

2023
Drinking Water Consumer Confidence Report
Racine Village

Introduction and General Information:

The Village of Racine has prepared this report to provide information to you the consumer. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and system contacts. It has always been the intent of the village water system to provide a high-quality water that meets or exceeds the standards set forth by the Ohio EPA. The village has and will always stay committed to the goal of providing a safe and pleasant drinking water. Anyone wanting more information on their drinking water can contact John Holman, Village Administrator at 740-949-2296 or at racinepsd@yahoo.com. Public participation and comments are encouraged at regular meetings of village council, which meets on the first Monday of every month at 6:30pm at the village hall. The Village of Racine had an unconditional license to operate our water system in 2023.

Where does your water come from?

The village water system acquires its drinking water from a groundwater source known as the Ohio Valley Aquifer, which is a sand and gravel aquifer. Currently the village has five wells in service. The location of the water system well field is located off of Third and Vine Streets.

Source Water Assessment and its Availability:

Completed in 2003 and updated in 2017 the Ohio EPA completed a study to identify potential contaminant sources and provide guidance on protecting our drinking water source. It was determined from this study that the aquifer supplying our drinking water has a high susceptibility to contamination. This susceptibility to contamination is due to the:

- Presence of a permeable layer of soil overlying the aquifer,
- Presence of a significant number of potential contaminant sources in the protection area,
- Presence of manmade contaminants (nitrate) in treated water at this time does not suggest that the ground water has been impacted by any significant levels of chemical contaminants. If you would want more information on this source water assessment or you need to find your Source Water Assessment information, contact John Holman at 740-949-2296.

What Are Sources of Contamination to Drinking Water?

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 land surface 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:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- B. Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining or farming;

C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;

D. 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;

E. Radioactive contaminants, which can be naturally occurring or be the results of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations, which limits the amount of certain contaminants in water provided by public water systems. FDA 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 amount 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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Who Needs to Take Special Precautions?

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 infection. 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 Safe Drinking Water Hotline (1-800-426-4791).

About Your Drinking Water.

The EPA requires regular sampling to ensure drinking water safety. The Racine Village water system conducted sampling for bacteria, inorganic, disinfection byproducts, synthetic organic, lead and copper. Samples for a total of 65 different contaminants most of which were not detected in the village water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentration of these contaminants do not change frequently. Some of the data, though accurate, are more than one year old. Listed below is information on those contaminants that was found in the village drinking water.

PFAS Sampling (Per-and Polyfluoroalkyl Substances).

In 2020, our PWS was sampled as part of the State of Ohio's Per- and Polyfluoroalkyl Substances (PFAS) Sampling initiative. Results from this sampling indicated PFAS were detected in our drinking water below the action level established by Ohio EPA. Follow up monitoring is being conducted. For more information about PFAS, and to view our latest results please visit pfas.ohio.gov.

Disinfectants and Disinfection By-Products	Collection Date	Level Found	Range of Detections	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2023	2.6	0.5 – 1.8	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Total Trihalomethanes (TThm)* D201 D202	2023	28.9	18.7 - 28.9	N/A	80	ppb	N	By-product of drinking water chlorination.
HAA5 D201 D202	2023	8.2	5.7 - 8.2	N/A	60	Ppb	N	By-product of drinking water chlorination.
Inorganic Contaminants	Collection Date	Level Found	Range of Detections	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2023	3.2	NA	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium	2021	0.0581	NA	2	2	ppm	N	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Arsenic	2021	14	ND -14	0	10	Ppb	N	Arsenic- Erosion of natural deposits; Runoff from orchards
Cyanide	2021	1	NA	200	200	ppb	N	Discharge from plastic and fertilizer factories, steel/metal factories
Fluoride	2021	0.13	NA	4	4	Ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Copper	Collection Date	90th Percentile	# of Samples over AL	MCLG	Action Level (AL)	Units	Violation	Likely Source of Contamination
Copper	2023	0.37	0	1.3	1.3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

0 out of 10 samples were found to have copper levels in excess of the action level of 1.3 ppm
0 out of 10 samples were found to have lead levels in excess of the action level of 15

Lead Educational 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 Village of Racine water system 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 two 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>. During this reporting period the village water system conducted 10 lead and copper samples at various homes throughout the distribution system. There was no lead detected in any of these samples.

Note: the action levels for lead is set at 15ppb and copper is set at 1.3ppm.

Arsenic Educational Information:

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increase risk of getting cancer.

DEFINITIONS:

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Contaminant Level (MCL): The highest level of 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.

Parts Per Million (PPM) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one bad apple in 2000 barrels.

Parts Per Billion (PPB) or Micrograms per Liter (mg/L) are units of measure for concentration of a contaminant.

A part per billion corresponds to one bad apple in 2 million barrels.

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

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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.

Per-and polyfluoralky Substances (PFAS): are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing.