

FERDINAND WATER DEPARTMENT ANNUAL WATER QUALITY REPORT 2018

INTRODUCTION The Ferdinand Water Department is proud to provide high quality drinking water and fire protection to our customers. This annual water quality report shows the source of our water, contains important information about water and health issues, and lists the results of our tests. The Ferdinand Water Department will notify you immediately if there is any reason for concern about our water. We are proud to show you that the water we provide to you has surpassed EPA water quality standards. The water in our lines undergoes rigorous testing for over .80 contaminants according to government requirements. As you will see in the following table, we detected only fifteen (15) items in the water, and all of those items were at safe levels below the MCLG.

The Ferdinand Water Department conducts monthly public meetings on the third Tuesday of each month at 7:30pm at the Town Hall located at 2065 Main Street in Ferdinand. Please feel free to attend and participate in these meetings.

OVERVIEW The Ferdinand Water

Department provides water for 1020 meters and fire protection in the Town of Ferdinand. All of the water for our system is purchased from Patoka Lake Regional Water & Sewer District located at 2647 North State Road 545 in Dubois, Indiana. Patoka provides us with a high quality of water that meets or exceeds the testing and reporting requirements of the National Primary Drinking Water Regulations (NPDWR), EPA and IDEM. Patoka participates in the State Dental Fluoridation program and adds fluoride to the treated water that Ferdinand purchases. A special testing for the gasoline additive MTBE was reported to be below the detection level. Samples are taken each month at sites throughout our system to test for any contaminants.

HEALTH INFORMATION 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. Drinking water, including bottled water, may reasonably be expected to contain at the 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 at (800) 426-4791.

The sources of drinking water (both tap water

and bottled water) include rivers, lakes, springs, ponds, reservoirs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals and 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, and residential uses.

**Pesticides and herbicides*, which may come from a variety of sources such as agriculture, storm water runoff, and residential use.

**Organic chemical contaminants*, including synthetic and volatile organics, 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.

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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Note: Since 1983, Patoka Lake Regional Water & Sewer District has used chloramines to disinfect the drinking water supplies to Ferdinand and surrounding communities. For all normal users, chlorinated water is the same as water disinfected with chlorine. However, kidney dialysis patients and aquarium or fishpond owners need to take special precautions when using chlorinated water. Kidney dialysis patients should consult their doctors, and fish owners should call their pet store for more information.

ADDRESSING LEAD IN DRINKING WATER

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. Ferdinand Water Department 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>.

WATER SOURCE In 2018 the sole source of the water distributed by the Ferdinand Water Department was surface water from the Patoka Reservoir. For more information about your drinking water, please call the Patoka Lake Regional Water & Sewer District at (812) 678-8300. You, as an end user and consumer of water, can help protect the sources of drinking water by increasing efforts to recycle materials and properly dispose of chemicals, used oils and petroleum products, batteries and other household refuse.

2018 MONITORING RESULTS FOR FERDINAND WATER DEPARTMENT DISINFECTION PROCESS BY PRODUCTS

Parameter	MCL	MRAA	Violation	Disinfection process by product
Total Haloacetic Acids 5	60 ppb	30.1 average	No	Disinfection process by product
Total Trihalomethanes	80 ppb	32.7 average	No	Disinfection process by product
Inorganic Constituents (2018)				
Barium	MCL	Mclg	Violation	
Copper (2017)	2 ppm	2 ppm	No	
Fluoride	1300 AL	.024 ppm	No	
Lead (2017)	2 ppm	240 AL	No	
Sodium	15 AL	.80 ppm	No	
Azazine	15 AL	5.0 AL	No	
	None	2.7 ppm	No	
	3.0 ppb	.01 ppb	No	

*The major sources for these constituents are corrosion of household plumbing, and erosion of natural deposits.

Radioactive Constituents (2018)

Parameter	MCL	MRAA	Violation
Radium 226 (2016)		.14 pCi/L	No
Radium 228 (2017)		.61 pCi/L	No
Gross Alpha (2017)	15 pCi/L	.99 pCi/L	No
Combined Radium (2016)	5 pCi/L	.97 pCi/L	No
Turbidity (Daily)	TT= 3 Ntu	.38 Ntu	No

*Turbidity presents no risk to human health. Turbidity is a measure of suspended matter in water, and is a good indicator that the filtration system is functioning properly.

*The major source of these constituents are erosion of natural deposits and runoff from herbicide use in row crops.

Total Organic Carbon (TOC) MCL MRAA
Average removal % 25% 29.3%
Violation

Unregulated Contaminants MRDL MRDLG MRAA Violation
Chloramine (Daily) 4.0 ppm 4.0 ppm 3.5 ppm No
EXPLANATION OF DATA TABLE: This report is based upon test performed by Patoka and Ferdinand's water systems. Terms used are defined below.

Definitions and Keys to Table
IDEM-INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
MCL-MAXIMUM CONTAMINANT LEVEL
BDL- BELOW DETECTABLE LIMIT
PCU- PICO CURIE PER LITER
DL- DETECTABLE LIMIT
MCL- PART PER MILLION OR MILLIGRAMS PER LITER
UG/L- PART PER BILLION OR MICROGRAMS PER LITER
U.C.-UNREGULATED CONTAMINATES
MRAA-MAXIMUM RUNNING ANNUAL AVERAGE
MCLG-MAXIMUM CONTAMINANT LEVEL
AL-ACTION LEVEL
TT-TREATMENT TECHNIQUE
MRDL-G-MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL
MRDL-MAXIMUM RESIDUAL DISINFECTANT LEVEL
NTU-NEPHELOMETRIC TURBIDITY UNITS
PPM-PARTS PER MILLION
PPB-PARTS PER BILLION