FREQUENTLY ASKED QUESTIONS

The following are some Frequently Asked Questions to assist you in understanding how drinking water is regulated and tested.

1. Is my drinking water safe?

Yes!

2. Do I need to boil my water?

No, you do not. If the need to boil water should arise, you would be alerted within 24 hours.

3. Why is my water safe to drink?

Your water has been disinfected to ensure that it is safe for consumption.

4. Why disinfect?

- Disinfection of drinking water is vital to protecting the public against disease. The use of chlorine and other disinfectants has virtually eliminated instances of waterborne diseases like typhoid fever, cholera and dysentery in the United States and other developed countries.
- It is widely acknowledged that filtration and disinfection of drinking water have played a large role in the 20th century's 50 percent increase in life expectancy.

5. What are types of disinfection?

- In treating drinking water, utilities typically disinfect water twice – to kill or inactivate microorganisms present in water arriving from a source and to prevent organisms from re-growing as the water travels from the treatment plant, through the distribution system pipes, all the way to consumers' homes.

6. What are DBPs (Disinfection Byproducts)?

- Trihalomethanes (THM) are a group of compounds that form when chlorine and chloramine react with organic matter, such as decaying plant material, present in source water. Surface waters, like lakes and rivers, may be especially high in organic matter because of plants and animals living in or near the water. The EPA regulates THMs at a maximum annual average of 80 parts per billion.
- Haloacetic acids (HAA5) are a group of five chemicals formed during disinfection with chlorine and chloramine. The EPA regulates HAA5 at a maximum annual average of 60 parts per billion.
- Bromate forms when ozone used for disinfection reacts with bromide naturally occurring in source waters. The EPA regulates bromate at a maximum annual average of 10 parts per billion.
- Chlorite is a potential by-product of chlorine dioxide disinfection. The EPA regulates chlorite at one part per million.

7. How are DBPs regulated?

- Under the Safe Drinking Water Act Amendments of 1996, the EPA created the Disinfection Byproducts Rule that establishes the standard for acceptable levels of DBPs in drinking water.
- The EPA sets the standard for each DBP on the assumption that a person could consume two liters of drinking water that contained the maximum level of the DBP daily for 70 years without experiencing any known health effects.
- All chemical disinfectants cause DBPs. Utilities must balance the need to protect the public from water-borne illnesses while keeping DBPs at safe concentrations.
- Utilities can control certain factors that influence the production of DBPs such as the amount of disinfectant used and the amount of organic material or minerals present during disinfection. Other factors such as temperature, pH and reaction time also affect DBP production.

8. How can I learn more?

To learn more, please refer to the following websites:

United States Environmental Protection Agency (EPA)
http://water.epa.gov/drink/standards/hascience.cfm

United States Centers for Disease Control & Prevention (CDC)
http://www.cdc.gov/safewater/chlorination-byproducts.html