

# **TOWN OF CUSICK**

## **DRINKING WATER REPORT**

### **FOR YEAR OF 2020**

This is the 2020 edition of the Town of Cusick annual drinking water report. The Safe Drinking Water Act (SDWA) requires that water utilities issue an annual "Consumer Confidence" Report (CCR) such as this one, to customers in addition to other notices that may be required by law. This CCR details where our water comes from, what it contains, and any risks our water testing and treatment are designed to prevent. In this report, you will see that sampling and testing have been conducted year around and results have been gathered to inform you the customer, about your drinking water. We hope this information will aid you and help you better understand your Water System.

## **WHERE OUR WATER COMES FROM**

Drinking water can come from many sources. Surface water comes from sources such as Lakes, Rivers, and even oceans, or rain. Ground Water comes from sources below the ground such as wells and springs. Our drinking water comes from a surface water source, the Pend Oreille River. Any surface water can naturally pick up minerals, metals, chemicals, and even radioactive materials, along with wastes from animal and human activity as the water flows down the river from the source. Even if the natural surroundings of the river, lakes and streams are remote and relatively free from human activity, surface water can pick up heavy metals and chemicals as it travels in the form of rain clouds across polluted areas far away from these bodies of water. The things that are carried by, dissolved by, or absorbed into pure water are called contaminants.

## **HOW WE MAKE SURFACE WATER POTABLE**

To help ensure the delivery of safe drinking water to customers, our raw source water is treated to remove and disinfect contaminants. We use chlorine for disinfection and then filter the water through a Rapid Sand Filter Plant to remove bacteria, viruses, or protozoa that may be present in the water. We also continually conduct samples of the water before, during, and after treatment to ensure it meets drinking water standards before it is served to anyone. Throughout the treatment process, the water is monitored by measuring instruments and controls to ensure water quality standards are being met. If at any time the water quality does not meet minimum standards, we will notify you, our customers of the event(s).

## **WATER QUALITY SAMPLING**

Water quality sampling is conducted at the Water Treatment Plant and throughout our water distribution system to proportionately gauge the quality of the water we serve all the way to your water tap. Tests and samples are performed consistently depending on the needs and requirements outlined in SDWA and Operation & Maintenance procedures specific to our Water Treatment Plant and Distribution system.

Many tests and samples are performed daily, some weekly, monthly, quarterly, yearly, or by a frequency specified by the Washington State Department of Health (DOH) and the United States Environmental Protection Agency (US EPA).

## THE U.S. EPA AND YOUR WATER...

The US EPA sets standards for our drinking water quality. These standards are regulations that the US EPA sets to control the level of acceptable contaminants in the nation's drinking water. These standards include assessing and protecting water sources, protection of wells and collection systems, ensuring qualified operators treat water, ensuring the integrity of the distribution system, and making information available to the public on the quality of our drinking water.

We treat our water according to both DOH and U.S. EPA's regulations. The U.S. FDA regulates interstate bottled water.

## WHAT IF I HAVE SPECIAL HEALTH CONCERNS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Examples would be people who are immune-compromised, undergoing chemotherapy, people who have had organ transplants, people with HIV or AIDS or other immune disorders. Some elderly people and infants can be particularly at risk from infections or other problems.

These people should seek advice about drinking water from their health care providers. U.S. EPA/CDC guidelines on appropriate means to lessen the risk of infections by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791

## SAMPLING FOR CONTAMINANTS

Over the years we have sampled for many different chemical, contaminants and have found very little (if any) contamination.

Keep in mind that it is to be expected to find at least small amounts of some contaminants. Even bottled drinking water may contain small amounts of contaminants. In many parts of the country the 'tap' water is actually more 'pure' than bottled water. Also keep in mind that the presence of contaminants does NOT necessarily indicate a health risk.

The following section details the types of contaminants source water and drinking water may contain.

## POSSIBLE CONTAMINANTS IN SURFACE WATER

**Microbial Elements** - Such as bacteria, viruses, or protozoa are usually single-cell creatures that for the most part, naturally occurring and harmless to humans, but may be harmful if originating from septic systems, livestock operations or wildlife.

**Inorganic Elements (IOC's)** - Such as heavy metals may be naturally occurring, but are usually the result of urban storm runoff, industry, or domestic wastewater discharge.

**Pesticides & Herbicides** - These may come from home and agricultural uses.

**Radioactive Elements** - Are naturally occurring elements.

**Organic Chemical Elements (SOC's)** - Are usually man-made (synthetic) and vaporize easily (volatile). Petroleum products & degreasers are examples of gas station and/or dry cleaner waste transported by storm water and sewers and discharged into surface water sources.

## SAMPLING FOR BACTERIA, VIRUSES AND PROTOZOA'S

Along with many tests, we sample for fecal coliform bacteria. Fecal coliform bacteria are a range of indicator microorganisms that should not be present in drinking water. The presence of these bacteria in drinking water indicates the possibility of other dangerous microorganisms or viruses that can cause severe illness in humans.

## PUBLIC PARTICIPATION AND INVOLVEMENT

We encourage you to get involved with your publicly owned water system. The Town of Cusick holds monthly council meetings where you are able to get present, current and future information on water projects, as well as information about the current state of our water system. Council meetings are the best way to directly get involved in the activities of our water system.

You may contact me at any time for questions, comments and/or help. My cell phone number is (509) 850-0020. I am usually at work from 8am to 4pm, Monday through Friday.

## COMPLIANCE VIOLATIONS

Due to the age of our Water Treatment Plant and limited staffing, we have had several treatment failures over the last few years. These failures have resulted in violations with the U.S. EPA and Washington DOH, we take violations very seriously.

Despite limited revenue, resources, and staffing, the Town of Cusick will strive to ensure that we are delivering quality potable water to our customers.

### Further Information:

Rustin Rathbun (certified system operator) (509) 850-0020	Spokane Health District (509) 324-1560
Cusick Town Hall (Clerk-Treasurer) (509) 671-9008	State Department of Health (509) 456-3115
State Department of Ecology (509) 329-3400	USEPA Safe Drinking Water Hotline (800) 426-4791

Washington State Department of Health Drinking Water Program home page <http://www.doh.wa.gov/ehp/dw>

The DOH Drinking Water Program has compiled **source water hazard assessment data** for all community water systems in Washington. To access this report, see this web page:

<http://www4.doh.wa.gov/dw/swap/app/login.cfm?app=maps>

Also on the web is the Sentry database, which holds water quality test results and reports on system operation and compliance. The following address is the direct link to it. <http://www.doh.wa.gov/ehp/dw/sentry.htm>

Protecting our source water quality is everyone's responsibility. Carefully follow manufacturer's instructions for use and disposal of herbicides, pesticides, fertilizer, solvents, paints, and other hazardous chemicals. You can help keep our water clean and plentiful. **Do not flush harmful chemicals or drugs down your sink and toilet drains.** Always use safe cleaning solutions. Don't spill gas or oil on the ground. **Be courteous enough not to over water our lawns and follow park watering schedule during hot months.** Use "safe for the environment" fertilizers and weed killers. Add lawn waste only to our compost pile to allow re-use of garden waste to amend our soil. If we all do our part, we can prevent pollution and keep our water resources running clean.

Sample:	Sample Test Result	Sample Frequency	Violation?
Total & Fecal Coliform bacteria (CFU) 2020.	Of the 12 samples collected for total and fecal coliform in 2020. Zero tested positive for coliform bacteria and E.Coli.	The Town collects at least one sample each month for indicator bacteria to ensure the water maintains its purity from the treatment plant to our customer.	No water quality violations were issued for coliform samples tested in 2020.
Filter Effluent Turbidity 2020	Our single highest turbidity level for 2020 was .19 nephelometric turbidity units (NTU). The Town met the 0.3 NTU requirement in 2020 100% of the time.	Filter Effluent Turbidity sample data is recorded continuously and monitored daily at the beginning and end of the treatment process.	No violations.
Free Chlorine Residual 2020	We try and run an avg. of 1.5 Chlorine. Requirements: Min.- .20 ppm - MCL 4.00 ppm	Chlorine residual sample data is recorded continuously at the water treatment plant and monitored daily at representative points throughout the water distribution system.	No violations were issued for free chlorine residual in 2020.

CONTAMINANT	AL	Test Result	MCL	MCLG	Sample Location	Typical Source of Contaminant
Haloacetic Acids (HAA5)	60.40 ug/L	34.700 Highest reported 16.580 Lowest Reported	60.4 ug/L	60.4 ug/L	Representative site near the far end system	Disinfection By-Products (DBP's)- Organic compounds resulting from the interaction of chlorine with natural organic matter in water supplies
Trihalomethanes (THM's)	80.40 ug/L	42.37 Highest reported 29.94 Lowest Reported	80.40 ug/L	80.40 ug/L		
Gross Alpha 5/2018 Every 6 yr.	15.00 pCi/L	3.000	15.00 pCi/L	N/A	Source #1 Post Treatment	Radium (Ra) is a naturally occurring radioactive element that is present in varying amounts in rocks and soil within the earth's crust. Surface water is usually low in radium.
Radium 228 5/2018 Every 6 yr.	5.0 pCi/L	.2220	5.0 pCi/L	N/A		

CONTAMINANT	AL	Test Result	MCL	MCLG	# of sites found above the AL	Typical Source of Contaminant
Lead Taken 7/2019 Every 3 Years	.015 mg/L	.0019 Highest reported .0002 Lowest Reported	N/A	N/A	0 Sites above AL out of 10 sites sampled. 90 <sup>Th</sup> % reported here.	Corrosion of household plumbing systems. Foreign made fixtures
Copper Taken 7/2019 Every 3 Years	1.3 mg/L	.0133 Highest reported .0033 Lowest Reported	N/A	N/A	0 Sites above AL out of 10 sites sampled. 90 <sup>Th</sup> % reported here.	Corrosion of household plumbing systems. Foreign made fixtures
Nitrate ppm Taken 3/2020 Yearly	10	.1000	10	10	Source of nitrate is likely from: Erosion of natural deposits in the ground, runoff from fertilizer use and/or leaching from septic tanks effluent:	

### There were NO Violations issued in 2020 from the Washington State Department of Health

The Washington State Department of Health reduced the monitoring requirements for complete Inorganic (IOC) because the source is not at risk of contamination. The last sample collected for these contaminants was taken on 5/23/2012 and was found to meet all applicable standards. Next sample to be taken in 2021.

#### Notice for the elderly, babies, and immune compromised people:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune compromised people such as those undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune 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. Environmental Protection Agency/Center for Disease Control guidelines on appropriate means to lessen risk of infection by Cryptosporidium and other microbial contaminants are available from the Environmental Protection Agency's **Safe Drinking Water Hotline (1-800-426-4791)**.

## IMPORTANT TERMS AND ABBREVIATIONS DEFINED

**Action Level {AL}**- The concentration of a contaminant, when is exceeded, triggers treatment or other requirements that a water system must follow.

**Disinfection By-Products {DBP's}**- Organic compounds resulting from the interaction of chlorine with natural organic matter in water supplies.

**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 Residual Disinfectant Level {MRDL}**- 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.

**Treatment Technique {TT}**- A required process intended to reduce the level of contaminant in drinking water.

**Parts per Billion {ppb}** - One part of a particular contaminant is present for every billion parts of water.

**Parts per Million {ppm}** - One part of a particular contaminant is present for every million parts of water.

**Not Applicable (NA)**- Means that EPA has not established MCLG's for these substances.

**MFL**- Million fiber per liter.

**pCi/l**- picocuries per liter (a measure of radiation).

**SRL**- State reporting limit.

**Turbidity** is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

**Nitrate** - Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome

**Copper** - Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal physician.

**Lead** - 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.

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. The Town of Cusick 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>