2017 Yakutat Water Quality Report

Yakutat Water and Wastewater Operations 2017-2018

Water safety and sanitary collection and treatment of wastewater are of great importance to the community of Yakutat. We have a long history of clean and safe water, which we intend to continue into the future. The community plays a significant role as a partner in working toward this goal. This Consumer Confidence Report, which is sent each year, is our report on the results of the previous year. This summary includes details of Yakutat's operations, and includes a report on sampling and testing conducted over the last year.

In July of 2017, we hired a water/sewer operator to take over when our previous operator resigned. Our new operator Adam Williams, is a long-time community resident. Adam immediately began studying for his water and wastewater tests for water collection, water treatment, waste water collection and waste water treatment, then attended training and was successful in passing his tests in all four of the topics, earning Level I Provisional status by last fall. Public Works Director, Ron Beattie, achieved Level I status in all 4 topics, moving up from Level I Provisional. This gave us a depth of training and experience required by the State of Alaska for our water and sewer operations.

Adam is conducting sampling, repairs and maintenance, required documentation and basic cleanup of grounds and facilities. He monitors our sampling schedule, and our facilities are gradually being repaired and organized. The Public Works department as a team has been working on Sanitary Survey Deficiencies for several years, with a majority of the issues now addressed. Work will continue this summer to address the final incomplete items. Fences around our water tanks have been repaired and completed, brush has been removed, and all facilities have been inventoried.

The City and Borough of Yakutat has invested in equipment, parts, and supplies this past year, in order to have the immediate response to breakdown for our aging lift stations, pumps and motors. The Village lift station got a new high-efficiency pump and motor, and a repaired control panel. The High School lift station got two new high-efficiency pumps, and has been significantly less problematic than in recent years. We were able to use grant funds for energy efficiency and self-sufficiency to fund purchases of these pumps. LED lighting was installed in all water and sewer facilities, including in the lift stations themselves to make operations as energy efficient as currently possible. The parts and supplies stock is in good shape, and vehicle repairs continue. New tires and chains have been ordered for vehicles that need them, and new (used) vehicle replacement planning is underway.

With the help of partners including ANTHC (Alaska Native Tribal Health Consortium) and ARWA (Alaska Rural Water Association), the management, planning, and administration of Yakutat's water and wastewater operations improves each year. We continue to work on grants for upgrades to all the infrastructure and facilities. A $300,000 engineering grant is currently in progress, with ANTHC working to provide guidance for future investment and repair. After the planning and engineering stage, construction grants will be pursued. A FEMA Hazard Mitigation Grant is in the planning stages, hopefully to allow for moving the High School lift station, removing the lift station inside of the elementary school, decommissioning the redwood water tank, and replacing the backup generator for the water wells.

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2017 Yakutat Water Quality Report

PWSID# AK 2130172

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

The City of Yakutat water system uses two ground water wells. The first well is located at 59 degrees, 32 minutes, 37.11 seconds North, and 139 degrees, 44 minutes, 03.58 seconds West. The second is located at 59 degrees, 32 minutes, 37.11 seconds North, and 139 degrees, 44 minutes, 01.82 seconds West.

Source water assessment and its availability

A source water assessment for the City of Yakutat water system was completed in 2004 and the results of the assessment are:

WL ARCO WELL #2-WL003 (Groundwater)
The Wellhead/Surface Intake Susceptibility is Low.
The Aquifer Susceptibility is Medium.
The overall vulnerability to potential contaminants is:
Bacteria and Viruses is Low;
Nitrates/Nitrites is Medium;
Volatile Organic Chemicals is High;
Inorganics/Heavy Metals is Medium;
Synthetic Organic Chemicals is Medium;
Other Organic Chemicals is Medium.

WL ARCO.2 WELLS WL002 (Groundwater)
The Wellhead/Surface Intake Susceptibility is Low.
The Aquifer Susceptibility is Medium.
The overall vulnerability to potential contaminants is:
Bacteria and Viruses is Low;
Nitrates/Nitrites is Medium;
Volatile Organic Chemicals is High;
Inorganics/Heavy Metals is Medium;
Synthetic Organic Chemicals is Medium;
Other Organic Chemicals is Medium.

For further information regarding this source water assessment please contact the local water system operator, or the Alaska Resources Library & Information Services (ARLIS) located at 3211 Providence Drive, Room 111, Anchorage, Alaska 99508; phone number 907-272-7547. Or you may call Chris Miller at the ADEC Drinking Water Protection Program at 907-269-4791, or 907-269-7549. You may also access the public source water executive summary data at the ADEC website: http://dec.alaska.gov/eh/dw/dwp/complete.aspx.

Why are there contaminants in my drinking water?

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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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: microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater 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 stormwater runoff, and residential uses; organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA

prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

Persons interested in learning more about the City of Yakutat water system can use the contact information in this report to contact us.

Waivers

ADEC has granted us a monitoring waiver for Synthetic Organic Compounds (SOC). We are not required to monitor during the waivered compliance period. We will continue to apply for waiver renewal at the end of each compliance period.

Monitoring and reporting of compliance data violations:

Total Coliforms and Chlorine

We are required to monitor monthly for Total Coliform (TCR) and at the same time test for chlorine residual and failed to record the chlorine results in January, February, April, July, November, and December. However, we did sample and returned to compliance in 2018.

E Coli

We are required to monitor for E. Coli on a monthly basis and failed to sample for the month of April. We did monitor for E. Coli in the following month and returned to compliance on 6/22/17.

Additional Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Yakutat is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Additional Information for Arsenic

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl2) (ppm)	4	4	.57	.33	.57	2015	No	Water additive used to control microbes
TTHMs [Total Trihalomethanes] (ppb)	NA	80	4.4	NA	NA	2016	No	By-product of drinking water disinfection
Inorganic Contaminants								
Arsenic (ppb)	0	10	.317	NA	NA	2013	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	.0159	NA	NA	2017	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	.119	NA	NA	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	.56	NA	NA	2017	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	.244	NA	NA	2017	No	Erosion of natural deposits

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	.067	2015	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Lead - action level at consumer taps (ppb)	0	15	2.9	2015	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Unit Descriptions	
Term	**Definition**
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	**Definition**
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

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