

ANNUAL WATER QUALITY REPORT

WATER TESTING
PERFORMED IN 2015

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 사용하십시오.

**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 التقرير يحتوي على معلومات مهمة تتعلق بمياه الشفة (أو الشرب).
ترجم التقرير، أو تكلم مع شخص يستطيع أن يفهم التقرير.“



Presented By
Cranberry Township

Meeting the Challenge

Once again we are pleased to present our annual drinking water report, covering all drinking water tests performed between January 1 and December 31, 2015. Over the years, we have dedicated ourselves to providing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to your homes and businesses. 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 of our water users.

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. 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.

Important Health Information

Some people are more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, people who have undergone organ transplants, anyone with HIV/AIDS or other immune system disorders, some elderly individuals and infants may be particularly at risk from infections. They 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>.

Where Does My Water Come From?

Our water comes from the Ohio River. Cranberry Township purchased its entire water supply – 863 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 decade, is secured through a 25-year agreement with West View, and we are now the Authority's biggest customer.

Substances That Could Be in Water

To make sure that tap water is safe to drink, the U.S. EPA has regulations limiting the amount of certain contaminants in water provided by public water systems. For bottled water U.S. Food and Drug Administration regulations establish limits for contaminants providing the same protection. However, drinking water, including bottled water, may contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily mean that the water poses a health risk.

The sources for both tap water and bottled water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface or through the ground, it dissolves naturally occurring minerals. In some cases they include radioactive material and substances resulting from the presence of animals or human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which can come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

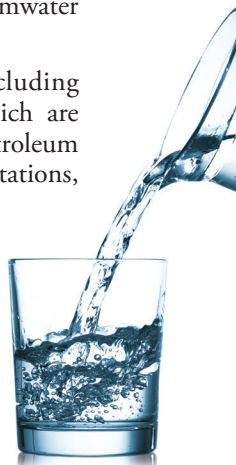
Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

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.



Community Participation

We welcome public involvement on issues concerning our water and wastewater systems. Meetings of the Cranberry Township Board of Supervisors are normally scheduled on the first and last Thursdays of each month at 6:30 p.m. in the Cranberry Township Municipal Center, 2525 Rochester Road, and an opportunity for public comment is always on the agenda. Check the Cranberry Township Web site (www.cranberrytownship.org) or call the Customer Service Center at 724-776-4806 to confirm meeting times.

2016 Consumer Confidence Report Letter to Customers

To our water system customers:

In addition to the good news you'll see in this report about our water test results, there are several new developments we'd like to share with you.

The first has to do with an initiative of the American Water Works Association – the premier professional association for people in the water industry – and Cranberry's participation in it. Their program – the Partnership for Safer Water – has actually been around for 25 years. But all the publicity surrounding water system failures in Flint, Michigan, has sharply increased public awareness about water safety and accelerated the adoption of better practices among water utility professionals.

The Partnership, an alliance formed by the Association along with several government agencies and nonprofit organizations, created a process to help participants optimize their water systems. This year, Cranberry joined that partnership to help assure customers of continued high-quality water throughout their own distribution system, which currently serves 30,000 residents along with many more who commute into town during the work week.

The program involves five steps, the first of which is improved data collection. For systems like ours, the program looks at three factors: chlorine levels, water pressure, and line breaks. To collect better, more representative data, Cranberry recently changed the locations where it draws its chlorine samples. As far as water pressure is concerned, better measurement techniques are still being explored. And, as a comparatively new system, the Township's distribution network has experienced relatively few line breaks. However, minimizing their occurrence will remain a priority.

The other major development is that, starting this year, the Township will be removing most of its residential and commercial water meters and replacing them with a new generation of highly accurate meters that transmit usage data to the billing system electronically. When the \$3.2 million project is complete – which isn't expected for a few more years – all billing will be for actual use; estimated use billing will be a thing of the past.

The first step involves setting up the antennae, which will allow the meters to talk wirelessly with our Finance Department. Then, in addition to replacing your old meter with a new one, your outdoor touchpad will be covered with a snap-on unit that allows it to be read remotely. However, unlike today's meters, which show use to the nearest 100 gallons, the new digital ones will register down to a single gallon and then send that data to a secure Web site where you can track your own water use in near-real time.

That can help you better manage your own water consumption. So, for example, you can set it to give automatic alerts when your measured use exceeds a preset amount.

Our transition to remotely read meters is not simply a Cranberry initiative; it's nationwide. The Township saw that trend emerging some years ago, and has carefully monitored the experience of other communities who made the switch to find out what worked as well as what didn't. And there have been spectacular examples of both that we can learn from.

Five or six years ago, Cranberry began pilot testing meters from different manufacturers to see which ones were the most accurate and trouble-free to install. The hands-down winner: Sensus MXU meters, a spinoff of the former Rockwell Manufacturing Company.

Both the Partnership program and the meter changeover take a long-term view of Cranberry's water system as well as of the evolving challenges to water safety. So we are pleased to report that again this year, as in years past, your water meets or exceeds all government standards and that you can continue feeling confident in your use of it.

Cranberry Township Board of Supervisors

Water Treatment Process

Before water arrives in Cranberry, it undergoes a series of treatments at the West View Water Authority's 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.

Flint, Michigan's Lead Problem

A lot of attention has been paid lately to water system failures affecting Flint, Michigan. So, understandably, people wonder if the same thing could happen in Cranberry. The answer is this: what happened in Flint cannot happen here.

Why? The most widely publicized problem in Flint was lead in customers' water, and lead can create serious health problems for people. It happened because Flint's water contained corrosives – not the sort of heavy industrial corrosives people might imagine, but naturally occurring elevated acid levels, or pH. That's not an unusual situation. However, most suppliers treat their water to control for pH. But for some reason, that didn't happen in Flint, so their water began eating away at the insides of older pipes on its way to customers.

Back in the early part of the last century, lead was frequently used as an alloy in plumbing, and that's where the lead in Flint's water came from. But pipe makers stopped using lead decades ago, and newer municipal water system lines, including Cranberry's, are lead-free, so it's not there to leach out of the pipes and contaminate the water. Beyond that, the West View Water Authority, which supplies Cranberry's water, is careful to minimize any corrosiveness by adjusting pH levels in the water it draws from the Ohio River before sending it out to customers.

Lead in Home Plumbing

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 installed more than 60 years ago. We are responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components of older homes. If you are concerned about that possibility, 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, you may also 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 www.epa.gov/lead.

Sampling Results

During the past year, we have taken hundreds of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic materials. The table below shows only those materials that were detected in the water. The state permits us to monitor 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
Barium (ppm)	2015	2	2	NA	NA	0.03	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chloramines [Distribution] (ppm)	2015	[4]	[4]	NA	NA	1.13	0.73–1.13	No	Water additive used to control microbes
Chloramines [Entry Point]¹ (ppm)	2015	MinRDL = 0.2	NA	NA	NA	0.43	0.43–1.4	No	Water additive used to control microbes
Chlorine [Distribution] (ppm)	2015	[4]	[4]	0.10	0.10–2.06	1.56	0.69–1.56	No	Water additive used to control microbes
Chlorine [Entry Point]¹ (ppm)	2015	MinRDL = 0.2	NA	0.812	0.414–2.49	0.95	0.95–2.18	No	Water additive used to control microbes
Di(2-ethylhexyl) Phthalate (ppb)	2015	6	0	NA	NA	0.8	NA	No	Discharge from rubber and chemical factories
Fluoride (ppm)	2015	2	2	0.745	0.71–0.787	0.6	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2013	60	NA	14.3	10.8–18.85	10.6	4.8–14.7	No	By-product of drinking water disinfection
Nitrate (ppm)	2015	10	10	NA	NA	0.6	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2015	80	NA	46.09	25.29–98.56	37.9	21.7–62.5	No	By-product of drinking water disinfection
Total Organic Carbon (% positive samples)	2015	TT	NA	NA	NA	38	38–56	No	Naturally present in the environment
Turbidity² (NTU)	2015	TT	NA	NA	NA	0.090	0–0.090	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2015	TT = 95% of samples < 0.3 NTU	NA	NA	NA	100	NA	No	Soil runoff
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%TILE)	SITES ABOVE AL/TOTAL SITES	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2013	1.3	1.3	0.03	0/16	0.085	0/50	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2013	15	0	0	0/16	8.4	3/50	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED SUBSTANCES - WEST VIEW WATER AUTHORITY

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Bromide (ppb)	2012	18	18–18
Chromium Hexavalent ³ (ppb)	2015	0.05	0.04–0.06
Strontium ³ (ppb)	2015	110	110–110

¹ The amount-detected value for chlorine [entry point] and chloramines [entry point] represent the lowest level that was detected.

² Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

³ Sampled under the Unregulated Contaminant Monitoring Rule Part 3 (UCMR3).

Definitions

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 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

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.