



CITY OF RUTLAND  
**DEPARTMENT OF PUBLIC WORKS**  
RUTLAND, VERMONT

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## INFORMATION ABOUT YOUR DRINKING WATER

This information sheet is not required by State and Federal regulators. It is being included in your water bill to keep you informed regarding the regular water quality monitoring the City conducts on our public water system and planned improvements to the City's drinking water system.

### **HALOACETIC ACID LEVELS CONTINUE TO STAY BELOW STATE AND FEDERAL LIMITS**

Based on the required quarterly sampling, the City continues to see concentrations of haloacetic acids (HAA5) in our drinking water below the State and Federal regulatory limit of 60 parts per billion (ppb). In fact, this past quarter resulted in all locations testing below 50 ppb. A contributing reason may be the extremely dry summer which has reduced erosion of dissolved organic matter into Mendon Brook (compounds invisible to the eye created by decaying vegetation). The City is required to take action to avoid future violations because past samples were measured to be over the 60 ppb limit for HAA5's.

### **TELL ME AGAIN, WHAT ARE HALOACETIC ACIDS? WHAT IS THE CONCERN?**

Several past notices have provided lots of information on what haloacetic acids (HAA5) are and how they happen to be found in drinking water. We don't want to repeat all that same information again, as you have read it several times in past notices. In summary, these compounds are formed when natural dissolved organic matter (from decomposing vegetation) in surface water sources combines with chlorine used for disinfection in the water treatment process. While our slow sand filters are great at removing biological contamination, some dissolved organic compounds cannot be removed prior to disinfection.

Drinking water containing HAA5's, at the concentrations found in the City's supply, will not lead to any adverse short-term effects. The maximum contaminant level set by EPA is intended to protect against potential health effects from lifetime exposure. The Vermont Department of Environmental Conservation states, "*Some people who drink water containing haloacetic acids in excess of the (60 ppb contaminate) limit over many years may have an increased risk of getting cancer*". In animal studies, some haloacetic acids have been associated with reproductive or developmental effects. Most testing and analysis on HAA5's have been done on laboratory animals (rats and mice), at higher doses, with the data extrapolated to a lifetime exposure of a human without causing an undue occurrence of cancer.

### **SO, WHAT IS THE PLAN?**

Again, a lot of detail has been provided in past billing inserts, but in summary, the City has decided to change the method of disinfection to a process which reduces the formation of haloacetic acid compounds. Known as chloramination, this is the same process used by Champlain Water District (the largest water system in Vermont) and hundreds of cities and communities throughout the nation. Instead of disinfecting our filtered water, as we do now, with sodium hypochlorite (the same compound as household bleach), the City will be changing to monochloramine, a compound formed when sodium hypochlorite is combined with ammonia (ammonium sulphate). This is not a new treatment method. It has been used in the US for almost 100 years, used in many of the nation's largest cities and consumed by more than 68 million people every day. 134 communities in New England alone use monochloramine for disinfection of their public water systems.

The reason monochloramine disinfection has an advantage over sodium hypochlorite is that it is less reactive (takes longer to disinfect) and therefore does not create the disinfection byproducts during water distribution. It also has the advantage of having less of a "chlorine" taste and odor in the water. Like chlorine, it can also be effectively removed from the water at facilities which cannot tolerate disinfectants in water, such as some hospital facilities and aquaculture businesses. From an operations point of view, it is not as simple as our current method of disinfection, but far simpler and less costly than any other alternative.

The City has retained an engineering consultant to design the process and we expect the physical change will occur by the end of 2026. All City water customers will be kept informed as we move towards this goal.

### **OTHER CITY WATER SYSTEM IMPROVEMENT PROJECTS**

There are several other drinking water related projects which will begin construction this fall and next year. The Belden Company was awarded the bid to install 4,500 feet of new water mains on Curtis Ave, Water Street, Madison Street, Chaplin Ave and Morse Place, including street reconstruction. This important \$2.5 million project will replace very old deteriorating water lines which do not provide adequate fire protection and undoubtedly contribute to water loss through leakage. There are still water mains in the City which date back to the Civil War era and water main replacement projects will be ongoing for many years to come.

Also happening next year, replacement of the old and undersized water mains on Center Street and Wales Street is anticipated, along with replacement of the sanitary sewer and storm sewers in this area. All this is necessary to make way for the planned street, pedestrian and hotel construction which will transform downtown.

Lastly, the City is completing the installation of water meters at the remaining properties which take drinking water from the City system. This work will include installing master meters at all locations where water leaves the City boundaries. This will allow the City to closely measure and monitor unaccounted-for water loss.

### **WHERE CAN I GET ADDITIONAL INFORMATION?**

You can contact the Department of Public Works at 802-773-1813 or at PO Box 969, Rutland, VT 05701 with any questions. Regarding your personal health concerns, we recommend contacting your personal health care provider. You are always welcome to visit our water filtration facility by appointment. Just leave your contact information at the number above and our water treatment operators will get back in touch with you.



A) 3.6 million gallon per day, slow sand water filtration facility

B) 5 million gallons of filtered water storage ready for an emergency

C) 80 million gallon open reservoir prior to filtration

