

Water Treatment Frequently Asked Questions

Environmental Services Department
Tel: (306) 828-2470
Fax (306) 786-6880

- **Is my water safe to drink?**

The City's waterworks system operates under a Permit, which is issued by the Water Security Agency (formerly Saskatchewan Ministry of Environment). Within that permit are strict guidelines that include: testing protocol, calculation and summation of records, sample collection, and water quality objectives. The City must meet these requirements:

- Submit weekly - Three (3) Bacteriological Samples for total coliforms.
- Submit a General Health and Total Toxicity Test once per year from the distribution system.
- Submit a General Chemical Test twice per year.

- **Why does my water smell like chlorine?**

The City uses chlorine to disinfect the water. The government states that the chlorine residual will not be lower than 0.1 mg/L free chlorine or 0.5 mg/L total chlorine anywhere in the distribution system. To achieve this, the City must insure that the water leaving the plant has enough chlorine to obtain these results at the far end of the distribution system. Therefore at certain times you may notice a strong chlorine odour, especially in the morning or if you are a low water user. If you let your tap run, the odour should dissipate.

- **Where does my water come from?**

There are 16 wells surrounding the City, each of the wells are located in various aquifers and at varying depths.

- **How does the City treat our water?**

All of the City's water is treated at the water treatment plant located on Queen Street West. The plant process consists of an aeration system, filters and chlorination equipment, all designed to remove iron and manganese from our groundwater sources.

- **What is the hardness of our water?**

In Canada we express hardness as Total Hardness of Calcium Carbonate, CaCO₃. The average Total Hardness of the water is approximately 600 mg/l. The theory is any water in excess of "300 mg/L" is considered "very hard".

- **I have just purchased a water softener and it requires a setting of "Grains per Gallon" of hardness, how do I set it?**

When setting your softener you have to convert Total Hardness of CaCO₃ to Grains per Gallon, this is accomplished by multiplying the total hardness of the water (which is approx. 600 mg/L) by 0.07016, this roughly equates to 40 grains per gallon.

- **When I fill my glass with water it appears cloudy and then dissipates and turns clear?**

Most taps consist of a small screen that aerates the water as it passes through it. The cloudiness shown in the glass is actually very small air bubbles, which dissipate after time.

- **Why are there deposits in my kettle and in my pots after I boil the water?**

The deposits remaining are calcium carbonate, it precipitates out when the water is boiled. The hardness of the water causes this to occur. These deposits can be removed by cleaning with vinegar.

- **Why is my water brown or discoloured?**

If the water is highly colored, the cause is most likely an extreme increase in water demand, which in turn cause a "flushing" of the distribution lines. This situation can be caused by water main breaks or connections and use of water from hydrants by the fire department, public works department, paving and asphalt companies, construction crews or insurance contractors.

- **Is fluoride added to the water?**

The City does not add fluoride to the water but this is a naturally occurring mineral, which consists of part of our water chemistry.

- **Why do we flush the water mains?**

The City flushes water mains yearly to remove iron, manganese and other deposits from within the distribution system.

- **Why is the water scummy?**

This is due to the minerals that are found within our water.