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TRUMBULL COUNTY

2016 DRINKING WATER

CONSUMER CONFIDENCE REPORT

HOWLAND WATER DISTRICT

INTRODUCTION

Trumbull County has a current, unconditioned license to operate this water district. Trumbull County has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. This report was required as part of the Safe Drinking Water Act Re-authorization of 1996 and is required to be delivered to the consumers by July 1, 2017. Included with this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

Trumbull County obtains its primary source water from the City of Niles, which in turn purchases water from Meander Water. Meander Water draws water from Meander Reservoir, which is considered a surface water source and requires extensive treatment before being used as drinking water.

Water Source Assessment

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 warning or time to prepare.

The Mahoning Valley Sanitary District water system treats the water to meet drinking water supply quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can further be decreased by measures to protect Meander Creek Reservoir and its watershed. More detailed information is provided in the Mahoning Valley Sanitary District's Drinking Water Source Assessment Report, which can be obtained by calling John Nemet at (330)652-3614. The MVSD Meander Creek Reservoir Drinking Water Source Protection Plan is available at the meanderwater.org website by clicking on the link for **Administration Public Records**.

WHAT ARE SOURCES OF CONTAMINATION TO DRINKING WATER

The sources of drinking water, both tap water and bottled water includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As the 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. These include:

- Viruses and bacteria, which may come from sewage treatment plants septic systems, livestock, and wildlife.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm run-off, and residential uses.
- Salts and metals, which can be natural or may result from storm runoff and wastewater discharges, and farming.
- Organic chemicals, which originate from industrial processes, petroleum production, gas stations, storm runoff, and septic systems.
- Radioactive substances, 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, which limit the amount of certain contaminants in water provided by public water systems. Drinking water, including bottled water, may reasonably 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.

Safe Drinking Water Hotline

1-800-426-4791

HOWLAND WATER FACTS

In their efforts to supply the safest possible product, Meander Water uses chloramines for disinfecting of viruses and bacteria. Fluoride is also added to enhance dental protection. The levels of these two additives are monitored daily to ensure proper dosages are being added.

On average, the County purchases 12.75 million gallons of water per month from the City of Niles for the Howland Township Water district. The distribution system consists of 35 miles of water line varying in size from 6 through 12 inches in diameter.

Howland Township Water District has 2332 service connections and services an estimated 5830 people.

The County strives to provide safe and aesthetically pleasing drinking water to its residents as well as many businesses and visitors.

SPECIFIC 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 infections. These people should seek advice about drinking water from their health care providers. EPA / CDC guidelines on appropriate means to **lessen the risk of an infection** by *cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

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. The Howland Township Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in household 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. A list of laboratories certified in Ohio to test for lead or perform other analyses on public drinking water may be found at www.epa.state.oh.us/ddagw or by calling 614-644-2752. 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>.

Revised Total Coliform Rule (RTCR) Information

The Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.

ABOUT YOUR DRINKING WATER

The EPA requires regular sampling to ensure drinking water safety. Meander Water (MVSD) and Trumbull County Sanitary Engineers (TCSE) conducts sampling for bacteria, inorganic, radiological, synthetic organic, and volatile organic contaminants during 2016. Samples were collected for a total of 56 different contaminants, most of which were not detected in either water supply. The Ohio EPA requires monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of their data, though accurate, are more than one year old.

MEANDER WATER DETECTED CONTAMINANTS FOR 2016

CONTAMINANT	UNIT	MCLG	MCL	LEVEL	TESTED	MAJOR SOURCES	VIOLATION
Fluoride	ppm	4	4	1.02	2016 MVSD	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	NO

Nitrate	ppm	10	10	0.243	2016 MVSD	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	NO
Cadmium	ppb	5	5	<0.5	2016 MVSD	Corrosion, erosion, batteries, paint	NO
Trihalo- methanes TTHM ³	ppb	NA	80	49.65 Avg.	2016 TCSE	By-product of drinking water chlorination Range from 36.2-62.9	NO
HAA-Halo Acetic Acid ³	ppb	NA	60	12.80 Avg.	2016 TCSE	By-product of drinking water Chlorination Range from 9.78-16.2	NO
Turbidity ¹	ntu	NA	TT	0.05	2016 MVSD	Soil run-off	NO
Bromodichloro methane	ppb	NA	NA	10.4	2016 MVSD	By-products of drinking water chlorination	NO
Chloroform	ppb	NA	NA	41.8	2016 MVSD	By-products of drinking water chlorination	NO
Lead	ppb	0.0	AL= 15	0.00	2014 TCSE	Household plumbing corrosion	NO
Copper	ppb	1300	AL= 1300	69.88	2014 TCSE	Household plumbing corrosion and leaching from wood preservatives	NO
Barium	ppm	2	2	.010	2016 MVSD	Discharge of drilling wastes; Discharge from metal refineries; natural deposits	NO
TOC ²	ppm	N/A	N/A	1.61	2016 MVSD	Naturally present in the environment	NO
Atrazine	ppb	3	3	0.19	2016 MVSD	Runoff from herbicide used on row crops	NO
Simazine	ppb	4	4	.18	2016 MVSD	Runoff from herbicide used on row crops	NO
PH				9.57 Avg.	2016 MVSD	Measure of the acidity or alkalinity of a solution	
Hardness	ppm			78 Avg.	2016 MVSD	Hardness is caused by compounds of calcium, magnesium, and a variety of other metals. For grains/gal. divide by 17.1	
Total Chlorine Chloramines	ppm	4	4	1.59 Avg.	2016 TCSE	Water additive used to control microbes Range-1.25-1.83	NO

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 the filtration system.

² the value reported under “Level Four” for Total Organic Carbon (TOC) is the lowest ratio between percentages of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.

³ Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

³ Some people who drink water containing Halo Acetic Acid in excess of MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

Our 90th percentile value for lead and copper does not exceed the action level, therefore, there are no actions being implemented at this time other than sharing this consumer notice.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about elevated lead levels in your home’s water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. 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>.

Health Effects Language for Chlorine Contact Time Violation

The United States Environmental Protection Agency (USEPA) sets drinking water standards and have determined that the presence of microbiological contaminants is a health concern at certain levels of exposure. If water is inadequately treated, microbiological contaminants in that water may cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water. USEPA has set enforceable requirements for treating drinking water to reduce the risk of these adverse health effects. Treatment such as filtering and disinfecting the water removes or destroys microbiological contaminants. Drinking water, which is treated to meet USEPA requirements, is associated with little to none of this risk and should be considered safe.

KEY TO TABLES

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.

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

ppb: parts per billion, or 1 part in a billion parts.

ppm: parts per million, or 1 part in a million parts.

TT: Treatment technique: A required process intended to reduce the level of a contaminant in drinking water. “<” This is a mathematical symbol that means “less than” “>” is a symbol that means “greater than”.

TTHMs: Trihalomethanes which are created by the disinfection process of water treatment. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

HAA5 : Haloacetic Acids (5): Contaminant group whose combined MCL is 60 ug/l and is calculated as the sum of the concentrations of the following five acids. Dibromo-acetic, Dichloro-acetic, Monobromo-acetic, Monochloro-acetic, and Trichloro-acetic based on a (RAA) Running Annual Average.

TOC: Total Organic Carbon: The value reported under “Level Found” for Total Organic Carbon is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value less than one (1) indicates a violation of the TOC removal requirements.

Nephelometric Turbidity Unit (NTU): Nephelometric Turbidity Unit is a measure of the clarity of the water. Turbidity in excess of 5 NTU is noticeable by the average person.

BDL: Below detectable limits.

ug/l : micrograms per liter: or parts per billion, or 1 part in a billion parts.

The “<” Symbol: A symbol which means less than. A sampling result of <.5 means the lowest level that could be detected is .5 and the contaminant in the sample is less than .5.

To put the unit **ppb** in perspective imagine one yellow M&M mixed in a container of 1 billion brown M&Ms

OHIO METER TAMPERING LAW

In accordance with Sections 4933.18, 19, & 99 of the Ohio Revised Code, Trumbull County is required to notify customers annually of the Ohio Meter Tampering Law.

- 1.) Tampering is defined as interfering with, damaging or bypassing a meter or service equipment to reduce the amount of water consumption registered on the meter.
- 2.) No person shall reconnect a water meter, conduit, or attachment that has been disconnected by a utility without the consent of the utility.

Violators may be sentenced to a maximum of five years in jail, and/or fined up to \$2500. In addition, violators must pay for the value of the water used and the cost of repairs or replacement of equipment.

SHOULD YOU HAVE QUESTIONS OR CONCERNS REGARDING THIS REPORT, DISTRIBUTION, SERVICE, PRESSURE, LEAD AND COPPER SAMPLING RESULTS OR DISCOLORED WATER, CONTACT Gary Newbrough, Deputy Sanitary Engineer @ 330-675-7753.