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Upland IN 46989-0428

d by Taylor University, Environmental Sciences for OF UPLAND Water & Sewage

TOWN OF UPLAND

DRINKING WATER QUALITY
2024 ANNUAL REPORT

(FOR TESTING IN 2023 AND PRIOR YEARS)



Photo credit: USEPA photo by Eric Vance

We are pleased to report that public water in Upland is safe to drink and meets the regulations of both the State of Indiana (IDEM) and the federal Environmental Protection Agency (EPA).

Source of Upland's Drinking Water

Upland's water supply comes from three 150-foot deep wells that draw from sand and gravel aquifers. These wells are located on property owned by the Town of Upland.

After pumping the groundwater from the aquifer source, the Town of Upland treats the water by filtration and chlorination to remove or reduce undesirable substances. During distribution, they also test the quality of your drinking water. These tests are conducted daily, monthly, quarterly, and annually for various substances, as required by the Indiana Department of Environmental Management (IDEM).

Protecting Upland's Water Supply

The U.S. Environmental Protection Agency (EPA) and the IDEM require all municipalities that provide public water to develop a **Wellhead Protection Plan** (WHPP).

For Upland, this includes determining the protection area for the pumping wells, identifying potential sources of contamination, and developing management plans for those sites. This wellhead protection area was designed to ensure that public groundwater supply is safeguarded against contaminants now and in the future.

The Upland WHPP Phase I was approved by IDEM in 2003, and Phase II was approved in 2011. These plans are available for review in the Upland Town Office.



If you observe a spill or a potential source of contamination within the Town of Upland, please report it to the Town office at 998-7439.

What Affects Our Water Quality?

Common sources of drinking water (both tap water and bottled water) may include rivers and streams, lakes and reservoirs, and 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 the presence of animals or from human activity. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. However, the presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural and livestock operations, and wildlife.

Inorganic contaminants, such as salts or metals, can occur naturally or from urban runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

<u>Pesticides and herbicides</u> may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemicals, including synthetic and volatile organic chemicals, may come from by-products of industrial processes and petroleum production, or from gas stations, urban storm water runoff, and septic systems.

<u>Radioactive materials</u> can be naturally occurring or be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

Upland Water Quality Monitoring

To ensure drinking water safety, the U.S. Environmental Protection Agency (EPA) prescribes maximum contaminant levels (MCLs) of certain contaminants in public water systems. The Food and Drug Administration (FDA) establishes limits for contaminants in bottled water, which must provide the same protection for public health.

Bacteriological monitoring

Four samples each month are sent directly to the IN State Department of Health Labs.

Copper Content

*In 2021, twenty public and private sources were sampled for copper, ranging <0.01-0.58. All samples were below the MCL of 1.3ppm.

Lead Content

If present at elevated levels, 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 private home plumbing. The Town of Upland is responsible for providing high quality drinking water, but cannot control the variety of materials in private plumbing.

**(In 2021, twenty public and private sources were sampled for lead. Sixteen were below detection (<1.0ppb). Four ranged from 7.4 to 23.8ppb. Only one sample (23.8ppb) exceeded the MCL (15ppb); the owner was recommended to use a different water source until the source of lead was identified and eliminated.)

When your water has been sitting for several hours, you can reduce the potential for lead exposure by flushing your tap for 30-120 seconds before using for drinking or cooking.

If you are concerned about lead in your water, you may wish to test your water.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure to lead is available at:

Upland Drinking Water Monitoring Results — 2023 and prior years, as required

The state allows us to monitor for some contaminants less than once per year. The dates in this report are from the most recent testing.

Contaminant	Unit Measure	Level Detected	EPA MCL ¹	Date Sampled	Likely Source(s) of Contamination	
Radioactive Contamina	ants					
Gross Alpha Gross Beta Radium 226 Radium 228	pCi/L pCi/L pCi/L pCi/L	3.95 2.29 0.561 1.713	15 4 5 5	8/29/23 8/29/23 8/29/23 8/29/23	Erosion of natural deposits Decay of natural and man-made deposits Erosion of natural deposits Erosion of natural deposits	
Inorganic Contaminan	<u>ts</u>		T	•		
Antimony	ppm ²	< 0.0010	0.006	8/31/21	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	
Arsenic	ppm	< 0.0010	0.010	8/31/21	Erosion of natural deposits; runoff from orchards; glass and electronics wastes	
Barium	ppm	0.020	2.0	8/31/21	Discharge from drilling wastes or metal refineries; erosion of natural deposits	
Beryllium	ppm	< 0.001	0.004	8/31/21	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace and defense industries	
Cadmium	ppm	< 0.001	0.005	8/31/21	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints	
Chromium (total)	ppm	< 0.005	0.1	8/31/21	Discharge from steel and pulp mills; erosion of natural deposits	
Copper*	ppm	0.12 (avg) < 0.01 to 0.58*	1.3	8/31/21	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Cyanide (as free cyanide)	ppm	<0.01	0.2	2/14/22	Discharge from steel/metal factories; or from plastic and fertilizer factories	
Fluoride (Natural)	ppm	1.61	4.0	8/31/21	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	
Lead**	ppb ³	2.53 (avg) < 1.0 to 23.8**	15.0	8/31/21	Corrosion of household plumbing systems; erosion of natural deposits	
Mercury (inorganic)	ppm	< 0.0002	0.002	8/31/21	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills or cropland	
Nickel	ppm	< 0.01	0.1	8/31/21	Possible waste runoff from industry	
Nitrogen-Nitrate Nitrogen-Nitrite	ppm ppm	< 1.0 < 0.01	10.0 1.0	8/29/23 6/29/22	Run-off from fertilizer use; leaching from septic tanks; sewage; erosion from natural deposits	
Selenium	ppm	< 0.0010	0.05	8/31/21	Discharge from petroleum & metal refineries or mines; erosion of natural deposits	
Sodium	ppm	55.8	N/A	8/31/21	Runoff from road salt application	
Thallium	ppm	< 0.0010	0.002	8/31/21	Leaching or discharge from ore-processing sites, electronic, glass, & drug factories	
					ganic Compounds (VOCs) and Synthetic Organic Compounds (SOCs) were sampled are not regulated. (The Detection Level is 0.5 ppb.)	
Bromodichloromethane Bromoform	ppb ³	18.0	N/A	8/17/12	Byproduct of industrial waste	
	ppb	1.5	N/A	8/17/12	Byproduct of industrial waste	
Chlorodibromomethane	ppb	10.7	N/A	8/17/12	Byproduct of industrial waste	
Chloroform	ppb	19.5	N/A	8/17/12	Byproduct of industrial waste	
Haloacetic acids (HAA5)	ppb	9.23 9.4	60	8/29/23 8/29/23	By-product of drinking water chlorination	
Total Trihalomethanes (TTHM)	ppb	19.3 25.7	80	8/29/23 8/29/23	By-product of drinking water chlorination	

¹ MCL = Maximum Contaminant Level ² ppm = parts per million (milligrams/liter, mg/L) ³ ppb = parts per billion (micrograms/liter, ug/l)

Aesthetic Water Quality

Hardness and iron are aesthetic factors and do not necessarily affect water quality for human health. These were tested in 2002.

Substance	Units	Amount Detected
Total Hardness (CaCO ₃)	ppm	380.0 (Very hard)
Iron	ppm	0.039

For Those at Higher Risk

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, who have undergone organ transplants, or have HIV/AIDS or other immune system disorders, and some elderly and infants may be particularly at risk from infections. These people should seek advice from their health care providers about their drinking water.

EPA/CDC guidelines on appropriate means to reduce risk of infection by cryptosporidium and other microbiological contaminants are available from Safe Drinking Water Hotline. 800-426-4791, http://water.epa.gov/drink/hotline.

Conserve Our Precious Water Supply

Conserving water helps save the water source and reduce the energy costs of pumping and chemical treatment. Please, conserve and protect our water resources:

- Run the washer & dishwasher at full loads.
- Use low-flow faucets, toilets, and aerators.
- Install a rain barrel for outdoor watering.
- Monitor your water use to identify leaks.
- Consider a home water audit.

If you have any questions, contact:

Brad Felver

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