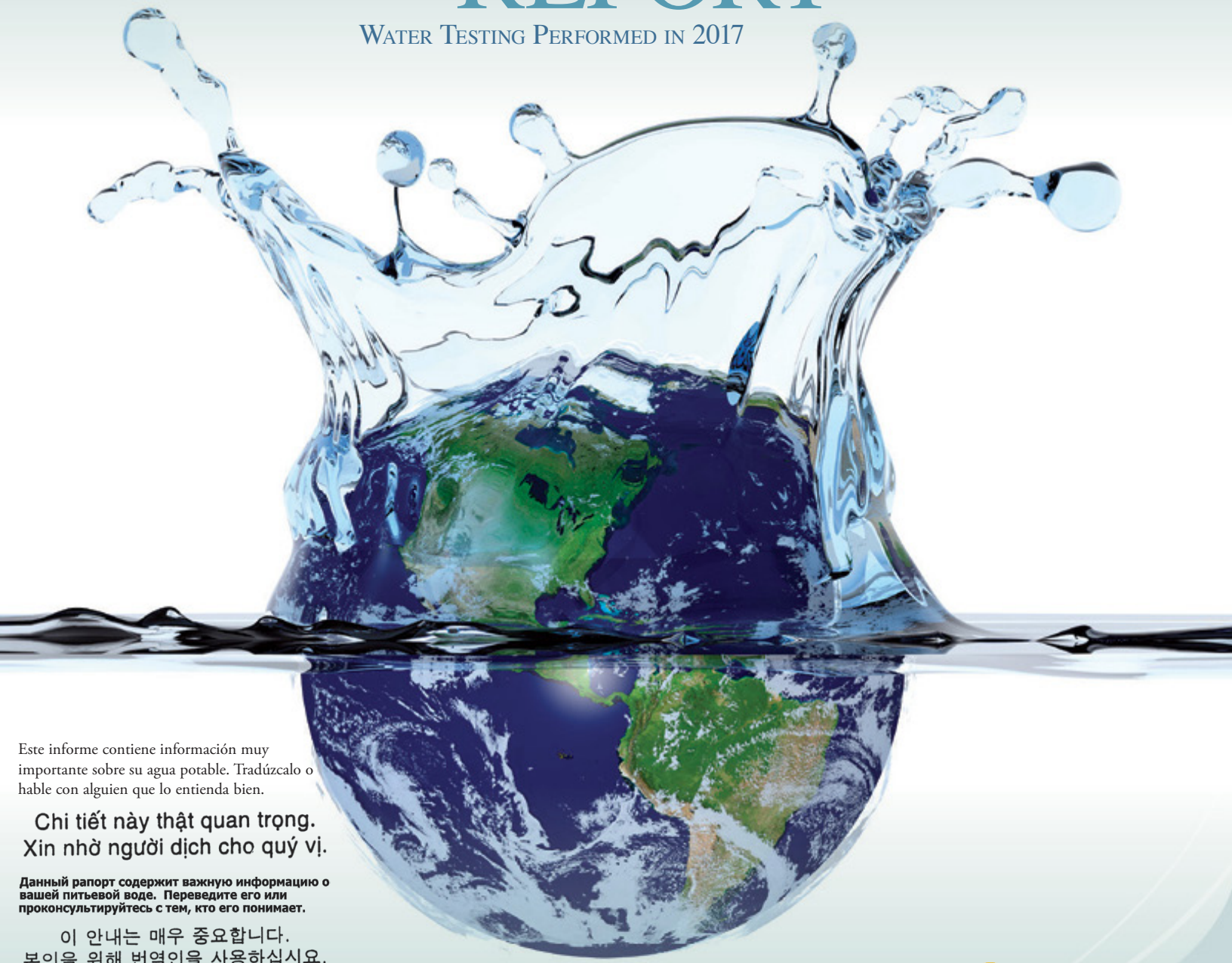
ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2017



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 معلوماً ت مهّمة تتعلق بمياه ألشفة (أو ألشرب).
ترجم ألتقرير, أو تكلم مع شخص يستطيع أن يفهم ألتقرير."

Presented By

CRANBERRY
• TOWNSHIP •

PWS ID#: 5100094

Board of Supervisors' Letter to Cranberry Water Customers

Once again this year, we are pleased to report that Cranberry's tap water has met or exceeded every federal health guideline, as confirmed by the 2017 test results reported here. Maintaining that level of quality – particularly at a time of heightened national concern over water quality – requires continuous effort by our own professional staff as well as by the West View Water Authority, our sole provider of fresh water.

In many parts of the country, including the City of Pittsburgh, water quality issues are frequently in the news. It is often because municipal and private water lines installed before World War II typically included lead, which can leach into the water they carry, creating serious human health problems. Elsewhere in the country, chemicals disposed of improperly, as well as animal waste, pesticides, industrial wastes injected underground, and substances that occur naturally in the soil – including radioactive ones – have contaminated drinking water.

In Cranberry, however, the water distribution system is newer – built after lead was eliminated from plumbing. The sorts of ground contamination that have damaged water tables and tainted well water in other parts of the country are not factors here either; all of Cranberry's water comes from the Ohio River and is thoroughly treated before it ever reaches Cranberry. Then, it's tested again and secondary treatments are applied as needed.

At the same time, however, some of the earlier housing plans in Cranberry were built using cast iron water supply lines. Over time, those lines can rupture. Right now, Cranberry's Public Works Department is focused on repairing any leaks as soon as they are reported. We will soon be systematically replacing aging water lines with new ones, which will allow the Township to keep its distribution network up to date.

One of the most remarkable things about Cranberry's water system is that despite the steady growth in both the Township's residential population and business community, the volume of water we consume has scarcely risen at all over the past 10 years. The decline in consumption per person reflects the growing use of water-conserving fixtures in the home, together with constant monitoring for leaks throughout the distribution network and a conscious effort to minimize the water consumed by our annual line flushing program.

This spring, we will be on the cusp of completing our transition from conventional water meters, which required bi-monthly house-to-house readings, to digital ones that wirelessly transmit usage data, in near-real time, to our administrative office. Not only are they far more accurate, providing readings by the gallon instead of by the thousands of gallons, they can also signal when there may be a leak in the homeowner's water line. A free smartphone app to track your metered use will be available later this year.

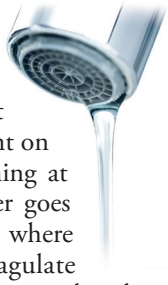
Finally, we want to salute Mike Sedon, who not only manages our wastewater treatment plant, but is also a leader in the fresh water side of our system. Last year he was elected by his fellow water quality professionals as the President of PWEA – the Pennsylvania Water Environment Association – whose mission is to enhance the knowledge and expand the abilities of Pennsylvania's water quality professionals, advance sustainable water policies, and promote public awareness of the need to protect water resources. With Mike's election, we think that PWEA is in good hands, and so is Cranberry's water system.

Cranberry Township Board of Supervisors

Where Does My Water Come From?

Our water comes from the Ohio River, Cranberry purchased its entire water supply – 865 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, and we are still comfortably below that level. 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. A Source Water Assessment (SWA) has been conducted by West View. The SWA report characterizes the potential pollutants that could contaminate our drinking water supply. For more information, a summary of the SWA report on potential pollution sources is online at: http://www.depgreenport.state.pa.us/elibrary/?aspxerrorpath=/elibraryredirect/dsweb/View/Collection-10045.

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, 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.

Quality First

Once again, we are pleased to present our annual water quality report. As in years past, we are committed to delivering the best-quality drinking water possible. Thank you for allowing us the opportunity to serve you and your family.

Substances That Could Be in Your Water

To ensure that tap water is safe to drink, the U.S. EPA and Pa Department of Environmental Protection (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:

> "Water treatment is a complex, time-consuming process."

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, 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.

Lead in Home Plumbing

Water containing traces of lead may be found in older homes and water systems. Lead typically leaches from plumbing where it has been used in pipelines and fixtures, contaminating the water. 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 the region are affected.

Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. We are responsible for providing high-quality drinking water, but cannot control the variety of materials formerly used in plumbing components. When water has been sitting for several hours, you can minimize the potential for lead exposure by flushing the tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you can test your water. 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.

Contaminants and Human Health

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.

Community Participation

We welcome your 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. An opportunity for public comment is always on the agenda.

QUESTIONS?

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.

Test Results

Our water is sampled for many different kinds of substances on a strict monitoring schedule. The information in the data tables shows only those substances that were detected between January 1 and December 31, 2017. However, detecting a substance does not necessarily mean the water is unsafe to drink; our goal is to keep any substances detected 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
Barium (ppm)	2017	2	2	NA	NA	0.031	0.031–0.031	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chloramines [Distribution] (ppm)	2017	[4]	[4]	1.52	0.10–1.52	0.96	0.76–0.96	No	Water additive used to control microbes
Chloramines [Entry Point][1] (ppm)	2017	MinRDL = 0.2	NA	0.17	0.17–1.25	0.73	0.73–2.02	No	Water additive used to control microbes
Chlorine [Distribution] (ppm)	2017	[4]	[4]	2.0	0.020–2.0	1.29	0.65–1.29	No	Water additive used to control microbes
Chlorine [Entry Point][2] (ppm)	2017	MinRDL = 0.2	NA	0.21	0.21–1.47	0.74	0.74–1.95	No	Water additive used to control microbes
Fluoride (ppm)	2017	2	2	NA	NA	0.5	0.5–0.05	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2017	60	NA	19.60	14.87–19.60	12.5	4.9–18.2	No	By-product of drinking water disinfection
Nitrate (ppm)	2017	10	10	NA	NA	0.7	0.7–0.7	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes][3] (ppb)	2017	80	NA	47.40	38.73–47.40	46.1	17.4–68.8	No	By-product of drinking water disinfection
Total Organic Carbon (% removal)	2017	TT	NA	NA	NA	38-61	NA	No	Naturally present in the environment
Turbidity (NTU)	2017	TT	NA	NA	NA	0.091	0–0.091	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)	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	0/31	11.6	4/54	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED AND OTHER SUBSTANCES

		Cranberry Township		West View Water Authority	
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Bromide (ppb)	2017	NA	NA	40	0–120
Chromium-6 (ppb)	2015	NA	NA	0.05	0.04–0.06
Nickel (ppb)	2017	NA	NA	1.5	NA
Strontium (ppb)	2015	NA	NA	110	110–110

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

[2] The amount-detected value for chlorine [entry point] represents the lowest level that was detected.

[3] Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

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 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

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.