WATER QUALITY. . . *that meets or exceeds all compliance standards*

Detected Contaminants Table for the Lake County Water System - 2015

Parameter	MCLG	MCL	Lake County East Values for Reporting Period	Range of Measurements	Reporting Period or Date Last Tested	Lake County West Values For Reporting Period	Range of Measurements	Reporting Period or Date Last Tested	Major Sources in Drinking Water
Turbidity (NTU)	N/A	TT (NTU)	0.20 (highest value) with 100% of samples meeting the limits	0.05 to 0.20	2015	0.09 (highest value) with 100% of samples meeting the limits	0.04 to 0.09	2015	Soil Runoff
Lead (µg/L)	0	AL=15	<2.0 (90th percentile)	<2.0 (All measurements)	2014	<2.0 (90th percentile)	<2.0	2014	Corrosion of household plumbing
Copper (mg/L)	1.3	AL=1.3	0.140 (90th percentile)	<0.010 to 0.320, no samples above AL	2014	0.047 (90th percentile)	<0.010 to 0.081, with no samples above AL	2014	Corrosion of household plumbing
** Values below are the range of the results from the Standard Monitoring Plan (SMP), a required yearly compliance monitoring program.									
**TTHMs (mg/L) SMP Results	N/A	80	44.49 as the running annual average	17.0 to 70.9	2015	35.6 as the running annual average	15.1 to 60.7	2015	By-product of drinking water chlorinaiton
**HAA5 (µg/L) SMP Results	N/A	60	19.51 as the running annual average	<6.0 to 32.5	2015	24.4 as the running annual average	9.0 to 45.2	2015	By-product of drinking water chlorinaiton
** Values above are the range of the results from the Standard Monitoring Plan (SMP), a required yearly compliance monitoring program.									
Tap Fluoride (mg/L)	4	4	1.01	0.80 to 1.22	2015	0.97	0.80 to 1.22	2015	Water additive which promotes strong teeth
Nitrate (mg/L)	10	10	0.61	0.34 to 0.98	2015	0.82	0.34 to 1.68	2015	Runoff from fertilizer use; leaching from septic tanks
Barium (mg/L)	2	2	0.016	0.016 only sample	2015	0.018	0.018 only sample	2015	Erosion of natural deposits
TOC (mg/l)	N/A	TT	1.8 as the running annual average	<0.7 to 2.2	2015	1.63 as the running annual average	<0.70 to 2.24	2015	Naturally present in environment
Chlorine (mg/l)	4 (MRDLG)	4 (MRDL)	1.5 as the running annual average	0.2 to 2.1	2015	1.5 as the running annual average	0.5 to 2.6	2015	Water additive used to control microbes

#The MCL for beta particles is 4 mrem/yr. EPA considers 50 pCi/L to be the level of concern for beta particles.

KEY TO TABLE

NTU is nephelometric turbidity unit.
mg/L is milligrams per Liter, or 1 part in a million parts.
µg/L is micrograms per Liter, or 1 part in a billion parts.
TT is treatment technique.
AL is action level.
ND is non-detected.
N/A is non-applicable.
MCL is Maximum Contaminant Level.
MCLG is Maximum Contaminant Level goal.
MRDL is Maximum Residual disinfectant level.
MRDLG is Maximum Residual disinfectant level goal.
TTHMs are Trihalomethanes, which are created by the disinfection process.
HAA5 are Haloacetic acids, which are created by the disinfection process.
< is less than.

Lake County regularly samples to ensure excellent drinking water quality is achieved.The table above is a summary of the water quality characteristics for Lake County Department of Utilities - East and West Sub districts. It shows levels of regulated contaminants that were detected while sampling during 2015.

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 a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

"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.

"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.

Treatment technique. A required process intended to reduce the level of a contaminant in drinking water.

Action level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Variance and exemption. State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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 contaminants in that sample was not detected.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

- **Microbial contaminants,** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminates**, 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.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **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.
- **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, EPA prescribes regulations which 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. Lake County Utilities Water Division 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 thirty seconds to two 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 800-426-4719 or at www.epa.gov/safewater/lead."

Lake County Department of Utilities operates and maintains two drinking water systems. "We have a current, unconditional license to operate our water system". Water is treated and disinfected before delivery to you. We take every precaution necessary to see that you and your family are getting the best possible product.

We are fortunate to have Lake Erie as our source of water. This body of water is classified as a surface supply and serves as a valuable resource for drinking water to millions of Ohio's residents. 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.

The Lake County East & West Subdistrict public water systems use surface water drawn from 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 with relatively short travel time from source to intake.

Although the Lake County East & West Subdistrict intakes are located offshore in Lake Erie, the proximity of the Grand River to the East Subdistricts intake and the Chagrin River to the West Subdistricts intake increase the susceptibility of the source water to contamination. The Lake County East & West Subdistrict drinking water source protection areas contain a moderate number of potential contaminant sources, which include accidental spills and releases associated with commercial shipping and recreational boating, air contaminant deposition, contaminants from industries and agricultural runoff along the shore and along streams (Grand & Chagrin Rivers) that empty into the lake, contaminants associated with oil and gas production and transportation, sediments from river dredging and disposal operations, natural erosional processes, contaminated storm water runoff, municipal and home sewage treatment system discharges, and combined sewer overflows.

The Lake County East & West Subdistrict public water systems treat the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie and the Grand & Chagrin Rivers. More detailed information is provided in the Lake County East & West Subdistrict Drinking Water Source Assessment reports, which can be obtained by calling the Lake County East Subdistrict (Ken Stoneman – 440.350.2155) or the Lake County West Subdistrict (John Spetrino – 440.918.3420).

Soil erosion is the major factor impacting Lake Erie waters. The wearing away of the shoreline results in an overall cloudiness - called turbidity. We measure samples of water with sensitive instruments that can detect slight changes in cloudiness, changes you could not detect by looking at water. We continually measure these changes in turbidity, so that treatment can be optimized by adjusting pretreatment and filtration processes to achieve maximum effectiveness.

Drinking water, including bottle 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 (800-426-4791)

LAKE COUNTY DEPARTMENT OF UTILITIES IS PROUD TO ANNOUNCE THAT OUR RECORD FOR MEETING ALL LOCAL, STATE AND FEDERAL DRINKING WATER STANDARDS REMAINS EXEMPLARY.

Our Mission: To Treat And Protect

Simply put, there is nothing more important than the quality of the water we provide to you.

We here in the Lake County Department of Utilities water division are ever vigilant to make sure the water will be safe to drink, achieves the highest standards of excellence and is available when you need it.

More than 120,000 samples are collected each year at the treatment plant, reservoirs and point-of-use locations throughout our systems. The samples are then tested by state-certified employees and laboratories that check the purity and insure that a consistent, high quality drinking water is produced and delivered to our customers.

Once you receive the water from us, no additional treatment is necessary. If you choose to use a point-of-use treatment system, be sure to follow the manufacturer's instructions so the quality of your water supply is not adversely affected.

See lakecountyohio.gov for scheduled public meetings

IF YOU ARE INTERESTED IN MORE INFORMATION ABOUT WATER QUALITY, PLEASE CALL Mrs. Toni Ice at 440-918-3420

SAFEGUARDING YOUR DRINKING WATER

Securing Safe Drinking Water

As a public water system, we understand concerns over security. In light of recent events, we are reviewing our contingency plans (emergency preparedness plans) and determining what security measures are appropriate for protecting your water system. The review has resulted in documentation of specific policies and procedures relating to security.

In addition to reviewing our contingency plans we have also enacted the following measures.

- Routine verification of security at all water system related buildings and facilities (locking doors, fencing, gates, access hatches, etc.)
- Restricted public access to water treatment facilities and distribution components.
- Increased frequency of inspections of water system (booster stations, tanks, etc.).
- Investigation of any reports of tampering with water system components.
- Meetings with local law enforcement officers including review of facilities to determine areas of concern. Increased patrolling of water system buildings and facilities.
- Maintaining our good relationship with the Lake County Emergency Management Agency.

1997 Award of Excellence
The Ohio EPA Recognizes Lake County West Water Subdistrict As An Outstanding Water System
OhioEPA

1998 Award of Excellence
The Ohio EPA Recognizes Lake County East Water Subdistrict As An Outstanding Water System
OhioEPA

The Ohio EPA has recognized our employees' commitment, dedication and expertise. As a repeat recipient of the "Outstanding Public Drinking Water System" award of excellence, we in Lake County can be proud to have the only water supplier (out of 6,000) in Ohio to earn such a distinction.

Return Service Requested

Lake County Department of Utilities
PO. Box 490
105 Main Street
Painesville, OH 44077

LAKE COUNTY DEPARTMENT OF UTILITIES

DIVISION OF WATER

WATER QUALITY REPORT

Lake County Department of Utilities

2015

EAST AND WEST SUB-DISTRICTS

THIS BROCHURE IS A SUMMARY OF THE QUALITY OF WATER PROVIDED TO OUR CUSTOMERS IN 2015.

Included are details about where your water comes from, how it is processed, what it contains, and how it meets the standards set by the Federal and the Ohio EPA.

We are pleased to provide this information to you.

Lake County Board of Commissioners

Judy Moran, President
Daniel P. Troy, Vice President
Kevin D. Malecek

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