



# Town of Orleans Water Works

## 2016 Annual Water Quality Report

Dear Customer:

We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The Town of Orleans Water Works is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water.

**Town of Orleans Water Work's drinking water meets or surpasses all federal and state drinking-water standards.**

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Town Council meetings occur on the third Thursday of every month, at the Town Hall at 7:00 PM. The public is welcome.

**Town of Orleans  
161 E Price Ave.  
Orleans, IN 47452**

## Overview

### Water Source

The Town of Orleans Water Works was supplied by surface water purchased from Patoka Lake Regional Water District and the City of Mitchell. There are 3 separate service zones.

These service zones are as follows:

**ZONE 1:** The Town Proper, which includes the vast majority of the water customers, is served by Patoka Water supplied at tank pressure from the Town water towers.

**ZONE 2:** The Mitchell water customers. These include all customers North of the northern Orleans City limits to the Mitchell connection just south of State Highway 60. These customers are served 100% by water purchased from the Mitchell Water System.

**ZONE 3:** The Industrial Park area, which includes everything along Martin Drive and South of Martin Drive. This area runs from State Highway 37 on the West, to Roosevelt Road on the East. This area is served by Patoka Water but operates at a slightly higher pressure supplied by the Patoka tower south of town.

If there are any questions as to what zone serves you, you can call the Town Hall (865-2539) during business hours Mon.- thru Fri., 8:00AM-5:00PM.

### 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 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 Safe Drinking Water Hotline at 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 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 or 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.

### Identification Numbers:

Orleans Water Department - PWSID #5259003  
Patoka Regional Water District - PWSID #5219012  
City of Mitchell Water Department - PWSID #5247003

**2016 Monitoring Results for Patoka Lake Regional Water & Sewer District - PWSID #5219012**

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.

CONSTITUENTS	Date Tested	Unit	MCL	MCLG	MRAA	Range	Violation	Major Sources
--------------	-------------	------	-----	------	------	-------	-----------	---------------

**DISINFECTION PROCESS BYPRODUCTS**

Total Haloacetic Acids (4)	2016	Ppb	60	NA	37.6	29 TO 47	No	Disinfection process byproduct
TTHM'S (Total Trihalomethanes)	2016	Ppb	80.0	NA	39.6	27.5 TO 60.3	No	Disinfection process byproduct

**INORGANIC CONSTITUENTS**

Fluoride	2016	Ppm	2.0	1.0	0.6		No	Water Additive to promote strong teeth & Erosion of natural deposits
Copper	2014	µg/L	1300 AL		210	90 <sup>th</sup> percentile value	No	Corrosion of household plumbing
Lead	2014	µg/L	15 AL		4.8	90 <sup>th</sup> percentile value	No	Corrosion of household plumbing

(For Lead & Copper the number of samples above AL is 0.)

Sodium	2016	PPM	None	None	2	NA	No	Erosion of natural deposits
Barium	2016	PPM	2	2	0.024	N/A	No	Erosion of natural deposits
Gross Alpha	2014	pCi/L	15	0	1.5	N/A	No	Runoff from herbicide used on row crops
Radium 226	2016	pCi/L		0	0.14	N/A	No	Erosion of natural deposits
Radium 228	2016	pCi/L		0	0.83	N/A	No	Erosion of natural deposits
Combined Radium	2016	pCi/L	5	0	.97	N/A	No	Erosion of natural deposits

Turbidity Daily NTU TT=0.3 NA .23 Highest reading No  
Turbidity does not present any risk to your health. Turbidity is a measure of suspended matter in water, and is a good indicator that the filtration system is functioning.

**TOTAL ORGANIC CARBON**

Average percent of removal	%	25%	100	31.4%	23% to 43%	No	Erosion of natural deposits
----------------------------	---	-----	-----	-------	------------	----	-----------------------------

**UNREGULATED CONTAMINANTS**

EPA is preparing a regulation, which will specify a Maximum Contaminant level for radon. Radon is a radioactive gas that occurs naturally in ground water and is released from water into the air during household use. At high exposure levels, it can cause lung cancer. Radon was not detected in the treated finished water distributed by Patoka Lake Regional Water & Sewer District.

CONSTITUENTS	Date Tested	Unit	MRDL	MRDLG	MRAA	Range	Violation	Major Sources
Chloramine	Daily	Ppm	4.0	4.0	3.5	4.0 to 2.0	No	Add for disinfection

**2016 Monitoring Results for City of Mitchell Water Department - PWSID #5247003**

**Regulated Contaminants:**

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG or MRDLG (Chlorine)	MCL or MRDL (Chlorine)	Units	Violation? Y/N	Likely Source of Contamination
Total Trihalomethanes (TTHM)	2016	5	4.4 - 5.1	No goal for the total	BO	ppb	No	By-product of drinking water disinfection
Chlorine	2016	1	1.0 - 1.0	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	UNITS	Violation? Y/N	Likely Source of Contamination
Nitrate (measured as Nitrogen)	2016	3	3.22 - 3.22	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks; sewage; Erosion of natural deposits.

Lead and Copper	Collection Date	MCLG	Action Level (AL)	90th Percentile	# Sites over AL	Units	Violation? Y/N	Likely Source of Contamination
Copper	2015	1.3	1.3	0.011	1	ppm	N	Erosion of natural deposits; leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2015	0	15	5		ppb	N	Erosion of natural deposits; Corrosion of household plumbing systems.

**EXPLANATION OF THE WATER QUALITY DATA TABLES**

This report is based upon tests performed by Patoka Lake Regional Water & Sewer District and the City of Mitchell personnel and contracted labs. Terms used in the Water Quality Table and in other parts of this report are defined here.

Definitions:

IDEM – Indiana Department of Environmental Management

EPA – Environmental Protection Agency

MCL – Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water as established by EPA. The MCL's are set as low to the MCLG's as feasible using the best available treatment technology.

MCLG – Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

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

TT – Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

MRDL – Maximum Residual Disinfectant Level

MRDLG - Maximum Residual Disinfectant Level Goal

MRAA = maximum running annual average

NA - Not applicable

ND - Not detected

AVG - Average

**Key To Table**

NTU = nephelometric Turbidity Units

pCi/L = picocurie per liter

ppb = parts per billion, or micrograms per liter (µg/L)

VOC = Volatile Organic Contaminants

ppm = parts per million, or milligrams per liter (mg/l)

**CHLORAMINES:**

Note: Since 1983, the Patoka Water District has used chloramines to disinfect your drinking water. For all normal users, chloraminated water is the same as water disinfected with chlorine. However, kidney dialysis patients and aquarium or fish pond owners need to take special precautions when using chloraminated water. Kidney dialysis patients should consult your doctors, and fish owners should call your pet store for more information.

Statement 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. Patoka Lake Regional Water & Sewer District and the City of Mitchell are 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>