2024 Water Quality Report Ligonier Water Works

This letter explains the quality of drinking water provided by Ligonier Water Works. Included is a listing of results from water quality testing, an explanation of our water sources, and tips on how to interpret the data. We are happy to share our results with you. Please read them carefully. These results are from January 1 to December 31, 2024.

We are proud to report that the water provided by Ligonier Water Works meets or exceeds established water quality standards. The water source for Ligonier Water Works is supplied by groundwater pumped from two wells that are 200 feet deep located at approximately 1 mile north of the city limits.

We continue to update the controls at our water plant to ensure the quality of water being distributed to you. Over the years the Ligonier Water Works has successfully completed the planning and implementation stages of our Well Head Protection Program. Signs indicate the exact location of our area of protection.

Important Health information

Drinking water, excluding 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 (EPA) Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled) 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 can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, these microbes may come from sewage treatment plants, septic systems, agricultural operation, 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, these chemicals 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 infections. These people should seek advice about drinking water from their health care providers. EPA and CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA Safe Drinking Water Hotline (800-426-4791).

How to Read the Water Quality Table

The results of the tests performed in 2023 or the most recent testing available are presented in the table. Terms used in the water quality table and in other parts of this report are defined here.

- Maximum Contaminants Level or MCL: The highest level of contaminants that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal: The level of contaminants in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- Detected Level: The highest level detected of a contaminant for comparison against the acceptance levels for each parameter.
- Action Level: The concentration of a contaminant which, if exceeded < triggers treatment or other requirements which a water system must follow.
- Range: The lowest to the highest values for all samples tested for each contaminant. If only one sample is tested, or no range is required for this report, then no range is listed for that contaminant in the table.

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Board of Public Works and Safety (BOW) meetings are held on the second and fourth Wednesday of each month at 301 S. Cavin Street at 1:30 p.m. The public is welcome to attend. This report may also be viewed on the City of Ligonier's website: https://www.in.gov/cities/ligonier/ The Ligonier Water Works' phone is 260-894-4241, PWSID # 5257010

You may also contact Jeff Boyle, Ligonier Water Superintendent, 260-894-1292, jboyle@ligonier-in.gov

Nitrate	Test Date	Detection Level	MCL	Result (mg/L)
Nitrate	06/14/2024	<1.0	10.0	BDL
Regulated Volatile Compounds	Test Date	Detection Level	MCL	Result (mg/L)
Benzene	06/18/2024	<0.5	5	BDL
Carbon Tetrachioride	06/18/2024	<0.5	5	BDL
Chlorobenzene	06/18/2024	<0.5	100	BDL
1,2-Dichlorobenzene	06/18/2024	<0.5	600	BDL
1,4-Dichlorobenzene	06/18/2024	<0.5	75	BDL
1,2-Dichloroethane	06/18/2024	<0.5	5	BDL
1,1-Dichloroethylene	06/18/2024	<0.5	7	BDL
1,2-Dichloroethylene, cis	06/182024	<0.5	70	BDL
1,2-Dichloroethylene, trans	06/18/2024	<0.5	100	BDL
Dichloromethane	06/18/2024	<0.5	5	BDL
1,2-Dichloropropane	06/18/2024	<0.5	5	BDL
Ethyl benzene	06/18/2024	<0.5	700	BDL
Styrene	06/18/2024	<0.5	100	BDL
Tetrachloroethylene	06/18/2024	<0.5	5	BDL
Toluene	06/18/2024	<0.5	1000	BDL
1,2,4-Trichlorobenzene	06/18/2024	<0.5	70	BDL
1,1,1-Trichloroethane	06/18/2024	<0.5	700	BDL
1,1,2-Trichloroethana	06/18/2024	<0.5	5	BDL
Trichloroethylene	06/18/2024	<0.5	5	BDL
Vinyl Chloride	06/18/2024	<0.5	2	BDL
Total Xylenes	06/18/2024	<0.5	10000	BDL
Regulated Inorganic Chemicals	Test Date	Detection Level	MCL	Result mg/L
Antimony	06/19/2024	0.0012	0.006	BDL
Arsenic	06/25/2024	0.0024	0.01	BDL
Barium	06/20/2024	.015	2.0	BDL
Beryllium	06/20/2024	<0.001	0.004	BDL
Cadmium	06/20/2024	<0.001	0.005	BDL
Chromium	06/20/2024	<0.005	0.1	BDL
Cyanide (Free)	06/25/2024	<0.01	.02	BDL
Nitrogen				
Fluoride (Natural)	06/17/2024	0.11	4.0	
Mercury	06/24/2024	<0.0002	0.002	BDL
Nickel	06/20/2024	<0.01	0.1	BDL
Selenium	06/21/2024	<0.001	0.05	BDL
Thallium	06/19/2024	<0.001	0.001	BDL
Sodium	06/26/2025	5	20	BDL

Synthetic Organic Compounds		Test Da	Detection Level		MCL		Result mg/L	
Alachlor (Lasso)	10/14/2022		<0.2		2	BDL		
Atrazine	10/14/2022		<0.5		3	BDL		
Benzoapyrene	10/14/2022		=0.1	().2	BDL		
Carbofuran				<0.9	40		BDL	
Chlordane (Alpha &Gan	nma)	10/05/20 10/14/20		<0.2	2	2.0	BDL	
2,4-D		09/26/20		<1		70	BDL	
Dalapon		09/26/2022		<5	200		BDL	
DBCP		09/08/2022		<0.02	0.2		BDL	
Dinoseb		09/26/2022		<1	7		BDL	
Diquat		10/04/2022		<2	20		BDL	
Di (2-ethylhexyl) adipat	e	10/14/20)22	<0.6	4	.00	BDL	
Di (2-ethylhexyl) phthal	ate	10/14/20)22	<0.6		6	BDL	
Endothall		09/19/20	022	<9	1	.00	BDL	
Endrin		10/14/20	022	0.1	2	2.0	BDL	
Ethylene Dibromide (ED)B)	09/08/20	022	<0.01	().1	BDL	
Glyphosate (Round-Up)		10/19/20	/19/2022 <30		7	00	BDL	
Heptachlor		10/14/2022		<0.1	0.0.2		BDL	
Heptachlor Epoxide		10/14/2022		<0.1	0.2		BDL	
Hexaclorobenzene	10/14/2022		<0.1	1		BDL		
Hexachlorocyclopentadiene		10/14/2022		<0.5	50		BDL	
Lindane	10/14/2022		<0.1	0.2		BDL		
Methoxychlor		10/14/2022		<0.1	40		BDL	
Oxamyl (Vydate)		10/05/2022		<2	200		BDL	
Pentachlorophenol		09/26/2022		<0.4	1		BDL	
Picloram (Tordon)		09/26/2022		<1	500		BDL	
Simazine		10/14/2022		<0.35		4	BDL	
2,4,5-TP (Silvex)	2,4,5-TP (Silvex)		022	<1	=,	50	BDL	
Toxaphene		09/22/2022		<1		3	BDL	
TTHM and HAA5		Test Date		Detection		1DL	Result	
				Level			(ug/L)	
HAA5		06/13/2024		23.4	60 ug/L		< 1.0	
TTHM		06/17/2024		11.6	80 ug/L		<0.5	
HAA5		08/07/2024		5.37	60 ug/L		<1.0	
TTHM		07/29/2024		9.52	80 ug/L		<0.5	
Radionuclides	Test D	Date	EPA	EPA Limit			Results (pCi/L)	
Gross Alpha 04/03		3/2025 15 p		Ci/L		-2.11±1.35		
Gross Beta	04/03	/2025	50 pCi/L			0.386±0.357		
Radium-228	04/0	Gross Alpha plus 0.622±0. Madium-228 < 5 pCi/L			±0.426			

PFAS	Test Date	Reporting Limit (ng/L)	Action Limit (ng/L)	Result (ng/L)
11Cl-PF3OUdS	05/22/2025	2.0		< 0.6
9Cl-PF3ONS	05/22/2025	2.0		< 0.5
ADONA	05/22/2025	2.0		< 0.5
HFPO-DA	05/22/2025	2.0		< 0.7
NETFOSAA	05/22/2025	2.0		< 0.6
NMEFOSAA	05/22/2025	2.0		< 0.5
PFBS	05/22/2025	2.0	2100	< 0.6
PFDA	05/22/2025	2.0		< 0.5
PFDoA	05/22/2025	2.0		< 0.7
PFHpA	05/22/2025	2.0		< 0.5
PFHxA	05/22/2025	2.0		< 0.5
PFHxS	05/22/2025	2.0	140	< 0.5
PFNA	05/22/2025	2.0	21	< 0.5
PFOA	05/22/2025	2.0	4.0	< 0.5
PFOS	05/22/2025	2.0	70	< 0.5
PFTeDA	05/22/2025	2.0		< 0.6
PFTrDA	05/22/2025	2.0		< 0.6
PFTUnA	05/22/2025	2.0		< 0.6

Lead and Copper								
	Date Sampled	MCLG	Action Level (AL)	90th Percentile	Number of Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/14/2023	1.3	1.3	0.1	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/14/2023	0	15	5.8	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

"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. We are responsible for providing high quality drinking water, but we 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".

The Ligonier Water Works Lead Service Line Inventory is available at https://idem.120water-ptd.com/

<u>Microbial Contaminants</u> - such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

<u>Inorganic Contaminants</u> - 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.

<u>Pesticides and Herbicides</u> - which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. <u>Organic Chemical Contaminants</u> – 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 which limit 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.

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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791. Contaminants that may be present in source water include:

<u>Microbial Contaminants</u> - such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

<u>Inorganic Contaminants</u> - 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.

<u>Pesticides and Herbicides</u> - which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. <u>Organic Chemical Contaminants</u> – 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.

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In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit 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.

Some people may be more vulnerable to contaminants in drinking water than the general population.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

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

In the tables below, you will find many terms and abbreviations you might not be familiar with. To help you understand these terms better, we have provided the following definitions:

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

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

<u>Level 1 Assessment</u>: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

<u>Level 2 Assessment</u>: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

<u>Maximum Contaminant Level or MCL</u>: The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

<u>Maximum Contaminant Level Goal or MCLG</u>: The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

<u>Maximum residual disinfectant level goal or MRDLG</u>: 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.

<u>Maximum residual disinfectant level or MRDL</u>: 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.

<u>Treatment Technique or TT</u>: A required process intended to reduce the level of a contaminant in drinking water.

<u>Variances and Exemptions</u>: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Avg: Average - Regulatory compliance with some MCLs are based on running annual average of monthly samples.

LRAA: Locational Running Annual Average

mrem: millirems per year (a measure of radiation absorbed by the body)

ppb: micrograms per liter (ug/L) or parts per billion - or one ounce in 7,350,000 gallons of water.

 \underline{ppm} : milligrams per liter (mg/L) or parts per million - or one ounce in 7,350 gallons of water

picocuries per liter (pCi/L): picocuries per liter are a measure of the radioactivity in water.

NA: not applicable.

You may also contact Jeff Boyle, Ligonier Water Superintendent, 260-894-1292, jboyle@ligonier-in.gov