

**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 which 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

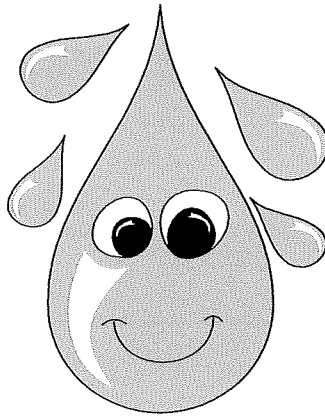
pCi/L = pico curies per liter (a measure of radiation)

**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.

**Violation Summary Table**

No violations were issued during this CCR year.



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

CCR 19; Vol 1  
**Highland Waterworks**  
PWSID#: 5245021

# 2017 Consumer Confidence Report

*Developed by  
the Highland Waterworks*

**Billing Department**  
219-972-7589

**Waterworks Superintendent**  
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.

**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. John Bach at (219) 972-5069.

**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](http://www.epa.gov/safewater/lead).

**Safe Drinking Water Hotline**

1-800-426-4791 [www.EPA.GOV/Safewater](http://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".

SUBSTANCE	MCLG	MCL	AMOUNT	90TH PERCENTILE	RANGE OF DETECTION	DATE TESTED	VIOLATION NOTED	TYPICAL SOURCE OF CONTAMINATION
<b>Regulated and Tested for in the Hammond Water Distribution System (data acquired from Hammond Waterworks)</b>								
Disinfectant Residual (mg/l)	na	na			1.0-2.3	2017	none	Disinfection by-Products
Total Haloacetic Acids (ppb)	na	na			3.0-4.1	2017	none	Disinfection by-Products
<b>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)</b>								
Toluene (ppm)	na	1.0	0.7			2001	none	Discharge from Petroleum Factories
Nitrate (ppm)	10	10	1.5			1999	none	
Sodium (mg/l)	na	na	9.9			2017	none	
Turbidity (% <0.30 NTU)	na	>95%	100%			2017	none	Soil Runoff
Turbidity (NTU)	na	1			0.04-11	2017	none	Soil Runoff
Fluoride (mg/l)	4	4			0.01-1.5	2017	none	Erosion of natural deposits/Water additive for prevention of tooth decay
<b>Regulated and Tested for in the Highland Water Distribution System</b>								
Microbial Substance E.coli (EC) (#positive/mo)	0	0	0			2013	none	Human and animal fecal waste
Total Haloacetic Acids (ppb)	na	60	3.5		2.8-4.2	2017	none	Disinfection by-Products
Total Trihalomethanes (ppb)	0	80	17.2		9.7-24.9	2017	none	Disinfection by-Products
Copper (mg/l)	1.3	Action Level = 1.3	0.43	0.31	<.01-.96	2017	none	Corrosion of household plumbing systems/ Erosion of natural deposits and leaching of wood preservatives
Lead (mg/l)	0	Action Level = 15	<5.0	2.7	<0.5	2017	none	Corrosion of household plumbing systems/ Erosion of natural deposits
Asbestos Fibers (fibers>10 micrometers)	7 million fibers per liter	7 million fibers per liter	0		<.03	2004	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	1	1		0	2017	none	Naturally present in the environment
<b>Data presented in the report are from the most recent testing done in accordance with the regulations</b>								

Contaminants

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine Disinfection	2017	2	2 - 2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control
(HAA5)	2017	4	3 - 10.7	No goal for the total	60	ppb	N	By-product of drinking water di
Trihalomethanes	2017	16	10.5 - 23	No goal for the total	80	ppb	N	By-product of drinking water di
Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
	2017	0.019	0.019 - 0.019	2	2	ppm	N	Discharge of drilling wastes; D metal refineries; Erosion of nat
	2017	0.7	0.74 - 0.74	4	4.0	ppm	N	Erosion of natural deposits; W promotes strong teeth; Discha and aluminum factories.
Lead and Copper	2017	0.41	0.41 - 0.41	10	10	ppm	N	Runoff from fertilizer use; Leac tanks, sewage; Erosion of natu

Measurement	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Turbidity	1 NTU	0.1 NTU	N	Soil runoff.
% meeting limit	0.3 NTU	100%	N	Soil runoff.

Comment: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiv