



CITY of DELPHI

Delphi Water Works 2024 CONSUMER CONFIDENCE REPORT

Public Water System # 52 08 002

Important information for the Spanish-speaking population

Este informe contiene información muy importante sobre la calidad del agua potable que usted consume. Por favor tradúzcalo, o hable con alguien que lo entienda bien y pueda explicarle.

Is our water safe?

We're pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

I'm also pleased to report that our drinking water meets state and federal requirements.

If you have any questions about this report or concerning your water utility, contact Craig Myers at 765-564-3944. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled City Council meetings. These meetings are held on the first Monday of every month at 6:00 p.m. in the City Council Chambers of the City Building.

The Delphi Water Works routinely monitors for constituents in your drinking water according to State and Federal laws. Our monitoring for the period of January 1, 2023 to December 31, 2023 found no contaminants above the allowable limits.

The table on the following page lists all the contaminants that we detected during the 2017-2023 period. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise indicated, the data presented in this table is from testing done between January 1 and December 31, 2023. The Indiana Department of Environmental Management (IDEM) requires us to monitor for certain contaminants at frequency less than once per year because the concentrations of these contaminants are not expected to vary significantly from one year to another. Some of the data, though representative of the water quality, may however be more than one year old.

Some of the terms and abbreviations used in this report are:

MCL:	Maximum Contaminant Level - the highest level of a contaminant that is allowed in drinking water.
MCLG:	Maximum Contaminant Level Goal - the level of a contaminant in drinking water below which there is no known or expected risk to health.
MRDL:	Maximum Residual Disinfectant Level - the highest level of disinfectant allowed in drinking water.
MRDLG:	Maximum Residual Disinfectant Level Goal - the level of drinking water disinfectant below which there is no known or expected risk to health.
AL:	Action Level - the concentration of a contaminant which, when exceeded, triggers treatment or other requirements or action which a system must follow.
TT:	Treatment Technique - a required process intended to reduce the level of a contaminant in drinking water.
NTU:	Nephelometric Turbidity Unit - a measure of the clarity (or cloudiness) of water.
ppm:	parts per million, or milligrams per liter.
ppb:	parts per billion, or micrograms per liter.
pCi/L:	picocuries per liter - a measure for radiation
p*:	potential violation or one that is likely to occur in the near future.
n/a:	either not available or not applicable
ND:	Not Detected - the result was not detected at or above the analytical method detection level.

Water Quality Data

Inorganic Contaminants										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
2023	Fluoride	4	4	ppm	1.25	.71	1.25		No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
2023	Nitrate (N)	10	10	ppm	0.917	0	0.917		No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
2020	Arsenic	10	0	ppb	1.4	0	1.4		No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
2020	Selenium	50	50	ppb	1.2	0	1.2		No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
2023	Barium	2	2	ppm	0.056	0.032	0.056		No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Lead & Copper										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
2021	Copper (90th Percentile)	1.3 (AL)	1.3	ppm	.143	.011	.151		No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
2021	Lead (90th Percentile)	15 (AL)	0	ppb	2.35	1.75	3.01		No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection By-products										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
2023	Haloacetic Acids (HAA5) 227 N Arnold St	60	NA	ppb	3	2.61	2.61		No	By-product of drinking water disinfection
2023	Haloacetic Acids (HAA5) Booster Station	60	NA	ppb	5	4.82	4.82		No	By-product of drinking water disinfection
2023	Total Trihalomethanes (TTHM) 227 N Arnold St	80	NA	ppb	24	24.3	24.3		No	By-product of drinking water disinfection
2023	Total Trihalomethanes (TTHM) Booster Station	80	NA	ppb	10	9.65	9.65		No	By-product of drinking water disinfection

Radiological Contaminants										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
2022	Gross Alpha, Excluding Radon, Uranium	15	0	pci/l	1.0	0	0		No	Erosion of natural deposits
2020	Beta Photon emitters	4	0	mrem/yr	4.3	3.2	5.3		No	Decay of natural and man-made deposits
2017	Uranium	30	0	ug/l	0.4782	0.4782	0.4782		No	Erosion of natural deposits
2020	Combined Radium	5	0	pCi/L	0.7	0.7	0.7		No	Erosion of natural deposits

Residual Disinfectant										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
2023	Chlorine Residual	4 MRDL	4 MRDLG	ppm	0	0.3	0.6		No	Water additive used to control microbes

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Special Note on Gross Beta:

The MCL for Gross Beta is 4 mrem/year; however, EPA considers 50 pCi/l to be the level of concern for Beta particles.

Special Note on Lead: 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. Our 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 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>.

Our water source is ground water pumped from five wells. Our wells draw from a Solurian Dolomite Limestone Aquifer called the Delphi Reef. Wells 1, and 3 are located along Carrollton Road next to the Carroll County Country Club. Well 4 is located at the end of North Union Street next to the Canal. Well 5 is near the intersection of 300 N and 700 W. Well 7 is located next to the golf course entrance along Stoney Drive.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least a small amounts of some contaminates. It's important to remember that the presence of these compounds does not necessarily pose a health risk. 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 regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 **Indiana Department of Environmental Management at 1-800-451-6027 or Environmental Protection Agency's Safe Drinking Water Hotline at 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 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, stormwater 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 stormwater runoff, and septic systems.
- Radioactive materials, which can be naturally occurring or be the result of oil and gas production and mining activities.

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 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Are you a critical water user? Who are critical water users? According to the definition "Critical water users' means water users whose immediate health or welfare would be affected in an adverse manner if water use is denied." This group of people includes hospitals, nursing homes, schools, day care, clinics, dialysis patients, immunocompromised persons, and others who depend critically on the supply of safe public drinking water. If you meet any of these criteria, please respond to this notice by contacting the Water Department.

Abandoned wells can serve as a direct channel for contamination of drinking water. Sometimes people have wells on their property they no longer use. Telltale signs that an abandoned well might be present include: a pipe sticking out of the ground, windmills, old hand pumps, an abandoned residence, an old cistern or even a wood cover laying over a hole in the ground.

If you have an old well on your property that has no foreseeable use in the future, the safest thing to do is to have the well properly abandoned by a well driller. The well driller will submit the appropriate forms to the Department of Natural Resources and the well will be added to a list of properly abandoned wells.

Clean, safe drinking water is vital to our community's health, economy, and environment. If the groundwater supply our community utilizes becomes contaminated, it is possible to lose the source forever or it may require expensive treatment. To ensure a safe quality drinking water supply now and in the future, it is important to protect the area around the wells from potential contaminants. Wellhead Protection is a process used to protect the groundwater drawn as drinking water from possible hazards.

If you want to learn more about Wellhead Protection or read a copy of the Wellhead Protection Plan for the City of Delphi, contact Mr. Craig Myers at 564-3944 or write to:

Mr. Craig Myers, Water Superintendent
City of Delphi | 201 S. Union St. | Delphi, IN 46923

Thank you for allowing us to continue providing your family with clean water this last year. Again, please call our office if you have questions, at 564-3944.

The Delphi Water Department works to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Important information for the Spanish-speaking population

Este informe contiene información muy importante sobre la calidad del agua potable que usted consume. Por favor tradúzcalo, o hable con alguien que lo entienda bien y pueda explicarle.



IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

The Delphi Water Works (PWSID#IN5208002) Has Levels of Perfluorooctanesulfonic Acid (PFOS) Above An EPA Drinking Water Standard That Becomes Effective June 25, 2024.

What is PFOS?

Perfluorooctanesulfonic acid (PFOS) is a member of the group of chemicals called per- and polyfluoroalkyl substances (PFAS), that are man-made and used in industrial and commercial applications. PFOS is used in metal plating and finishing as well as in various commercial products. PFOS has also been used in aqueous film-forming foams for firefighting and training, and it is found in consumer products such as stain-resistant coatings for upholstery and carpets, water-resistant outdoor clothing, and greaseproof food packaging. Major sources of PFOS in drinking water include discharge from industrial facilities where it was made or used, and the release of aqueous film-forming foam. Although the use of PFOS has decreased substantially, contamination is expected to continue indefinitely because it is extremely persistent in the environment and is soluble and mobile in water.

Are there PFAS in Delphi’s Water?

The Indiana Department of Environmental Management (IDEM) Drinking Water Branch, in collaboration with the Indiana Department of Health (IDOH), has received Per- and polyfluoroalkyl substances (PFAS) results for Delphi Water Works. The samples were collected by the Delphi Water Works to assist in completing the PFAS Sampling Initiative.

The individual supply wells and entry points to the distribution system were sampled on 2/14/2022 to assess the potential impact from PFAS. The samples were analyzed for 18 common PFAS compounds. IDEM compared the sample results to Health Advisory Levels (HALs) established by the U.S. EPA for PFOA and PFOS and IDEM action levels for additional PFAS compounds including GenX, PFBS, PFHxS, and PFNA.

Levels in Effect at the Time of February 2022 & June 2023 Water Sampling					
U.S EPA Health Advisory Level Parts Per Trillion (ppt)			IDEM Action Level Parts Per Trillion (ppt)		
PFOA	PFOS	GenX	PFBS	PFHxS	PFNA
> 70 single or combined with PFOS	> 70 single or combined with PFOA	> 700	> 2100	> 140	> 21

So what has changed since the sampling in 2022 & 2023 to cause an exceedance of a new proposed Drinking Water Standard now?

The water samples were taken in 2022 & 2023, and did not exceed the limits at that time per IDEM's correspondence. On March 14, 2023, the Environmental Protection Agency (EPA) announced the proposed National Primary Drinking Water Regulation (NPDWR) for six PFAS including perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorononanoic acid (PFNA), hexafluoropropylene oxide dimer acid (HFPO-DA, commonly known as GenX Chemicals), perfluorohexane sulfonic acid (PFHxS), and perfluorobutane sulfonic acid (PFBS). The EPA's PFAS NPDWR becomes effective June 25, 2024. The new regulation requires testing/reporting for three years and maintaining compliance levels within five years of the effective date.

EPA's National Primary Drinking Water Regulation (NPDWR) to establish legally enforceable levels, called Maximum Contaminant Levels (MCLs), for six PFAS in drinking water and health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for these six PFAS will become effective June 25, 2024.

Compound	Proposed MCLG	Proposed MCL (enforceable levels)
PFOA	Zero	4.0 ppt (also expressed as ng/L)
PFOS	Zero	4.0 ppt
PFNA	1.0 (unitless)	1.0 (unitless)
PFHxS		
PFBS		
HFPO-DA (commonly referred to as GenX Chemicals)	Hazard Index	Hazard Index

The regulation will require public water systems to:

- Monitor for these PFAS
- Notify the public of the levels of these PFAS
- Implement procedures to reduce the levels of these PFAS in drinking water if they exceed the proposed standards.

For a complete summary of the EPA's of the proposed NPDWR process see:

[Per- and Polyfluoroalkyl Substances \(PFAS\) | US EPA](#)

What does this mean?

Identifying the risk a chemical may pose to human health is a scientific process. It involves determining how much of a chemical is present in the environment, how much a person comes in contact with the chemical, and how toxic or harmful the chemical is to people. Risk, or likelihood of harm to human health, is a function of both chemical hazard and chemical exposure.

It is important to understand how toxic a chemical is and how much a person is exposed to the chemical before health risks can be identified and steps to reduce these risks can be taken.

For example, a chemical can be very toxic but people are very rarely exposed to it, so the risk to human health may be low. If another chemical is only moderately toxic but people are routinely exposed to it in high quantities, then the risk to human health may be high.

For detailed information regarding the PFAS studies by the Environmental Protection Agency (EPA) and Agency for Toxic Substances and Disease Registry (ATSDR), see the following websites:

<https://www.epa.gov/pfas/increasing-our-understanding-health-risks-pfas-and-how-address-them><https://www.atsdr.cdc.gov/pfas/activities/studies.html>

What is the City going to do?

Delphi Water Works has begun to identify possible process and treatment methods to reduce its PFAS levels in its finished water to be below the proposed MCL. Currently available remedies for PFAS in water include filtration and chemical treatment. Excavation and disposal, physical barriers, and heat treatment are among effective remedies for PFAS in soils. Other technologies are under development by U.S. EPA, U.S. Department of Defense, private industry, academic research institutions, and others.

For more information, see <https://www.in.gov/idem/resources/nonrule-policies/per-and-polyfluoroalkyl-substances-pfas/>

For more information, please contact the Delphi Water Works at 765-564-3944 or Water@cityofdelphi.org.

Deadline Report Violations

There were **NO Contamination Violations.**

The laboratory failed to report to IDEM in a timely manner.

Violations

During the period covered by this report we had the below noted violations.

Violation Period	Analyte	Violation Type	Violation Explanation
3/31/2023 - 6/29/2023	TOXAPHENE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	SIMAZINE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	PICLORAM	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	PENTACHLOROPHENOL	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	OXAMYL	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	METHOXYCHLOR	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	LASSO	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	HEXACHLOROCYCLOPENTADIENE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	HEXACHLOROBENZENE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	HEPTACHLOR EPOXIDE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	HEPTACHLOR	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	ETHYLENE DIBROMIDE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	ENDRIN	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	ENDOTHALL	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	DIQUAT	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	DINOSEB	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	DI(2-ETHYLHEXYL) PHTHALATE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	DI(2-ETHYLHEXYL) ADIPATE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	DALAPON	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	CHLORDANE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	CARBOFURAN	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	BHC-GAMMA	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported

3/31/2023 - 6/29/2023	BENZO(A)PYRENE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	ATRAZINE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	2,4-D	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	2,4,5-TP	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported
3/31/2023 - 6/29/2023	1,2-DIBROMO-3-CHLOROPROPANE	MONITORING, ROUTINE MINOR	Some, but not all monitoring samples were taken or reported

Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta particle and photon radioactivity in excess of the MCL over many years may have an increased risk of getting cancer.

Deficiencies

Unresolved significant deficiencies that were identified during a survey done on the water system are shown below.

Date Identified	Facility	Code	Activity	Due Date	Description
4/7/2020	WELL #1	SO12	SANITARY SURVEY LETTER RESPONSE	4/26/2023	Well components are not maintained or operating properly
4/7/2020	WELL #1	SO12	SANITARY SURVEY CORRECTIVE ACTION/PLAN	8/13/2023	Well components are not maintained or operating properly



CITY *of* DELPHI

Water Works
201 S. Union St.
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