



WATER CHLORINATION FREQUENTLY ASKED QUESTIONS

What is chlorine?

Chlorine is a common element in nature, where it is usually found combined with other elements. The largest amount of chlorine on earth is found in the oceans as sodium chloride or salt. In fact, salt and water are the most common ingredients used to manufacture the chlorine used in your drinking water.

Why is chlorine added to drinking water?

Chlorine is a strong disinfectant that is able to kill many types of bacteria, viruses and parasites (pathogens) that cause water-borne infections. Some water-borne infections can cause severe illness and even death. Water suppliers add chlorine disinfectants to drinking water to kill pathogens.

Chlorine disinfectants were first added to a permanent water supply in North America in 1908. By the 1920s, thousands of North American cities were using chlorine disinfectants to treat their drinking water supplies. There was a drastic reduction in water-borne infections, such as typhoid fever and cholera, and infant mortality. Currently, most cities or towns in North America use chlorine disinfectants to treat drinking water.

How is chlorine added to drinking water?

There are many ways to add chlorine to drinking water because there are many different chlorine disinfectant products available on the market. These products can take the form of a solid, liquid or gas depending on the other ingredients. However, they all work in a similar way once added to water. This is why they all get the generic labeling of "chlorine". The City of Duncan chose injection of liquid chlorine based on a number of factors, including cost and ease of handling.

Can the City of Duncan use anything else to disinfect my drinking water?

Ultraviolet light and ozone are capable of disinfecting drinking water. However, they do not provide protection once the water enters the pipes that bring water to your home. Only chlorine disinfectants are able to provide some continued protection of the water after entering the pipes.

Another reason chlorine disinfectants may be used is they are typically easier to handle and/or less expensive than other disinfectants. This makes them a preferred choice of cost-conscious water supply system operators and individual homeowners with their own water supply systems.

Can the chlorine added to my drinking water harm me?

There is no evidence that chlorine disinfectants are harmful to people when used on their own in the small amounts needed for drinking water disinfection. In addition, Health Canada reports no harmful health effects in people that drink water with large concentrations of chlorine (50mg/L) over short periods of time. The City of Duncan will be using a concentration much, much lower than 50 mg/L over a short period of time to keep your drinking water safe.

Will chlorine be used continually in my water?

The City of Duncan intends to only use chlorine once per year in conjunction with the annual water main flushing program or in the event of an emergency.