

## 2023 CONSUMER CONFIDENCE REPORT FOR NORTH LAWRENCE WATER AUTHORITY IN5247004

We are pleased to present to you the Annual Water Quality Report (Consumer Confidence Report) for the period of 1-1-2023 to 12-31-2023. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

North Lawrence Water Authority is purchased surface water. Our water sources and source assessment information are listed below:

SOURCE NAME	TYPE OF WATER
WELL #1	GROUND
WELL #2	GROUND
WELL #3	GROUND
WELL #4	GROUND
WELL #5	GROUND
BEDFORD-IN5247001	SURFACE

The sources of drinking water (both tap 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. Drinking water, even 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 EPA's Safe Drinking Water Hotline at 800-426-4791

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limit the amounts 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. Some people may be more vulnerable to contaminants in drinking water than the general population. Contaminants may be found in drinking water that may cause taste, color or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, color or odor of drinking water, please call the office at 812-279-2774. 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 and 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 microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791

North Lawrence Water Authority is directed by a seven-member board. Those board members represent their respective districts along with one at-large director that represents the entire area. Monthly board meetings occur on the 3<sup>rd</sup> Tuesday of every month at 3pm at 116 Bailey Scales Rd Bedford IN.

Our office is located at 315 Bailey Scales Rd Bedford IN and our hours of operation are Monday-Friday 7am-3:30pm.

Our general manager is Monte Johnson and you can reach him with any questions at 812-279-2774 during regular business hours.

North Lawrence Water Authority was formed in 1967. Service slowly started growing and now covers a vast area of Lawrence County and into Monroe County. We provide water to approximately 4800 customers and currently have 13 employees, 7 board members and almost 250 miles of pipe in the ground ranging from ¾ inch to 12 inches.

North Lawrence Water Authority's mission is to be committed to providing safe, high quality water services to our community and in a timely fashion while maintaining a standard of excellence in customer service and environmental conservation.

Our goal is to improve our service area's quality of life by providing the best product we can deliver. To achieve this goal, we have dedicated and skilled employees that work constantly to provide safe, clean drinking water to you, our customer.

OUR WATER SYSTEM TESTS A MINIMUM OF 10 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.

UNIT	DATE	HIGHEST RAA	UNIT	RANGE	MRDL	MRDLG	TYPICAL SOURCE
CHLORINE	2023	1	PPM	0.3-1.9	4	4	WATER ADDITIVE USED TO CONTROL MICROBES

COLIFORMS ARE BACTERIA THAT ARE NATURALLY PRESENT IN THE ENVIRONMENT AND ARE USED AS AN INDICATOR THAT OTHER POTENTIALLY HARMFUL BACTERIA MAY BE PRESENT. COLIFORMS WERE FOUND IN MORE SAMPLES THAN ALLOWED AND THIS WAS A WARNING OF POTENTIAL PROBLEMS.

MICROBIOLOGICAL	RESULT	MCL	MCLG	TYPICAL SOURCE
COLIFORM (TCR)	IN THE MONTH OF SEPTEMBER, 1 SAMPLE WAS RETURNED AS POSITIVE	TREATMENT TECHNIQUE TRIGGER	0	NATURALLY PRESENT IN THE ENVIRONMENT

IF PRESENT, ELEVATED LEVELS OF LEAD CAN CAUSE SERIOUS HEALTH PROBLEMS, ESPECIALLY FOR PREGNANT WOMEN & YOUNG CHILDREN. LEAD IN DRINKING WATER IS PRIMARILY FROM MATERIALS & COMPONENTS ASSOCIATED WITH SERVICE LINES & HOME PLUMBING. WE ARE RESPONSIBLE FOR PROVIDING HIGH QUALITY DRINKING WATER, BUT WE 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>.

LEAD & COPPER	PERIOD	90 <sup>TH</sup> PERCENTILE: 90% OF OUR LEVELS WERE LESS THAN	RANGE OF SAMPLED RESULTS (LOW-HIGH)	UNIT	AL	SITES OVER AL	TYPICAL SOURCE
COPPER, FREE	20-23	0.142	0.004-0.392	PPM	1.3	0	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS; LEACHING FROM WOOD PRESERVATIVES
LEAD	20-23	2.31	1.05-5.05	PPB	1.5	0	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS

IN THE TABLES BELOW, WE HAVE SHOWN THE REGULATED CONTAMINANTS THAT WERE DETECTED. CHEMICAL SAMPLING OF OUR DRINKING WATER MAY NOT BE REQUIRED ON AN ANNUAL BASIS THEREFORE, INFORMATION PROVIDED IN THIS TABLE REFERS BACK TO THE LATEST YEAR OF CHEMICAL SAMPLING RESULTS.

REGULATED CONTAMINANTS	COLLECTION DATE	HIGHEST VALUE	RANGE	UNIT	MCL	MCLG	TYPICAL SOURCE
FLUORIDE	3-8-21	0.54	0.54	PPM	4	4	EROSION OF NATURAL DEPOSITS; WATER ADDITIVE WHICH PROMOTES STRONG TEETH; DISCHARGE FROM FERTILIZER & ALUMINUM FACTORIES
NITRATE	2-21-23	4.23	4.23	PPM	10	10	RUNOFF FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS, SEWAGE; EROSION OF NATURAL DEPOSITS

CERTAIN MINERALS ARE RADIOACTIVE AND MAY EMIT FORMS OF RADIATION KNOWN AS PHOTONS AND BETA RADIATION. SOME PEOPLE WHO DRINK WATER CONTAINING BETA PARTICLE AND PHOTON RADIOACTIVITY IN EXCESS OF THE MCL OVER MANY YEARS MAY HAVE AN INCREASED RISK OF GETTING CANCER.

<b>RADIOLOGICAL CONTAMINANTS</b>	<b>COLLECTION DATE</b>	<b>HIGHEST VALUE</b>	<b>RANGE</b>	<b>UNIT</b>	<b>MCL</b>	<b>MCLG</b>	<b>TYPICAL SOURCE</b>
GROSS ALPHA, EXCL. RADON & U	4-21-19	1.5	0.5-1.5	PCI/L	15	0	EROSION OF NATURAL DEPOSITS
GROSS BETA PARTICLE ACTIVITY	8-11-19	0.6	0.6	PCI/L	0	0	DECAY OF NATURAL & MAN-MADE DEPOSITS. NOTE: THE GROSS BETA PARTICLE ACTIVITY MCL IS 4 MILLIREMS/YEAR ANNUAL DOSE EQUIVALENT TO THE TOTAL BODY OR ANY INTERNAL ORGAN. 50 PCI/L IS USED AS A SCREENING LEVEL.
RADIUM-228	4-21-19	0.02	0-0.02	PCI/L	5	0	

<b>DISINFECTION BYPRODUCTS</b>	<b>SAMPLE POINT</b>	<b>PERIOD</b>	<b>HIGHEST LRAA</b>	<b>RANGE</b>	<b>UNIT</b>	<b>MCL</b>	<b>MCLG</b>	<b>TYPICAL SOURCE</b>
HALOACETIC ACIDS TOTAL (HAA5)	2212 HARRODSBURG RD	22-23	7	5.9-7.81	PPB	60	0	BY-PRODUCT OF DRINKING WATER DISINFECTION
HALOACETIC ACIDS TOTAL (HAA5)	3970 COVEYVILLE RD	22-23	7	6-17-8.02	PPB	60	0	BY-PRODUCT OF DRINKING WATER DISINFECTION
HALOACETIC ACIDS TOTAL (HAA5)	4613 JUDAH LOGAN RD	22-23	10	5.88-11-6	PPB	60	0	BY-PRODUCT OF DRINKING WATER DISINFECTION
HALOACETIC ACIDS TOTAL (HAA5)	62 REUTER LN	22-23	6	5.06-7.36	PPB	60	0	BY-PRODUCT OF DRINKING WATER DISINFECTION
TTHM	2212 HARRODSBURG RD	22-23	14	11.2-19.6	PPB	80	0	BY-PRODUCT OF DRINKING WATER CHLORINATION
TTHM	3970 COVEYVILLE RD	22-23	16	11.1-22.3	PPB	80	0	BY-PRODUCT OF DRINKING WATER CHLORINATION
TTHM	4613 JUDAH LOGAN RD	22-23	28	13.9-23.8	PPB	80	0	BY-PRODUCT OF DRINKING WATER CHLORINATION
TTHM	62 REUTER LN	22-23	19	10.2-26.9	PPB	80	0	BY-PRODUCT OF DRINKING WATER CHLORINATION

NORTH LAWRENCE WATER AUTHORITY, ON RARE OCCASIONS, PURCHASES WATER FROM BEDFORD CITY UTILITIES (BCU). WE ARE REQUIRED TO PROVIDE TESTING RESULTS FOR THEIR WATER SYSTEM.

REGULATED CONTAMINANTS	COLLECTION DATE	WATER SYSTEM	HIGHEST SAMPLE RESULT	RANGE OF SAMPLE RESULTS	UNIT	MCL	MCLG	TYPICAL SOURCE
ATRAZINE	5-14-23	BCU	1.3	0-1.3	PPB	3	3	RUNOFF FROM HERBICIDE USED ON ROW CROPS
BARIUM	10-1-23	BCU	0.061	0.061	PPM	2	2	DISCHARGE OF DRILLING WASTES; DISCHARGE FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS
DIBROMOCHLOROMETHANE	10-2-23	BCU	0.0089	0-0.0089	MG/L	0.1	0	
FLUORIDE	10-1-23	BCU	0.17	0.17	PPM	4	4	EROSION OF NATURAL DEPOSITS; WATER ADDITIVE WHICH PROMOTES STRONG TEETH; DISCHARGE FROM FERTILIZER & ALUMINUM FACTORIES
NITRATE	1-16-23	BCU	1.6	0.47-1.6	PPM	10	10	RUNOFF FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS, SEWAGE; EROSION OF NATURAL DEPOSITS
NITRATE-NITRITE	1-16-23	BCU	1.6	0.47-1.6	PPM	10	10	RUNOFF FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS, SEWAGE; EROSION OF NATURAL DEPOSITS
SIMAZINE	5-14-23	BCU	0.17	0-0.17	PPB	4	4	HERBICIDE RUNOFF

**VIOLATIONS-** DURING THE PERIOD COVERED BY THIS REPORT WE HAD THE BELOW NOTED VIOLATIONS:

VIOLATION PERIOD	ANALYTE	VIOLATION TYPE	VIOLATION EXPLANATION
1-5-23 TO 1-25-23	REVISED TOTAL COLIFORM RULE (RTCR)	SAMPLE SITING PLAN ERRORS (RTCR)	FAILED TO DEVELOP/REVISE A COLIFORM SAMPLE SITING PLAN, INCLUDING SCHEDULE, SAMPLE SITES AND/OR HOW SITES WERE CHOSEN. WE SUCCESSFULLY SUBMITTEN A CORRECTED SAMPLE SITE PLAN.

In the tables above, there may be terms that you are not familiar with. To help you better understand these terms, we have provided the following definitions.

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

ALG (Action Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Level 1 Assessment: A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why and E. Coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs 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. MCLGs allow for a margin of safety.

MRDLG (Maximum residual disinfectant level goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MRDL (Maximum residual disinfectant level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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

Variances and exemption: State of EPA permission not to meet an MCL or a treatment technique under certain conditions.

AVG (Average): Regulatory compliance with some MCLs is based on running annual average of monthly samples.

LRAA: Locational running annual average.

MREM: Millirems per year (a measure of radiation absorbed by the body)

PPB: Micrograms per liter (UG/L) or parts per billion-or 1 ounce in 7,350,000 gallons of water.

PPM: Milligrams per liter (MG/L) or parts per million-or 1 ounce in 7,350 gallons of water.

PCI/L (picocuries per liter): a measure of radioactivity in water.

NA: not applicable

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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides & Herbicides: which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

Organic Chemical Contaminants: 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 Contaminants: which can be naturally occurring or be the result of oil and gas production and mining activities.