverse Osmosis

- Under pressure, the salty water (brine) is forced through a semi-permeable membrane
- 14% of total treated wastewater is left behind as a brine (saltwater) waste

Second Pass Reverse Osmosis

- RO brine waste is forced through a semi-permeable membrane a second time, concentrating and reducing the volume of brine by 50%, resulting in a large cost savings.

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Santa Clarita Valley

