



City of Chardon

CONSUMER CONFIDENCE REPORT

FOR YEAR 2008

It's All About your Water

As required by the Safe Drinking Water Act Re-authorization of 1996, the City of Chardon Water Department has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is information regarding general health, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts. In summary, the City of Chardon drinking water meets or exceeds all EPA standards.

THE SYSTEM

The City of Chardon receives its drinking water from six wells. In 2008, the Water Department pumped 205.4 million gallons of water to the City. The well water is treated at the new water treatment plant where arsenic, iron and manganese are removed and chlorine is added for disinfection, fluoride to help prevent dental decay, and a phosphate blend to prevent corrosivity in the water mains.

Ohio EPA recently approved a study of the City of Chardon's source of drinking water, to determine its susceptibility to contamination. Ohio EPA determined, the aquifer (water-rich zone) that supplies water to the City of Chardon has a moderate susceptibility to contamination. This determination was based on the following:

- presence of a moderately thick protective layer of clay overlying the aquifer,
- no evidence to suggest that ground water has been impacted by any significant levels of chemical contaminants from human activities, and
- the presence of significant potential contaminant sources in the protection area

This susceptibility rating means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is moderate. This likelihood can be minimized by implementing appropriate protective measures. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling 286-2657.

WHAT ARE SOURCES OF CONTAMINATION TO DRINKING WATER?

The sources of drinking water, both tap and bottled, 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.

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.

(continued on page 2)

Sources of Contamination continued from page 1

In order to ensure that tap water is safe to drink, the 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. 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).

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 Safe Drinking Water Hotline (1-800-426-4791).

HOW DO I PARTICIPATE IN DECISIONS CONCERNING MY DRINKING WATER?

Public participation and comment are encouraged at regular meetings of the Chardon City Council.

ABOUT YOUR DRINKING WATER.

The EPA requires regular sampling to ensure drinking water safety. The City of Chardon Water Department conducted sampling for *disinfection by-products, bacteria, inorganic, radiological, synthetic organic, and volatile organic* contaminants, during 2004-2008. Samples were collected for various different contaminants, most of which were not detected in the City of Chardon's water supply.

The Ohio EPA requires the City to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of the data, though accurate, are more than one year old.

Listed below is information on those contaminants that were found in the *City of Chardon's drinking water*.

Note: Arsenic's MCL was changed by the EPA and became effective 1-2006. The MCL of 50 ug/l was in effect until 1-2006.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Inorganic Contaminants							
Fluoride	4 mg/l	4 mg/l	1.24 mg/l	0.81-1.24 mg/l	NO	2008	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead	AL=15	0	<5 ug/l	<5 ug/l-25.7 ug/l	NO	2008	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	AL=1300	1300 ug/l	820 ug/l	<2-820 ug/l	NO	2008	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Nitrate	10 mg/l	10 mg/l	<0.100 mg/l	NA	NO	2008	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits;
Nitrite	1 mg/l	1 mg/l	<0.100 mg/l	NA	NO	2008	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits;
TTHM s	NA	.08 mg/l	.016 mg/l	NA	NO	2008	Disinfection byproducts
HAA5	NA	.06 mg/l	<.006 mg/l	NA	NO	2008	Disinfection byproducts
Arsenic Quarterly avg.	NA	10 ug/l	9 ug/l	<3-12 ug/l	NO	2008	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes

RADON MONITORING

The City of Chardon Water Department monitored for radon in the finished water during 1997. One sample was collected and the radon level was 208.0 pCi/L. Radon is a radioactive gas that occurs naturally in some ground water. It may pose a health risk when the gas is released from water into air, as occurs during showering, bathing, or washing dishes and clothes. Radon gas released from drinking water is a relatively small part of the total radon in air. Major sources of radon gas are soil and cigarettes. Inhalation of radon gas has been linked to lung cancer, however, the effects of radon ingested in drinking water are not yet clear. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on how to have your home tested, call 1-800-SOS RADON.

ARSENIC HEALTH EFFECTS

The Ohio EPA requires the following health advisory be included in this publication:

“Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.”

OTHER INFORMATION FROM DISTRIBUTION SAMPLES

TEST	RESULT	UNITS
Alkalinity, Total	223	mg/l
Hardness, Total (as CaCO ₃)	210	mg/l
Calcium	57	mg/l
Sodium	25	mg/l
Magnesium	16	mg/l
Manganese	0.043	mg/l
Potassium	<3.0	mg/l
Iron	0.4	mg/l

For more information on your drinking water, contact:
 Dan Sellitto, Superintendent of Water & Wastewater
 (440) 286-2657
 Web Site <http://www.chardon.cc>
 E-Mail water@chardon.cc

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.

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.

Note: If delivered to other than a residence, please make this information available for all interested people to view.

PRESORTED
STANDARD
U.S. POSTAGE
PAID
CHARDON, OH
PERMIT#24

If delivered to other than a residence, please
make this information available for all
interested people to view.