PLYMOUTH WATER DEPARTMENT

2017 CONSUMER CONFIDENCE REPORT



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Public Water Supply ID Number: 5250010
Member American Water Works Association
Alliance of Indiana Rural Water
Indiana Rural Water Association

2017 Drinking Water Quality Report

It is time, once again, for the City of Plymouth Water Department's Consumer Confidence Report (CCR). The Environmental Protection Agency (EPA) and the Indiana Department of Environmental Management (IDEM) regulate this report. To ensure safe drinking water for our community, the IDEM and the EPA monitor our compliance with the many regulatory standards. This report contains the latest water quality testing results that have been submitted to the IDEM and the EPA.

We are proud to report that the water quality provided by your Plymouth Water Department has met or exceeded the quality standards established at the State and Federal levels.

The City of Plymouth's water comes from ground water that is pumped from deep wells. This water has a substantial quantity of Iron and Manganese, which the treatment facilities are designed to remove by oxidation (making the Iron and Manganese into solid particles) and filtration. Fluoride is added to the water to protect dental health, and Chlorine is added for disinfection. We test the Iron, Manganese, Fluoride, and Chlorine levels at the plants daily, and we test the distribution system for adequate levels of Chlorine daily. All of this information is reported to the IDEM monthly. For more information about the City of Plymouth Water Department, please contact Jeff Yeazel, Assistant Superintendent, at (574) 936 – 2543 or at water@plymouthin.com

Water is our most precious natural resource. It is everyone's responsibility to prevent the pollution of ground water, streams, lakes, and rivers. We desire public interest and participation in our community's decisions affecting drinking water. The Board of Works and Safety meets every second and fourth Monday at the City Council Chambers at 124 N. Michigan St., (Garro St. entrance), at 6:00 pm. The public is invited.

Lead and Copper:

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below there which is not a known or expected risk to health. ALGs allow for a margin of safety.

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

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 by plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by ushing 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.

Inorganic Contaminants

Contaminant	Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violates	Likely Sources
Arsenic	9/17/15	1.5	0 - 1.5	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	9/17/15	0.076	0.068 - 0.076	2	2	ppm	N	Discharge of drilling waste;Discharge from metal refineries;Erosion of natural deposits
Chromium	9/17/15	1	0 - 1	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	9/17/15	0.7	0.6 - 0.7	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate measured as Nitrogen	2016	0.3	0 - 0.3	10	10	ppm	N	Runoff from fertilizer use, leaching from septic tanks,sewage, erosion of natural deposits.

Lead & Copper

Contaminant	Date	MCLG	Action Level (AL)	90th Percentile	# of Sites AL	Units	Violation	Likely Sources of Contamination
Copper	6/24/14	1.3	1.3	.11	0	ppm	N	Erosion of natrual deposits; Leaching from woodpreservatives; Corrosion of household plumbing systems
Lead	6/24/14	0	15	3.9	0	ppb	N	Corrosion of household plumbing systems; Erosion of natrual deposits

Regulated Contaminants: Disinfectants & Disinfection By-Products

Contaminant	Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violates	Likely Sources
Chlorine	2016	1	0 - 1	MRDLG = 7	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2016	8	0 - 21.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalometh-anes (TTHM)	2016	21	3.3 - 40.8	No goal for the total	80	ppb	N	By-product of drinking water disinfection

Radiological Contaminants

Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
8/4/09	Uranium	30	0	ppb	1.1	1.1	1.1		N	Erosion of natural deposits
8/4/09	Gross Alpha	15	0	pci/l	2.3				N	Erosion of natural deposits
8/4/09	Gross Beta	4	0	pci/l	1.6	1.6	1.6		N	Decay of natural or man made deposits

Unregulated Contaminants

Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	Above AL	Violates	Likely Sources
2012	Nickel	n/a	100	ug/l	2.6	1.1	1.2		N	Erosion of natural deposits; Leaching
2012	Sodium	n/a		mg/l	7.7	4.5	7.0		N	Erosion of natural deposits; Leaching
12/21/09	Sulfate	n/a		mg/l	67	51	67		N	

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform of E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violates	Likely Sources of Contamination
0	1 positive monthly sample	1		0	N	Naturally present in the environment

TOTAL COLIFORM SAMPLING - we are mandated by the state for the size of our city to take 120 routine samples. They were collected at various locations throughout the city in the year of 2016. Also, all new mains are disinfected and tested before they are put into service.

Most regulated and unregulated substances monitored by the EPA are not detected in Plymouth's drinking water. IDEM allows us to monitor for some substances less than once per year because the concentrations are not likely to change. Some of the data presented is more than one year old. Some substances were monitored more than once in 2016, or they were from several locations (Distribution HAAS) which required the averaging of the results and the listing of the range.

Water Quality Test Results:

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Maximum Contaminant Level or MCL:	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.
Maximum Contaminant Level Goal or 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 or MRDL:	The hightest level of disinfectant allowed in drinking water. There is convincing evidence that addition to a disinfectant is necessary for control of microbial contaminants.
Maximum residual disinfectant level goal or MRDLG:	The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not re ect the benefits of the use of disinfectants to control microbial contaminant.
MFL:	Million fibers per liter (a meaure of asbestos).
na:	Not applicable.
NTU:	Nephelometric turbidity units (a measure of turbidity).
pCi/L:	Picocuries per liter (a measure of radioacitivy).
ppb:	Micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
ppt:	Parts per trillion, or nanograms per liter (ng/L).
ppq:	Parts per quadrillion, or picograms per liter (pg/L).

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The FDA regulates contaminant limits in bottled water, which must provide the same protection for public health.

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. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as a person with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or the immune system disorder, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. More information about contaminants and potential health effects, along with the EPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants, can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Our Watershed Protection Efforts

Our water system is working with the community to increase awareness of better waste disposal practices to further protect the sources of our drinking water. We are also working with the other agencies and with local watershed groups to educate the community on ways to keep our water safe.