



2015 ANNUAL DRINKING WATER QUALITY REPORT

CITY OF PELICAN RAPIDS, MN 56572
DONALD SOLGA, CITY ADMINISTRATOR



The City of Pelican Rapids is pleased to present to you this year's Annual Quality Water Report for the time period of January 1 to December 31, 2015. This report is designed to inform you, the customer, about the quality water and services that we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve this water treatment process. The purpose of this report is to advance the customers' understanding of drinking water and heighten awareness of the need to protect our precious water resources. We are committed to ensuring the quality of your water.

The water provided to customers may meet drinking water standards but the Minnesota Department of Health has determined how vulnerable the source of water may be to future contamination incidents. If you wish to obtain the entire source water assessment regarding your drinking water, please call 651-201-4700 or 1-800-818-9318 (and press 5) during normal business hours. Also, you can view it on line at www.health.state.mn.us/divs/eh/water/swp/swa.

If you have any questions about this report, or concerning the City of Pelican Rapids drinking water, please call City Hall at 218-863-6571. We want our valued customers to be informed about their water utility. If you would like more information about opportunities for public participation in decisions that may affect the quality of this water, please attend one of our City Council Meetings. They are held at the Pelican Rapids City Hall at 315 North Broadway at 5:00 p.m. on the second and last Tuesday of each month.

The City of Pelican Rapids provides drinking water to its residents from a groundwater source: five (5) wells ranging from 108 to 422 feet deep, that draw water from the Quaternary Water Table and Quaternary Buried Artesian aquifers.

Each well has its own pump, which pumps the "raw" ground water, via underground water piping, to the Water Treatment Plant. At this site, the water is routed to an aeration chamber and tank, and then flows, by gravity, to a common splitter box where the water is routed for treatment to four (4) iron removal sand filters. The filtering out of iron and other sediments takes place in these four (4) filters. The water flows by gravity through the top of the filters to the bottom of the filters. These filters are approximately seven (7) feet deep. The bottom layer is two (2) inch rock. The rock decreases in size towards the top of the filter whereas the top layer is anthracite coal. These rocks and coal are referred to as filter media.

The finished water then passes through level controlled pneumatic valves to a 20,000 gallon clear well. The water is then pumped, by demand, by one (1) of three (3) high service pumps from the clear well to a 500,000 gallon elevated storage tank. The storage tank provides for (A) adequate water supply, (B) fire protection, and (C) a pressurized water distribution system. The water flows by gravity from the storage tank through underground water mains to customer water services lines, may they be residential, commercial, or industrial, where the water is metered, before you, the public, consume or use this water.

The filters become dirty and are cleaned or backwashed three (3) times per week. This backwash, or dirty water flows through an underground pipe to the City of Pelican Rapids lagoon system.

The City of Pelican Rapids Water Treatment Plant staff adds three (3) chemicals to the water which you drink and use. Chlorine gas is added before the water is aerated and after the filtration process. Hydrofluosilicic acid and LPC-DP are added before the water is pumped to the elevated storage tank. Chlorine gas is added to your water to kill coliform bacteria which cause illness. Hydrofluosilicic acid is added to your water to help prevent tooth decay. LPC-DP is added to your water as a corrosion inhibitor in the water pipes to prevent the metals of copper and lead from leeching into the water. Chlorine and fluoride residuals are tested on weekdays. LPC-DP residuals are tested twice per week. Also, a quarterly fluoride residual sample is collected and shipped to the Minnesota Department of Health Laboratories for analysis.

A Total Coliform Bacteria test is conducted twice per month. Water samples are collected from selected sampling locations within the City of Pelican Rapids, and shipped to the RMB Labs in Detroit Lakes, MN for analysis. These test results are sent to the City of Pelican Rapids, and the Minnesota Department of Health in Saint Paul, Minnesota.

Total Iron, Total Manganese, and Total Hardness tests are analyzed on a quarterly basis. These tests are conducted at a private laboratory after our staff gathers the samples from selected sites within the City of Pelican Rapids. These three (3) constituents can make the water look, taste, and /or smell bad, but do not cause adverse health effects.

Othro Phosphate and Total Phosphorus tests are conducted as mandated by the Minnesota Department of Health. Samples from three (3) selected sites are gathered and analyzed for p.h. and temperature, at the City of Pelican Rapids Laboratory. The remaining samples are shipped to the Minnesota Department of Health Laboratories for the analysis of Othro Phosphate, and Total Phosphorus.

“I am pleased to report that our drinking water is safe for human consumption, and meets federal and state requirements,” states the City of Pelican Rapids Mayor Brent E. Frazier.

The City of Pelican Rapids public water system is routinely monitored for other constituents in your drinking water according to Federal and State laws. The Minnesota Department of Health conducts the sampling of our water for Nitrate Nitrogen, Mercury, Fluoride, Barium, Sulfate Chloroform and Sodium as mandated by their sampling schedule.

The tables that follow shows the results of the monitoring for the period of January 1 to December 31, 2015. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some of these constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

No contaminants were detected at levels that violated Federal drinking water standards. However, some contaminants were detected in trace amounts that were below legal limits. The table that follows shows the contaminants that were detected in trace amounts last year. (Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for in 2015. If any of these contaminants were detected the last time they were sampled, they are included in the table along with the date that the detection occurred.)

Key to abbreviations:

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

MCL – Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

MRDL – Maximum Residual Disinfectant Level.

MRDLG – Maximum Residual Disinfectant Level Goal.

AL – Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.

90th Percentile Level – This is the value obtained after disregarding 10 percent of the samples taken that had the highest levels. (For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result, which represents 10 percent of the samples.) Note: In situations in which only 5 samples are taken, the average of the two with the highest levels is taken to determine the 90th percentile level.

ppb – Parts per billion, which can also be expressed as micrograms per liter (ug/l).

ppm – Parts per million, which can also be expressed as milligrams per liter (mg/l).

N/A – Not applicable (does not apply).

Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant
			Range (2010)	Average /Result*	
Barium (ppm)	2	2	N/A	.26	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4.0	4.0	.73 -1.1	1.13	State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Haloacetic Acids (HAA5) (ppb)	0	60	N/A	3.9	By-product of drinking water disinfection
Nitrate(as Nitrogen)(ppm)	10.4	10.4	N/A	1.2	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHM (Total Trihalomethanes) (ppb)	0	80	N/A	26.5	By-product of drinking water disinfection

*This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

Contaminant (units)	MRDLG	MRDL	****	*****	Typical Source of Contaminant
Chlorine (ppm)	4	4	.05-.9	.44	Water additive used to control microbes

****Highest and Lowest Monthly Average.

*****Highest Quarterly Average.

Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Typical Source of Contaminant
Copper (ppm)	1.3	1.3	.65	1 out of 10	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	0	15	2.1	1 out of 10	Corrosion of household plumbing systems; Erosion of natural deposits.

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 Pelican Rapids 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>.

Monitoring may have been done for additional contaminants that do not have MCLs established for them and are not required to be monitored under the Safe Drinking Water Act. Results may be available by calling 651-201-4700 or 1-800-818-9318 during normal business hours.

COMPLIANCE WITH NATIONAL PRIMARY DRINKING WATER REGULATIONS

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 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.

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 US Environmental Protection Agency (EPA) prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Safe Drinking Water Hotline at 800-426-4791.

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* are available from the Safe Drinking Water Hotline (1-800-426-4791). Please call our office at 218-863-6572 if you have questions.

On September 19, 2006, the City of Pelican Rapids Wellhead Protection Plan was approved by the Minnesota Department of Health.

Wellhead protection is a means of safeguarding public water supply wells by preventing contaminants from entering the area that contributes water to the well or well field over a period of time. The wellhead protection area is determined by using geologic and hydrologic criteria, such as the physical characteristics of the aquifer and the effects which pumping has on the rate and direction of groundwater movement. A management plan is developed for the wellhead protection area that includes inventorying potential sources of groundwater contamination, monitoring for the presence of specific contaminants, and managing existing and proposed land and water uses that pose a threat to groundwater quality.

The Minnesota Department of Health (MDH) and Minnesota Rural Water Association (MRWA) were the lead agencies for administering the City of Pelican Rapids' Wellhead Protection Program. However, wellhead protection will be effective only through the cooperation of state and local governments, public water suppliers, contaminant source owners, and general public.

During this time period a delineation (drawing or mapping) was authored by a MDH hydro geologist. Also, Wellhead Protection Program Committee meetings and public meetings were conducted, and Interstate Engineering, Inc., of Fergus Falls, was retained as the lead consultant for our Wellhead Protection Plan.

A very clear benefit of Wellhead protection is the emphasis on the prevention of drinking water contamination versus the remediation of a contaminated drinking water supply. The cost of prevention is less than the cost of remediation.

Thank you for allowing us to continue providing you and/or your family with clean, quality water this past year.

The Pelican Rapids Water Treatment Plant Staff strive to provide top quality water to every faucet in Pelican Rapids. 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 and grandchildren's future.

Please note that this report is not being distributed to all customers but is available upon request. In order to reach the many ethnic groups within our community, this report will be posted at West Central Turkey's.

Información importante. Si usted no entiende que alguien lo traduzca para usted ahora.