

# Fairfield County Utilities



## 2005 Drinking Water Consumer Confidence Report Tussing Road Water System



In stilling confidence in our customers that the drinking water is safe and the environment is protected.

### Report Information

The Fairfield County Utilities Department has prepared this eighth annual Water Quality Report to provide information on the quality of the waters supplied to our customers between January and December 2005, in accordance with the Consumer Confidence Report requirements of the Federal Safe Drinking Water Act of 1996. We are pleased to report the Fairfield County Division of Water met all State and Federal regulations for the Tussing Road Water Treatment Facility during 2005.

### User Data

As of December 31, 2005, the Utilities Department provides service to 4,998 water customers (accounts) and 5,770 sewer customers (accounts). This represents an increase of 133 water customers and 119 sewer customers from 2004.

Accounts	Residential	Commercial
WATER	4,833	165
SEWER	5,580	190

### Water Division

In 2005, the Water Division operated two County-owned water treatment facilities (Tussing Road and Little Walnut Water Systems). You are receiving this report because you live in the Tussing Road Water service area. The Tussing Road Water Treatment Facility, located at 11030 Tussing Road, serves northern Violet Township and part of the City of Pickerington along State Route 256. This facility is capable of producing 3.0 million gallons per day of drinking water by utilizing the Gravity Filtration/Ion Exchange water treatment process. The source water is a ground water supply withdrawn from two distinct underground aquifers located within the County-owned Violet Township wellfield adjacent to the treatment facility. The water system has two elevated storage tanks (750,000 gallons each) providing system pressure and water storage capacity for fire protection.

### Source Water Information

The Fairfield County Tussing Road Water System receives its drinking water from two distinct underground aquifers (shallow and deep) located in Violet Township, adjacent to the treatment facility. The underground supply is delivered to the treatment facility by nine wells located throughout the wellfield.

The Tussing Road Water System also has an emergency connection with the City of Columbus, City of Pickerington and the Southwest Licking Water District. During 2005, no water was used from these connections. This report does not contain information on the quality of the emergency connections' water but a copy of their Consumer Confidence Report can be obtained by contacting those departments directly.

### Source Water Assessment

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

Future contamination of the 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. Please contact John A. Wood, Chief Water Operator at 614.864.3370 or Ohio EPA at 614.644.2752 for more information.

### Health Related Information

Drinking water, including bottled water, may reasonably be expected to contain very 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 (800.426.4791).

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 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 insure 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.

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 infections. These people should seek advice about drinking water from their healthcare providers. The Environmental Protection Agency and Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbial contaminants are available from the Safe Drinking Water Hotline (800.426.4791). Cryptosporidium is a microbial parasite found in surface water throughout the United States. The water supply for the northern Violet Township Wellfield is groundwater; therefore, Cryptosporidium is not a health related standard affecting this water supply.

The EPA requires regular sampling to ensure drinking water safety. The Tussing Road Water System conducted sampling for bacteria, haloacetic acids, total trihalomethanes, inorganics, nitrate, fluoride, volatile organic, and synthetic organic contaminant sampling during 2005. Of the contaminants sampling conducted, most were not detected in the Tussing Road Water System 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.

**Definitions**

AL: Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.  
 CFU: Colony Forming Unit.  
 MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water by the Safe Drinking Water Act. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.  
 MGD: Million Gallons per Day.  
 mg/l: Milligrams per liter. Corresponds to one part per million or one gallon in one million gallons.  
 MRDL: Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.  
 MRDLG: Maximum Residual Disinfectant Level Goal. The level of a disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.  
 NA: Not applicable.  
 OEPA: Ohio Environmental Protection Agency  
 pCi/l: Picocurie per liter. Corresponds to one part per trillion or one gallon in one trillion gallons.  
 ug/l: Micrograms per liter. Corresponds to one part per billion or one gallon in one billion gallons.  
 <: 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.

REGULATED HEALTH RELATED STANDARDS: This table provides health related information about the quality of the water supplied to the water system in 2005 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 DETECTION	SAMPLE YEAR	ARE WE IN COMPLIANCE	TYPICAL SOURCE OF CONTAMINANTS
			TUSSING ROAD WATER				
NITRATE (mg/l)	10	10	0.29 mg/l	0-0.29 mg/l	2005	YES	RUNOFF FROM FERTILIZER USE, LEACHING FROM SEPTIC TANKS, SEWAGE, EROSION OF NATURAL DEPOSITS
FLUORIDE (mg/l)	4	4	2.275	0.8-2.275	2004	YES	WATER ADDITIVE WHICH PROMOTES STRONG TEETH
LEAD (ug/l)	0	AL=15	<5.0	<5.0	2003	YES	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS
COPPER (mg/l)	1.3	AL=1.3	1.1	0.05-1.1	2005	YES	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS
SULFATE (mg/l)	NA	NA	1.29	NA	1995	YES	EROSION OF NATURAL DEPOSITS
ARSENIC (mg/l)	0	0.05	<.005	<.005	2002	YES	EROSION OF NATURAL DEPOSITS
BARIUM (ug/l)	2000	2000	8.75 ug/l	1.050-8.75 ug/l	2005	YES	EROSION OF NATURAL DEPOSITS, DISCHARGE OF DRILLING WASTES, DISCHARGE FROM METAL REFINERIES
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, PLEASE CONTACT THE WATER DIVISION.							
RADIOACTIVE CONTAMINANTS							
RADIUM 228 (pCi/l)	NA	5	<1.0	<1.0	2005	YES	EROSION OF NATURAL DEPOSITS, DISCHARGE OF DRILLING WASTES, DISCHARGE FROM METAL REFINERIES
VOLATILE ORGANIC CHEMICALS (VOC'S)							
BROMODICHLOROMETHANE (ug/l)	NA	NA	8.16	8.16	2004	YES	BYPRODUCT OF DRINKING WATER CHLORINATION
BROMOFORM (ug/l)	NA	NA	1.38	1.38	2004	YES	BYPRODUCT OF DRINKING WATER CHLORINATION
CHLOROFORM (ug/l)	NA	NA	5.83	5.83	2004	YES	BYPRODUCT OF DRINKING WATER CHLORINATION
DIBROMOCHLOROMETHANE (ug/l)	NA	NA	6.56	6.56	2004	YES	BYPRODUCT OF DRINKING WATER CHLORINATION
DISINFECTION BY -PRODUCTS							
HALOACETIC ACIDS	NA	60	8.75 ug/l	1.050-8.75 ug/l	2005	YES	BYPRODUCT OF DRINKING WATER CHLORINATION
TOTAL TRIHALOMETHANES	NA	80	21.00 ug/l	17.04-28.40 ug/l	2005	YES	BYPRODUCT OF DRINKING WATER CHLORINATION
NON-REGULATED HEALTH STANDARDS: Non-Mandatory Water Quality Standards					UNIT	SECONDARY LEVELS	TUSSING ROAD WATER
IRON	IRON IS NOT A HEALTH RELATED STANDARD BUT IS AESTHETICALLY UNPLEASANT FROM ITS YELLOWISH TO BROWNISH COLOR AND STALE TASTE				mg/l	0.30	0.03
MANGANESE	MANGANESE IS NOT A HEALTH RELATED STANDARD BUT IS AESTHETICALLY UNPLEASANT DUE TO ITS ABILITY TO CAUSE BLACK STAINS				mg/l	0.05	0.02
HARDNESS	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				mg/l	NA	120
PHOSPHATE	ADDED TO HELP PREVENT LEACHING OF COPPER OR LEAD INTO THE WATER AND SEQUESTER ANY RESIDUAL IRON OR MANGANESE				mg/l	NA	0.5
SODIUM	INFORMATION FOR THOSE WHO MAY BE ON A SODIUM RESTRICTED DIET				mg/l	NA	140
CHLORINE	ADDED TO DISINFECT THE WATER				mg/l	NA	1.10

Public participation and comment are encouraged at regular meetings of the Board of Fairfield County Commissioners, which meets Tuesday at 10:00 am in the Commissioners Hearing Room, Fairfield County Courthouse, 210 East Main Street, Lancaster, Ohio.

**Contact Information**

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If you have any questions regarding your drinking water, please contact John Wood, Chief Water Operator, to discuss your concerns.

Fairfield County Utilities Certified Drinking Water Operators  
 John Wood, Class IV      Roger Donnell, Class III  
 Paul Hellman, Class III      Aaron Black, Class I  
 Rick Krueger, Class II      Thomas Bouts, Class I