CCR 21; Vol 1

Highland Waterworks

PWSID#: 5245021

2021 Consumer Confidence Report

3.0

Developed by the Highland Waterworks

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219-972-5069

Waterworks Operations
219-972-5083

The Highland Waterworks (HWW) is committed to providing the best water quality and services to our customers.

As part of this commitment to you, the customer, we have developed this Consumer Confidence Report (CCR).

This report is intended to provide you with up to date information regarding the quality of your water supply.

In 1996, Congress amended the Safe Drinking Water Act. It added a provision requiring that all community water systems deliver to their customers a brief annual water-quality report.

Town of Highland
3333 Ridge Road
Highland, IN 46322-2018

Highland Waterworks
PWSID #5245021

2021 Consumer Confidence Report

To our water customers, the Indiana Department of Environmental Management (IDEM) has directed the Highland Water Works to include regulated contaminents that are tested for in the Hammond water distribution system by the Hammond Water Works. The data was provided by the IDEM.

Regulated and Tested for in the Hammond Water Distribution System (data acquired from Indiana Department of Environmental Management)

Summary of Water Quality Data

Microbiological Contaminants	*Date Tested*	*Unit*	*Goal (MCLG)*	*Maximum Allowed (MCL)*		*Detected Level*	*Range of Values Tested*	*Likely Source of Contamination*
Total Coliform	2020	% of Samples	0	≥5		2.3%	n/a	Naturally present in the environment
Turbidity[1]	2020	NTU	n/a	TT		0.04-0.15	n/a	Soil runoff
	Limit (Treatment Technique)			Level Detected			Violation	
Highest Single Measurement	1 NTU			0.15 NTU			N	Soil runoff
Lowest Monthly % Meeting Limit	0.3 NTU			100%			N	Soil runoff
Inorganic Chemicals	*Date Tested*	*Unit*	*MCLG*	*MCL*		*Level*	*Range*	*Likely Source of Contamination*
Nitrate (measured as Nitrogen)	2021	ppm	10.0	10.0		0.3281	n/a	Runoff from fertilizer use; Leaching from septic tanks, sewage
Barium	2021	ppm	2.0	2.0		0.021	n/a	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2021	ppm	4.0	4.0		0.7	0.74-0.74	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead and Copper	*Date Sampled*	*MCLG*	*Action Level (AL)*	*90th Percentile*	*# Sites Over AL*	*Units*	*Violation*	*Likely Source of Contamination*
Copper[2]	2021	1.3	1.3	0.1146	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives. Corrosion of household plumbing systems
Lead[3]	2021	0	15.0	2.3	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits
Disinfection By-Products	*Date Tested*	*Unit*	*MCLG*	*MCL*		*Level*	*Range*	*Likely Source of Contamination*
Total Halocetic Acids	2021	ppb	n/a	60		8.0	2.2-5.8	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	2021	ppb	n/a	80		15.7	10.8-20.6	By-product of drinking water chlorination
Chlorine	2021	ppm	n/a	4.0		2.2	1.6-2.2	By-product of drinking water chlorination
Radioactive Contaminants	*Collection Date*	*Highest Level Detected*	*Range of Levels Detected*	*MCLG*	*MCL*	*Units*	*Violation*	*Likely Source of Contamination*
Gross alpha excluding radon and uranium	2018	0.54	0.54-0.54	0	15	pCi/L	N	Erosioin of natural deposits
Synthetic Organic Contaminants Including Pesticides and Herbicides	*Collection Date*	*Highest Level Detected*	*Range of Levels Detected*	*MCLG*	*MCL*	*Units*	*Violation*	*Likely Source of Contamination*
2,4-D	05/07/2019	0.5	0.5-0.5	70	70	ppb	N	Runoff from herbicide used on row crops
Atrazine[4]	2021	BDL	BDL	3	3	ppb	N	Runoff from herbicide used on row crops

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	*Violation Begin*	*Violation End*	*Violation Explanation*
INITIAL GAP SAMPLING (LCR)	07/01/2021	12/31/2021	Water samples showed that the corrosion control we use failed to consistently control the aggressive nature of our drinking water for the period indicated, thus likely increasing the amount of lead or copper in our drinking water

Revised Total Coliform Rule (RTCR)

Violation Type	*Violation Begin*	*Violation End*	*Violation Explanation*
REPORT SAMPLE RESULT FAIL MINITOR - RTCR	08/01/2021	08/31/2021	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated

Water Quality Table Footnotes

1. 100% of the samples tested were below the treatment technique level of 0.3 NTU. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
2. None of the samples tested for copper exceeded the current action level of 1.3 ppm.
3. None of the samples test for lead exceeded the current action level of 15.0 ppb.
4. BDL = Below Detection Level of 0.1 ppb.

Source Water Information

The Surface Water Source for The City of Hammond and its wholesale customers comes from Lake Michigan. The Indiana Department of Environmental Management has assessed all surface water sources. In Indiana all surface waters are considered to be susceptible to contamination. Therefore, chemical treatment, filtration, and lab analysis ensures high quality drinking water. For more information please contact IDEM-Drinking Water Branch at (800) 451-6027.

Water System Information

The Highland Waterworks Board of Directors oversees the operation of the Highland Waterworks. The Board of Directors is comprised of five (5) members appointed by the municipal executive (Town Council President) for a term of three (3) years. No more than three (3) may be of the same political party. The Board of Directors meets on the 2nd (study session) and 4th (public meeting) Thursdays of each month at 7:00 p.m. All meetings are open to the public. If you have any questions about the contents of this report, please contact Mr. Mark Knesek at (219) 972-5083 or visit www.highland.in.gov.

Sources of Water and Distribution

HWW purchases finished water from the Hammond Waterworks, which has a Lake Michigan (surface water) source. The Indiana Department of Environmental Management (IDEM) will be completing assessments of Lake Michigan source water over the next several years. The Hammond Waterworks delivers water to the Bradley Pump Station ground storage reservoirs located at 8005 Kennedy Avenue. From the Bradley Pump Station, water is distributed throughout the community. The HWW has six (6.0) million gallons of ground storage capacity and one and one-half (1.5) million gallons of elevated storage capacity with a total of seven and one-half (7.5) million gallons of total storage.

Information Regarding 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. 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 elevated lead levels in your home's 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.

Safe Drinking Water Hotline
1-800-426-4791 www.EPA.GOV/Safewater

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 the 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 water and bottled 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, 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 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, storm water runoff, and residential uses;

(D) Organic chemicals, 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 materials, 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health".

Violation Summary Table

No violations were issued during this CCR year.

2021 total water pumped: 1,285,590,000

Vulnerable Populations

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 infections. These people should seek advice about drinking water from their health care providers. EPA and 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 at (800) 426-4791.

Terms and Abbreviations used in the Report

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

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below with there is no known or expected risk to health.

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

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

Nephelometric Turbidity Unit (NTU): A measure of the clarity (or cloudiness) of water.

ppb = Parts Per Billion Parts
ppm = Parts per Million Parts
ug/l = Micrograms per liter
mg/l = Milligrams per liter
P* = Potential violation or one that is likely to occur in the near future
na = either not available or not applicable
pCi/L = pico curies per liter (a measure of radiation)

Synthetic Organic Contaminants (SOC's), Volatile Organic Compounds (VOC's) and any Unregulated Contaminants were not detected in the Finished Water at the entry point of the Hammond distribution system (data acquired from Hammond Waterworks)

SUBSTANCE	MCLG	MCL	AMOUNT	90TH PERCENTILE	RANGE OF DETECTION	DATE TESTED	VIOLATION NOTED	TYPICAL SOURCE OF CONTAMINATION
Nitrate (ppm)	10	10	0.39		0.33 mg/L	2021	none	
Sodium (mg/L)	na	na	8.8		0.9 mg/L	2021	none	
Turbidity (%,<0.30 NTU)	na	>95%	100%			2021	none	Soil Runoff
Turbidity (NTU)	na	1			0.06 - 0.15 NTU's-Tap	2021	none	Soil Runoff
Fluoride (mg/l)	4	4			0.7 - 1.0 mg/L	2021	none	Erosion of natural deposits/Water additive for prevention of tooth decay
Regulated and Tested for in the Highland Water Distribution System								
Microbial Substance E.coli (EC) (#positive/mo)	0	0	0			2021	none	Human and animal fecal waste
Total Haloacetic Acids (ppb)	na	60	5.2		0 - 5.2	2021	none	Disinfection by-Products
Total Trihalomethanes (ppb)	na	80	18.6		10.7 - 18.6	2021	none	Disinfection by-Products
Atrazine	na	0.1 ug/L	0.1	3	3	2021	none	Runoff from herbicide used on row crops
Copper (mg/L)	1.3	Action Level = 1.3	0.43	0.22	<0.01 - 0.72	2020	none	Corrosion of household plumbing systems/Erosion of natural deposits and leaching of wood preservatives
Lead (ug/L)	0	Action Level = 15	<5.0	4.1	<0.5 - 5.3	2020	none	Corrosion of household plumbing systems/Erosion of natural deposits
Asbestos Fibers (fiber>10 micrometers)	7 million fibers per liter	7 million fibers per liter	0		<0.03	2020	none	Decay of asbestos cement in water mains; erosion of natural deposits

SUBSTANCE	MCLG	Total Coliform Maximum Contaminant Level	HIGHEST NO. OF POSITIVE		TOTAL NO. OF POSITIVE E. COLIFORM OR FECAL COLOFORM SAMPLES	DATE TESTED	VIOLATION NOTED	TYPICAL SOURCE OF CONTAMINATION
Microbial Substance Total Coliform (TC) (#positive/mo)	0	none	0	0	0	2021	none	Naturally present in the environment

Data presented in the report are from the most recent testing done in accordance with the regulations