

Roxborough's New Water Treatment Plant

FAQs

What technological improvements are in Roxborough's water treatment plant?

This is the first treatment plant in Colorado to receive 100 percent of its primary disinfection credits from Ultra Violet (UV) light. In addition, the plant utilizes Actiflo with the ability to remove over 99 percent of the naturally occurring contaminants of raw water. Chloramination of the water will occur at the end of the water treatment process which will keep the water safe throughout the distribution system.

What is Actiflo?

Actiflo is a highly efficient water pre-treatment (clarification) process that is more compact than other systems. It requires a smaller footprint, which saves construction costs, and has been in use for municipal water treatment plants for over 25 years to help provide high-quality water.

Why does the treatment plant use UV light?

Ultra Violet (UV) light has been proven to safeguard drinking water from naturally occurring microorganisms such as Cryptosporidium and Giardia, which can be present in even the most pristine mountain streams. UV light is very effective, free of any chemicals, doesn't affect the taste, helps keep the water clear, and doesn't add any odors.

Why use chloramines rather than chlorine for water treatment?

Both chloramines and chlorine can be used to maintain disinfection in the water after it leaves a plant to ensure safe drinking water at the faucet. Chloramines are a good way to meet the state's regulations that require a disinfectant residual remains in the treated water as it travels through the system because it is more stable and easier to work with than chlorine. Chloramines also have the added benefits that the residual lasts longer and the formation of disinfection by-products is much slower. Early in 2018, the Water Treatment Plant plans to switch to using chloramines.

What are chloramines?

Chloramines are a chemical compound made by reacting ammonia with the active ingredient in chlorine bleach. Chloramines are more stable than chlorine, which is why many water systems in the United States, such as Denver Water, use chloramines.

Will there be any taste or smell from chloramines?

Water treated with chloramines has less of a "chlorinated" taste and smell than water treated with chlorine.

Do chloramines pose any health concerns?

The Environmental Protection Agency (EPA) states neither chlorine nor chloramines pose health concerns to humans at the levels used for drinking water disinfection. However, either chlorine or chloramines may cause issues for a person on kidney dialysis. If you are on kidney dialysis or have any health issues, you should always contact your physician or medical center about any issues with chlorine or chloramines.

Will a filter remove chloramines from the water?

There are special types of granular active carbon filters that are designed specifically for chloramine removal.

Are chloramines toxic to animals or fish?

The small amount of chloramines added to the water will not affect animals such as dogs, cats, and birds, so it can be used regularly for watering and bathing animals. Like chlorine, chloramines are harmful to fish. Check with your local pet store for more information.

How much water can the new water treatment plant treat in a day?

Roxborough has the capacity to treat 4-million gallons of water per day (mgd) for our customers at the new water treatment plant. Sterling Ranch, through its District (Dominion Water & Sanitation), funded the construction of an additional 2 mgd of capacity to serve their residents, increasing the total capacity of the plant from 4 to 6 mgd. Partnering with Dominion helped fund the plant's construction and will allow us to realize economies of scale in operation, but Roxborough owns and operates the entire plant.

For more information visit: www.RoxWater.org.



ROXBOROUGH WATER AND SANITATION DISTRICT

A "Water Efficient" Community