



2025 CARMEL WATER QUALITY REPORT



We are pleased to report that your tap water met all Environmental Protection Agency (EPA) and state standards in 2025.



CITY OF CARMEL
Sue Finkam, Mayor
One Civic Square
Carmel, IN 46032
PWSID# 5229004

Water Purity, What's Normal and Safe

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances.

All 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 EPA's Safe Drinking Water Hotline at (800-426-4791).

What if I Have a Compromised Immune System?

Raw water may contain cryptosporidium and other microbial contaminants, which water treatment technologies effectively inactivate. However, some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as those 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/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Carmel Utilities maintains the highest drinking water standards for the City of Carmel.



For maintenance concerns or questions about hydrants, taps or mains, call the water utilities' operations facility at 317-733-2855 or email Utlcustomerservice@carmel.in.gov.

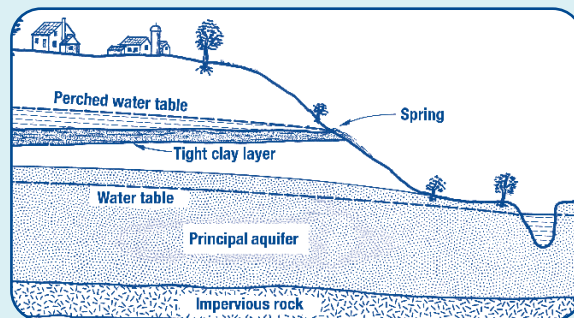
City of Carmel Council meetings are regularly held on the 1st and 3rd Monday of each month, starting at 6 p.m.

If you have any questions about this report or concerning your water utility, please contact Carmel Utilities at 317-571-2443 or go to the Utilities page on the City of Carmel website at www.carmel.in.gov

What is a Drinking Water Quality Report?

Carmel Utilities provides safe high-quality drinking water and routinely monitors for constituents in your water according to Federal and State laws. The inside table shows the results of our monitoring for the period of January 1 to December 31, 2025.

As water travels over the land or underground, it can pick up substances or contaminants. The table gives a quick look at some of the substances that the EPA requires the utility to test for. The contaminant is listed to the left, followed by the maximum amount allowed by regulations and then the amount that we found in our water. The tests are performed on treated or "finished" water (excluding the "untreated" samples in this chart.) See the definitions at the bottom of the table.



Tell Me More About Groundwater

Carmel's water supply comes from groundwater under a direct influence surface water source called an aquifer. The aquifer is commonly referred to as the Upper White River Basin Watershed. 20 wells located throughout the city pump water from the aquifer to five water plants for treatment. The production wells range in depth from 49 to 108 feet deep, are 10 to 36 inches in diameter, and have pumping capacities ranging from 175 to 2,800 gallons per minute.

If you have questions about source water or our plan to protect, please email dwcompliance@carmel.in.gov.

Carmel Water is Safe – Older Homes May Consider Testing for Lead

Carmel's water meets all federal and state safety standards. Because lead can enter water through older household plumbing, testing your home may provide added peace of mind.

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breast-fed) and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

To better understand potential lead service lines in your area, explore our service line inventory map at <https://pws-ptd.120wateraudit.com/Carmel-IN>

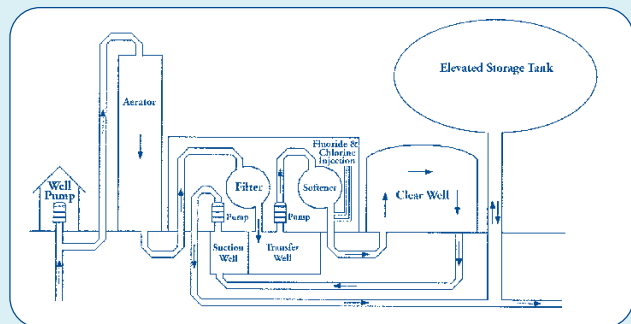
You may also choose to have your water tested. Learn more about lead, testing, and how to reduce exposure at www.epa.gov/safewater/lead or call the EPA Safe Drinking Water Hotline at 800-426-4791.

What's in my Drinking Water Before it's Treated?

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 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 storm 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, storm water runoff and residential uses.
- Organic chemicals 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.
- Radioactive materials which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.



Carmel's 3-Step Water Treatment Process

1) Iron Removal – The water treatment plant aerates the water to oxidize the soluble iron found naturally in well water. The oxidized iron adheres to itself forming clumps that are filtered out of the water by iron filters.

2) Water Softened – Then, the iron filtered water passes through a process where the water is softened to eight grains hardness, which is considered moderately hard water. Should you desire water that has been softened to zero (0) grains hardness, a home softener will be needed. During periods of extremely high summer water usage, the level of softening may be decreased to meet customer demand.

3) Chlorine and Fluoride Added – Chlorine is added to destroy any harmful bacteria present and to maintain a level of protection as the water travels through the distribution system. Fluoride is added to help strengthen resistance to cavities in teeth. Following the injection of chlorine and fluoride, the water enters the distribution system to be delivered to Carmel's homes and businesses.



Carmel Water Utility 2025 — Water Quality Results

REGULATED SUBSTANCES							PWSID# 5229004
SUBSTANCES (UNIT OF MEASURE)	MCL (MRDL)	MCLG [MRDLG]	SYSTEM WIDE [AVG]	SYSTEM WIDE [MAX]	RANGE LOW-HIGH	VIOLATIONS	TYPICAL SOURCE
Barium (ppm)	2	2	0.106	0.106	ND - 0.106	NO	Discharge of drilling wastes and metal refineries; erosion of natural deposits
Beta/Photon emitters (mrem/yr) (2021 data)	4	0	N/A	74	3.1 - 74	NO	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation
Chlorine (ppm)	4	4	1.01	1.46	0.52 - 1.46	NO	Water Additive Used to Control Microbes
Combined Radium (pCi/L) (2021 data)	5	0	N/A	2.4	ND - 2.4	NO	Erosion of Natural Deposit
Fluoride (ppm)	4	4	0.69	1.09	0.05 - 1.09	NO	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Gross Alpha, Excl. Radon & Uranium (pCi/L) (2021 data)	15	0	N/A	5.1	0.1 - 5.1	NO	Erosion of Natural Deposit. Certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
Haloacetic Acid [HAA] (ppb) SS#11	60	N/A	14 (LRAA)	16.4	11.2 - 16.4	NO	By product of Drinking Water Disinfection
Haloacetic Acid [HAA] (ppb) SS#13	60	N/A	15 (LRAA)	20.8	11.9 - 20.8	NO	By product of Drinking Water Disinfection
Haloacetic Acid [HAA] (ppb) SS#16	60	N/A	13 (LRAA)	14.4	11.8 - 14.4	NO	By product of Drinking Water Disinfection
Haloacetic Acid [HAA] (ppb) SS#23	60	N/A	15 (LRAA)	20.4	11.9 - 20.4	NO	By product of Drinking Water Disinfection
Nitrate (ppm)	10	10	BDL	BDL	BDL	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radium-226 (pCi/L) (2021 data)	5	0	N/A	1.6	ND - 1.6	NO	Erosion of Natural Deposit
Radium-228 (pCi/L) (2021 data)	5	0	N/A	0.8	0.8	NO	Erosion of Natural Deposit
Total Trihalomethanes [TTHMs] (ppb) SS#11	80	N/A	29 (LRAA)	32.6	21.4 - 32.6	NO	By product of Drinking Water Disinfection
Total Trihalomethanes [TTHMs] (ppb) SS#13	80	N/A	37 (LRAA)	46.9	25.9 - 46.9	NO	By product of Drinking Water Disinfection
Total Trihalomethanes [TTHMs] (ppb) SS#16	80	N/A	26 (LRAA)	28.6	21.3 - 28.6	NO	By product of Drinking Water Disinfection
Total Trihalomethanes [TTHMs] (ppb) SS#23	80	N/A	37 (LRAA)	46.8	24.0 - 46.8	NO	By product of Drinking Water Disinfection
Total Coliform Bacteria (% positive samples)	5%	N/A	0.10%	1.08%	0% - 1.08%	NO	Naturally Present in the Environment

*Secondary standards are non-mandatory guidelines established by the EPA to assist utilities in managing drinking water for aesthetic considerations, such as taste, odor, and color. These contaminants are not considered to present a risk to human health at the SMCL.

SECONDARY CONTAMINANTS	SMCL	MCGL					
Hardness (grains/gal)	NA		13.3	37	4 - 37	NO	Erosion of Natural Deposit; Leaching
Iron (ppm)	0.3		0.04	0.05	ND - 0.05	NO	Erosion of Natural Deposit; Leaching
pH (Units)	6.5 - 8.5		7.67	8.18	6.91 - 8.18	NO	
Sodium (ppm)	N/A		132.7	196	67.8 - 196	NO	Erosion of Natural Deposit; Leaching

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

	TT	MONTHS MONITORED	%	HIGHEST MEASUREMENT	MONTH OCCURRED	VIOLATION	TYPICAL SOURCE
Turbidity (NTU) Plant 1A	100% < 1	12	100%	0.12	April	NO	Soil Runoff
Turbidity (NTU) Plant 1B	95% < 0.3		100%	0.11	April	NO	Soil Runoff

Tap water samples were collected for lead and copper analyses from samples sites throughout the community.

	AL	MCLG	#OF SITES OVER AL	90TH PERCENTILE	RANGE LOW TO HIGH	VIOLATION	TYPICAL SOURCE
Copper (ppm) (2023 data)	1.3	1.3	0 of 30 > AL	0.144	0.043 - 0.156	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching
*Lead (ppb) (2023 data)	15	0	0 of 30 > AL	2.94	1.11 - 5.63	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching

Untreated Source Water Data

	TT	MONTHS MONITORED	SYSTEM WIDE (AVG)	SYSTEM WIDE (MAX)	RANGE LOW-HIGH	VIOLATIONS	TYPICAL SOURCE
TOC (ppm)		12	ND	1.56	ND - 1.56	NO	Naturally present in the environment

Unregulated Contaminant Monitoring Rule (UCMR)

Carmel Utilities collected samples under the U.S. EPA Unregulated Contaminants Monitoring Rule (UCMR) for 29 PFAS compounds and Lithium. This monitoring is being conducted so the EPA can receive occurrence data for these compounds to determine what additional compounds may need to be regulated in drinking water. We collected samples in February, May, June, August, October and November of 2023 in compliance with UCMR and additional voluntary samples and detected the compounds shown in this table. These compounds are not regulated at this time. If you would like to view our results, contact our office at 317-571-4141 and/or email dwcompliance@carmel.in.gov.

	COLLECTION MONTHS	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	EXCEEDENCE OF PROPOSED RULE	TYPICAL SOURCE
Lithium (ppb)	February, June, August & October	9.57	ND - 9.57	NO	Naturally present in the environment
Perfluorobutanesulfonic acid (PFBS) (ppt)	February, May, June, August, October & November	2.9	ND - 2.9	NO	Discharge from manufacturing and industrial chemical facilities and certain firefighting activities
Perfluorobutanoic acid (PFBA) (ppt)		4.1	ND - 4.1	NO	
Perfluoropentanoic acid (PFPeA) (ppt)		3.9	ND - 3.9	NO	
Perfluorohexanoic acid (PFHxA) (ppt)		2.5	ND - 2.5	NO	
Perfluorooctanoic acid (PFOA) (ppt)		1.4	ND - 1.4	NO	
Perfluorohexanesulfonic acid (PFHxS) (ppt)		1	ND - 1.0	NO	
Perfluoroheptanoic acid (PFHpA) (ppt)		0.99	ND - 0.99	NO	

What do these terms mean?

- AL (Action Level)** – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- Avg (Average)** Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- BDL (Below Detectable Limits)** – laboratory analysis indicates the constituent is below detectable limits of the instruments and methods used to detect this constituent.
- LRAA (Locational Running Annual Average)** The average of sample analytical results for samples taken at a particular monitoring location during the previous four quarters.
- N/A (Not Applicable)** – not required to test for this constituent during the current calendar year.
- ND (Non-Detects)** - laboratory analysis indicates that the constituent is not detected.

- PPM (Parts per million)** - one part substance per million parts water or Milligrams per liter [mg/L]
- PPB (Parts per billion)** - one part substance per billion parts water or Micrograms per liter [ug/L]
- PPT (Parts per trillion)** - one part substance per trillion parts water or Nanograms per liter [ng/L]
- pCi/L (Picocuries per liter)** - used to measure radioactivity in the water.
- MREM/YR (Millirems per year)** - measure of radiation absorbed by the body.
- NTU (Nephelometric Turbidity Unit)** - unit to measure the cloudiness of the water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- TT (Treatment Technique)** - A required process intended to reduce the level of a contaminant in drinking water.

- MCL (Maximum Contaminant Level)** - The "Maximum Allowed" (MCL) is 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 "Goal" (MCLG) is 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.
- 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.