

GREENFIELD TOWNSHIP WATER AND SEWER DISTRICT

Drinking Water Consumer Confidence Report

For 2011

The Greenfield Township Water and Sewer District (GTWSD) 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.

The GTWSD's water treatment facility receives its drinking water from two (2) water wells located at the water treatment plant. Treatment consists of iron and manganese removal, ion exchange softening and chlorination.

Ohio EPA recently completed a study of the GTWSD's source of drinking water to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer (water-rich zone) that supplies water to the GTWSD has a low susceptibility to contamination. This determination is based on the following:

Presence of a thick protective layer of clay overlying the aquifer, significant depth (over 25 feet below ground surface) of the aquifer, no evidence to suggest that ground water has been impacted by any significant levels of chemical contaminant from human activities, and presence of some significant sources in the protection area.

This susceptibility means that under current existing conditions, the likelihood of the aquifer becoming contaminated is relatively low. 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 GTWSD at (740) 654-2500.

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.

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.

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

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).

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. The Little Walnut Water System 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 State Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

The EPA requires regular sampling to ensure drinking water safety. The GTWSD conducted sampling for total coliform bacteria, iron, manganese, sodium, hardness and nitrate-nitrogen contaminant sampling during 2011. Samples collected for nitrate-nitrogen was below detectable limits in the District 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. Some of our data, though accurate, is more than one year old.

REGULATED HEALTH RELATED STANDARDS: This table provides health related information about the quality of the water supplied to the water system in 2011 by the GTWSD. This information is intended to assist our customers in making informed decisions regarding the consumption, protection and conservation of the water supply.

REGULATED HEALTH RELATED STANDARDS: This table provides health related information about the quality of the water supplied to the water system in 2011 by the Utilities Department. This information is intended to assist our customers in making informed decisions regarding the consumption, protection and conservation of the water supply.							
INORGANIC CONTAMINANTS	MCLG	MCL	LEVEL FOUND	RANGE OF DETENTION	SAMPLE YEAR	ARE WE IN COMPLIANCE	TYPICAL SOURCE OF CONTAMINANTS
			Greenfield WATER				
CHLORINE (mg/l)	4	4	1.2mg/l	0.67-1.1 mg/l	2011	YES	ADDED TO DISINFECT THE WATER
NITRATE (mg/L)	10	10	0.19 mg/L	N/A	2011	YES	RUNOFF FROM FERTILIZER USE; DISCHARGE OF DRILLING WASTER OR METAL REFINERIES
TOTAL, ARSENIC (ug/L)	0	10	<3.0 ug/L	N/A	2011	YES	EROSION OF NATURAL DEPOSITS
LEAD (ug/l)	0	AL=15	<5.0 ug/L	N/A	2010	YES	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS
	0 out of 10 samples was found to have lead levels in excess of the action level of 15 ug/l)						
COPPER (ug/l)	1350 ug/L	AL =1350 ug/L	109 ug/l	<50 - 154 ug/l	2010	YES	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS
	0 out of 10 samples was found to have copper levels in excess of Action Level of 1350 ug/L						
TOTAL, BARIUM (ug/l)	2000	2000	34.2 ug/l	N/A	2011	YES	EROSION OF NATURAL DEPOSITS
COPPER LEVEL IN DRINKING WATER MAY BE ELEVATED WHEN COPPER SERVICE LINES ARE USED IN A HOUSE OR BUSINESS. ADDITIONALLY, IF YOUR RESIDENCE HAS AN IMPROPER ELECTRICAL GROUND, COPPER LEVELS IN THE DRINKING WATER MAY INCREASE. FOR MORE INFORMATION ON COPPER IN DRINKING WATER, PLESE CONTACT THE WATER DIVISION.							
DISINFECTION BY-PRODUCTS							
HALOACETIC ACIDS 5 (ug/l)	NA	60	<6.0	<1.0-1.1	2011	YES	BYPRODUCT OF DRINKING WATER CHLORINATION
TOTAL TRIHALOMETHANES (ug/l)	NA	80	8.0	0.56-8.0	2011	YES	BYPRODUCT OF DRINKING WATER CHLORINATION
NON-REGULATED SECONDARY STANDARDS: Non-Mandatory Water Quality Standards							
IRON (mg/L)	N/A	N/A	<0.08	N/A	2011		IRON IS NOT A HEALTH RELATED STANDARD BUT IS AESTHETICALLY UNPLEASANT FROM ITS YELLOWISH TO BROWNISH COLOR AND STALE TASTE
MANGANESE (mg/L)	N/A	N/A	<0.03	N/A	2011		MANGANESE IS NOT A HEALTH RELATED STANDARD BUT IS AESTHETICALLY UNPLEASNT DUE TO ITS ABILITY TO CAUSE BLACK STAINS
HARDNESS (mg/L)	N/A	N/A	114	90-134	2011		PRIMARILY MADE UP OF CALCIUM AND MAGNESIUM SALTS. SOFT WATER CREATES SUDS EASIER. WATER TOO SOFT CAN BE CORROSIVE. THE HARDER THE WATER, THE MORE RESIDUAL DEPOSITS. OEPA RECOMMENDS HARDNESS IN THE RANGE OF 120-160 mg/l
SODIUM (mg/L)	N/A	N/A	110	80.2-130	2011		INFORMATION FOR THOSE WHO MAY BE ON A SODIUM RESTRICTED DIET

Public participation and comment are encouraged at regular monthly meetings of the GTWSD at the Colonial Estates Clubhouse the second Thursday of every month at 4:00 pm. For more information on your drinking water contact John Arnett at (740) 654-2500.

We have a current unconditioned license to operate our water system.

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 ($\mu\text{g/L}$) 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.