



# **CITY OF NORTH RIDGEVILLE**

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## **DRINKING WATER CONSUMER CONFIDENCE REPORT** **FOR 2007**

### **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 2007, the City of North Ridgeville purchased its water from three (3) suppliers at the following amounts:

<b>SUPPLIER</b>	<b>APPROXIMATE AMOUNT</b> (In million gallons)
Avon Lake Utilities Department (MOR)	<b>527</b>
Rural Lorain County Water Authority (RLCWA)	<b>346</b>
Elyria Utilities Department	<b><u>73</u></b>
<b>2007 TOTAL</b>	<b>946</b>

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 92.3% 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 keys 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 property; 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.

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 2007*. 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 those contaminants that were found in the City of North Ridgeville drinking water and/or from our three (3) suppliers (whichever levels were highest as applicable).

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
<b>Microbiological contaminants</b>							
Turbidity (NTU)	0	100% < 0.3	0.80	0.05 to 0.8	(1) NO	2007	Soil runoff
Total Organic Carbon (TOC)	removal > 1	removal>1	(3)1.0	1.0 to 1.33	(2) NO	2007	Naturally present in the environment
<b>Inorganic contaminants</b>							
Barium (ppm)	2	2	0.025	0.02 to 0.025	NO	2006-07	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits.
* Copper (ppm) 90 <sup>th</sup> percent sample results	1.3	AL=1.3	0.093	<0.01 to 0.13	NO	2007	Corrosion of household plumbing; erosion of natural deposits; leaching of wood preservatives.
* Lead (ppb) 90 <sup>th</sup> percent sample results	0	AL=15	6.5	<5.0 to 9.3	NO	2006-07	Corrosion of household plumbing; erosion of natural deposits.
Nitrate (ppm)	10	10	1.12	0.05 to 1.17	NO	2007	Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits.
Fluoride (ppm)	4	4	1.80	0.12 to 1.80	NO	2007	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nickel (ppm)	100	100	6.8	6.5 to 6.8	NO	2006-07	Erosion of natural deposits. Discharge from electroplating, stainless steel and alloy products.
<b>Volatile Organic chemical contaminants</b>							
<b>Total THM (ppb)</b>	N/A	80	69.3	12.1 to 69.3	NO	2006-07	By-Product of drinking water chlorination.
Haloactic Acids (ppb)	N/A	60	48.8	9.8 to 48.8	NO	2006-07	By-Product of drinking water chlorination.
Chlorine (ppm)	4	4	1.08	0.89 to 1.08	NO	2007	Water additive used to control microbes.
<b>Radioactive Contaminants(4)</b>							
Beta/photon emitters (pCi/l)	0	AL = 50	1.15	N/A	NO	2003	Decay of natural and man made deposits.

\* = These values were obtained from the three suppliers, per EPA regulations. Because of the low numbers, the City of North Ridgeville is only required to test every three years.

- (1) = Maximum contaminant level was below *0.3* for 95% of the time and can not exceed 1 NTU at any time = No violation.
- (2) = TOC has no health effects. However, TOC provides a medium when the water is disinfected for the formation of disinfection by products. TOC removal early in the treatment plant is required.
- (3) = The monthly TOC removal ratio is calculated as the *ratio* between the actual TOC removal and the TOC rule removal requirement and other parameters. *The* actual ratio shown is the average of the ratios for 12 months.
- (4) = The Ohio EPA requires monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

**A Question to Ponder: Why, when all the leading consumer organizations report that our treated water has fewer contaminants than bottled water, will people pay \$2.00 for a bottle of water but complain if their water bill goes up \$2.00 a month?**

## **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 OF SOME TERMS CONTAINED WITHIN THIS REPORT**

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.

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.

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.

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

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

NTU = Nephelometric Turbidity Units: A measurement of the cloudiness of the drinking water.

TTHM = Total Trihalomethanes

N/A = Not Applicable

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 contaminant in that sample was not detected.

The ">" symbol: A symbol which means greater than.

Picocuries per Liter (pCi/L) a measure of radiation.