

Annual Drinking Water Quality Report

City of Portland, North Dakota

2018

We're very pleased to provide you with this year's "*Annual Drinking Water Quality Report*." We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is to provide you with a safe and dependable supply of drinking water. We purchase treated ground water from East Central Regional Water District. The ground water is drawn from 8 wells located between the cities of Portland and Clifford. The well water is treated at the Mayville Reverse Osmosis treatment plant.

East Central Regional Water District is involved in North Dakota's Wellhead Protection Program. A copy of the Wellhead Protection Plan along with other relevant information is available from their Clifford office by calling 701-488-2536 during normal business hours.

East Central Regional Water District, in cooperation with the North Dakota Department of Health, has completed the delineation and contaminant/land use inventory elements of the North Dakota Source Water Protection Program. Based on the information from these elements, the North Dakota Department of Health has determined that our source water is not susceptible to potential contaminants.

If you have any questions regarding this report or concerning your water utility, please contact Nadine Rygg, Auditor, 702 Arnold Ave, P.O. Box 189, Portland, North Dakota, call 701-788-2463. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Monday of each month at 6:00 PM in the Portland City Hall. If attendance is desired, please call the office in advance, for further information. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call the office at the number listed above.

The City of Portland would appreciate it if large volume water customers would please post copies of the "*Annual Drinking Water Quality Report*" in conspicuous locations or distribute them to tenants, residents, patients, students, and/or employees, so individuals who consume the water, but do not receive a water bill can learn about our water system.

The City of Portland routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2018. As authorized and approved by the EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data [e.g. for inorganic contaminant], though representative, is more than one year old.

The sources of drinking water (both tap 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 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 storm water, industrial or domestic wastewater discharges, oil production, mining or farming.

Pesticides and herbicides, which 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 by-products 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 be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Not applicable (NA), No Detect (ND)

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter ($\mu\text{g/l}$) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/l) –Pico curies per liter is a measure of the radioactivity in water.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is 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 - The “Goal” (MCLG) is 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.

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.

Maximum Residual Disinfectant Level Goal (MRDLG) – 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.

2018 Test Results for the City of Portland, ND and East Central Regional Water District

<u>Contaminant</u>	<u>MCL G</u>	<u>MCL</u>	<u>Level Detected</u>	<u>Unit Mea sure men t</u>	<u>Range</u>	<u>Date (year)</u>	<u>Violation Yes/No Other Info</u>	<u>Likely Source of Contamination</u>
Lead/Copper (Portland)								
Copper	1.3	AL=1.3	.937 90 th % Value	pp m	NA	2016	1 Sites Exceeded AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead*	0	AL=15	No Detect	ppb	NA	2016	0 Sites Exceeded AL	Corrosion of household plumbing systems, erosion of natural deposits
Disinfectants (Portland)								
Chlorine	MRDLG =4.0	MRDL =4	.6	pp m	0.45 to 0.89	2018	No	Water additive used to control microbes
Stage 2 Disinfection By-Products (TTHM/HAA5) (Portland)								
HAA5	NA	60	2	ppb	N/A	2018	No	By-product of drinking water chlorination
TTHM	NA	80	4	ppb	N/A	2018	No	By-product of drinking water chlorination
Radioactive Contaminants (City of Mayville)								
Gross Alpha including RA, excluding R&N	15	15	0.62	pCi/l	N/A	2017	No	Erosion of natural Deposits
Radium, Combined (226, 228)	0	5	0.16	pCi/l	N/A	2017	No	Erosion of natural Deposits
Uranium, Combined	0	30	0.02	Ppb	N/A	2017	No	Erosion of natural Deposits
Unregulated Contaminants (City of Mayville)								
Alkalinity, Total	N/A	N/A	80.7	ppm	N/A	2017	No	N/A
Bicarbonate as HCO ₃	N/A	N/A	98	ppm	N/A	2017	No	N/A
Calcium	N/A	N/A	27.1	ppm	N/A	2017	No	N/A
Chloride	N/A	N/A	3.24	ppm	N/A	2017	No	N/A
Conductivity @25 UMHOS/CM	N/A	N/A	265	Umho/ cm	N/A	2017	No	N/A
Hardness, Total (AS CAC03)	N/A	N/A	105	ppm	N/A	2017	No	N/A
Magnesium	N/A	N/A	9.1	ppm	N/A	2017	No	N/A
Nickel	N/A	N/A	0.00131	ppm	N/A	2017	No	N/A
pH	N/A	N/A	7.2	pH	N/A	2017	No	N/A
Potassium	N/A	N/A	2.1	ppm	N/A	2017	No	N/A
Sodium	N/A	N/A	7.2	ppm	N/A	2017	No	N/A
Sodium Adsorption	N/A	N/A	0.31	obsvns	N/A	2017	No	N/A

Sulfate	N/A	N/A	46.9	ppm	41.5 to 46.9	2017	No	N/A
TDS	N/A	N/A	141	ppm	N/A	2017	No	N/A
Zinc	N/A	N/A	0.0104	ppm	N/A	2017	No	N/A
Inorganic Contaminants (East Central Regional Water District)								
Arsenic	0	10	3.45	Ppb	N/A	2018	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2	2	0.00986	ppm	N/A	2017	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Nitrate-Nitrite	10	10	0.35	Ppm	N/A	2018	No	Runoff from fertilizer use; Leaching from septic tanks; Erosion of natural deposits.
Fluoride	4	4	0.699	ppm	N/A	2017	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

*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 City of Portland is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. **Use water from the cold tap for drinking and cooking. 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 drinking 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>.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The City of Portland works diligently to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Please contact our office if you have questions.

