

2023 Consumer Confidence Report Data PORTAGE WATERWORKS, PWS ID: 11100397

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

Dlaim ntawv tshaabzu nuav muaj lug tseemceeb heev nyob rua huv kws has txug cov dlej mej haus. Kuas ib tug paab txhais rua koj, los nrug ib tug kws paub lug thaam.

Water System Information

If you would like to know more about the information contained in this report, please contact Jerad Royal at (608) 742-4727.

Opportunity for input on decisions affecting your water quality

The common council meets the second and fourth Tuesdays of the month at 6:00 p.m. in the Common Council Chambers at the Municipal Building located at 115 W Pleasant Street, Portage WI 53901.

Health Information

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 (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 systems 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 microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Source(s) of Water

Source ID	Source	Depth (in feet)	Status
3	Groundwater	125	Active
6	Groundwater	145	Temp. out of Service as of
8	Groundwater	269	Active
9	Groundwater	274	Active

To obtain a summary of the source water assessment please contact, Jerad Royal at (608) 742-4727.

Educational Information

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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Definitions

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
HA and HAL	HA: Health Advisory. An estimate of acceptable drinking water levels for a chemical substance based on health effects information. HAL: Health Advisory Level is a concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice. Health Advisories are determined by US EPA.
HI	HI: Hazard Index: A Hazard Index is used to assess the potential health impacts associated with mixtures of contaminants. Hazard Index guidance for a class of contaminants or mixture of contaminants may be determined by the US EPA or Wisconsin Department of Health Services. If a Health Index is exceeded a system may be required to post a public notice.
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred or why total coliform bacteria have been found in our water system, or both, on multiple occasions.
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.
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.
MFL	million fibers per liter
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.
MRDLG	Maximum residual disinfectant 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.
mrem/year	millirems per year (a measure of radiation absorbed by the body)
NTU	Nephelometric Turbidity Units
pCi/l	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)
ppt	parts per trillion, or nanograms per liter

Term	Definition
ppq	parts per quadrillion, or picograms per liter
PHGS	PHGS: Public Health Groundwater Standards are found in NR 140 Groundwater Quality. The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.
RPHGS	RPHGS: Recommended Public Health Groundwater Standards: Groundwater standards proposed by the Wisconsin Department of Health Services. The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.
SMCL	Secondary drinking water standards or Secondary Maximum Contaminant Levels for contaminants that affect taste, odor, or appearance of the drinking water. The SMCLs do not represent health standards.
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Detected Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

Disinfection Byproducts

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2023)	Violation	Typical Source of Contaminant
HAA5 (ppb)	B 10	60	60	5	5		No	By-product of drinking water chlorination
TTHM (ppb)	B 10	80	0	19.1	19.1		No	By-product of drinking water chlorination
HAA5 (ppb)	B 17	60	60	3	3		No	By-product of drinking water chlorination
TTHM (ppb)	B 17	80	0	1.2	1.2		No	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2023)	Violation	Typical Source of Contaminant
BARIUM (ppm)		2	2	0.016	0.015 - 0.016		No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE (ppm)		4	4	0.6	0.4 - 0.6		No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)		100		3.5000	0.0000 - 3.5000		No	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
NITRATE (N03-N) (ppm)		10	10	0.81	0.00 - 0.81		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)		n/a	n/a	98.50	49.60 - 98.50		No	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2023)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.3710	0 of 30 results were above		No	Corrosion of household plumbing systems; Erosion of natural

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2023)	Violation	Typical Source of Contaminant
				the action level.			deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	6.20	1 of 30 results were above the action level.		No	Corrosion of household plumbing systems; Erosion of natural deposits

PFAS Contaminants with a Recommended Health Advisory Level

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a large group of human-made chemicals that have been used in industry and consumer products worldwide since the 1950. The following table list PFAS contaminants which were detected in your water and that have a Recommended Public Health Groundwater Standard (RPHGS) or Health Advisory Level (HAL). There are no violations for detections of contaminants that exceed the RPHGS or HAL. The RPHGS are levels at which concentrations of the contaminant present a health risk and are based on guidance provided by the Wisconsin Department of Health Services.

Typical Source of Contaminant		Drinking water is one way that people can be exposed to PFAS. In Wisconsin, two-thirds of people use groundwater as their drinking water source. PFAS can get in groundwater from places that make or use PFAS and release from consumer products in landfills.			
Contaminant (units)	Site	RPHGS or HAL (PPT)	Level Found	Range	Sample Date (if prior to 2023)
PFBS (ppt)		450000	1.84	0.00 - 2.39	
PFBA (ppt)		10000	1.21	0.00 - 1.22	
PFHXS (ppt)		40	3.39	0.00 - 5.84	
PFHXA (ppt)		150000	1.30	0.00 - 1.32	
PFOA (ppt)		20	0.67	0.00 - 0.74	
PFOA AND PFOS TOTAL (ppt)		20	0.30	0.00 - 0.61	

Radioactive Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2023)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)		15	0	3.6	2.3 - 3.6	1/7/2020	No	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)		5	0	0.7	0.4 - 0.7	1/7/2020	No	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)		n/a	n/a	3.8	3.1 - 3.8	1/7/2020	No	Erosion of natural deposits
COMBINED URANIUM (ug/l)		30	0	1.2	0.3 - 1.2	1/7/2020	No	Erosion of natural deposits

Contaminants with a Public Health Groundwater Standard, Health Advisory Level, or a Secondary Maximum Contaminant Level

The following table lists contaminants which were detected in your water and that have either a Public Health Groundwater Standard (PHGS), Health Advisory Level (HAL), or a Secondary Maximum Contaminant Level (SMCL), or both. There are no violations for detections of contaminants that exceed Health Advisory Levels, Public Health Groundwater Standards or Secondary Maximum Contaminant Levels. Secondary Maximum Contaminant Levels are levels that do not present health concerns but may pose aesthetic problems such as objectionable taste, odor, or color. Public Health Groundwater Standards and Health Advisory Levels are levels at which concentrations of the contaminant present a health risk.

Contaminant (units)	Site	SMCL (ppm)	PHGS or HAL (ppm)	Level Found	Range	Sample Date (if prior to 2023)	Typical Source of Contaminant
SULFATE (ppm)		250		24.00	8.20 - 24.00		Runoff/leaching from natural deposits, industrial wastes

Unregulated Contaminants

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. EPA required us to participate in this monitoring.

Contaminant (units)	Level Found	Range	Sample Date (if prior to 2023)
NAPHTHALENE (ppb)	0.11	0.00 - 0.42	

Additional Health Information

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. Portage Waterworks 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 www.epa.gov/safewater/lead.

PORTAGE WATER UTILITIES

Cross Connection Prevention

CITY OF PORTAGE



'Where the North Begins'

What is a cross connection?

It is a connection or potential connection between any part of a water supply system and another environment containing substances in a manner that, under any circumstances, would allow the substances to enter the water supply system by means of a back-siphonage or back pressure.

In simple terms please?

The public water system is a closed system, but there are thousands of private connections to it. A situation can occur where contaminated water or fluids have the opportunity to be drawn back (back flow or back-siphonage) into our public water supply piping and possibly be ingested by an individual. It may occur where toilet tank water could possibly be drawn back in to the drinking water piping by means of a noncompliant fill valve for the tank; or dirty water from a mop bucket would be drawn back into the drinking water piping by the absence of a backflow protection device on the faucet; or lastly contaminated boiler water could be drawn back into the drinking water piping by the lack of a backflow protection device.

What causes the reverse flow of water in the piping system?

Generally, a low pressure drop upstream from the water meter or connection. The drop in pressure can occur for a variety of reasons but a common one is when a fire department hooks up to a hydrant and subsequently draws large amounts of water to fight a fire. These events are usually unplanned and it is difficult to predict their effect on the water system.

While not an everyday occurrence, a contamination could lead to serious injury or death. A small amount of prevention can be worth a large amount of cure. The good news is for most small businesses and home owners, the prevention costs are most times under \$20. And many times, the work involves a simple repair by the owner or maintenance person.

So how will I know if I need to install protection devices?

Inspections by the Water Utility shall occur at 10 year intervals for small businesses that have similar fixtures found in homes. The results of the inspection/survey will be given to the customer with any violations that are to be corrected. Most times, the fix is simple and a call can be made to the Water Utility informing them that the work is completed. Time will be scheduled to revisit the customer and review the repair.

PORTAGE WATER
UTILITIES

115 W Pleasant St
Portage, WI 53901

Phone: 608-742-4727

Website: [www.
portagewi.gov](http://www.portagewi.gov)

Examples of Potential Cross Connections

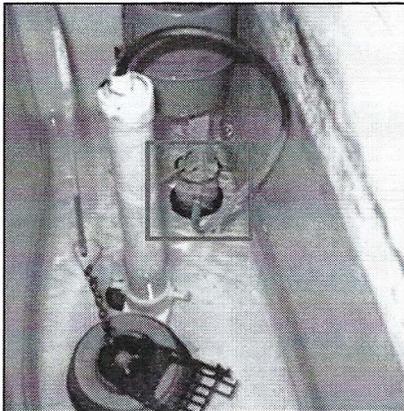


Figure 1:



Figure 2:

In **Figure 1**, the photo at the left shows an **improper fill valve** with a toilet ballcock where the cutoff is located **below the water level** (Fluid Master 200). In **Figure 2**, the photo at the right shows a **compliant fill valve** now installed with the ballcock cutoff located **above the water line**, thus preventing the opportunity for back siphonage to occur.

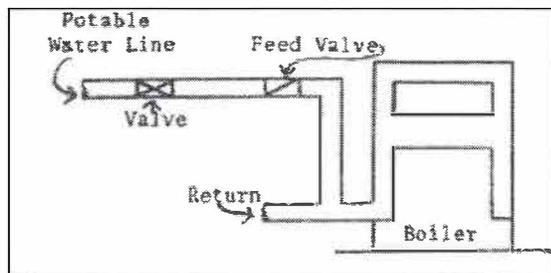


Figure 3:



Figure 4:

Possible cross connections to a pressurized system, such as a hot water boiler **shown in Figure 3**, are not uncommon. In this case backflow can occur by back pressure and by back siphonage. Back pressure-backflow can occur when the water pressure in the boiler or pressurized tank exceeds the positive pressure in the water distribution lines. **Figure 4** shows a **backflow preventer (ASSE 1012)** device that can be used on the supply line to the boiler to prevent backflow.



Figure 5:



Figure 6:

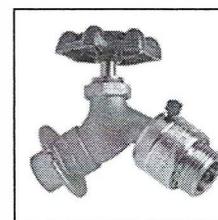


Figure 7:

Figure 5 on the left, displays an unprotected garden hose faucet. A backflow situation can also occur on a laundry tub or mop sink where a threaded faucet, without protection, allows a hose to be connected. The device to repair the faucet is called a **backflow preventer (ASSE 1011)** and is shown at **Figure 6**. It is used on threaded water faucets where a hose can be connected. **Figure 7** shows the device simply **installed on a similar faucet** and thus eliminating the opportunity for backflow to occur.