## The Tussing Road Water Treatment System Drinking Water Consumer Confidence Report For 2016

The Tussing Road Water Treatment System 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 Tussing Road Water Treatment System receives its drinking water from two distinct underground aquifers located within the County-owned Violet Township wellfield adjacent to the treatment facility. The groundwater supply is delivered to the treatment facility by nine wells located throughout the wellfield.

The Tussing Road Water System also has emergency connections with the City of Columbus, City of Pickerington, and Southwest Licking County Water and Sewer District. This report does not contain information on the water quality of these other systems. A copy of their consumer confidence report can be obtained by contacting them.

The shallow aquifer that supplies drinking water to Fairfield County's Violet wellfield has a moderate susceptibility to contamination, due to the moderately sensitive nature of the aquifer in which the drinking water wells are located and the existing potential contaminant sources identified. This does not mean that the shallow aquifer will become contaminated; only that conditions are such that the groundwater could be impacted by potential contaminant sources. The deep aquifer that supplies drinking water to Fairfield County's Violet wellfield has a low susceptibility to contamination, due to the low sensitivity of the aquifer in which the drinking water wells are located and the existing potential contaminate sources identified. This does not mean that the deep aquifer cannot be contaminated, only that the likelihood of contamination is relatively low.

Future contamination of the shallow and deep aquifers can be avoided by implementing protective measures. Fairfield County has implemented, and will continue to implement, protective measures to prevent contamination of the drinking water sources. More information is available by contacting Roger A. Donnell, Chief Water Operator, at (614) 322-5200 or Ohio EPA at (614) 644-2752.

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, 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).

The EPA requires regular sampling to ensure drinking water safety. The Tussing Road Water System conducted sampling for bacteria; haloacetic acids; total trihalomethanes; nitrate; and fluoride during 2016. Of the contaminant sampling conducted, most were not detected in the Tussing Road Water System 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, are more than one year old.

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 Tussing Road 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 Safe Drinking Water Hotline or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

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

Listed below are the results from the sampling conducted in 2016 on the Tussing Road Water System as required by the EPA.

REGULATED HEALTH RELATED STANDARDS: This table provides health related information about the quality of the water supplied to the water system in 2016 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	MCLG	MCL	LEVEL FOUND	RANGE OF DETENTION	SAMPLE YEAR	ARE WE IN	TYPICAL SOURCE OF
CONTAMINANTS		WICL	TUSSING ROAD WATER			COMPLIANCE	CONTAMINANTS
NITRATE (mg/L)	10	10	0.31	N/A	2016	YES	RUNOFF FROM FERTILIZER USE; LEACHING OF SEPTIC TANKS, SEWAGE; EROSION OF NATURAL DEPOSITS
FLUORIDE (mg/l)	4	4	1.06	0.91-1.17	2016	YES	WATER ADDITIVE WHICH PROMOTES STRONG TEETH

CHLORINE (mg/L)	4	4	1.20	0.80-1.30	2016	YES	ADDED TO DISINFECT THE WATER		
LEAD (ug/l)	0	AL=15	<5.0	N/A	2015	YES	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS		
	0 out of 31 samples was found to have lead levels in excess of the action level of 15 ug/l)								
COPPER (ug/l)	1350	AL =1350	622	68 - 707	2015	YES	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS		
	0 out of 31 samples was found to have copper levels in excess of Action Level of 1350 ug/L								
ARSENIC (ug/l)	0	10	3.3	N/A	2014	YES	EROSION OF NATURAL DEPOSITS		
BARIUM (ug/l)	2000	2000	39.7	N/A	2014	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								
MONOCHLOROACETIC ACID (ug/L)	N/A	N/A	<2.0	N/A	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
DICHLOROACETIC ACID (ug/L)	N/A	N/A	1.8	1.7-1.8	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
TRICHLOROACETIC ACID (ug/L)	N/A	N/A	1.1	1.1-1.1	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
MONOBROMOACETIC ACID (ug/L)	N/A	N/A	<1.0	N/A	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
DIBROMOACETIC ACID (ug/L)	N/A	N/A	2.2	2.2-2.2	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
HALOACETIC ACIDS 5 (ug/L)	N/A	60	<6.0	N/A	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
CHLOROFORM (ug/L)	N/A	N/A	4.64	4.55-4.64	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
BROMOFORM (ug/L)	N/A	N/A	2.33	2.32-2.33	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
BROMODICHLOROMETHANE (ug/L)	N/A	N/A	7.87	7.71-7.87	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
DIBROMOCHLOROMETHANE (ug/L)	N/A	N/A	8.19	8.16-8.19	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
TOTAL TRIHALOMETHANES (ug/L)	N/A	80	23.0	22.8-23.0	2016	YES	BYPRODUCT OF DRINKING WATER CHLORINATION	
NON-REGULATED SECONDARY STANDARDS: Non-Mandatory Water Quality Standards								
IRON (mg/L)	N/A	0.30	<0.08	N/A	2016	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	0.05	<0.03	N/A	2016	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	124	100-150	2016	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		
PHOSPHATE (mg/L)	N/A	N/A	0.85	0.52-0.67	2016	ADDED TO HELP PREVENT LEACHING OF COPPER OR LEAD INTO THE WATER AND SEQUESTER ANY RESIDUAL IRON OR		

						MANGANESE
SODIUM (mg/L)	N/A	N/A	180	136-159	2016	INFORMATION FOR THOSE WHO MAY BE ON A SODIUM RESTRICTED DIET

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 by products in drinking water, including both TTHMs and HAA5s.

Public participation and comment are encouraged at regular meetings of the Fairfield County Commissioners, which meet weekly on Tuesdays in the second floor of the Fairfield County Courthouse, 210 East Main Street, Lancaster, Ohio at 10 am.

For more information on the Tussing Road Water System drinking water contact Roger A. Donnell at (614) 322-5200

## Definitions of some terms contained within this report.

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

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.