

CRESCENTA VALLEY WATER DISTRICT

2700 FOOTHILL BOULEVARD
LA CRESCENTA, CALIFORNIA

Agenda for the Meeting of the Engineering Committee
of the Crescenta Valley Water District

To be held on

August 24, 2018 at 9:00 AM

Posted August 23, 2018 at 9:00 AM

Call to Order

Adoption of Agenda

Information Items

1. Discussion of TTHM Study and Upgrades to Disinfection System
 - Option 1 – Operational Changes
 - Option 2 – Chloramine Conversion

Public Comments

At this time, members of the public shall have an opportunity to address the Committee on items of interest that are within the subject matter jurisdiction of this Committee. This opportunity is non-transferable and speakers are limited to three (3) minutes each.

Committee Member's Request for Future Agenda Items

Next Engineering Committee Meeting – September 20, 2018

Adjournment

CVWD is switching to chloramine disinfection

WHY NOW?

In addition to disinfection requirements, state and federal regulations also govern byproducts in drinking water that result from the treatment process. Chlorine creates chemicals during treatment when it reacts with organic materials such as leaves and soil in the untreated water.

CVWD has seen a steady rise in the concentration of these byproducts, known as total trihalomethanes, or TTHMs, in the water served to customers. The amount of organic material in water varies by source.

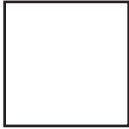
Groundwater from our local Verdugo Basin has less organic materials than the imported water we purchase from Foothill Municipal Water District. The imported supply comes from the Colorado River and the State Water Project, which has a higher concentration of organic materials.

The District typically uses a blend of 60 percent groundwater and 40 percent purchased imported water to meet customer demands. But because groundwater levels have not yet recovered from the latest drought, the blends are now closer to 30 percent groundwater and 70 percent imported water from the Colorado River and State Water Project.

The increase in imported water, coupled with the additional chlorine required to maintain the system, has led to a rapid increase in by-product levels in the distribution system. The District is proactively switching to the alternative chloramine method to comply with drinking water standards.



Please see inside for answers to frequently asked questions and information about special requirements for dialysis machines and aquariums.



Crescenta Valley Water District
2700 Foothill Boulevard
La Crescenta, CA 91214



IMPORTANT INFORMATION

About the Treatment of your Drinking Water



Crescenta Valley Water District disinfects drinking water to kill bacteria and other germs as required by the U.S. Environmental Protection Agency and the State Water Resources Control Board's Division of Drinking Water. These standards ensure that the water we deliver to taps is safe for drinking, cooking and bathing.

Chloramines have been used in municipal water supplies since the 1930s. Today, many agencies across the country use this method, including the cities of Los Angeles, Burbank, Glendale, Pasadena, San Francisco, Boston, and Washington, D.C., along with the Metropolitan Water District of Southern California.

Chloramine disinfection may begin as early as **October 2018.**

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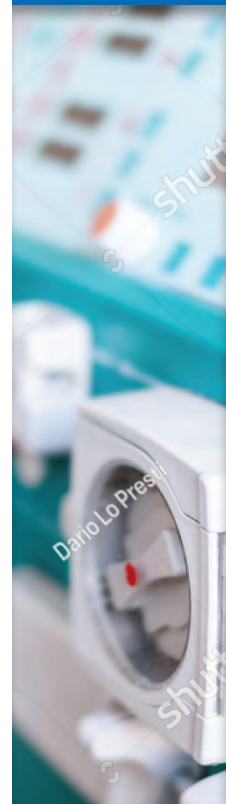


What is chloramination?

Chloramines are a group of chemical compounds that contain chlorine and ammonia. The type of chloramine used in drinking water disinfection is called monochloramine. It is mixed into water in levels that kill germs but are still safe to drink.

Is chloramine safe?

Yes, it is safe for everyone, including children and pregnant women. Chloramine is recognized as a safe disinfectant and a good alternative to chlorine. According to the Centers for Disease Control, studies show that using or drinking water with small amounts of chloramine does not cause harmful health effects. These studies reported no observed health impacts from drinking water with chloramine levels of less than 50 milligrams per liter. We routinely test our water to make sure it is safe and meets all health standards.



What are the precautions for dialysis machine users and dialysis providers?

All dialysis machines use a series of filtration systems to remove impurities from the water used by the machine. It is likely that all dialysis machines come equipped with filters that remove both chlorine and chloramine.

However, out of an abundance of caution, the District is notifying all potential dialysis machine users and dialysis treatment providers about the switch to chloramine and the need to verify that their machines are equipped with the proper filters to receive water containing chloramine.

Can water containing chloramines be used in aquariums for fish and amphibians?

Both chlorine and chloramine pose a problem for fish, frogs, turtles and other aquatic animals because it can get into their blood stream and cause them harm. For this reason, all aquariums have filters designed to remove chlorine from the water and owners of fish treat the water with a chemical to destroy chlorine before adding water to a fish bowl. The same approach needs to be applied with chloramine. However, the filter used for chlorine removal may not be sufficient for chloramine removal. For this reason, owners of aquatic animals should ensure that the filters they use are rated for both chlorine and chloramine.



Is the water safe for dogs, cats and other pets besides aquatic animals?

Yes. Chloraminated water is safe for people and animals to drink, along with all other general uses.

Will chloramine affect my swimming pool?

No. You can continue treating your pool the same way you do now.



What are the advantages of this type of disinfection?

Because chloramine lasts longer in water pipes, it offers better protection against bacterial growth and minimizes biofilm, a slimy buildup that develops in pipes and can impact drinking water. Chloramine is also less reactive with organic matter than chlorine, so it creates lower concentrations of disinfection by-products in the water supply.



Is chloramine treatment standard practice?

The drinking water used by most people in Southern California has contained chloramine since the 1980s. More water districts have switched to chloramine as chlorine treatment byproduct levels have increased.



For more information about this change in treatment, please contact the District at (818) 248-3925 or visit www.cvwd.com.



Water Quality Update

THMs

August 23, 2018

We have a water quality issue related to “THMs”

What are THMs?



Organic Materials

- High level in surface water
- MWD water, our primary source



Chlorine Treatment

- Chlorine reacts with organics
- Creates “Disinfection By-Products”



THMs

- Total of 4 types of DBPs

Why are THMs an Issue?

1. THMs have been linked to long-term health concerns
2. “MCL” stands for Maximum Contaminant Level = 80 µg/L



Mission:

Provide safe drinking water to customers

Public Perception:

Customers must be notified of an MCL violation

What are the options on the table?

Short Term

Switch to 100% MWD
(no groundwater)

- MWD uses “chloramines” instead of chlorine
- No chlorine means less by-products (THMs)

Longer Term *Option 1*

Switch to “Chloramine” process

- Lowers amount of chlorine used
- More difficult to operate
- Lower cost
- 2-3 months to transition

Longer Term *Option 2*

Switch to “Aeration” process

- Removes THMs with blowers at storage tanks
- Less difficult to operate
- Higher cost
- 6-12 months to transition

What do we need to know?

Operations

- Receive training and any other relevant support
- Implement 100% MWD and then Plan 1 or 2

Public Outreach

- Coordinate with State DDW
- Issue public notification within the next 5 days
- Coordinate public outreach

Field & Office

- Develop FAQs to address inquiries in the field and over the phone
- Be informed about operational impacts

Engineering

- Work with Operations for designing projects
- Work with Public Outreach for technical aspects of public outreach

Crescenta Valley Water District DBP Mitigation Plan & Schedule

DRAFT

