



AND-TRO WATER AUTHORITY
2023 ANNUAL WATER QUALITY REPORT
DISTRICT #2
IN5262003

Annual Water Quality Report for the period of January 1 to December 31, 2023. This report is intended to provide you with important information about your drinking water and the efforts made by And-Tro Water Authority to provide safe drinking water.

In 2023 the sole water source of the water treated and distributed by Patoka Lake Regional Water & Sewer District was surface water from the Patoka Lake Reservoir.

If you have any questions about the contents of this report, please contact Ms. Jackie Hilgartner at 812-836-2020. Or you can join us at our Water Board Meetings, which are held regularly the second Monday of each month at And-Tro Water Authority Office located at 14100 Old State Road 37, Tell City, IN 47586 at 9:00 a.m. We encourage you to participate and give us your feedback. Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo o hable con alguien que lo entienda bien.

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 bottle 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 and bottle 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. The 2023 testing including weekly microbiological test, which showed no positive result for Total Coliform from Patoka Lake Regional Water. The 2023 testing including monthly microbiological test, which showed no positive result for Total Coliform from And-Tro Water Authority. There were no detects for Radioactive Contaminants or Synthetic Organic Contaminants. A special testing for the gasoline additive MTBE was reported to be below the detection level. Patoka Lake Regional Water District participates in the State Dental Fluoridation Program and adds fluoride to the treated water.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses, and bacterial, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wild life.
- **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, urban storm water runoff, and residential users.
- **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.

CHLORAMINES

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

Statement of 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. And-Tro Water Authority 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 and cooking. If you are concerned about lead in your drinking 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>.

PWSID # IN5262003

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812-836-2020

And-Tro Water Authority is an equal opportunity provider and employer.

2023 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. Immunocompromised 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.

REGULATED CONTAMINANTS:

DISINFECTION BYPRODUCTS & PRECURSORS

Constituents	Date Tested	Units	MCL	MCLG	MRAA	Range	Violation	Major Sources
HAA5's (Total Haloacetic Acids)	2023	ppb	60	N/A	29.7	17.8 to 43	No	Disinfection process byproduct
TTHM's (Total Trihalomethanes)	2023	ppb	80	N/A	38.1	18.7 to 72.6	No	Disinfection process byproduct

INORGANIC CONSTITUENTS

Constituents	Date Tested	Units	MCL	MCLG	MRAA	Range	Violation	Major Sources
Fluoride	2023	ppm	4	4	.72	N/A	No	Water additive to promote strong teeth & erosion of natural deposits
Sodium	2023	ppm	None	None	2.7	N/A	No	Erosion of natural deposits
Silica	2023	ppb	None	None	1.2	N/A	No	
Barium	2023	ppm	2	BDL	.019	N/A	No	Erosion of natural deposits

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	Units	MCL	MCLG	MRAA	Range	Violation	Major Sources
Copper	2020-2023	Ug/L	1300 AL		.423	0.0047 – 1.30	No	Corrosion of household plumbing
Lead	2020-2023	Ug/L	15 AL		6.7	.5 - 17	No	Corrosion of household plumbing

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

Constituents	Date Tested	Units	MCL	MCLG	MRAA	Range	Violation	Major Sources
Gross Alpha	2023	pCi/L	15	0	1.7	N/A	No	Runoff from herbicide used on row crops
Radium 226	2023	pCi/L		0	0.14	N/A	No	Erosion of natural deposits
Radium 228	2023	pCi/L		0	0.17	N/A	No	Erosion of natural deposits
Combined Radium	2023	pCi/L	5	0	.97	N/A	No	Erosion of natural deposits
Turbidity	Daily	NTU	TT-0.3	NA	.25	Highest Reading	No	

Information Statement: Turbidity does not present a 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

Constituents	Units	MCL	MCLG	MRAA	Range	Violation	Major Sources
Average % of removal	%	25%	100	35.3%	25% to 41%	No	Erosion of natural deposits

UNREGULATED CONTAMINANTS:

Constituents	Date Tested	Units	MCL	MCLG	MRAA	Range	Violation	Major Sources
Chloramine	Daily	Ppm	4.0	4.0	3.40	.4 to 3.9	No	Added for disinfectant

VIOLATIONS

Violation Period	Analyte	Violation Type	Violation Explanation	Remedy
6/30/2023 – 8/20/2023	Consumer Confidence Rule	CCR Report	Patoka Lake Regional Water failed to deliver Consumer Confidence Report to the state or customers on time	District will submit CCR's on time.

2023 Monitoring Results for And-Tro Water Authority – District 2

PWSID# IN5262003

Our water system tested a minimum of 2 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. With the microbiological samples collected, the water system collects disinfectant residuals to ensure control of microbial growth.

REGULATED CONTAMINANTS

Lead & Copper	Date Tested	Unit	Action Level (AL)	90 th Percentile: 90% of your water utility levels were less than	Range	Sites over AL	Major Source
Copper	8/2021	ppm	1.3	0.136	.00311 – .292	0	Corrosion of household plumbing
Lead	8/2021	ppb	15	0	0	0	Corrosion of household plumbing

DISINFECTION BYPRODUCTS & PRECURSORS

Disinfection Byproducts	Sample Site	Period	Unit	MCL	MCLG	Highest Level Detected	Range	Major Sources
Halo acetic Acid (HAA5)	Marcy's	2023	Ppb	60	0	29.3	9.36 - 23.8	Disinfection process by-product
Halo acetic Acid (HAA5)	St. Croix Pit	2023	Ppb	60	0	40	8.93 – 39.3	Disinfection process by-product
Total Trihalomethanes (TTHM)	Marcy's	2023	Ppb	80	0	37.3	20 - 58	Disinfection process by-product
Total Trihalomethanes (TTHM)	St. Croix Pit	2023	Ppb	80	0	35.8	17 - 61	Disinfection process by-product

VIOLATIONS TABLE

Violation Type	Violation Begin	Violation End	Violation Explanation
<i>No violations during this period</i>			

DEFICIENCIES

Date identified	Facility	Code	Activity	Due Date	Description
<i>No deficiencies during this period</i>					

EXPLANATION OF THE WATER QUALITY DATA TABLES

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

IDEM: Indiana Department of Environmental Management

EPA: Environmental Protection Agency

MCL: Maximum Contaminant Level: The highest level of contaminant that is allowed in drinking water.

MCLG: Maximum Contaminant Level Goal: The level of 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, if exceeded, trigger treatment or other requirements that the water system must follow.

TT: Treatment Technique:

NTU: Nephelometric Turbidity Units, a measure of the clarity (or cloudiness) of water

pCi/L: picocurie per liter, a measure of radiation

ppb: parts per billion, a measure of concentration equivalent to micrograms per liter

ppm: parts per million, a measure of concentration equivalent to milligrams per liter

MRAA: maximum running annual average

VOC: Volatile Organic Contaminants

BDL: Below Detected Level

Total Coliform: Coliform are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliform were found in more samples than allowed and this was a warning of potential problems.