



CITY OF NORTH RIDGEVILLE

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DRINKING WATER CONSUMER CONFIDENCE REPORT FOR 2008

YOUR WATER MEETS ALL EPA DRINKING WATER STANDARDS.

The City of North Ridgeville 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.

During the year 2008, the City of North Ridgeville purchased its water from three (3) suppliers at the following amounts:

SUPPLIER	APPROXIMATE AMOUNT (In million gallons)
Avon Lake Utilities Department (MOR)	521
Rural Lorain County Water Authority (RLCWA)	326
Elyria Utilities Department	<u>123</u>
2008 TOTAL	970

Most water consumers in our City receive a "blend" of water from our three (3) suppliers based on their proximity to these sources, while less than 5% receive their water from one (1) supplier or another. *Avon Lake and Elyria have water treatment plants and both receive their water from intakes in Lake Erie, a surface water supply. RLCWA obtain their water from Avon Lake, thus 87.3% of our water comes from the Avon Lake water treatment plant.*

WHAT ARE SOURCES OF CONTAMINATION TO DRINKING WATER?

The sources of drinking water (both tap 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, 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 storm 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.

Implementing measures to protect Lake Erie can improve our water quality. Several key ways are; Remove trash and debris from storm sewers and ditches; Dispose of household wastes such as fertilizers, pesticides, paints, paint thinners, motor oils and pet wastes properly; Prevent soil erosion by planting trees, grass and shrubs along streams and rivers (but not in them); and support local watershed groups and other organizations dedicated to protecting the environment. To become active in the Black River Watershed, contact Dan Gouch, Black River Watershed Coordinator at 440-328-2339.

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. 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.

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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

ABOUT YOUR DRINKING WATER.

The EPA requires regular sampling to ensure drinking water safety. The City of North Ridgeville conducted sampling for bacteria *during 2008*. In addition, samples were collected for several dozen different contaminants by Avon Lake, RLCWA and Elyria most of which were not detected in their 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.

WHAT IS THE LATEST INFORMATION ON DISINFECTION?

Disinfection is an absolutely essential component in the treatment of drinking water. One of the by-products of chlorinating water containing organic matter is trihalomethanes (TTHMs). There are some health concerns related to higher levels of TTHMs; The EPA and water agencies nationwide are looking into new treatment options to minimize this risk and still maintain sufficient disinfection. Chlorine is added after most of the organic matter has settled out or been filtered out of the process to minimize the production of TTHMs.

Listed below is information on the contaminants found in the City of North Ridgeville drinking water and/or as reported to us by our three (3) suppliers. When applicable, whatever levels are higher are what is reported.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contaminants
Microbiological Contaminants							
¹ Turbidity (NTU)	NA	TT	0.75	0.06 - 0.75	NO	2008	Soil Runoff
Turbidity (% samples meeting standard)	NA	TT	98.9%	98.9 - 100%	NO	2008	
² Total Organic Carbon (ppm)	NA	TT	1.0	1.0 - 1.6	NO	2008	Naturally present in the environment
Inorganic Contaminants							
⁴ Barium (ppm)	2	2	0.026	<0.02 - 0.026	NO	2007-08	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Copper (ppm)	1.3	AL=1.3	0.13	<0.01 - 0.13	NO	2007	Corrosion of household plumbing, erosion of natural deposits
90th percent sample result	Zero out of thirty samples was found to have copper levels in excess of the copper action level of 1.3 ppm.						
Lead (ppb)	0	AL=15	6.5	<5.0 - 9.3	NO	2007	Corrosion of household plumbing, erosion of natural deposits
90th percent sample result	One out of thirty samples was found to have lead levels in excess of the lead action level of 15 ppb.						
Fluoride (ppm)	4	4	0.92	0.21 - 1.22	NO	2008	Water additive which promotes strong teeth
⁴ Nickel (ppb)	100	100	10.5	5.3 - 10.5	NO	2007-08	Erosion of natural deposits; Discharge from electroplating, stainless steel and alloy products
Nitrate (ppm)	10	10	1.77	0.13 - 1.77	NO	2008	Natural deposits, fertilizers, sewage, septic tanks
Radiological Contaminants							
Beta Particle (pCi/l)	0	4 mem/yr AL=50 pCi/l	1.15	NA	NO	2003	Decay of natural and man-made deposits
Volatile Organic Contaminants							
Haloacetic Acids (ppb)	NA	60	48.8	9.8 - 48.8	NO	2007-08	By-product of drinking water disinfection
Total Trihalomethanes	NA	80	69.3	12.1 - 69.3	NO	2007-08	By-product of drinking water disinfection
TTHM's (ppb)							
Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR) required Initial Distribution System Evaluation (IDSE) results.							
IDSE HAA5	NA	NA	NA	6.1 - 43.2	NA	2008	By-product of drinking water disinfection
IDSE TTHM	NA	NA	NA	8.1 - 45.4	NA	2008	By-product of drinking water disinfection
Residual Disinfectants							
⁴ Chlorine (ppm)	MRDLG	MRDL	1.11	0.90 - 1.16	NO	2007-08	Water additive to control microbes
Unregulated Contaminants (Monitoring Required)							
Contaminants (Units)	Entry point to the Distribution system	Level Found	Range of Detections	Year Sampled	Typical Source of Contaminants		
Chloroform (ppb)		47.40	9.5 - 47.4	2008	By-product of drinking water disinfection		
Bromodichloromethane (ppb)		17.70	7.1 - 17.7	2008	By-product of drinking water disinfection		
Dibromochloromethane (ppb)		4.20	1.9 - 4.2	2008	By-product of drinking water disinfection		

¹Turbidity 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 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported above the Avon Lake WTP highest recorded turbidity result for 2008 was 0.75 NTU and lowest monthly percentage of samples meeting the turbidity limits was 98.9%.

²The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. This removal ratio is calculated as the ratio between the actual TOC removal and the TOC rule removal requirements and other parameters. A value of at least one (1) indicates that the water system is in compliance with TOC removal requirements.

³Ohio EPA requires monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

⁴These contaminants level found is the highest compliance value based on a running annual average. This average includes results from 2007.

⁵"Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2012. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfection byproducts in drinking water, including both TTHMs and HAA5s."

MONITORING VIOLATIONS: NONE

HOW DO I PARTICIPATE IN DECISIONS CONCERNING MY DRINKING WATER?

Public participation and comment are encouraged at regular council meetings of the City of North Ridgeville which meets the first and third Monday of each month, excluding August and when a government holiday falls on the first or third Monday the meeting is then held on Tuesday. For more information on your drinking water system, contaminants and potential health effects, contact one of the following; City of North Ridgeville Engineer Larry J. Griffith, P.E., at (440) 353-0862 and/or the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

DEFINITIONS

1. AL = Action level – The concentration of a contaminant that, if exceeded, triggers a treatment or other requirement that a water system must follow.
2. Contaminant – Any physical, chemical, biological, or radiological substance or matter in water.
3. MCL = Maximum Contaminant Level – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
4. MCLG = Maximum Contaminant Level Goal – The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
5. MRDL = Maximum Residual Disinfectant Level
6. MRDLG = Maximum Residual Disinfectant Level Goal
7. NTU = Nephelometric Turbidity Units
8. Parts per billion (ppb) or Micrograms per Liter (ug/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
9. 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.
10. pCi/l = picocuries per liter (a measure of radioactivity)
11. TOC = Total Organic Carbon has no health effects. However, TOC provides a medium when the water is disinfected for the formation of disinfection byproducts. Toc removal byproducts. Toc removal early in the treatment plant is required.
12. TT = Treatment technique – A required process intended to reduce the level of a contaminant in drinking water. For example we add lime to increase the ph of our finished water water in order to maintain compliance with the lead and copper rule.
13. VOC – Volatile Organic Chemicals
14. WTP – Water Treatment Plant