

**Kelleys Island Water Treatment Plant**  
**Drinking Water Consumer Confidence Report**  
**For 2015**

**Introduction**

The Kelleys Island Water Treatment Plant 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 test results, how to participate in decisions concerning your drinking water and water system contacts.

**Source Water Information**

The Village of Kelleys Island public water system uses surface water drawn from an intake 600 feet out in Lake Erie. For the purposes of source water assessments in Ohio, all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens which may rapidly arrive at the public drinking water intake with little or no warning or time to prepare. The Village of Kelleys Island drinking water source water protection contains potential contaminant sources such as discharges of industrial wastewater and inadequately treated residential sewage. Runoff containing nitrates and pesticides from agricultural and landscaped areas may also impact the source water. Recreational and commercial boating traffic poses a threat of fuel and oil spills.

The Village of Kelleys Island public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. More detailed information can be obtained by calling the Water Department at 419-746-2555.

**What are sources of contamination to drinking water?**

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 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 stream 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, USEPA prescribes regulations which limit the amount 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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

**Who needs to take special precautions?**

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).

**About your drinking water.**

The EPA requires regular sampling to ensure drinking water safety. The Kelleys Island Water Treatment Plant conducted sampling for bacteria; inorganic; synthetic organic; and volatile organic contaminants during 2015. Samples were collected for a total of approximately 68 different contaminants, most of which were not detected in the Kelleys Island Water Treatment water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

**Table of Detected Contaminants**

Listed below is information on those contaminants that were found in the Kelleys Island drinking water.

**TABLE OF DETECTED CONTAMINANTS**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Bacteriological</b>							
Turbidity NTU	N/A	TT	5.1	.03-5.1	No	2015	Soil Runoff
Turbidity (% meetin Standards)	N/A	TT	66.1 %	66.1 % to 100 %	Yes	2015	Soil Ruunoff
Total Organic Carbon mg/L	N/A	TT	1.6	1.6-1.9	No	2015	Naturally present in the environment
<b>Inorganic Contaminants</b>							
Copper mg/L	.613	AL= 1.35	.304	N/A	No	2013	Corrosion of household plumbing; erosion natural deposits; leaching from wood preservatives
Lead mg/L	.015	AL= .015	.005	N/A	No	2013	Corrosion of household plumbing ; erosion of natura deposits

Nitrates (as Nitrogen) mg/L	10	10	.64 mg/L	<.10 mg/ to.64 mg/L	No	2015	Runoff from fertilizer use ; leaching from septic tanks; sewage; erosion of natural deposits
<b>Disinfection Byproducts</b>							
Total Trihalomethanes TTHM (ppb)	0	80	50.8	32.6-58.8	No	2015	By-product of drinking water chlorination
Haloacetic Acids HAA5 (ppb)	0	60	47.1	12.8-54.1	No	2015	By-product of drinking water chlorination
<b>Residual Disinfectants</b>							
Total Chlorine (ppm)	MRDL= 4	MRDL G= 4	1.90	.83-2.20	No	2015	Water additive used to control microbes

### Turbidity

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is .3 NTU in 95% of the daily samples and shall not exceed 5 NTU at any time. As reported above, the Kelleys Island Water Treatment Plant highest recorded turbidity result for 2015 was 5.1 NTU and lowest monthly percentage of samples meeting the turbidity limits was 66.1 %.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for bacterial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, parasites, and viruses that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

### Violations

***The Kelleys Island Water Treatment Plant had a treatment technique violation during the months of October and November 2015 as the flash mixer was removed for repairs. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps and diarrhea and associated headaches. Kelleys Island Water System had the mixer repaired and reinstalled October 17<sup>th</sup>, repair parts are to be kept on hand to preclude a repeat occurrence.***

### 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. Kelleys Island Water Treatment 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

#### **License to Operate (LTO) Status Information**

In year 2015 we had an unconditioned license to operate our water system.

#### **Public Participation Information**

##### **How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of Village Council which meets monthly at the Town Hall. Summer months from May through September meetings are held the 2<sup>nd</sup> Thursday at 7 PM. Winter months from October through March meetings are held the 2<sup>nd</sup> Saturday at 10 AM. For more information on your drinking water contact the water Department at 419-746-2555.

##### **Definitions of some terms contained within this report.**

**Maximum Contaminant Level Goal (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 (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Parts per Million (ppm) or Milligrams per Liter (mg/L)** are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

**Parts per Billion (ppb) or Micrograms per Liter (µg/L)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

**Maximum Residual Disinfectant Level Goal (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 (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.

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

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

The "<" symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected

**ORC 4933.19 ".....tampering with or bypassing a meter constitutes a theft offense that could result in the imposition of criminal sanctions."**