



# 2021 CONSUMER CONFIDENCE REPORT DATA

## PEWAUKEE CITY WATER AND SEWER UTILITY, PWS ID: 26802149

### Water System Information

If you would like to know more about the information contained in this report, please contact Jane E. Mueller, Utility Manager at (262) 691-0804.

### Opportunity for Input on Decisions Affecting Your Water Quality

City of Pewaukee Common Council meets the first and third Monday of the month at 6:30 p.m. at Pewaukee City Hall, Common Council Chambers, W240N3065 Pewaukee Road, Pewaukee, WI 53072, unless otherwise stated.

### 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 the 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 at (800) 426-4791.

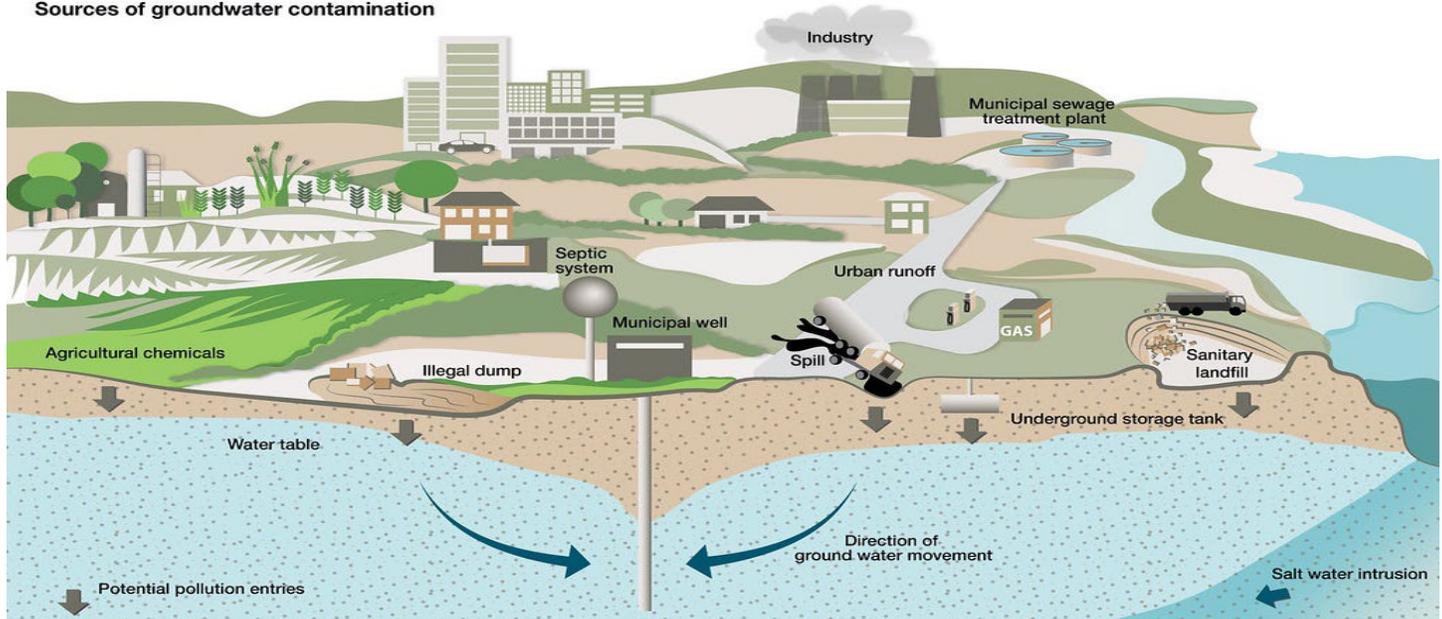
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS, or other immune systems disorders, some elderly, and infants 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 by calling the EPA's Safe Drinking Water Hotline.

### Source(s) of Water

Source ID	Source	Depth (in feet)	Status
1	Groundwater	1200	Active
2	Groundwater	1075	Active
3	Groundwater	340	Active
4	Groundwater	350	Active
5	Groundwater	1000	Active
6	Groundwater	1415	Active

Source ID	Source	Depth (in feet)	Status
7	Groundwater	1344	Active
8	Groundwater	180	Active
9	Groundwater	1400	Active
10	Groundwater	182	Active
11	Groundwater	1180	Active
12	Groundwater	154	Active

Sources of groundwater contamination



To obtain a summary of the source water assessment, please contact Jane Mueller at (262) 691-0804.

### **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 byproducts 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 EPA provides regulations that limits 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**

<b>Term</b>	<b>Definition</b>
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
HAL	Health Advisory Level: The concentration of a contaminant which, if exceeded, poses a health risk and may require a system 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
ppq	parts per quadrillion, or picograms per liter
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 2021)	Violation	Typical Source of Contaminant
HAA5 (ppb)	MDBP - 2	60	60	4	4		No	By-product of drinking water chlorination
TTHM (ppb)	MDBP - 2	80	0	11.5	11.5		No	By-product of drinking water chlorination

### Inorganic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2021)	Violation	Typical Source of Contaminant
BARIUM (ppm)	2	2	0.060	0.060		No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE (ppm)	4	4	0.4	0.4		No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)	100		1.0000	1.000		No	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
NITRATE (NO3-N) (ppm)	10	10	0.22	0.00 - 0.22		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)	n/a	n/a	37.00	37.00		No	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2021)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.1400	0 of 20 results were above the action level.	9/15/2020	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	3.30	0 of 20 results were above the action level.	9/15/2020	No	Corrosion of household plumbing systems; Erosion of natural deposits

### Radioactive Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2021)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)	15	0	7.2	-0.4 – 8.2		No	Erosion of natural deposits
RADIUM (226 + 228) (pCi/l)	5	0	4.2	0.0 – 4.2		Yes, Ongoing	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)	n/a	n/a	7.5	0.0 - 8.4		No	Erosion of natural deposits
COMBINED URANIUM (ug/l)	30	0	0.6	0.3 - 0.7		No	Erosion of natural deposits

### Contaminants with a Health Advisory Level or Secondary Maximum Contaminant Level

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

Contaminant (units)	SMCL (ppm)	HAL (ppm)	Level Found	Range	Sample Date (if prior to 2021)	Typical Source of Contaminant
ALUMINUM (ppm)	0.05	0.2	0.03	0.00-0.03	8/10/2017	Runoff/leaching from natural deposits
CHLORIDE (ppm)	250		200.00	0.00-200.00	3/21/2017	Runoff/leaching from natural deposits, road salt, water softeners
IRON (ppm)	0.3		0.40	0.05-0.40	3/21/2017	Runoff/leaching from natural deposits, industrial wastes
MANGANESE (ppm)	0.05	0.3	0.06	0.01-0.06	3/21/2017	Leaching from natural deposits
ZINC (ppm)	5		0.06	0.00-0.06	3/21/2017	Runoff/leaching from natural deposits, industrial wastes

#### **Health Effects for Any Contaminants with MCL Violations/Action Level Exceedances/SMCL Exceedances/HAL Exceedances**

Contaminant	Health Effects
IRON	Waters containing iron in quantities above the SMCL are not hazardous to health but may be objectionable for taste, odor, or color.
MANGANESE	Waters containing manganese in quantities above the SMCL are not hazardous to health but may be objectionable for taste, odor or color.
RADIUM (226 + 228)	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

#### **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. The City of Pewaukee Water & Sewer Utility 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 by calling the Safe Drinking Water Hotline at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

#### **Corrective Actions Taken**

The City of Pewaukee is under a DNR Consent Order to comply with the radium standard at Well #5. Initial studies recommended the installation of a Hydrous Manganese Oxide (HMO) treatment system to remove/reduce the radium to acceptable levels. In Spring 2021, the Utility discovered that the well bore hole had failed, making this site unreliable for long-term use. Consultants investigated several alternatives for the loss of the use of Well #5. In December 2021, the Common Council chose to install a water main extension that will provide redundancy in water supply and fire protection for the customers in the Well #5 service area. The Utility is currently seeking project approvals from the Wisconsin Public Service Commission and the Department of Natural Resources. We anticipate an early fall bidding of the project to allow for winter construction for the water main crossing of the Fox River.

Well #5 is currently operating on a very limited basis. The well will be pumped periodically and will be available for use should an emergency arise, or if the water demand increases during the summer peak water demand season.

If you have questions about this report, please contact Jane Mueller, Utility Manager at (262) 691-0804.