

ANNUAL DRINKING WATER QUALITY REPORT **2023 CONSUMER CONFIDENCE REPORT**

The amendments to the 1996 Safe Drinking Water Act require each public water supply to produce a water quality report titled the Consumer Confidence Report (CCR). Following is the University's annual report for the 2023 calendar year.

The University's water system is a privately owned public water supply operated by the Utilities Department. The University's system provides water to the University community and the nearby C.S.C. properties. Questions regarding the system or sampling results can be directed to Michael Cira, Senior Environmental & Safety Specialist, Utilities Department, 100 Facilities Bldg, Notre Dame, IN 46556, phone 574.631.7110 or Erin Hafner, Environment & Health Assistant Director, Risk Management & Safety, 636 Grace Hall, Notre Dame, IN 46556, phone 574.631.7889.

There are currently seven wells serving the water system, all located on the campus proper. The water is drawn from deep aquifers surrounded by substantial clay barriers that serve to protect the groundwater supply. We do not believe that our source is vulnerable to contamination. We are also taking steps to ensure that our water source does not become contaminated through our Wellhead Protection Program. This program assists in defining where the water supply comes from and methods to protect the aquifers from potential contamination.

The sources of drinking water (both tap water and bottled) 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, in some cases, radioactive material, and can pick up substances resulting from animal and human activity.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (1.800.426.4791) or at the EPA's website at www.epa.gov/safewater.

Contaminants that might be expected to be in source water (untreated water) include:

- 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 was found in more samples than allowed (1 sample) and this was a warning of potential problems. All follow up samples were clear of coliform.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil, pesticides and herbicides.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production or can come from gas stations, urban stormwater runoff, and septic systems.

- Radioactive contaminants, which can be naturally-occurring or are the result of oil and gas production and mining activities.
- 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 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 the 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 www.epa.gov/safewater/lead.

Some people may be more vulnerable to contaminants in drinking water than the general population. Persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly susceptible. 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 from Cryptosporidium and microbial contaminants are available from the Safe Drinking Water Hotline (1.800.426.4791) or at the EPA’s website at www.epa.gov/safewater.

We have tested for over 150 parameters regulated by the EPA and the State of Indiana. Included in these tests were metals, volatile organics, pesticides, herbicides, synthetic organic chemicals and cyanide.

Water Quality Data

The table below lists the EPA’s regulated and unregulated contaminants detected in the University’s drinking water. All of the contaminants are below allowable levels.

Not included in the table are the more than 150 other contaminants including pesticides, herbicides, metals, synthetic organic chemicals, volatile organic chemicals and others which were tested and not detected.

Regulated at Point of Entry (Well)

Regulated Contaminants	Collection date	Unit	Highest Level Detected	EPA’s MCL	EPA’s MCLG	Range	Likely Source of Contamination
Arsenic	11/14/2023	ppb	4.1	10	0	0 –4.1	Erosion of natural deposits
Barium	11/14/2023	ppm	0.19	2.0	2.0	0.062 - 0.190	Erosion of natural deposits
Chromium	11/14/2023	ppb	2.3	100	100	1.3-2.3	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	11/14/2023	ppm	0.09	4	4	0.060 - 0.09	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nickle	11/14/2023	mg/l	0.0028	0.1	0.1	0.0012-0.0028	
Nitrate	11/14/2023	ppm	1.1	10	10	0 – 1.1	Runoff from fertilizer, septic tanks, natural deposits
Nitrate-Nitrite	11/14/2023	ppm	1.1	10	10	0 – 1.1	Runoff from fertilizer, septic tanks, natural deposits
Nitrite	11/14/2023	ppm	0.013	1	1	0 – 0.013	Runoff from fertilizer, septic tanks, natural deposits

Radiological Contaminants	Collection Date	Unit	Highest Level Detected	MCL	MCLG	Range	Likely Source of Contamination
Combined Radium 226/228	06/12/2022	pCi/L	0.89	5	0	0 – 0.89	Erosion of natural deposits
Gross alpha Excluding radon and uranium	06/12/2022	pCi/L	2.07	15	0	0 – 2.07	Erosion of natural deposits
Radium 226	06/12/2022	PCI/L	0.28	5	0	0 – 0.28	Erosion of natural deposits
Radium 228	06/12/2022	PCI/L	0.7	5	0	0.0 – 0.7	Erosion of natural deposits

Regulated at User Tap

Regulated Contaminants	Collection Date	Unit	90 th Percentile	# Sites over AL	MCL	MCLG	Range	Source of Contamination
Copper	09/30/2023	ppm	0.32	1	1.3	1.3	<0.001 – 2.2	Corrosion of plumbing systems, failure of sampling protocol
Lead	09/30/2023	ppb	7.54	3	15	0	<0.5 – 130	Corrosion of plumbing systems, failure of sampling protocol

Microbiological	Result	MCL	MCGL	Typical Source
COLIFORM	In the month of October, 1 sample returned as positive. Follow up samples were clear of all coliform	Treatment Technique Trigger	0	Naturally present in the environment

Violations

Violation Type	Analyte	Violation Period	Violation Explanation
Monitoring and Reporting Violation Routine, Minor (RTCR)	E. Coli	12/31/2022-01/30/2023	Contract Laboratory failed to submit required Coliform Reports in timely manner (samples had been collected and submitted to lab correctly)
Monitoring and Reporting Violation Routine, Minor (RTCR)	E. Coli	10/31/2023-11/29/2023	Contract Laboratory failed to submit required Coliform Reports in timely manner (samples had been collected and submitted to lab correctly)

Definitions

MCL: Maximum Contaminant Level (MCL). The highest level of a contaminant allowed in drinking water.

MCLG: Maximum Contaminant Level Goal (MCLG). The level of a contaminant at which there is no known or expected health risk.

mrem/yr: millirems per year (a measure of radiation absorbed by the body)

ppm: parts per million.

ppb: parts per billion.

90th Percentile: 90% of the samples were below the number listed.

pCi/L: picocuries per liter.