City of Homer Water Utility 2018 Drinking Water Quality Report

Richard Klopp 2018 Wastewater Operator of the Year

Homer's lead water distribution and wastewater collection operator, *Richard Klopp* was awarded the 2018 Wastewater Operator of the Year by the Alaska Rural Water Association.

His improvements to Homer's preventative maintenance program, including smoke testing, have reduced operating costs and have also reduced labor costs through fewer emergency call-outs. His efforts have resulted in over $50,000 savings since 2015.

He is an asset to Public Works and to the City of Homer.

Thank you and congratulations!

We are committed to providing you with a clean and dependable supply of drinking water.

We are proud to report that water delivered to our customers meets or exceeds all federal and state standards.

2018 WATER QUALITY REPORT

THINK BEFORE YOU FLUSH!

Irresponsible flushing impacts our homes, wastewater infrastructure and wallets

No matter what it says on the packaging, most of our everyday personal healthcare products must never be thrown down the toilet. Many of these products don't break down like toilet paper. Instead they collect in our domestic and municipal waste water pipes and form blockages. Plumbing pipes in homes and businesses are not designed to handle this type of waste either and can easily become blocked.

Blockages that build up in sewer systems are called ***fatbergs***. Fatbergs form like snowballs. When things like wet wipes and sanitary products get flushed down the toilet and oil and grease get thrown down the sink, they all congeal together and gradually form a hard mass.

The idea of a sewer system is that waste keeps moving through it. But when fatbergs grow large, they slow the movement of waste or even block it entirely, causing sewage to back up to the surface.

Another colorful (and apt) name, ***ragging***, describes the clogging and damage caused to pumps by sewage-related litter, especially wet wipes that people flush down the toilet.

At Homer's Wastewater Treatment Plant, sewage litter adds to the volume of solid matter which has to be carefully, expensively removed. Even dental floss should not be flushed down the toilet as it can collect in filters during the treatment process and cause machinery to break down.

At home and at the treatment plant, irresponsible flushing results in costly maintenance, repairs, flooding and environmental pollution.

Most products should be treated as waste and put in the trash, not flushed down the toilet.

City of Homer Drinking Water Monitoring Results

The City of Homer routinely monitors your drinking water according to Federal and State laws. The table below shows the results of our monitoring from January 1st to December 31st, 2018, unless otherwise noted. The state requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

2018 test results indicate excellent water quality that meets and exceeds all Federal and State requirements.

2018 Water Quality Test Results

Contaminant	Sample Date	Violation Yes/No	Level Detected	Unit of Meas-	MCL	MCLG
Volatile Organic Contaminants (Locational Running Annual Average)						
Total Trihalomethanes	2018	No	50.95 LRAA BW 51.53 LRAA Spit Range: 43 - 52	ug/L	80	N/A
Total Haloacetic Acids	2018	No	34.33 LRAA BW 35.00 LRAA Spit Range: 28 - 48	ug/L	60	N/A
Radioactive Contaminants						
Gross Beta	2013	No	2.4	pCi/L	50	0
Radium 226/228	2013	No	0.043		5	
Gross Alpha	2013	No	0.85		15	
Microbiological Contaminants						
Turbidity	1/30/2017	No	0.25	NTU	0.3	N/A
Inorganic Contaminants						
Barium	2011	No	26.5	ug/L	2000	2000
Chromium	2011	No	0.453	ug/L	100	100
Total Thallium	2011	No	0.0839	ug/L	2	0.5
Nitrate	2016	No	0.159	mg/L	10	10
Arsenic	2012	No	0.221	ug/L	10	0
Lead*	2017	No	0.0077	mg/L	.015	0
Copper*	2017	No	0.16	mg/L	1.3	1.3
Unregulated Contaminant Monitoring						
Manganese	10/21/15	No	36	ug/L	N/A	N/A
Strontium	10/21/15	No	38	ug/L	N/A	N/A
Chlorate	10/21/15	No	79	ug/L	N/A	N/A

Units of Measure:

Ppm or mg/L
Parts per million or milligrams per liter: parts per million corresponds to one minute in two years or a single penny in $10,000.

pCi/L
Radioactive measurement: 1 trillionth of a Curie.

*Violation determination is based on the 90th percentile. Results of 20 samples ranged from non-detected to 0.00373 ppm of lead and 0.0143 to 0.157 ppm of copper.

Ppb or ug/L
Parts per billion or *micrograms per liter*: parts per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000.

Definitions:

MCL
Maximum Contaminant Level: the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCGLs as feasible using the best available treatment technology.

MCLG
Maximum Contaminant Level Goal: the level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

LRAA
Locational Running Annual Average: the average and range of sample analytical results from Best Western (BW) and Spit locations during the previous four calendar quarters.

N/A
Not applicable.

AL
Action Level: the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

TT
Treatment Technique: a required process intended to reduce the level of a contaminant in drinking water. For example, we are required to use filtration technology to remove turbidity from our water.

Turbidity
Suspended material or cloudiness measured in NTUs.

NTU
Nephelometric Turbidity Unit: Units of turbidity indicated by an instrument that measures refracted light through a water sample.

Questions? Call Public Works at 907-235-3170.

Safe Drinking Water Is Everybody's Business

We do our part to ensure that the water delivered to your home is safe to drink.

You can do your part by preventing backflow.

Do any of these situations sound familiar to you?

When cleaning up after a day of fishing, you leave the hose submerged in the cooler with fish slurry while you let it soak in a disinfectant?

When filling your hot tub, you connect your garden hose and leave it in the tub?

You put your garden hose in a fertilizer or pesticide sprayer when you are filling it up for use?

In all of these examples, a sudden drop in water supply pressure (due to a water main break, high demand from firefighting, or a power outage to a pump) could draw contaminants – chemicals, fertilizer, soapy water and bacteria – back into your pipes and into the public water system. This is called backflow.

Any of these contaminants can cause serious health problems if ingested.

Fortunately, keeping your water safe from these contaminants (and others like them) is easy! Take the following precautions to protect your drinking water:

NEVER Submerge a garden hose in a bucket, sink, tub or anything else. Instead…

ALWAYS hold the hose above whatever you are filling. Keeping an air gap between the hose end and the container is the safest and the simplest way of preventing backflow.

ALWAYS Buy and install inexpensive backflow-prevention devices called ***hose bibbs*** for all threaded faucets around your home (see photo left). They are available at hardware stores and take only a couple minutes to install. Be sure to test it afterwards!

NEVER Attach a chemical sprayer to your hose without a backflow-prevention device. The chemicals you use on your lawn or for cleaning are toxic and can be fatal if ingested.

Substances that may be found in your drinking water

The sources of any drinking water—tap and bottled water alike—include rivers, lakes, streams, ponds, reservoirs, springs, and wells. While the City of Homer has taken steps to protect the land in the Bridge Creek Reservoir's watershed, as water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. **Contaminants that may be present in source water include:**

Microbial contaminants, such as viruses and bacteria, which may come from septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally-occurring or by the result of oil and gas production and mining activities.

To protect public health, water treatment plants reduce these contaminants to safe levels established by regulation. However, drinking water (including bottled water) may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Special Information for Vulnerable Populations

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

These people should seek advice from their health care providers. Guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available by calling the EPA/CDC Safe Drinking Water Hotline: **800-426-4791.**