CONSUMER CONFIDENCE REPORT ELECTRONIC DELIVERY CERTIFICATION - DRINKING WATER

State Form 55623 (7-14)
Indiana Department of Environmental Management (IDEM)
Office of Water Quality – Drinking Water Branch – Compliance Section

IDEM – Drinking Water Branch
100 N. Senate Ave.
MC 66-34
Indianapolis, IN 46204-2251
Telephone: 317-234-7435
Fax: 317-234-7436
Email: dwbmgr@idem.in.gov

INSTRUCTIONS: 1. *Complete the Consumer Confidence Report Electronic Delivery Certification form.*
2. *Submit the form to IDEM by October 1st of reporting year.*

Example 3-1- CCR Certification Form
(updated with electronic delivery methods)

CWS Name: Carmel Water Utility

PWSID Number: 5229004

The community water system named above hereby confirms that its consumer confidence report has been distributed to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the state/primacy agency.

Certified by:

Name: Jaimie Foreman Signature: Jaimie Foreman

Title: Drinking Water Compliance Supervisor

Telephone number: 317-571-4144 Date *(month, day, year)*: 06/27/2024

Please check all items that apply.

✓ CCR was distributed by mail.

✓ CCR was distributed by other direct delivery method. Specify direct delivery methods:

___ Mail – notification that CCR is available on Web site via a direct uniform resource locator (URL)

✓ E-mail – direct URL to CCR

___ E-mail – CCR sent as an attachment to the e-mail

✓ E-mail – CCR sent embedded in the e-mail

___ Other: _____

If the CCR was provided by a direct URL, please provide the direct URL Internet address:

www, https://carmelutilities.com/2024/04/30/now-available-carmel-water-2023-water-quality-report/

If the CCR was provided electronically, please describe how a customer requests paper CCR delivery:

Copies are available at Carmel City Hall, Water Distribution Office

✓ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods as recommended by the state/primacy agency:

✓ posting the CCR on the Internet at www. carmelutilities.com

✓ mailing the CCR to postal patrons within the service area *(Attach a list of ZIP codes used.)*

___ advertising availability of the CCR in news media *(Attach copy of announcement.)*

___ publication of CCR in local newspaper *(Attach copy of newspaper announcement.)*

___ posting the CCR in public places *(Attach a list of locations.)*

✓ delivery of multiple copies to single bill addresses serving several persons such as: apartments, businesses, and large private employers

___ delivery to community organizations *(Attach a list.)*

✓ electronic city newsletter or electronic community newsletter or listserv *(Attach a copy of the article or notice.)*

✓ electronic announcement of CCR availability via social media outlets *(Attach list of social media outlets utilized.)*

✓ (For systems serving at least 100,000 persons) Posted CCR on a publicly-accessible Internet site at the address: www. https://carmelutilities.com/water-quality/

✓ Delivered CCR to other agencies as required by the state/primacy agency. *(Attach a list.)*

City of Carmel Utilities
30 West Main Street, Suite 220, Carmel, IN 46032 / 317-571-2442

Carmel Water
CCR – PWSID 5229004

Electronic city newsletter or electronic community newsletter or listserv (Please see embedded notice below)
Every Friday from April 19 – May 31, 2024

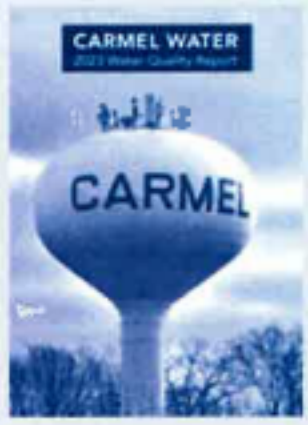
CARMEL
INDIANA

News from the City of Carmel - May 17, 2024

To comply with Indiana Department of Environmental Management state regulations, **Carmel Utilities** issues an annual Water Quality Report (also called Consumer Confidence Report) describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources.

Carmel Utilities is pleased to report that your tap water met or exceeded all Environmental Protection Agency and state standards in 2023.

This link takes you to the 2023 Water Quality Report



Good Faith List:

-Mailing the CCR to postal patrons within the service area:
46032
46033
46074
46077
46080
46082
46290

-Electronic announcement of CCR availability via social media outlets (Please see list of social media outlets utilized)

Twitter: @CarmelUtilities

Facebook: https://www.facebook.com/CarmelUtilities

Nextdoor: https://nextdoor.com/city/feed/?

CARMEL WATER
2023 Water Quality Report

City of Carmel Utilities

We are pleased to report that your tap water met all Environmental Protection Agency (EPA) and state standards in 2023.

Lead in Water*

Carmel Utilities regularly tests drinking water for lead and takes steps in its treatment process to ensure corrosive elements do not result in elevated levels of lead in customer tap water. Lead exposure comes primarily from water service lines which extend from the water main to the home and/or from interior plumbing components. Homes built before 1950 are more likely to have lead pipes. Homes built before 1986 may have lead soldering. Carmel Utilities lead testing comes exclusively from homes most likely to have lead in its plumbing system. If you would like to determine if your home has lead in its plumbing components or service line, hire a licensed plumber who can best advise you. 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. Carmel Utilities 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.**

Hoosier Water Guardian Award

Awarded to communities who go above and beyond the state's requirements for protecting their drinking water supply.

Groundwater Guardian

Educates people and inspires action to restore, sustain and protect clean groundwater for future generations.

Water Purity

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).

Compromised Immune Systems

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).

Water Contaminants Before Treatment

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, 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 Water Supply Source

Carmel's water supply comes from a ground water source called an aquifer. The aquifer is commonly referred to as the Upper White River Basin Watershed. Twenty wells located throughout the city pump water from the aquifer to four water plants for treatment. The production wells range in depth from 49 to 108 feet, are 10 to 36 inches in diameter, and have pumping capacities ranging from 175 to 2,600 gallons per minute.

Our 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.

City of Carmel Utilities

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

Questions?

If you have any questions about this report or concerning your water utility, please contact Carmel Utilities at 317-571-2443 or visit the Carmel Utilities website at carmelutilities.com

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

EPA WaterSense PARTNER

EPA's Safe Drinking Water (800) 426-4791
www.EPA.gov

City of Carmel Utilities

Carmel Utilities routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2023. As water travels over the land or underground, it can pick up substances or contaminants. The chart below gives 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 charts.

Carmel Water 2023 — Water Quality Results

REGULATED SUBSTANCES **PWSID# 5229004**

Consumer Confidence Report Data 2023

SUBSTANCES (UNIT OF MEASURE)	MCL (MRDL)	MCLG (MRDLG)	SYSTEM WIDE (AVG)	SYSTEM WIDE (MAX)	RANGE LOW-HIGH	VIOLATIONS	TYPICAL SOURCE
Barium (ppm)	2	2	0.104	0.104	ND - 0.104	NO	Natural Deposits
Beta/photon emitters (mrem/yr) (2021 data)	4	0	N/A	7.4	3.1-7.4	NO	Decay of natural and man-made deposits
Chlorine (ppm)	4	4	0.99	1.34	0.51 - 1.34	NO	Water Additive Used to Control Microbes
Combined Radium (pCi/L) (2021 data)	5	0	N/A	2.6	ND-2.6	NO	Erosion of Natural Deposit
Fluoride (ppm)	4	4	0.70	1.31	0.21 - 1.31	NO	Natural Deposits and Treatment Additive
Gross Alpha, Excl. Radon & Uranium (pCi/L) (2021 data)	15	0	N/A	5.1	**3.1-5.1**	NO	Erosion of Natural Deposit
Haloacetic Acid (HAA) (ppb) SS#11	60	N/A	13 (LRAA)	17.1	**10.5 - 17.1**	NO	By-Product of Chlorination Treatment
Haloacetic Acid (HAA) (ppb) SS#13	60	N/A	18 (LRAA)	21.3	14.2 - 1.3	NO	By-Product of Chlorination Treatment
Haloacetic Acid (HAA) (ppb) SS#16	60	N/A	12 (LRAA)	14.7	8.85 - 14.7	NO	By-Product of Chlorination Treatment
Haloacetic Acid (HAA) (ppb) SS#23	60	N/A	15 (LRAA)	16.7	12 - 16.7	NO	By-Product of Chlorination Treatment
Nitrate (ppm)	10	10	0.01	0.191	ND - 0.191	NO	Fertilizers, Septic Tank Leachate
Total Trihalomethanes (TTHMs) (ppb) SS#11	80	N/A	28 (LRAA)	29.7	22 - 29.7	NO	By-Product of Chlorination Treatment
Total Trihalomethanes (TTHMs) (ppb) SS#13	80	N/A	36 (LRAA)	43	27.7 - 43	NO	By-Product of Chlorination Treatment
Total Trihalomethanes (TTHMs) (ppb) SS#16	80	N/A	25 (LRAA)	23	16.6 - 23	NO	By-Product of Chlorination Treatment
Total Trihalomethanes (TTHMs) (ppb) SS#23	80	N/A	37 (LRAA)	33.9	25.9 - 33.9	NO	By-Product of Chlorination Treatment
Total Coliform Bacteria (% positive samples)	5%	N/A	0.12%	1.5%	0% - 1.5%	NO	Naturally Present in the Environment

SECONDARY SUBSTANCES	SMCL	MCGL	*Secondary standard 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 Secondary Maximum Contaminant Level (SMCL).				
Hardness (grains/gal)	NA		12.5	28	5 - 28	NO	Erosion of Natural Deposit; Leaching
Iron (ppm)	0.3		0.02	0.07	ND-0.07	NO	Erosion of Natural Deposit; Leaching
pH (Units)	6.5-8.5		7.52	8.55	6.72 - 8.55	NO	
Sodium (ppm)	N/A		146.9	186	91.7-186	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.

			%	Highest Measurement	Month Occurred	Violation	Source
Turbidity (NTU) Plant 1A	100% < 1	N/A	100%	0.2%	May	NO	Soil Runoff
Turbidity (NTU) Plant 1B	95% < 0.3	N/A	100%	0.10	June	NO	Soil Runoff

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

	AL	MCLG	Carmel Water Utility (2023 data)				
			Rate over AL	90th percentile	Range		
Copper (ppm)	1.3 (90th percentile)	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)	15 (90th percentile)	0	0 of 30 > AL	2.99	1.11 - 5.03	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching

Untreated Source Water Data

			System Wide (avg)	System Wide (max)	Range Low-High	Violations	Typical Source
TOC (ppm)	N/A	N/A	0	0	ND	NO	Naturally present in the environment

Untreated Contaminants

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.

Compound	Collection Date	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 in groundwater from interactions with minerals
Perfluorobutanesulfonic acid (PFBS) (ppt)	February, May, June, August, October, & November 2023	2.9	ND - 2.9	NO	There are more than 3,000 PFAS. Because many PFAS have useful properties, some of them have been used since the 1940s in products like textiles, paper, cookware, firefighting foams, and electronics.
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	

DEFINITIONS

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

BDL (Below Detectable Limits) – Laboratory analysis indicates that the constituent is not present at the level of detection set for the particular method used to analyze for the constituent.

NA (Not Applicable) – Not required to test for or the constituent during the 2023 calendar year.

ND (Non-Detects) – Laboratory analysis indicates that the constituent is not present.

PPM (Parts per million) – One part substance per million parts water (or milligrams per liter).

PPB (Parts per billion) – One part substance per billion parts water (or micrograms per liter).

PPT (Parts per trillion) – One part substance per trillion parts water (or nanograms per liter).

pCi/L (Picocuries per liter) – A unit used to express the radioactivity (or radiation emitted by the atom).

mrem/yr (Millirems per year) – A measure of radiation absorbed by the body.

NTU (Nephelometric Turbidity Unit) – A unit of measure for the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

TT (Treatment Technique) – A treatment technique is 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.