

# Frequently Asked Questions (FAQs)

## Water Quality and Appearance

Because drinking water is a natural resource, its taste, color and odor can sometimes vary slightly from day to day, from town to town and from faucet to faucet. KKW's drinking water is treated according to strict state and federal standards so that it is safe to drink. Here are some answers to frequently asked questions about drinking water.

➤ **Is KKW drinking water hard or soft?**

Water "hardness" and "softness" is due to its concentration of minerals – calcium and magnesium. The lower the mineral concentration, the softer the water is. Mineral concentrations, measured in parts per million (ppm) ranging between 0-45 are considered extremely soft to soft; 46 – 90 are considered soft to moderately hard. The KKW uses both surface water and groundwater sources, most often in a blended fashion. The surface water alone has a hardness value of around 10 while the groundwater alone has a hardness value of around 88.

➤ **Is water treated with chlorine safe to drink?**

Yes. Extensive testing and study by the EPA and others over many years have shown that the amount of chlorine used to treat drinking water is safe. In fact the use of chlorine actually makes drinking water safer by disinfecting (to kill or inactivate) any potential disease causing organisms that may be present. The potential for water contamination when chlorine is not used, outweighs any long term concerns.

➤ **Is there lead in my water?**

There is no lead in the water when it leaves the Filtration Plant. If there is lead present, it originates from your household plumbing. And while we meet the federal lead standard, a small percentage of the homes in our system may have lead levels that exceed the level considered safe. Lead levels may be of particular concern for homes built between 1982-1986. Since we first tested for lead in the early 1990s, we have adjusted our treatment process in an effort to lower the number of homes exceeding the lead standard. The results have been excellent.

To be sure the water you drink is low in lead, simply run the water for a short time (until it is cold) before using it for drinking, cooking or making beverages. Also, see the *Summer 2009 What's On Tap* for more information on lead in drinking water. You may also contact the District if you have any further questions or would like to have your water tested for lead.

➤ **What causes the blue-green staining where faucets drip on tubs and sinks?**

Blue-green stains on plumbing fixtures are the result of copper leaching from the plumbing in your house due to low pH or electrolysis. The KKW adjusts the pH of the water during the treatment process to reduce the tendency of copper and lead (from your plumbing) to leach into your drinking water. Electrolysis is generated by stray electrical current from improper grounding and can also lead to pinhole leaks in plumbing lines. Please contact the District if you would like to have your water tested for copper.

➤ **Why does my tap water sometimes look cloudy?**

The occurrence of cloudy water, sometimes referred to as white water, is caused by tiny air bubbles in the water and is particularly noticeable in water taken directly from the tap. Within seconds, the bubbles rise to the top and naturally disappear. This type of cloudiness occurs more often during the winter when the water temperature is coldest, and does not indicate any problem with the water.

➤ **Is there sodium in my drinking water?**

Yes, but the levels are considered to be very low by the Food and Drug Administration (FDA). The EPA currently does not regulate sodium levels in drinking water. The KKW tests regularly for sodium and the highest level found was 18 parts per million (ppm).

The FDA reports that most American adults tend to eat between 4,000 and 6,000 mg of sodium per day, "and therapeutic sodium restricted diets can range from below 1,000 mg to 3,000 mg per day." It lists the following nutrient guidelines for food labeling:

**-Low-sodium:** 140 mg or less per serving

**-Very low-sodium:** 35 mg or less per serving

**-Sodium-free:** Less than 5 mg per serving

Based on the KKW sodium level of 18 ppm, a person drinking two liters (about 8 glasses) of water per day would typically ingest 36 mg of sodium per day from drinking water. Based on this data, a 1/4-liter serving (about an 8-ounce glass) would contain 9 mg of sodium, well within FDA's "very low sodium" category.

It is important to note that sodium is an essential nutrient. The Food and Nutrition Board of the National Research Council recommends that most healthy adults need to consume at least 500 mg/day, and that sodium intake be limited to no more than 2400 mg/day.

➤ **Should I use a home water filter?**

Our water meets all drinking water standards and does not require additional treatment or filtration beyond what it already receives. However, the choice to use a home filtration system is yours to make. Home filtration devices can reduce chlorine levels which some would prefer not to taste or smell. In some cases, these filtration products can also remove metals such as lead and copper that could dissolve in the water during contact with household plumbing. The removal of fluoride is also possible with a more expensive reverse osmosis type filtration device. If you decide to install and use a home water-filtration system, it is important to specify a device that will achieve the desired result as well to follow the manufacturer's operation and maintenance protocol.

➤ **Is that pink slime in my shower caused by my water?**

No. Certain species of airborne bacteria gravitate towards and thrive in a moist environment, such as showers, toilet bowls and sink drains. These slimy bacteria are naturally occurring and can be unattractive but are generally harmless. The best way to avoid this problem is to keep these surfaces free from bacterial film through regular cleaning with chlorine-based products.

➤ **Is tap water suitable for use in a home kidney dialysis machine?**

No, not without further treatment. The water used in a kidney dialysis machine is brought into close contact with the patient's blood, requiring far higher quality than that of ordinary drinking water. Aluminum, fluoride, ammonia, chlorine and chloramines are examples of substances that are not typically acceptable in water used for kidney dialysis. We recommend you contact a Kidney dialysis center for advice on this matter.

➤ **Is it safe to use tap water to fill my aquarium?**

Tap water containing trace amounts of certain gases and heavy metals that is safe to drink can prove toxic to fish. It is recommended that you contact your pet store to determine the type of additive that may be needed to neutralize any chlorine, chloramines, fluorine and heavy metals such as copper and iron that may be present.

## **Plumbing and Other Issues**

➤ **What causes my pipe to shudder and bang?**

This problem is caused by your plumbing lines not being properly secured, allowing them to move suddenly when fixtures are rapidly opening and closed creating a "water hammer" effect. It can be easily fixed by adding additional pipe hangers, but only if your water lines are accessible. You may also want to install a water hammer arrestor to combat this problem. They consist of a small air bladder within a cylinder plumbed to the piping system and can be purchased at your local hardware or plumbing supply store.

➤ **Why does sediment buildup in my hot water heating device?**

All water contains dissolved minerals. However, the District's groundwater, like most groundwater, is higher in mineral content than that of surface waters. The District began supplementing its Branch Brook surface water supply with high quality groundwater in 2007, however the naturally higher mineral content of the groundwater may require more frequent maintenance for hot water heating systems, especially those heating water above 140 degrees F.

The heating of water in your water heater causes dissolved minerals, such as calcium carbonate, to precipitate out and coat heating elements, boiler components and settle to the bottom of tanks as sediment. The coating on heating elements and boiler components acts like an insulation blanket, slowing the heat transfer process which requires more energy (higher cost) and longer times to heat your hot water. Left unchecked, the coating can render a heating device inoperable.

One key to proper maintenance is to regularly flush heating devices in accordance with the manufacturer's recommendation to remove any deposits and sediment that may have accumulated. In addition to flushing, some manufacturer's also recommend periodically pumping white vinegar or another low-grade acid through the heating device to clear out these deposits and sediment. In order to extend the life of your hot water heating device and keep it running optimally, consult your owner's manual and/or licensed plumber to determine the proper maintenance regiment for your particular hot water heating device.

➤ **Why do I have rust colored water coming from my hot water tank?**

Most hot water tanks are glass lined and designed to last 15-20 years. As a tank gets older, the glass lining can develop cracks that expose the metal underneath which begins to rust and imparts color to the water. If this happens, the tank needs to be replaced.

Another common problem is that the sacrificial anode rod in the tank has failed (anode rods dissolve slowly to prevent rusting in the tank). These anode rods can be replaced with magnesium anode rods that are available at your local hardware store or plumbing supply store.