

# JEFFERSON COUNTY WATER AND SEWER DISTRICT



John T. Gilmore, P.E. Sanitary Engineer

## 2008 WATER QUALITY REPORT

### For Service Area PINEY FORK/ STATE ROUTE 152

#### Introduction

The Jefferson County Water and Sewer District (JCWSD) 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

The JCWSD does not own a water treatment plant. Therefore, it must purchase all the water it delivers to its customers from various suppliers. The vast network of pipelines, storage tanks, and booster pump stations used to distribute water by the JCWSD are divided into different service areas. The Table below lists the different service areas and corresponding supplier.

SERVICE AREA	SUPPLIER
B-1, M, PHKE	City of Toronto Water Department
O, J	City of Steubenville Water Department
A	Brilliant Water and Sewer District
<b>PINEY FORK &amp; STATE ROUTE 152</b>	<b>Brilliant Water and Sewer District / Village of Tiltonsville Water and Sewer Department</b>
G1 & G2	Village of Tiltonsville Water and Sewer Department

The Brilliant Water & Sewer District's water source comes from two (2) wells. #1 Well is 62' deep and #2 Well is 77' deep. These wells are located at the water treatment plant which is located at North Market Street, in Brilliant, Ohio. These wells are designated as ground water supply meaning that no surface water enters the well supply. The water is softened through ion exchange and is treated with a polyphosphate solution and then it is chlorinated with sodium Hypochlorite before it goes into the system.

The source of water for the Village of Tiltonsville Water and Sewer Department are two wells located approximately 100 ft. north of the water treatment plant. The South well is located just east of the water treatment plant at the eastern end of Hodges Avenue. After the water comes out of the well it is treated to remove several contaminants, and a disinfectant is added to destroy microbiological contaminants.

Brilliant's and Tiltonsville's source water assessments have been completed by the Ohio EPA. For information on how to obtain a copy of this report, please visit Ohio EPA's Source Water Assessment and Protection Program Web page at <http://www.epa.state.oh.us/ddagw/pdu/swap.html> or contact the Jefferson County Water and Sewer District.

#### What are the sources of contamination to drinking water?

The sources of 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by the 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 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).

### About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The JCWSD, the Brilliant Water & Sewer District and the Village of Tiltonsville Water and Sewer Department conducted sampling for; bacteria; nitrate and other contaminants during 2007; most of which were not detected in the 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.

Listed below is information on those contaminants that were found in the JCWSD Water system as the result of monitoring by the Brilliant Water and Sewer District .

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection's	Violation	Sample Year	Typical Source of Contaminants
<b>Inorganic</b>							
Lead (ppb)	0	AL = 15	<5.0	NA	No	2006	Corrosion of household plumbing systems; erosion of natural deposits.
Copper (ppm)	1.3	AL = 1.3	0.474	NA	No	2006	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate (ppm)	10	10	1.48	NA	No	2008	Runoff from fertilizer use; erosion of natural deposits
Barium (ppm)	2	2	0.0636	NA	No	2006	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Residual Disinfectants</b>							
Chlorine (ppm)	MRDLG=4	MRDL=4	0.56	0.45 – 0.65	No	2005	Water additive used to control microbes

<b>Volatile Organic</b>							
Total Trihalomethanes (ppb)	NA	80	4.3	NA	No	2006	By-product of drinking water chlorination
Five Haloacetic Acids (ppb)	NA	60	3.23	NA	No	2005	By-product of drinking water chlorination

Listed below is information on those contaminants that were found in the JCWSD Water system as the result of monitoring by the Village of Tiltonsville Water.

<b>Contaminants (Units)</b>	<b>MCLG</b>	<b>MCL</b>	<b>Level Found</b>	<b>Range of Detection's</b>	<b>Violation</b>	<b>Sample Year</b>	<b>Typical Source of Contaminants</b>
<b>Inorganic</b>							
Copper (ppm)	1.3	AL = 1.3	0.80	NA	No	2008	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate (ppm)	10	10	0.82	NA	No	2008	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Lead (ppb)	0	15	11.1	NA	No	2008	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Disinfectants &amp; Disinfection By-Products</b>							
Chlorine (ppm)	4	4	1.49	NA	No	2008	Water additive used to control microbes

Listed below is information on those contaminants that were found in the JCWSD Water system as the result of monitoring by the JCWSD.

<b>Contaminants (Units)</b>	<b>MCLG</b>	<b>MCL</b>	<b>Level Found</b>	<b>Range of Detection's</b>	<b>Violation</b>	<b>Sample Year</b>	<b>Typical Source of Contaminants</b>
<b>Inorganic</b>							
Lead (ppb)	0	AL = 15	<5.0	NA	No	2006	Corrosion of household plumbing systems; erosion of natural deposits.
	Zero out of six samples were found to have lead levels in excess of the Action Level of 15 ppb						
Copper (ppb)	1,300	AL = 1,300	259	NA	No	2006	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	Zero out of six samples were found to have copper levels in excess of the Action Level of 1,300 ppb						

### **How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of the Jefferson County Board of Commissioners which meets every Thursday morning at 9:00 A.M. at 301 Market Street, Steubenville, Ohio 43952.

**For help obtaining more information** on your drinking water contact the Customer Service Department of the JCWSD at (740) 283-8577.

**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 levels (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 (ppms) 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 (ppbs) 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.

The “>” symbol: A symbol which means greater than.

**P.O. Box 2579  
596 State Route 43  
Wintersville, OH 43953-0579  
PHONE: 740-283-8577  
FAX: 740-283-8634  
e-mail: [ktermana@jeffcowatsew.com](mailto:ktermana@jeffcowatsew.com)**

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