ANNUAL WATER QUALITY REPORT

Reporting Year 2018

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

Данный рапорт содержит важную информацию о вашей питьевой воде. Переведите его или проконсультируйтесь с тем, кто его понимает.

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시요.

**この情報は重要です。
翻訳を依頼してください。**

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद करायें ।

此份有关你的食水报告,
内有重要资料和讯息,请找
他人为你翻译及解释清楚。

"هذا ألتقرير يحتوي على معلومآ ت مهمّة تتعلق بمياه ألشفة (أو ألشرب).
ترجم ألتقرير ، أو تكلم مع شخص يستطيع أن يفهم ألتقرير."

Presented By

CRANBERRY TOWNSHIP

PWS ID#: 5100094

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water. We are always available to assist you with concerns about your water supply. For any questions relating to your drinking water, call Lorin F. Meeder, Cranberry Township Environmental Programs Coordinator, at (724) 776-4806, ext. 1176 or come to a meeting of the Cranberry Supervisors where there is always an opportunity for public comment. This report, along with those from previous years, is posted online at www.cranberrytownship.org/WaterQualityReport. Printed copies of this report are also available upon request.

Where Does My Water Come From?

Our water comes from the Ohio River. Cranberry Township purchased its entire water supply - 885 million gallons last year - from the West View Water Authority in Allegheny County. Cranberry has a state allocation permit to use up to 4.4 million gallons a day from the Ohio River for drinking water, and we are still comfortably below that allocated level of use. The township's water supply, which includes provisions for substantial growth over the coming decades, is secured through a 25-year agreement with West View, and we are now the authority's biggest customer.

Information on the Internet

The U.S. EPA (https://goo.gl/TFAMKc) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, the Pennsylvania DEP has a Web site (https://goo.gl/S8tGjj) that provides complete and current information on water issues in Pennsylvania, including valuable information about our watershed.

Lead in Home Plumbing

Water containing traces of lead is sometimes found in older homes and water systems. It typically leaches from plumbing used in pre-World War II pipelines and fixtures that contain lead. However, Cranberry's water system is relatively new, largely built after lead was outlawed in municipal and residential plumbing. As a result, lead is not an issue for the Township's water supply. But some older communities in Western Pennsylvania are affected.

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. We are responsible for providing high-quality drinking water, but we 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 www.epa.gov/safewater/lead.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

We're Freshening Up Our Water Testing

First things first: we're pleased to report that Cranberry's water quality is excellent. The results of our state-mandated water tests for 2018, included here, document that fact. At the same time, we also want you to know that the number of new government regulations designed to safeguard America's water safety keeps growing. One of them recently came into force.

Public water systems are already required to maintain a certain level of disinfectant. The focus of the new regulation concerns the consistency of that chlorination, which can vary depending on where in a system's distribution lines the water is drawn. The flip side of that issue concerns total trihalomethanes (TTHMs) – by-products of the chlorine used to disinfect drinking water – which tend to build up over time, especially in slow-moving water. TTHMs have been associated with adverse health effects.

> "We remain vigilant in delivering the best-quality drinking water"

So the township established a handful of sampling stations to check on disinfectant and TTHM levels in key parts of the network. That information allowed us to satisfy state requirements and manage our system's water treatment more effectively.

But regulations can change. Until last year, we managed our water system based on the number of residents that subscribe to our water service. Of the 12,000 or so households in Cranberry, about 1,000 use water from their own wells, so we subtracted them from the total. But then last fall, Chapter 109 of the state's Safe Drinking Water Regulations was updated in a way that affected how we count Cranberry's water customers.

For example, we now count people commuting into Cranberry for work, but we only count each one as one-third of a person. At the same time, we subtract a similar fraction for Cranberry residents who commute out of the township for work. Then we add in the guests staying at Cranberry's 13 hotels, the patrons of Cranberry's 80 restaurants, the people admitted to the local hospital, and shoppers or visitors passing through our community. In the end, when you crunch all those numbers, we find ourselves serving a population significantly greater than our customer base.

One outcome of our recalculation was that we had to significantly expand the number and scope of our sampling stations. So we did. We now have more than 40 sampling points scattered throughout the system, with a particular emphasis on lines at the perimeter of the township, where slow-moving water tends to accumulate, along with TTHMs. Those findings, in turn, reinforced our strategy of accelerating turnover of the water in our system and the arsenal of methods we use to achieve that.

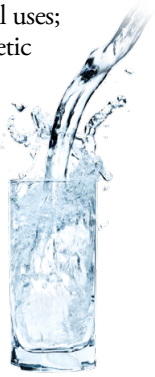
As a result, we are pleased to report once again that water from Cranberry Township continues to be safe, fresh, abundant, and poised to continue meeting the needs of our residents, businesses, and guests well into the future.

Cheers, *Cranberry Township Board of Supervisors*

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA and DEP prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration and DEP 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include: Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife; Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems; Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.



For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Treatment Process

Before water arrives in Cranberry, it undergoes a series of treatments at the West View Water Authority plant on Neville Island. After screening at the plant's intake, the water goes through a mixing chamber, where treatment chemicals coagulate unwanted particles. Those particles then settle to the bottom in a clarifier tank, followed by activated carbon filtration to remove any remaining particles, odors, colorants, or anything else affecting its taste. Then a disinfectant is added to kill bacteria, and the water passes through an ultraviolet light disinfection system, fluoride is added, and its pH level is stabilized with sodium hydroxide before powerful pumps send the water on its way to Cranberry.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

				Cranberry Township		West View Water Authority			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloramines [Distribution] (ppm)	2018	[4]	[4]	0.20	0.20–1.38	1.04	0.65–1.04	No	Water additive used to control microbes
Chloramines [Entry Point] (ppm)	2018	MinRDL = 0.2	NA	1.02[1]	0.59–1.95	0.70[1]	0.70–1.77	No	Water additive used to control microbes
Chlorine [Distribution] (ppm)	2018	[4]	[4]	0.30	0.30–1.75	1.47	1.23–1.47	No	Water additive used to control microbes
Chlorine [Entry Point] (ppm)	2018	MinRDL = 0.2	NA	0.19[1]	0.19–1.88	0.77[1,2]	0.77–2.10[2]	No	Water additive used to control microbes
Fluoride (ppm)	2018	2	2	NA	NA	0.45	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	2018	10	10	NA	NA	0.87	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	57.95	31–66.9	54.2	18.7–95.7	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

				Cranberry Township		West View Water Authority			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2016	1.3	1.3	0.06	0/31	0.09	0/54	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2016	15	0	0.0008	0/32	11.6	4/54	No	Lead service lines, corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

SECONDARY SUBSTANCES

				Cranberry Township		West View Water Authority			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Manganese (ppb)	2018	50	NA	NA	NA	1.62	1.62–1.62	No	Leaching from natural deposits

UNREGULATED CONTAMINANT MONITORING RULE - PART 4 (UCMR4)

		Cranberry Township		West View Water Authority	
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
HAA5 (ppb)	2018	20.15	6.25–34.2	20	9.8–33.5
HAA6Br (ppb)	2018	NA	NA	11	4.1–24.3
HAA9 (ppb)	2018	NA	NA	21.8	12.0–42

[1] Lowest level detected.
[2] Sampled in 2016.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): 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.

MinRDL (Minimum Residual Disinfectant Level): The minimum level of residual disinfectant required at the entry point to the distribution system.

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 drinking water 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.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.