What's in My Water?

CONTAMINANTS	Units	MCLG (1)	MCL (2)	Amount Detected	Range of Detection	Violation	Sample Year	Typical Source of Contamination
Inorganic Contaminants								
* 1) Lead	ppb	0	AL=15	2.2	< 2 to 8.83	NO	2011	Corrosion of household plumbing
* 2) Copper	ppm	1.3	AL=1.3	0.634	.041 to.751	NO	2011	Corrosion of household plumbing
* 0 out of 30 distribution samples were found to have levels that exceeded the action level of 15 ppb lead and 1.3 ppm copper								
NORTH PLANT								
Barium	ppm	2	2	0.0603	N/A	NO	2011	Erosion of natural deposits
Fluoride	ppm	4	4	0.26	N/A	NO	2011	Erosion of natural deposits
Nitrate	ppm	10	10	0.111	N/A	NO	2013	Erosion of natural deposits
SOUTH PLANT								
Arsenic	ppb	0.0	10	5.32	BDL - 5.32	NO	2011	Erosion of natural deposits
Barium	ppm	2	2	0.0246	N/A	NO	2011	Erosion of natural deposits
Fluoride	ppm	4	4	BDL	N/A	NO	2011	Erosion of natural deposits
Volatile Organic Compounds Distribution System								
* **TTHM**	ppb	N/A	80	23.215	4.96 to 41.53	NO	2013	By-product of drinking water chlorination
* **HAA5**	ppb	N/A	60	5.333	0 to 10.78	NO	2013	By-product of drinking water chlorination
* Compliance of TTHM's and HAA5 are based on a running annual average, not individual sample values								
Volatile Organic Compounds - North Plant								
Bromoform	ppb	N/A	N/A	0.710	N/A	No	2011	By-product of drinking water chlorination
Bromodichloromethane	ppb	N/A	N/A	2.22	N/A	No	2011	By-product of drinking water chlorination
Chloroform	ppb	N/A	N/A	0.980	N/A	No	2011	By-product of drinking water chlorination
Dibromochloromethane	ppb	N/A	N/A	2.97	N/A	No	2011	By-product of drinking water chlorination
Residual Disinfectants								
CONTAMINANT	**Units**	**MRDLG(3)**	**MRDL(4)**	**Amount Det.**	**Range Det.**	**Violation**	**Sample Yr.**	**Typical Source of Contamination**
Total Chlorine	ppm	4	4	1.05	0.94 to 1.12	NO	2012-2013	By-product of drinking water chlorination.

Table Definitions

(1) 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 safety margin.

(2) 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 treatment technology.

Parts Per Million (PPM) - One part per million (or milligrams per liter) corresponds to one penny in $10,000

Parts Per Billion (PPB) - One part per billion (or micrograms per liter) corresponds to one penny in $10,000,000.

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

(3) 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.

(4) 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.

Center for Disease Control (CDC), Million Gallons (MG), Not Regulated (NR), Not Applicable (NA), Below Detectable Limit (BDL)

**90th Percentile - The 90th percentile value is calculated by placing all sample results in order from the lowest to the highest concentration. Number each sample starting with 1 for the lowest up to the highest concentration. Then multiply the total number of samples collected by 0.9, the number corresponding to the calculated value is the 90th percentile.

LANCASTER DIVISION OF WATER

CONSUMER CONFIDENCE REPORT

This report was prepared in accordance with the U.S EPA's National Primary Drinking Water Regulation for Consumer Confidence Reports.
Additional reports are available upon request.

Lancaster Municipal Water Department
225 North Memorial Drive
Lancaster, Ohio 43130

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LANCASTER DIVISION OF WATER

CONSUMER CONFIDENCE REPORT

2013 Annual Water Quality Report

The City of Lancaster Water Treatment Division 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.

Council Meetings

You are invited to participate in the city's Council Meetings and voice your concerns. We meet the 2nd and 4th Monday of every month beginning at 7:00 p.m. at the Lancaster Education Service Center, 111 S. Broad St.

For more information on your drinking water contact the Superintendent, Mike Nixon (740) 687-6664 or Plant Managers, Darren Drumm, at (740) 687-6631(North Plant) or Bill Wills at (740) 652-2285 (South Plant). Written suggestions or comments can be sent to:

City of Lancaster Division of Water
225 N. Memorial Drive
Lancaster, OH 43130

Water Usage

Toilet flushing is by far the largest single use of water in your home. Each flush uses 4 to 6 gallons of water. Here are typical percentages of water use for a family of four:

- Toilet flushing - 40%
- Bath/Shower - 32%
- Laundry - 14%
- Dishwashing - 6%
- Cooking/Drinking - 5%
- Bathroom Sink - 3%

Lancaster Water Plants

South Plant
4600 Sugar Grove Rd.
Phone Number
740-652-2285

North Plant
225 N. Memorial Dr.
Phone Numbers
Office 740-687-6631
Meter shop 740-687-6635

www.ci.lancaster.oh.us

Wellhead Protection

Lancaster's Wellhead Protection Program is dedicated to providing our community with a clean and safe drinking water supply. Community efforts in water conservation and pollution prevention will assist in achieving that goal. If you have questions concerning the program please contact Mike Wickham at the Water Department (740-687-6631).

Source Water Information

The City of Lancaster Water Treatment Plants receive their drinking water from wells located adjacent to the Water Treatment Plants. Water is drawn out of the Hocking River Valley Aquifer by 14 separate wells situated in the Miller Park Well Field for the North Plant. The South Water Treatment Plant draws water from 4 wells in the South Well Field near the South Plant.

Important Phone Numbers

Water Plant Office
740-687-6631 North Plant
740-652-2285 South Plant

Safe Drinking Water Hotline
1-800-426-4791

Aquifer Protection Questions
740-687-6631

License to Operate (LTO) Status

We have a current, unconditioned license to operate our water system. This means there are no ongoing conditions or violations we are required to address in order to operate.

Source Water Assessment

The Ohio EPA has completed a study of the City of Lancaster's drinking water source to determine its susceptibility to contamination. The City's present

groundwater supply is located within the Hocking River Valley Aquifer. This extensive system is comprised of vast quantities of subsurface sand and gravel deposits. The North Well Field has been operational since 1932 and has continued to be a reliable and clean source of drinking water for Lancaster's residents.

The City of Lancaster also has an additional wellfield and treatment plant south of Lancaster. The wellfield south of Lancaster will provide for Lancaster's water supply needs well into the future. This wellfield is located within the same Hocking River Valley Aquifer as the North Well Field.

Based upon known hydro-geologic conditions and from information gathered during the development of the Wellhead Protection Program, the City of Lancaster's source water is considered to have a high susceptibility to contamination. The susceptibility rating means that under existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. At this time there is no evidence indicating the quality of water provided by the City of Lancaster has been impacted by contaminants.

Wellhead Protection Program

Based on the potential for contamination, the City of Lancaster has placed a priority on protecting its groundwater sources through a combination of public education, routine groundwater monitoring, a pollution source inventory, contingency and emergency planning, and zoning ordinances. The City has been administering the Wellhead Protection Program since 1996 to ensure the safety of the community's water supply. The City received full endorsement from the Ohio EPA for their Wellhead Protection Plans for both the North and South wellfields.

Protecting our drinking water source from contamination is the responsibility of all area residents. Please dispose of hazardous chemicals in the proper manner and report polluters to the appropriate authorities. Only by working together can we ensure an adequate safe supply of water for future generations.

The City of Lancaster has devoted considerable time and expense in developing, implementing, and managing its Wellhead Protection Program to ensure the integrity of its water supply. More information about the source water assessment and what consumers can do to help protect the aquifer is available by calling 740-687-6631.

Your Water

General Health Information

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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791). Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 Water Drinking Hotline (1-800-426-4791).

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. City of Lancaster Department of Water 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 or at http://www.epa.gov/safewater/lead.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Water Monitoring

The sources of drinking water both tap water and bottled water includes 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. It can also pick up substances resulting from the presence of animals or from human activity.

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 water 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; and *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 the water provided by public water systems. The Federal Drug Administration (FDA) has established limits for contaminants in bottled water which must provide the same protection for public health.

The EPA requires regular sampling to ensure drinking water safety. Samples are collected and analyzed for many different contaminants. The monitoring frequency requirement for some contaminants is less than once per year because the concentrations of these contaminants do not normally change. Some of our data, though accurate, may be more than one year old.

Your Right to Know

As a public water consumer, it is your right to know the quality of your drinking water. Reading your annual water quality report is the first step you can take to become a more knowledgeable consumer. So, look for your report each year. When you receive it, take the time to read it. If you don't receive a report by July 1st each year, contact your water company to request a copy. As you're reading the report, write down any questions you may have. Contact your local water company to get the answers to those questions.

Frequently Asked Questions

What causes dark stains on bathroom fixtures?

Manganese is a naturally occurring mineral found in rocks, soil and some drinking water supplies. Manganese is an essential trace element for humans. Consumption of manganese has no known harmful effect on humans. The main problem with manganese in drinking water has to do with black staining of bathroom fixtures. Build up of manganese in distribution lines, customer plumbing and water heaters may slough off and be broken up by the movement of water, causing it to be seen pouring from customer's taps. Although Lancaster water routinely monitors manganese and consistently keeps the manganese level well below the EPA secondary maximum containment level of 0.05 mg/L, there may be an occasional black residue on plumbing fixtures.

What is the white stuff in my coffee pot?

Minerals dissolved in water tend to settle out when water is heated. These minerals are white and accumulate in coffee pots, water heaters, and on shower heads and glass doors. These minerals are necessary to meet other standards set forth by the EPA.

What causes discolored water?

Routine hydrant flushing or plumbing changes in your home can stir up material that has settled. This can give your water a temporary "sandy" appearance. The best way to solve this problem is to verify with your water supplier that there is no break in the system, and if there is none, flush your home pipes by running cold water for a while through your largest faucet, probably the bathtub.

Sulfurous (rotten egg) odor

The most likely cause of a sulfurous or "rotten egg" odor is from the water trap below the sink (i.e. the "P-Trap"). If the trap is dry or if organic material settles in the water trap beneath the sink a sulfurous, or rotten egg smell is often mistakenly perceived as coming from the water. Cleaning the trap or filling it with water and allowing it to sit overnight should help relieve the problem.

North and South Water Treatment Plants