

Chlorination Q&A
12/17/2019

1. Why is the gas chlorination station being activated?

We have a portion of our water system that is contaminated with coliform bacteria. We are not sure of the cause of the contamination but have noticed dirt and silt when flushing hydrants in the development and low flow. We have attempted to eliminate the bacteria by aggressively flushing fire hydrants since the problem was discovered. Although we have reduced the bacteria level by flushing, we have not been able to eliminate it. After consulting with water experts with the Rural Water Association of Utah and the Utah Division of Drinking Water we have concluded that chlorination is the only practical solution.

2. What are coliform bacteria and are they dangerous?

Coliform bacteria are a group of bacteria found everywhere around us. They occur in animals, plants, soil, air, and water. Most are harmless to humans. A subgroup, fecal bacteria, can cause illness. We have not detected any fecal bacteria in our system after repeated testing. We sample for coliform bacteria monthly and occasionally find it either from a contaminated sample or dirt being dislodged in one of our lines.

3. Where is the contaminated area?

The area that is contaminated is Old Farm Estates Development and the distribution line that runs along Cochran Lane from the entrance to Field of Dreams Development north to Old Farms Estate.

4. Will I smell and taste the chlorine?

It will be used at a low concentration so that once the system is calibrated most people will not notice a taste or smell although some very sensitive individuals may notice it.

5. Is chlorinating drinking water dangerous?

Chlorination is used extensively in water systems in Utah and throughout the country. At the levels we will use it is safe for human consumption in drinking water. Our operator, Alan Clark, will be monitoring the chlorine level daily once chlorination is started. If you have any concerns with the chlorine level in your home call Alan (435-496-3468) and he can check the level.

6. Will it cause problems in my home?

In most homes no. Chlorine will oxidize iron so in some of the older homes on Campbell Road, 570 West and Silver Spur that have galvanized laterals from the meter box to the house may initially notice some dark sediment in toilet tanks and aerators. If you notice the flow reduced at a sink, remove and flush the aerator.

7. Will the chlorination affect my soft water system?

There are some reports that chlorinated water can reduce the life of the resin beads in softeners that use this technology. There are many other factors that affect the life of a softener including the mineral load. Softeners on our system are doing good to last 10 years.

8. Is there another way to fix the problem?

We explored other options using chlorine but they would have a greater impact on shareholders as well as costing more money and still may not resolve the problem. When the water system was upgraded in 2009, a gas chlorination station was included in the project in anticipation that we might need it in the future to deal with a bacteria problem. Our water quality has been good since the 2009 project, so the system has never been activated.

9. Will we have to continue chlorinating once the problem is resolved?

Once we have the bacteria contamination eliminated, we plan to bring in a company to inspect the water lines using a camera and hydrophone system. If we can find a cause such as a large dirt deposit or obstruction in a line, we will correct it and then hope to stop chlorinating if the bacteria does not return. Usually once a chlorination system is activated it continues to be used. We are working with the Division of Drinking Water to get their approval to discontinue chlorination if we can find and fix the problem but that is not a guarantee.

10. When could I notice chlorine smell or taste in my water?

When the chlorination station is activated. Chlorine will go into water immediately after it is pumped from a well, will be carried to our tank, and then flow back down our distribution lines. It will take a few days after the system is activated for the chlorine treated water to reach homes. The plan right now is to start the chlorine station on Friday, December 20 although this could be delayed a couple days if everything is not in place. We will run it initially at 1 part per million concentration.

11. Where can I get additional information?

We will post additional information on coliform bacteria and chlorination on our website as we find good publications. If you have additional questions please call Alan Clark, our water operator at 435-496-3468. If he cannot answer your question immediately, he will get an answer from the Division of Drinking Water or the Rural Water Association of Utah who are assisting us during this process. We are working with the Utah Division of Drinking Water and they are a good source of information. If you do an internet search make sure you are looking at reliable sources like University Extension Services. As with anything on the internet there are some crazy things out there.