

# ***Indian Hill Water Works***

## **2021 DRINKING WATER CONSUMER CONFIDENCE REPORT**

**OUR COMMITMENT** – The Indian Hill Water Works (IHWW) has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality tests, how to participate in decisions concerning your drinking water and water system contacts. Our employees work daily to ensure that the water delivered from the facilities is safe, dependable, and meets or exceeds all regulatory requirements. “Your drinking water met all Ohio EPA standards in 2021”.

**ORIGIN OF OUR WATER** - Our water originates from nine groundwater wells located along the Little Miami River in Hamilton and Clermont Counties between Milford and Camp Dennison. Protecting our drinking water source from contamination is the responsibility of all area residents and businesses. Please dispose of hazardous chemicals and prescription drugs in the proper manner and report polluters to the appropriate authorities. Only by working together can we ensure an adequate safe supply of water for future generations. The Water Treatment Plant is adjacent to the wellfield at 7100 Glendale Milford Road (State Route 126). The ground water is softened to remove a portion of the hardness, chlorinated for disinfection, fluoridated for dental health, and zinc orthophosphate is added for corrosion control. The Water Treatment Plant produced more than 807 million gallons of water in 2021. Indian Hill Water Works also has auxiliary connections with the Greater Cincinnati Water Works for emergency use. We used one of those connections in 2018 during our Electrical Power improvement project.

**SUSCEPTIBILITY ANALYSIS** - In 2011 the Ohio EPA endorsed the Indian Hill Water Works Source Water Assessment and Protection Plan. Indian Hill Water Works has since added a Best Management Practices for Lead at the Indian Hill Shooting Ranges, Best Management Practices for Road Salt Storage at the Public/Water Works Facility, and added an additional Monitoring Well within the one-year time of travel zone to our production wells. According to this study, the aquifer that supplies water to IHWW has a high susceptibility to contamination. This determination is based on the following: 1) lack of a protective layers of clay/shale/or other low permeability material overlying the aquifer; 2) shallow depth (less than 15-30 feet below ground surface) of the aquifer; 3) and the presence of manmade contaminants in the treated water. Nitrates were detected in the treated water at a level of concern in 2021. This indicates an impact from land use activities, but these concentrations are well below the federal and state drinking water standard of 10 ppm. The risk of future contamination can be minimized by implementing the protective measures outlined in the Source Water Assessment and Protection Plan. Please contact Indian Hill Water Works at 513-831-3885 for more information on this plan.

**SOURCES OF CONTAMINATION TO DRINKING WATER**- According to the Ohio EPA, “The sources of drinking water both tap 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 the presence of animals or from human activity. Contaminants that may be present in source water include: (A) microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture urban storm water runoff, and residential uses; (D) 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 storm water runoff, and septic systems; (E) radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, the EPA prescribes regulations 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. 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 (1-800-426-4791).”

**HEALTH CONCERNS**- 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 infection. 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 (1-800-426-4791).

**WATER QUALITY CHARACTERISTICS** - Indian Hill Water Works conducted sampling for bacteria, nitrates, nitrites, inorganics, lead, copper, radiologicals, synthetic organic chemicals, volatile organic chemicals, asbestos, total chlorine and disinfection byproducts in 2021. Ohio EPA requires regular sampling to ensure drinking water safety. Some contaminants are monitored less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, may be more than one year old. We are pleased to report that no violations of EPA MCLs occurred in 2021.

**LEAD EDUCATIONAL INFORMATION** - 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. Indian Hill Water Works is 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

**IT’S YOUR UTILITY** - We at the Indian Hill Water Works take our responsibility very seriously when it comes to providing you with the safest water possible. Your input is valuable to us and is welcome at any time by calling Indian Hill Water Works at 513-561-6679. Also, Village of Indian Hill Council meetings occur monthly, except July, on scheduled Mondays at 6:30 P.M. The schedule is included on the website at [www.ihill.org](http://www.ihill.org), and in the Indian Hill Bulletin, or can be obtained by calling the Village of Indian Hill Administration Building at 513-561-6500. Indian Hill Water Works had an unconditional license to operate our system in 2021. Any questions or comments regarding the Source Water Protection Plan and this report may be directed to Aaron Freson, Chief Plant Operator, at 513-831-3885.

TABLE OF DETECTED CONTAMINANTS

REGULATED CONTAMINANTS								
Substance	Units	MCLG	MCL	Level Found	Range of Detection	Violation	Year Sampled	Typical Sources of Contamination
Antimony	ppb	6	6	0.49	NA	No	2021	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium	ppm	2	2	0.032	NA	No	2021	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	ppm	4	4	1.05	0.83 - 1.25	No	2021	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	ppm	10	10	1.10	0.38 - 1.10	No	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
Thallium	ppb	0.5	2	0.42	NA	No	2021	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Total Trihalomethanes	ppb	NA	80	20.2	19.4 - 20.2	No	2021	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	ppb	NA	60	7.77	6.79 - 7.77	No	2021	By-product of drinking water chlorination
Total Chlorine	ppm	MRDL= 4	MRDLG= 4	0.96	0.78 - 0.97	No	2021	Water additive used to control microbes
Contaminant	Units	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Range Detected	Violation	Year Sampled	Typical Sources of contamination
Lead	ppb	15.0	NA	<1	NA	No	2021	Corrosion of household plumbing systems; erosion of natural deposits
		Zero of 31 samples were found to have lead in excess of the action level of 15 ppb						
Copper	ppm	1.30	NA	0.91	0.21 - 1.29	No	2021	Corrosion of household plumbing systems; erosion of natural deposits
		Zero of 31 samples were found to have copper in excess of the action level of 1.3 ppm						
UNREGULATED CONTAMINANTS DETECTED								
Contaminant	Units	MCLG / AL	MCL	Level Found	Range of Detection	Violation	Year Sampled	Typical Sources of Contamination
Bromoform	ppb	NA	NA	1.1	1.0 - 1.1	NA	2021	By-product of drinking water chlorination
Chloroform	ppb	NA	NA	7.1	6.9 - 7.3	NA	2021	By-product of drinking water chlorination
Dibromochloro-methane	ppb	NA	NA	4.7	4.7 - 4.7	NA	2021	By-product of drinking water chlorination
Bromodichloro-methane	ppb	NA	NA	6.9	6.7 - 7.1	NA	2021	By-product of drinking water chlorination
Monochloroacetic Acid	ppb	NA	NA	2.1	2.0 - 2.1	NA	2021	By-product of drinking water chlorination
Dichloroacetic Acid	ppb	NA	NA	1.5	1.2 - 1.7	NA	2021	By-product of drinking water chlorination
Trichloroacetic Acid	ppb	NA	NA	1.3	1.0 - 1.6	NA	2021	By-product of drinking water chlorination
Dibromoacetic Acid	ppb	NA	NA	2.5	2.5 - 2.5	NA	2021	By-product of drinking water chlorination
Nickel	ppb	NA	NA	2.4	NA	NA	2021	A chemical element
PFOS	ppt	70	NA	12.1	NA	NA	2021	One of a group of man-made chemicals known as PFAS, applied to consumer goods to make them waterproof, stain resistant, or nonstick.

Listed below are abbreviations and definitions that will help you with the table above:

- ppm:** Parts per million, are units of measure for concentration of a contaminant. A part per million corresponds to one second in approximately 11.5 days.
- ppb:** Parts per billion, are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- ppt:** Parts per trillion, are units of measure for concentration of a contaminant. A part per trillion corresponds to thirty seconds in a million years.
- <:** Less than symbol
- NA:** Not applicable

**Definitions**

**Maximum Contaminant Level Goal or MCLG:** 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.

**Maximum Contaminant Level or MCL:** 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.

**Action Level or AL:** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system shall follow.

**Maximum Residual Disinfectant Level Goal or MRDLG:** The level of 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.

**Maximum Residual Disinfectant Level or MRDL:** 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.

**PFAS:** PER- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into harm they may cause to human health is still ongoing.

*\* In 2020, our PWS was sampled as part of the State of Ohio's Per- and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Results from this sampling indicated PFAS were detected in our drinking water below the action level established by Ohio EPA. Follow up monitoring was conducted in 2021 and that sample indicated 12.1ppt. For more information about PFAS, and to view our latest results, please visit [pfas.ohio.gov](https://pfas.ohio.gov).*