



CITY of DELPHI

Delphi Water Works

2016 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 7:00 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, 2015 to December 31, 2015 found no contaminants above the allowable limits.

The table on the following page lists all the contaminants that we detected during the 2005-2015 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, 2015. 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
2011	Antimony	6	6	ppb	0.25	0	0.5		No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition
2011	Arsenic	10	0	ppb	0.4	0	0.8		No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
2009	Barium	2	2	ppm	0.0669	0.0669	0.0669		No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
2011	Beryllium	4	4	ppb	0.25	0	0.5		No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
2008	Cadmium	5	5	ppb	0.05	0	0.01		No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
2014	Chromium	100	100	ppb	1.0	0	1.0		No	Discharge from steel and pulp mills; Erosion of natural deposits
2015	Copper 90th Percentile	1.3 (AL)	1.3	ppm	0.195				No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
2014	Fluoride	4	4	ppm	.973	.372	.973		No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
2015	Lead 90th Percentile	15 (AL)	0	ppb	4.1				No	Corrosion of household plumbing systems; Erosion of natural deposits
2011	Mercury	2	2	ppb	0.3	0	0.6		No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
2015	Nitrate (N)	10	10	ppm	.785	.173	.785		No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
2008	Selenium	50	50	ppb	1.25	0	2.5		No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
2009	Thallium	2	0.5	ppb	1.9	0	3.8		No	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories.
2015	Atrazine	3	3	ppb	0.44	0	0.44		No	Runoff from herbicide used on row crops

Disinfection By-products										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
2014	Haloacetic Acids (haa5)	60	NA	ppb	8.8	4.2	8.8		No	By-product of drinking water disinfection
2014	Total Trihalomethanes (TTHM)	80	NA	ppb	6.3	3.1	6.3		No	By-product of drinking water disinfection

Radiological Contaminants										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
2008	Gross Alpha, Excluding Radon, Uranium	15	0	pci/l	2.8	0	2.8		No	Erosion of natural deposits
2008	Beta Photon emitters	4	0	mrem/yr	3.2	0.1	3.2		No	Decay of natural and man-made deposits
2008	Uranium	30	0	ug/l	0.0029	.0012	.0029		No	Erosion of natural deposits

Unregulated Contaminants										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
2005	Nickel	n/a	100	ug/l	1.5				No	Erosion of natural deposits; Leaching
2005	Sodium	n/a		mg/l	17.25				No	Erosion of natural deposits; Leaching

Residual Disinfectant										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
2015	Chlorine Residual	4 MRDL	4 MRDLG	ppm	1	1	1		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 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>.

Special Note on Gross Beta:

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

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, 2, 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, and well 5 is near the intersection of 300N. and 700 W.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least a small amounts of some contaminants. 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, Certified Operator
City of Delphi
210 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.

Delphi Well Field WHPA

Dear Property Owner:

Delphi Water Works and the Wellhead Protection Local Planning Team, in accordance with the Indiana Department of Environmental Management (IDEM), has defined a Wellhead Protection Area around the City's five public water supply wells. The attached map shows the established wellhead protection area for these wells. Based on our records, the Wellhead Protection Area includes your property, residence, or business.

Within the wellhead protection area, the City's wells and most of the area residential and/or farmstead wells are completed within the same aquifer. The steps that we take to protect this groundwater resource will benefit not only us and our families but help assure a safe drinking water supply for future generations.

To help protect our source of groundwater and wells from contamination, the City and Local Planning Team seek your participation in the proper use and disposal of chemicals in the area. If you are engaged in farming, please follow all regulations and guidelines for the use, storage, disposal, application, mixing and transportation of fuel, fertilizers, restricted use pesticides, and manure waste within the protection area. Report chemical and petroleum spills promptly to the Indiana Department of Environmental Management at the 24-hour hotline (888-233-7745) and clean up spills as soon as they occur. If you lease farm ground located within the protection area, please provide this notification to the tenant farmer.

Homeowners should follow all label directions for the proper use and disposal of household, automotive and lawn chemicals. For the disposal of household hazardous waste, please contact the Northwest Indiana Solid Waste District at (574) 583-5976 for upcoming hazardous waste collection locations and dates.

Private septic systems can also contribute to groundwater contamination. Regular maintenance of your septic tank and leach field will keep your system working efficiently. Inspections can save you money by preventing unnecessary pump-outs, and a well-maintained system helps protect water quality. For more information on your septic system operation and maintenance, please contact the Carroll County Health Department at (765) 564-3420.

Another way you can help protect the local drinking water aquifer is to properly seal and abandoned water wells that are no longer in use. This prevents chemicals from entering the groundwater through the well. Plugging abandoned residential and farmstead water wells can be completed by the property owner. Additional information on abandoned wells and plugging procedures can be obtained from the Carroll County Soil & Water Conservation District. You can contact the SWCD at (765) 564-4480 for more information on this program.

We have enclosed educational materials for your consideration and thank you for your cooperation in helping protect our groundwater resource for our families and future generations. If you have any questions or would like additional information, please contact me at (765) 564-3944. You may also review a copy of the Wellhead Protection Plan during normal business hours at the Water Department, Waste Water Treatment Plant, Police Station, and Street Department at 201 S. Union St. in Delphi, the Carroll County Sheriff's Office at 310 W. Main St. in Delphi, and the Carroll County Health Department at 101 W. Main St. in Delphi.

Sincerely,

Craig Myers, Water Superintendent
Delphi Water Works