

2022 Water Quality Report

B.T.C Regional Water District
PWSID # IN5210002

CONTACT INFORMATION:

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Borden Tri County Regional Water District strives to deliver safe drinking water to our customers and are proud to deliver this annual report for year 2022.

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Our hours are Monday - Friday 8:00am - 4:00pm

www.BordenTC.com | [812.967.2226](tel:812.967.2226)

The U.S. Environment Protection Agency (EPA) wants you to know:

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

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 storm water 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 storm water 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 storm water runoff, and septic systems.

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

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

Source Water Info: We purchase 70% of our water from Indiana American Water, Inc. which relies on ground water from 19 wells located in two well fields in Jeffersonville. The water pumped from both well fields is treated at the Southern Indiana Operations and Treatment Center. We make 30% of our water that comes from the Packwood reservoir and our treatment plant, located @ 1791 W. Water St. Borden, Indiana 47106.

For more information about your drinking water, please contact Daryl Naville, Manager, by email btewater1@yahoo.com, or call 812-967-2226 or by writing to the address: PO Box 40, Borden, IN 47106. You are welcome to attend our monthly meeting on the third Tuesday of each month at 7:30 PM at our office.

Information on Radon and Lead:

Radon is a radioactive gas that occurs naturally in some ground waters. It may pose a health risk when the gas in the drinking water is released from water into air, as occurs during showering, bathing, or washing dishes or clothes. Radon gas is released into

homes and ground water from soil. B.T.C.'s water was tested for radon during 2003. The level detected was 150 pCi/L (picocuries per liter - a measure of radiation). EPA

is planning to regulate radon at a level of 300 pCi/L to 4,000 pCi/L. Inhalation of radon gas has been linked to lung cancer; however, the effects of radon ingested in drinking water are not yet clear. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on how to have your home tested for radon, contact your Indiana

Radon Hotline at (800) 272-9723, or the National Radon Hotline at (800) 767-7236.

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. BTC Water 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 <http://www.epa.gov/safewater/lead>.

Definitions

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

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Residual Disinfectant Level (MRDL): A required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health.

mrem/year: Millirems per year (a measure of radiation absorbed by the body).

NA: Not applicable.

ND: Not detectable at testing limits.

pCi/L (or picocuries per liter): A measure of radioactivity.

ppm (or parts per million): Milligrams per liter (mg/L).

ppb (parts per billion): One part substance per billion parts water, or milligrams per liter.

gpg: 11 grains per gallon

2022 Water Quality Report

Water Quality Statement

We are pleased to report that during the past year, the water delivered to your home or business complied with, or was better than, all state and federal drinking water requirements. For your information, we have compiled a list in the tables below indicating what substances were detected in your drinking water during 2022. Although all of the substances listed below are under the Maximum Contaminant Level (MCL) set by the EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

BTC REGIONAL WATER DISTRICT PWS ID IN5210002

Other Compounds (Measured in the Distribution System)

Unregulated substances are measured, but maximum allowed contaminate levels have not been established by the government.

Substance (units)	Year Sampled	MCLG	MCL	Level Found	Range of Detections (Low-High)	Compliance Achieved	Typical Source
Total Trihalomethanes - TTHM (ppb)	2022	NA	80	53.0	26.2 - 73.0	Yes	By-product of drinking water chlorination
Haloacetic Acids - HAA5 (ppb)	2022	NA	60	40.0	17.2 - 51.8	Yes	By-product of drinking water chlorination
Chlorine (ppm) - Total	2022	4	4	1	1 - 1	Yes	Water additive used to control microbes

Tap Water Samples: Lead and Copper Results

Substance (units)	Year Sampled	MCLG	Action Level	90th Percentile	Number of Samples	Number of Samples Above Action Level	Compliance Achieved	Typical Source
Copper (ppm)	2020	1.3	1.3	0.74	30	0	Yes	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2020	0	15	5.61	30	0	Yes	Corrosion of household plumbing systems; erosion of natural deposits

Regulated Contaminants

Inorganic Contaminants	Year Sampled	Level Detected	Range Levels Detected	MCLG	MCL	Violations	Likely Source of Contamination
Fluoride (ppm)	2022	0.044	0.044 - 0.044	4	4	No	Erosion of Natural Deposits; Water additive to promote strong teeth; Discharge from fertilizer & aluminum factories
Nitrate (as N) (ppm)	2022	0.157	0.157 - 0.157	10	10	No	Erosion of natural deposits, runoff from fertilizer; Leaching septic systems
Barium (ppm)	2022	0.025	0.025 - 0.025	2	2	No	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits.

Turbidity	Year Sampled	Unit (TT)	Level Detected	Violations	Likely Source of Contamination
Highest Single Measurement	2022	1 NTU	0.77 NTU	No	Soil Runoff
Lowest Monthly % Meeting Limit	2022	0.3 NTU	99.30%	No	Soil Runoff

Violations Table

Total Organic Carbon

Total organic carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects: liver or kidney problems, or nervous system effects, and may lead to an increased risk of pathogens being present and other contaminants that can cause illness if consumed.

Violations Type	Violation Began	Violation Began	Violation Explanation
Inadequate DBP Precursor Removal	10/1/2022	12/31/2022	Our treatment plant failed to adequately reduce the total organic carbon content of our source water which is needed to properly minimize the amount of disinfection by products in out drinking water.

2022 Water Quality Report continued

Indiana-American Water Company, Inc. PWS ID#5210005

Lead and Copper Monitoring Program - At least 30 tap water samples collected at customers' taps every three years

Substance (units)	Year Sampled	Action Level	MCLG	90th Percentile	Number of samples taken	Number of samples above Action Level	Compliance Achieved	Typical Source
Lead (ppb)	2021	15	0	ND	30	0	Yes	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	2021	1.3	1.3	0.622	30	0	Yes	Corrosion of household plumbing systems; erosion of natural deposits

Revised Total Coliform Rule - At least 80 samples collected each month in the distribution system

Substance	Year Sampled	MCL	MCLG	Highest Percentage OR Highest No. of Samples	Compliance Achieved	Typical Source
Total Coliform ¹	2022	*MCL = Less than 5% OR MCL = No more than 1 positive monthly sample	0	2.4%	Yes	Naturally present in the environment
E. Coli ²	2022	TT = No confirmed samples	0	0	Yes	Human and animal fecal waste

NOTE: Coliforms are bacteria that are naturally present in the environment and are used as an indicator of the general bacteriological quality of the water. We are reporting the highest percentage of positive samples / highest number of positive samples in any month.

¹ The Treatment Technique for Total Coliforms requires that if the maximum percentage OR number of total coliform positive samples are exceeded a system assessment must be conducted, any sanitary defects identified, and corrective actions completed. Additional Level 1 Assessments or Level 2 Assessments are required depending on the circumstances.

² The Treatment Technique for E. Coli requires that for any total coliform positive routine sample with one or more total coliform positive check samples and an E. Coli positive result for any of the samples a Level 2 Assessment must be conducted, any sanitary defects identified, and corrective actions completed. The E. Coli MCL is exceeded if routine and repeat samples are total coliform-positive and either is E. Coli-positive, or the system fails to take repeat samples following an E. Coli-positive routine sample, or the system fails to analyze total coliform-positive repeat samples for E. Coli.

Disinfection Byproducts - Collected in the Distribution System

Substance (units)	Year Sampled	MCL	MCLG	Highest	Range Detected	Compliance Achieved	Typical Source
Total Trihalomethanes (TTHMs) (ppb)	2022	80	NA	33.2	28.7 - 33.2	Yes	By-product of drinking water chlorination
Halo acetic Acids (HAAs) (ppb)	2022	60	NA	17.7	13.3 - 17.7	Yes	By-product of drinking water chlorination

NOTE: Compliance is based on the running annual average at each location. The Highest LRAA reflects the highest average at an y location and the Range Detected reflects all samples from this year used to calculate the locational running annual average.

Disinfectants - Collected in the Distribution System

Substance (units)	Year Sampled	MRDL	MRDLG	Maximum Chlorine Residual	Compliance Result	Range Detected	Compliance Achieved	Typical Source
Distribution System Chlorine Residual (ppm)	2022	4	4	0.2	1.30	1.04 - 1.43	Yes	Water additive used to control microbes

1 - Data represents the highest monthly running annual average of chlorine residuals measured throughout our distribution system.

Other Regulated Substances - Collected at the Treatment Plant

Substance (units)	Year Sampled	MCL	MCLG	Highest Compliance Result	Range Detected	Compliance Achieved	Typical Source
Fluoride (ppm)	2021	4	4	0.77	NA	Yes	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories.
Nitrate (ppm)	2021	10	10	0.42	NA	Yes	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Indiana-American Water Company, Inc. PWS ID#5210005 continued

Other Regulated Substances - Collected at the Treatment Plant

Substance (units)	Year Sampled	MCLG	SMCL	Level Found	Range Detected	Typical Source
Chloride (ppm)	2021	NA	250	28.3	NA	Erosion of natural deposits; road salting.
Iron (ppm)	2022	NA	0.3	0.02	ND - 0.08	Naturally occurring
Manganese (ppm)	2022	NA	0.05	0.01	ND - 0.05	Naturally occurring
pH	2022	NA	6.5 - 8.5	7.37	7.05 - 7.67	Naturally occurring
Sulfate (pp)	2021	NA	250	39.7	NA	Erosion of natural deposits

1 - Substances with Secondary MCLs do not have MCLGs; these limits are primarily established to address aesthetic concerns.

Other Substances of Interest - Collected at the Treatment Plant

Substance (units)	Year Sampled	EPA Guidance Level	Level Found	Range Detected	Typical Source
Hardness (ppm)	2022	NA	191	125 - 222	Naturally occurring
Sodium (ppm)	2021	20	18.3	NA	Naturally occurring

1 - For healthy individuals the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

Additional Water Quality Parameters of Interest - (Water in the Distribution System)

Parameter	Units	Year Sampled	Level Found	Range Detected	Typical Source
Bromodichloroacetic Acid	ppb	2019	4.2	3.3 - 4.2	By-product of drinking water disinfection
Bromochloroacetic Acid	ppb	2019	5.5	4.4 - 5.5	By-product of drinking water disinfection
Chlorodibromoacetic Acid	ppb	2019	1.6	1.5 - 1.6	By-product of drinking water disinfection
Dibromoacetic Acid	ppb	2019	1.7	1.4 - 1.7	By-product of drinking water disinfection
Dichloroacetic Acid	ppb	2019	6.5	5.1 - 6.5	By-product of drinking water disinfection
Monobromoacetic Acid	ppb	2019	0.47	0.39 - 0.47	By-product of drinking water disinfection
Trichloroacetic Acid	ppb	2019	6.8	5.2 - 6.8	By-product of drinking water disinfection

Additional Water Quality Parameters of Interest - (Water in the Distribution System)

Parameter	Units	Year Sampled	Level Found	Range Detected	Typical Source
Manganese*	ppb	2021	1.0	NA	Naturally occurring

* Manganese has a Secondary MCL of 50 ppb.

Parameter	Units	Year Sampled	Level Found	Range Detected	Typical Source
Bromide	ppm	2019	0.04	NA	Naturally present in the environment
Total Organic Carbon	ppm	2019	1.23	NA	Naturally present in the environment

Additional Water Quality Parameters of Interest - (Water in the Distribution System)

Unregulated Per fluorinated Compounds

Parameter	Units	Year Sampled	Level Found	Range Detected	Typical Source
Perfluorooctanoic Acid (PFOA)	ppt	2021	2.5	NA	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorobutyrate (PFBA)	ppt	2021	2.2	NA	
Perfluorooctanesulfonic Acid (PFBS)	ppt	2021	2.2	NA	

