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

Detected Contaminants Table for the Lake County Water System - 2020

| Table 1 - Detected Contaminants in 2020 | | | | | | | | | | | |
|--|----------------|----------------|--|---|--|--|---|--|--|--|--|
| 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 | VIOLATION | Major Sources in Drinking Water | |
| Turbidity (NTU) | N/A | TT (NTU) | 0.09 (highest value) with 100% of samples meeting the limits | 0.03 - 0.09 | 2020 | 0.08 (highest value) with 100% of samples meeting the limits | 0.02 - 0.08 | 2020 | NO | Soil runoff | |
| Lead (µg/L) | 0 | AL=15 | 23 (90th percentile) 30 samples collected | <2.0 - 8.9, no samples above AL | 2018 | <2.0 (90th percentile) 30 samples collected | <2.0 no samples above AL | 2020 | NO | O Corrosion of household plumbing | |
| Copper (mg/L) | 13 | AL=1.3 | 0.150 (90th percentile) 30 samples collected | <0.010 - 0.330, no samples above AL | 2018 | 0.083 (90th percentile) 30 samples collected | <0.010 - 0.180, no samples above AL | 2020 | NO | 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 (µg/L) SMP Results | N/A | 80 | 54.9 as the locational running annual average | 21.3 - 64.3 | 2020 | 52.2 as the locational running annual average | 12.1 - 69.4 | 2020 | NO | By-product of drinking water chlorination | |
| **HAA5 (μg/L) SMP Results | N/A | 60 | 28.6 as the locational running annual average | 15.6 - 33.9 | 2020 | 23.2 as the locational running annual average | 7.8 - 32.3 | 2020 | NO By-product of drinking water chlorination | | |
| ** Values below are | the range of 1 | the results fr | om the Standard Monitoring | Plan (SMP), a re | equired yearly | compliance monitoring prog | gram. | | | | |
| Tap Fluoride (mg/L) | 4 | 4 | 1.06 Highest monthly annual average | 0.90 - 1.12 | 2020 | 0.93 Highest monthly annual average | 0.77 - 1.08 | 2020 | NO | Water additive which promotes strong teeth | |
| Nitrate (mg/L) | 10 | 10 | 0.80 | <0.10 - 0.80 | 2020 | 1.00 | <0.10 - 1.00 | 0 2020 NO | | Runoff from fertilizer use; leaching from septic tanks | |
| Barium (mg/L) | 2 | 2 | 0.018 | 0.018 only sample | 2020 | 0.018 | 0.018 only sample | | | Erosion of natural deposits | |
| TOC (mg/l) | N/A | TT | 1.0 | 1.0 - 1.3 | 2020 | 1.04 | 1.0 - 1.32 | 2020 | NO | Naturally present in environment | |
| Chlorine (mg/l) | (MRDLG) | (MRDL) | 1.50 | 1.2 - 1.7 | 2020 | 1.46 | 1.2 - 1.6 | 2020 | NO | Water additive used to control microbes | |
| Table 2 - Unregulated Contaminants Detected in 2015 | | | | | | | | | | | |

Table 2 - Unregulated Contaminants Detected in 2015

Unregulated contaminants monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. The results in this table are from sampling done for the Unregulated Contaminant Monitoring Rule. For a copy of results, call 440-918-3420.

| Contaminant | | Chlorate (ppb) | | Chromium (ppb) | | Hexavalent Chromium (ppb) | | Molybdenum (ppb) | | Strontium (ppb) | | Vanadium (ppb) | |
|--|---------|---------------------|-----------|------------------------|-------------|------------------------------|--------------|----------------------|-------------|---|--|--|-------------|
| Diant Tan | Average | <20.0 | 135 | 0.23 | 0.16 | 0.09 | 0.09 | 1.2 | 1.3 | 165 | 170 | N / A | |
| Plant Tap | Range | <20.0 | 66 - 242 | <02.0 - 0.35 | <0.2 - 0.37 | 0.062 - 0.11 | 0.046 - 0.17 | 1.1 - 1.3 | 1.1 - 1.3 | 160 - 170 | 164 - 174 | N/A | |
| Distribution | Average | <20.0 | 134 | 0.40 | 0.32 | 0.21 | 0.13 | 1.2 | 1.3 | 183 | 171 | 0.24 | 0.21 |
| | Range | <20.0 | 76 - 240 | 0.26 - 0.47 | 0.24 - 0.41 | 0.20 - 0.24 | 0.075 - 0.20 | 1.1 - 1.4 | 1.1 - 1.4 | 170 - 190 | 159 - 179 | <0.2 - 0.43 | <0.2 - 0.34 |
| Table 3 - Unregulated Contaminants Detected in 2019 KEY TO TABLES MCL is Maximum | | | | | | | | | | | | | |
| Contaminant | | Manganese (µg/L) | | HAA5 Group (µg/L) | | HAA6Br Group (µg/L) | | HAA9 Group (μg/L) | | NTU is Nephelometric Turbidity Unit. | | Contaminant Level. MCLG is Maximum Contaminant Level Goal. | |
| Plant Tap | Average | 3.3 | 1.7 | | | | | | | | | AL is Action Level. | |
| | Danas | | | N/A | | N/A | | N/A | | N/A is Non-applicable. | | MRDL is Maximum Residual Disinfectant Level. | |
| | Range | 2.4 - 5.2 | 1.1 - 3.4 | | | | | | | mg/L is milligrams per Liter, or 1 part in a million parts. (PPM) | | MRDLG is Maximum Residual | |
| | Average | N/A | | 24.1 | 19.9 | 11.8 | 10.4 | 34.9 | 29.3 | μg/L is micrograms per Liter | | Disinfectant Level Goal. TTHMs and HAA5 are created | |
| Distribution | Range | | | 13.7 - 37.0 5.8 - 30.8 | | 7.4 - 16.7 5.6 - 13.9 | 56-130 | 22.2 - 51.9 | 10.7 - 43.3 | | a billion parts. (PPB) by the disinfection pro | | |
| | nulige | | | 13.7 5 37.0 | 9.0 - 90.0 | 7.4 - 10./ | 9.0 - 19.9 | 22.2 -)1.9 | 10.7 - 45.5 | TT is Treatment Technique. < is Le | | < is Less Than. | Less Ihan. |

L ake County regularly samples to ensure excellent drinking water quality is achieved. The tables above are a summary of the water quality characteristics for Lake County Department of Utilities - East and West Sub districts. 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

"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.

microbia 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.

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. Total Organic Carbon (TOC). The value reported is the lowest ratio between percent 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. 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 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.

• 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.

S ome 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 800-426-4791 or at www.epa.gov/safewater/lead." L ake 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. Please contact the East Subdistrict Superintendent at 440-918-3420 for more information pertaining to the reports.

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. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported in the table, the highest recorded turbidity result for 2020 was 0.09 NTU for Lake County East and 0.08 NTU for Lake County West and lowest monthly percentage of samples meeting the turbidity limits was 100% for both.



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)

DRINKING WATER NOTICE Monitoring requirements were not met for Lake County West Water Subdistrict

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During February 2020, we "did not monitor or test" or "did not complete all monitoring or testing" for total coliform bacteria, and therefore, cannot be sure of the quality of your drinking water during that time.

What Should I Do?

- There is nothing you need to do at this time. You do not need to boil your water or take other corrective action.
- This notice is to inform you that LAKE COUNTY WEST WATER SUBDISTRICT did not monitor and report results for the presence of total coliform bacteria in the public drinking water system during *February 2020* time period, as required by the Ohio Environmental Protection Agency. We collected 79 of the required 80 routine total coliform distribution system samples.

What is being done?

Upon being notified of this violation, the water supply was required to have the drinking water analyzed for the above-mentioned parameters. The water supplier will take steps to ensure that adequate monitoring will be performed in the future.

For more information:

Contact:Sandra VozarPhone Number:(440) 918-3420Mailing Address:38265 Aquarius Parkway, Willoughby, OH 44094

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

PWSID: **OH4302411** Date this public notice was distributed: **March 8, 2021** Violation ID: 1210 Tier 3: Routine Monitoring Community (Type 3A)

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.

PUBLIC PARTICIPATION IN YOUR WATER SYSTEM: See lakecountyohio.gov for scheduled public meetings IF YOU ARE INTERESTED IN MORE INFORMATION ABOUT WATER QUALITY, PLEASE CALL OUR LAB AT 440-918-3420

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.

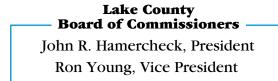
LAKE COUNTY DEPARTMENT OF UTILITIES DIVISION OF WATER



THIS BROCHURE IS A SUMMARY OF THE QUALITY OF WATER PROVIDED TO OUR CUSTOMERS IN 2020.

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.



Return Service Requested

Department of Utilities PO. Box 490 105 Main Street

County

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ainesville, OH