

2015 Consumer Confidence Report Data

PEWAUKEE CITY WATER AND SEWER UTILITY, PWS ID: 26802149

The City of Pewaukee is pleased to present the Annual Drinking Water Quality Report. The report is designed to inform you about the quality of the drinking water the City delivers to you every day. This report communicates to the public the source of the City's water and also summarizes the detected compounds from the sampling results for the year ending 2015. Our goal is to provide you with safe and dependable drinking water.

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).

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.

Water System Information

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

Opportunity for input on decisions affecting your water quality

The City of Pewaukee, Public Works Committee meets at W240N3065 Pewaukee Rd., Pewaukee in the Common Council Chambers at 6:00pm. Meetings are on the 4th Thursday of the following months: January, March, May, July, September and November.

Source(s) of Water

Source ID	Source	Depth (Ft.)	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 (Ft.)	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

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 2015)	Violation	Typical Source of Contaminant
HAA5 (ppb)	MDBP - 2	60	60	1	1		No	By-product of drinking water chlorination
TTHM (ppb)	MDBP - 2	80	0	14.1	14.1		No	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
ANTIMONY TOTAL (ppb)		6	6	0.1	0.0 - 0.1	6/11/2014	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC (ppb)		10	n/a	1	0 - 1	6/11/2014	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)		2	2	0.200	0.028 - 0.200	6/11/2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CADMIUM (ppb)		5	5	0.1	0.0 - 0.1	6/11/2014	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
FLUORIDE (ppm)		4	4	0.4	0.3 - 0.4	6/11/2014	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)		100		8.0000	0.6300 - 8.0000	6/11/2014	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	0.21	0.00 - 0.21		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)		n/a	n/a	40.00	13.00 - 40.00	6/11/2014	No	n/a
THALLIUM TOTAL (ppb)		2	0.5	0.2	0.0 - 0.2	6/11/2014	No	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.1800	0 of 20 results were above the action level.	7/23/2014	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	6.40	1 of 20 results were above the action level.	7/23/2014	No	Corrosion of household plumbing systems; Erosion of natural deposits

Radioactive Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)		15	0	6.4	0.8 - 10.4		Yes, Ongoing	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)		5	0	4.5	0.3 - 5.2		Yes, Ongoing	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)		n/a	n/a	13.3	0.8 - 18.8		No	Erosion of natural deposits
COMBINED URANIUM (ug/l)		30	0	5.1	0.0 - 5.8		No	Erosion of natural deposits

Health effects for any contaminants with MCL violations/Action Level Exceedances

Contaminant	Health Effects
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.
GROSS ALPHA, EXCL. R & U	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
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.

Corrective Actions Taken

The City of Pewaukee Water & Sewer Utility conducted pilot testing on two different types of water treatment devices that could potentially reduce/remove the gross alpha from the water at Well #5. Current water test results from sampling conducted in 2015 indicate that the City is in compliance with the gross alpha levels at this well. However, we will continue seeking avenues to maintain our compliance with the <15 picocuries per liter of gross alpha.

The Utility will start conducting a pilot study of the water at Well #1 in late May 2016. We anticipate the testing to last 6-8 weeks. Once the pilot data is available, a treatment plan can be developed and associated approvals will be obtained. We anticipate construction to take place 2017. Meanwhile, we will continue to use this well at a reduced rate and on a minimal schedule.

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. Pewaukee City Water and 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 from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

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.
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
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.