

# 2016 Dillingham Water Quality Report PWSID# AK2260197

## 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 Dillingham public water system gets its water from two ground water wells.

- Well #2 is located in the Old Courthouse parking lot at 715 Seward Street.
- Well #5 is located in the High School parking lot at 565 Seward Street.

## Source water assessment and its availability

A source water assessment for the groundwater well #2 - WL001 was completed in 2004 and the results of the assessment are:

- The Wellhead/Surface Intake Susceptibility is Low.
- The Aquifer <u>Susceptibility</u> is Very High.

The overall <u>vulnerability</u> to potential contaminants is:

- Bacteria and Viruses is High;
- Nitrates/Nitrites is High;
- Volatile Organic Chemicals is High;
- Inorganics/Heavy Metals is High;
- Synthetic Organic Chemicals is Medium;
- Other Organic Chemicals is High.

## Source water assessment – what does this mean?

The ground water wells the community relies upon draws water from aquifers located beneath the community – and as such, has a greater susceptibility to contamination than if the source water did not have a community above it. An excerpt from the source water assessment for groundwater well #2 states:

Identified potential and current sources of contaminants for the public drinking water source include: aircraft maintenance shops, gasoline stations, motor/vehicle repair shops, domestic wastewater collections systems, large capacity septic systems, injection wells, seafood processing, aboveground fuel drums and tanks, underground fuel tanks, wastewater holding taks, ADEC recognized contaminated sites and leaking underground storage tank (LUST) sites, water supply wells, boat yards and marinas, a floatplane dock/refueling area, electric power generation, medical / veterinary facilities, Laundromats, meat processing, cemeteries, an airport, motor vehicle/general storage yards / facilities, and firehouse.

A source Water Assessment report for the groundwater well #5 (New Well) - WL006 has not been completed for this source.

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: <a href="http://dec.alaska.gov/eh/dw/dwp/complete.aspx">http://dec.alaska.gov/eh/dw/dwp/complete.aspx</a>.

## 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 wishing to learn more about the City of Dillingham public water system may contact us using the contact information in this report.

#### 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

## - Consumer Confidence Report (CCR):

We are required to complete and distribute our CCR to our water consumers by July 1 and submit the certification page to ADEC by October 1. We did complete and submit the CCR to ADEC on time, but did not distribute the CCR to consumers until 8/2/2016 and submitted the certification to ADEC on 8/18/2016.

### Total Coliform:

We are required to collect and submit two total coliform samples monthly and only took one in April. For that reason we received a violation in April. Dillingham took the required two samples the next month and returned to compliance on 5/24/16.

## - Chlorine:

The City of Dillingham is not required to chlorinate its drinking water, but voluntarily does so. Therefore, we are required to sample for the Chlorine residual from within the distribution system when we take each routine total coliform samples. When we did not take the total coliform sample in April, we also did not take the chlorine residual, so incurred a violation. We did sample the following month and return to compliance at that time.

## **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. Dillingham Water System 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 available from the Safe Drinking Hotline exposure is Water or 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.

			Detect	Ra	nge						
Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	In Your Water	Low	High	Sample Date	Violation	Typical Source			
Disinfectants & Disinfection By-Products											
(There is convinci	(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)										
Haloacetic Acids (HAA5) (ppb)	NA	60	4	NA	NA	2016	No	By-product of drinking water chlorination			
TTHMs [Total Trihalomethanes] (ppb)	NA	80	2	NA	NA	2016	No	By-product of drinking water disinfection			
Inorganic Conta	Inorganic Contaminants										
Arsenic (ppb)	0	10	1.1	NA	NA	2013	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes			
Radioactive Con	Radioactive Contaminants										
Alpha emitters (pCi/L)	0	15	9.4	NA	NA	2015	No	Erosion of natural deposits			
Beta/photon emitters (pCi/L)	0	50	4.9	NA	NA	2015	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.			
Radium (combined 226/228) (pCi/L)	0	5	.273	NA	NA	2015	No	Erosion of natural deposits			

	MCLG	MC	Det L, I		Range	-				
Contaminants	or MRDLG	TT,	or Yo		w High	Sam Da		Violat	ion	Typical Source
Volatile Organic Contaminants										
Ethylbenzene (ppb)	700	700	) 1.4	48 N.	A NA	201	13	No		Discharge from petroleum refineries
Xylenes (ppm)	10	10	.009	954 N.	A NA	2013		No		Discharge from petroleum factories; Discharge from chemical factories
Contaminants	MCL	G AL	Your Water	Sample Date	# San Excee	ding		ceeds		Typical Source
Inorganic Contai	ninants	<b>!</b>		!			,			
Copper - action level at consumer taps (ppm)	1.3	1.3	.15	2016	0			No		rrosion of household plumbing systems; Erosion natural deposits
Inorganic Contai	Inorganic Contaminants									
Lead - action level at consumer taps (ppb)	0	15	2.3	2016	0			No		rrosion of household plumbing systems; Erosion natural deposits
<b>Unit Descriptions</b>	S									
Term		Definition								
ppm				pp	m: parts	per n	nillio	on, or r	nilli	grams per liter (mg/L)
ppb				pj	b: parts	per b	illio	n, or m	icro	grams 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 Drink	ing Water	· Defii	nitions							
Term								Defin	itio	n
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.								

Contaminants	MCLG A	Your AL Water	_	# Samples Exceeding AL	Exceeds AL	Typical Source			
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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