

King County Water District
#54 serves downtown
Des Moines and the southern
portion of Normandy Park.



KING COUNTY WATER DISTRICT #54

Annual Drinking Water Report

We at King County Water District #54 are pleased to present to you this year's Annual Water Quality Report for 2015

This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water is drawn from four wells in the Highline Aquifer. This aquifer is overlain by 130 to 165 feet of glacial drift, which acts as a natural filter.

For your Health

King County Water District #54 routinely monitors for constituents in your drinking water according to Federal and State laws.

The following tables show the results of our monitoring for the period of January 1st to December 31st, 2015, although not all of the following test results are from 2015 testing.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. The presence of constituents does not necessarily indicate that the water poses a health risk.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should

We have a source water protection plan available for review at our office. This provides more information such as potential sources of contamination.

We're pleased to report that our drinking water is safe and meets federal and state requirements.

Many of our customers are experiencing brown water at this time, this is caused from the chlorine we are currently adding to the system washing 70+ years of mineral build up off the pipes. We hope to have this remedied very soon.

seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

MCL's (Maximum Contaminant Level) are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

For more info about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at (800)426-4791.

Meetings:

Our regularly scheduled meeting time is 4:00 PM at our office on the first and third Tuesdays of every month

Working Hard For You

The United States Environmental Protection Agency (EPA) sets the National standards for public drinking water quality to ensure that tap water is safe to drink. Water District #54 has been chlorinating the water since September 2013. The District will be submitting a

second project report to the Department of Health requesting that we be allowed to discontinue the chlorination. We should hear back from DOH shortly.

To protect public health, EPA and the Washington State Department of Health establish maximum contaminants levels

and the specific actions required if levels of certain contaminants are exceeded, including public notification. (Food and Drug Administration regulations establish limits for contaminants in bottled water.)

Water Use Efficiency

The Department of Health and the Department of Ecology have been working together to work with water utilities to conserve water, therefore, we are required to have a water use efficiency plan. This requires us to state goals and how we plan to achieve these goals.

As part of these goals we strive to pump less water and to have each indi-

vidual user use less water.

In the last few years we have been very consistent in the water used per single-family homes. For 2015 we used about 166 gallons per single family home. Our 5 year average is 160 gallons per single family household.

The Department of Ecology has set the water use efficiency goal of less than

10% for unaccounted for water. We are continuing to change old inefficient meters. The new meters are touch read, which allows the meter reader to touch a pad on the meter box with an electronic device which transfers the usage to a digital display. If you've noticed a round pad on your meter box lid you have a new meter. The round pad is the new touch pad.

What are IOC's?

Inorganic Chemicals are considered to be of a mineral, not biological. Typical

inorganic compounds include: Carbon monoxide, carbon dioxide, carbonates,

cyanides among many others.

Microbiological Contaminants

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. If coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water sup-

ply. If this limit is exceeded, the water supplier must notify the public by mail within 30 days.

Fecal Coliform/E.Coli: Fecal Coliforms and E.Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diar-

rhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems. The water supplier must notify the public by newspaper, television or radio within 24 hours.

Inorganic Contaminants

Nitrates: Nitrate in drinking water at levels above 10 parts per million is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby

syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care

provider. As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

What are Radionuclides's?

Radionuclide is the testing for radioactive mineral in water which is found in rocks and soil predominately found in the Northeast part of the state. When uranium decays, it changes into differ-

ent elements that are also radioactive, including radon, a gas that is known to cause cancer. The main concern for uranium in drinking water is harm to the kidneys.

Radon is most hazardous when inhaled, not when ingesting. High radon levels in drinking water may suggest elevated radon in indoor air.

Manganese

Manganese is considered a secondary contaminant by the Environmental Protection Agency (EPA). Manganese does not cause disease from being consumed. It is however a nuisance. Even in low levels it will cause the staining of porcelain fixtures and laundry. Food cooked in water containing

high levels of manganese may become discolored, but the off color does not mean it is not safe to eat or drink. Manganese may give water an unusual taste and odor that has been described as "musty" or "metallic". Manganese deposits consist of a black powder that does not dissolve in water, it builds up

in tanks, and in distribution lines in a water system. When there is a change in water pressure or some disruption in the water system, manganese deposits are knocked loose from the pipe, causing the water to become cloudy or brown.

| TEST RESULTS (Measured at the Source) | | | | | | |
|---------------------------------------|---------------|----------------|------|--------------|--------------------|---|
| Inorganic Chemicals (IOC's) | Violation Y/N | Level Detected | Unit | MCL | SRL | Explanation |
| Arsenic | N | <0.002 | Mg/L | .01 | .002 | Found in natural deposits underground |
| Fluoride | N | <0.2 | Mg/L | 4 | 0.2 | Found naturally in water, food & soil. Also synthesized in labs |
| Iron | N | <0.1 | Mg/L | 0.3 | 0.1 | Makes up 5% of earths crust |
| Manganese | N | 0.06 | Mg/L | 0.05 | 0.01 | Naturally occurring, found in air, food, soil & water |
| Nitrate | N | <0.2 | Mg/L | 10 | .5 | Found in fertilizer, manure & liquid waste |
| Tested Compound | Violation Y/N | Level Detected | Unit | Action Level | # of Homes over AL | Explanation |
| Lead | N | 0.007 | Mg/L | 0.015 | 0 | Corrosion of household plumbing |
| Copper | N | 0.07 | Mg/L | 1.13 | 0 | Corrosion of household plumbing |

In the table above you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

***Parts per million (ppm) or Milligrams per liter (Mg/L)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.

***State Reporting Limit (SRL)** - The limit at which the State Department of Health must be notified.

*< - Indicates 'less than'.

***Maximum Contaminant Level -** (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best

available treatment technology.

***Picouries per liter (Pcil/L)** - this is the measurement of radioactivity in the water.

***Non-regulated (NR)-** items not regulated by the state.

King County Water District #54

922 South 219th Street

Des Moines, WA 98198

(206) 878-7210

Presorted Standard

U.S. Postage

PAID

Seattle, WA

Permit No. 4136

System ID: 399504

System Operator: Eric Clarke

The District is owned by the ratepayers and managed through a Board of Commissioners elected by the ratepayers.

Board of Commissioners

Yoshiko Grace Matsui

John Rayback

James Langston

Miscellaneous District Info

Routine Sampling: Every month, 6 water samples are drawn to test for coliform bacteria and in 2015 we had no violations.

Permanent sample stations have been installed throughout the District for the routine samples to be drawn from, as well as follow-up sample sites. We have hired a professional lab to take the monthly samples to ensure that the utmost care is taken while sampling

If you are experiencing brown water this is caused from the chlorine washing 70+ years of mineral build up off the pipes. Flush your cold water from the bath tub. This should clear it up, but if it doesn't, call the office and staff will flush the water main. The District is required by the DOH to perform 72 rou-

tine coliform samples. These sample are based upon the population within the water district. In addition, the water district drew 156 extra samples. These were done to try and determine where the system needs to be flushed. The chlorine that is blended with the water will scour the inside of the pipe walls releasing minerals stuck to the pipe causing the water to become discolored.

If you have any questions about this report or concerning your water utility, please contact the office at: (206)878-7210. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at 4:00 pm on the 1st and 3rd Tuesdays of each month at the District office.

Survey: Shortly we will be sending a report to the Department of Health requesting to turn the chlorinator off. If we are allowed to turn it off we will be sending you a survey, please do not ignore it. This survey is very important. It will request your opinion of which direction you wish your water system to proceed. The survey will ask: 1) If we should turn the chlorinator off and revert back to the unchlorinated water we had prior to September 2013. 2) Purchase water from the neighboring water system. 3) Install a filter to capture the manganese. This filter system would cost near a million dollars, or 4) Sequester, this method adds a polymer to the water which collects the manganese particles so that they don't typically flow through the system.
