

CITY OF HOMER WATER UTILITY

PUBLIC WORKS DEPARTMENT

ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2016

Water Quality Test Results						
Contaminant	Sample Date	Violation Yes/No	Level Detected	Unit of Measure	MCL	MCLG
Volatile Organic Contaminants (Running Annual Average)						
Total Trihalomethanes	3/9/16	No	70 (RAA)	ug/L	80	N/A
Total Haloacetic Acids	6/7/16	No	50 (RAA)	ug/L	60	N/A
Radioactive Contaminants						
Gross Beta	2013	No	2.4	pCi/L	50	0
Radium 226/228	2013	No	.043		5	
Gross Alpha	2013	No	0.85		15	
Microbiological Contaminants						
Turbidity	3/26/16	No	0.28	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*	2014	No	.00373	mg/l	.015	0
Copper*	2014	No	.157	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

Safeguard Your Water by Preventing Backflow

When water flows backward through the water supply system, it is called backsiphonage or backflow. When that water is accidentally mixed with hazardous chemicals or bacteria, it is called dangerous!

The danger comes when the hose—any hose—is connected to a harmful substance. If the pressure in a water main drops while your hose is submerged in polluted or contaminated water, the water (and whatever is in it) could be sucked back into your pipes and your drinking water supply. Water pressure drops are not uncommon. They can happen when firefighters battle a nearby blaze or when a water main breaks.

Some harmful substances you should be wary of are the chemicals used to fertilize your grass or the weed killer used in your yard. The cleanser used on your kitchen sink could be hazardous if swallowed, as could the bacteria in the water from your wading pool or waterbed.

Fortunately, keeping your water safe from these contaminants is easy. Take the following precautions to protect your drinking water.

- **Never** submerge hoses in buckets, pools, tubs, or sinks.
- **Always** keep the end of the hose clear of possible contaminants.
- **Do Not** use spray attachments without a backflow prevention device. The chemicals used in your yard are toxic and can be fatal if ingested.
- **Do** buy and install inexpensive backflow prevention devices for all threaded faucets around your home.

They are available at hardware and home-improvement stores.

Residences with an automatic irrigation system, fire sprinkler system or boiler have additional legal requirements for backflow prevention, as do high hazard sites such as hospitals, mortuaries and chemical plants. For more information, contact the Public Works Department's Cross Connection Specialist at 296-5401, extension 2013.

Adapted from *Backflow Prevention: Safeguard Your Water*, by permission. Copyright 2005, American Water Works Association.



Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can 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 metal, 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.

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.

The source of the City of Homer's water is Bridge Creek Reservoir. The reservoir is located about one half mile north of Skyline Drive.

Monitoring results indicate excellent water quality.

Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water.

Vulnerable Population

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.

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 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Definitions & Terms Used in the Table of Detected Contaminants

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

N/A: not applicable

RAA: Running Annual Average

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

Ppb or ug/l: parts per billion or micrograms per liter—one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

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.

Treatment Technique (TT): 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.

Maximum Contaminant Level (MCL): 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.

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

≤: Less than or equal to

pCi/L: =1 trillionth of a Curie –radioactive measurement

What is Household Hazardous Waste?

EPA considers some leftover household products that can catch fire, react, or explode under certain circumstances, or that are corrosive or toxic as household hazardous waste. Products, such as paints, cleaners, oils, batteries, and pesticides can contain hazardous ingredients and require special care when you dispose of them. Check EPA's web site for more info on HHW.

<https://www.epa.gov/hw/household-hazardous-waste-hhw>



Some Examples of HHW:

Automotive:

- Auto batteries, Antifreeze, Oils/Filters, Tires

Lawn and Garden:

- Fertilizers, Lighter Fluid, Pesticides,

Household Items:

- Aerosol cans, Batteries (non-alkaline), Cleaners, Fluorescent bulbs, Furniture polish, Needles/syringes/lancets, Nail polish

Home Improvement:

- Driveway sealer, Paint, Paint remover/stripper/thinner, Solvents

Medications:

- prescription, over-the-counter or illegal, expired, unused, or unwanted drugs--including prescription drugs for pain, like opioids, ointments, vitamins, samples, even medications for pets.

Please dispose of HHW properly, Properly disposing of waste is not just a personal responsibility; some kinds of waste, usually hazardous, must be properly disposed of according to law set forth by the Environmental Protection Agency. Toxic waste can seep into the ground and contaminate water supplies.

Please do not dispose of HHW in the City Sewer System by flushing down you toilet or sink.

KPB Solid Waste Dept. provide a waste disposal program,

Check out their site at:

<http://www.kpb.us/swd-waste/about-solidwaste>

and the Hazardous Waste Program Schedule:

<http://www.kpb.us/images/KPB/SWD/documents/Hazmatflyer.pdf>



City of Homer Police Dept.

The Homer Police Department provides a drug drop box in the station's entrance lobby to safely dispose of drugs, any-time day or night, no questions asked. The service is free and anonymous. And it's easy. Just drop the pills, bottles, tubes or patches – or whatever the form of the drug – with any personal prescription information removed into the special drop box .

<http://www.cityofhomer-ak.gov/police/april-30th-national-drug-take-back-day>

Can what happened to the drinking water in Flint, Michigan happen in Homer?

Homer Public Works is hard at work making sure that your drinking water meets EPA standards and is not contaminated with lead – as appears to be the case in Flint, Michigan. The problems in Flint were first brought to the attention of the public when residents were found to have elevated levels of lead in their blood stream. The corrosive Flint River water may have caused lead from aging pipes to leach into the water supply, causing extremely elevated lead levels.

The City of Homer’s drinking water source does not contain lead and our water distribution system has no lead components. There are some homes that may have some aging plumbing that do. Public Works does three things to make sure what happened in Flint does not happen in Homer:

At the treatment plant, small amounts of sodium hydroxide are added to the water for pH adjustment. This increases the pH of the water, minimizing the potential for the water to be aggressive, and reduces the opportunity for lead and copper to leach into the water.

Orthophosphate, a corrosion inhibitor, is added which creates a thin coating on the inside walls of the pipes in your home, creating a protective barrier between the water and the copper pipes/lead solder.

In homes constructed prior to 1986 (when lead was routinely used in building plumbing work), the City randomly completes testing at the tap to verify that lead and copper levels in the water meet EPA drinking water standards. Based on the encouraging results of these tests in Homer, EPA has approved reduced monitoring of this potential problem, but testing continues.

Public Works completes extensive testing - at the treatment plant, in the distribution system and in the homes of our customers to assure that your drinking water is safe – and that what has happened in Flint does not happen in Homer. Call Public Works at 235-3170 if you have questions about the quality of our drinking water.



Homer, Alaska 99603

OCCUPANT / RESIDENT

PRESORTED STANDARD
U.S. POSTAGE PAID
HOMER, AK
PERMIT NO. 10

City Of Homer, Water Utility
3575 Heath St
Homer, ALASKA 99603
PWS ID#: AK240456

