



JEFFERSON COUNTY WATER AND SEWER DISTRICT

2017 Drinking Water Consumer Confidence Report

For Service Areas G1 & G2

(Part of Area "A", OEPA PWS ID OH4100803)

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.

License to Operate (LTO) Status

We have a current, unconditional license to operate our water system.

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, Overlook Hills Subdivision	City of Toronto Water Department
J, Sunshine Park, Jefferson Heights Area	City of Steubenville Water Department
A, New Alexandria, CR 19, SR 151 Smithfield, Piney Fork & SR152	Brilliant Water and Sewer District
<i>G1 & G2, Rayland Area, SR 150</i>	<i>Village of Tiltonsville Water and Sewer Department</i>

The source of water for the Village of Tiltonsville Water and Sewer Department are two wells. The North well is located approximately 100 ft. north of the water treatment building at the eastern end of Hodgens Avenue in Tiltonsville, Ohio. The south well is located directly adjacent to the water treatment plant. After the water comes out of the well it is treated to remove several contaminants, and a disinfectant is added to destroy microbiological contaminants. The North well liner was replaced with a new stainless steel liner and pump in December, 2013. In 2005, the south well was replaced with a new well and submersible pumping system. There is a back-up connection with the Village of Yorkville for emergency use. A copy of Yorkville's Consumer Confidence report can be obtained by calling 740-859-5171.

Source Water Assessment and its availability

The Ohio EPA has completed a source water assessment for the Village of Tiltonsville to identify potential contaminant sources and provide direction on protecting the drinking water source. According to this study, **the aquifer (water-rich zone) that supplies water to the Village of Tiltonsville has a relatively high susceptibility to contamination.** This is based on the following: The lack of a protective layer of clay/shale/other overlying the aquifer and the presence of significant potential contaminant sources in the protection area. **This susceptibility means that under current, existing conditions, the likelihood of the aquifer becoming contaminated is relatively high.** This likelihood can be minimized by implementing

appropriate protective measures. 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 Carl Sgalla, Tiltonsville Village Administrator, at 740-859-4692 or the Jefferson County Water and Sewer District at 740-283-8577.

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 for 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 and the Village of Tiltonsville Water and Sewer Department conducted sampling for; bacteria; nitrate and other contaminants during 2017, most of which were not detected in the water supply. The Ohio EPA requires systems to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently, therefore, some results were obtained prior to 2017. **Listed below is information on those contaminants that were found as the result of monitoring by the Village of Tiltonsville Water and Sewer Department and the JCWSD. (Contaminants sampled by the JCWSD are marked with an *.)**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection's	Violation	Sample Year	Typical Source of Contaminants
Inorganic Contaminants							

Lead (ppb)*	0	AL = 15	0	NA	No	2015	Corrosion of household plumbing systems; erosion of natural deposits.
	1 of 23 samples exceeded the action level of 15 ppb						
Copper (ppm)*	1.3	AL= 1.3	.3632	NA	No	2015	Corrosion of household plumbing systems; erosion of natural deposits
	0 of 23 samples exceeded the Action Level of 1.3 ppm						
Nitrate (ppm) [measured as nitrogen]	10	10	1.7	NA	No	2017	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits
Fluoride	4	4	.25	NA	No	2015	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Barium (ppm)	2	2	0.0405	NA	No	2015	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection's	Violation	Sample Year	Typical Source of Contaminants
Volatile Organic Contaminants							
Total Trihalomethanes (ppb)	N/A	80	6.9	5.19 – 8.62	No	2017	By-product of drinking water disinfection
Residual Disinfectants							
Chlorine (ppm)*	4	4	0.97	0.62 – 1.2	No	2017	Water additive used to control microbes

The following information details 2017 violations and exceedences in Tiltonsville and the actions taken by the Village of Tiltonsville Water Department.

Violations and Exceedances
<p>Copper - action level at consumer taps Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. After performing our lead and copper tests on September 15, 2017 and September 21, 2017 higher than usual copper readings were discovered at three locations containing water softeners. Upon notification we immediately increased our phosphate feed at the water treatment plant and notified the affected customers. We estimate the violation occurred for one day after notification. The water department completed a Corrosion Control Treatment Report which was sent to Ohio EPA for approval. The findings supported the need to increase the phosphate feed at the water treatment plant.</p>
<p>Lead - action level at consumer taps Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. After performing our lead and copper tests on September 21, 2017 we were notified of one lead reading higher than usual at one location containing a water softener. Upon notification we immediately increased our phosphate feed at the water treatment plant and notified the affected customers. We estimate the violation occurred for one day after notification. The water department</p>

Violations and Exceedances

completed a Corrosion Control Treatment Report which was sent to Ohio EPA for approval. The findings supported the need to increase the phosphate feed at the water treatment plant.

TT Violation	Explanation	Length	Health Effects Language	Explanation and Comment
Lead and copper rule violations	After performing our lead and copper tests on September 15, 2017 and September 21, 2017 higher than usual copper readings were discovered at three locations containing water softeners. Upon notification we immediately increased our phosphate feed at the water treatment plant and notified the affected customers.	We estimate the violation occurred for one day after notification.	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.	The water department completed a Corrosion Control Treatment Report which was sent to Ohio EPA for approval. The findings supported the need to increase the phosphate feed at the water treatment plant.

Additional Information for Lead

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. JCWSD 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

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 Wayne R. Ruckman of the JCWSD at (740)283-8577 or via email at wruckman@jcwatersewer.com.

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 (µg/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.

PWS: Public Water System (Public Water Supply)

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