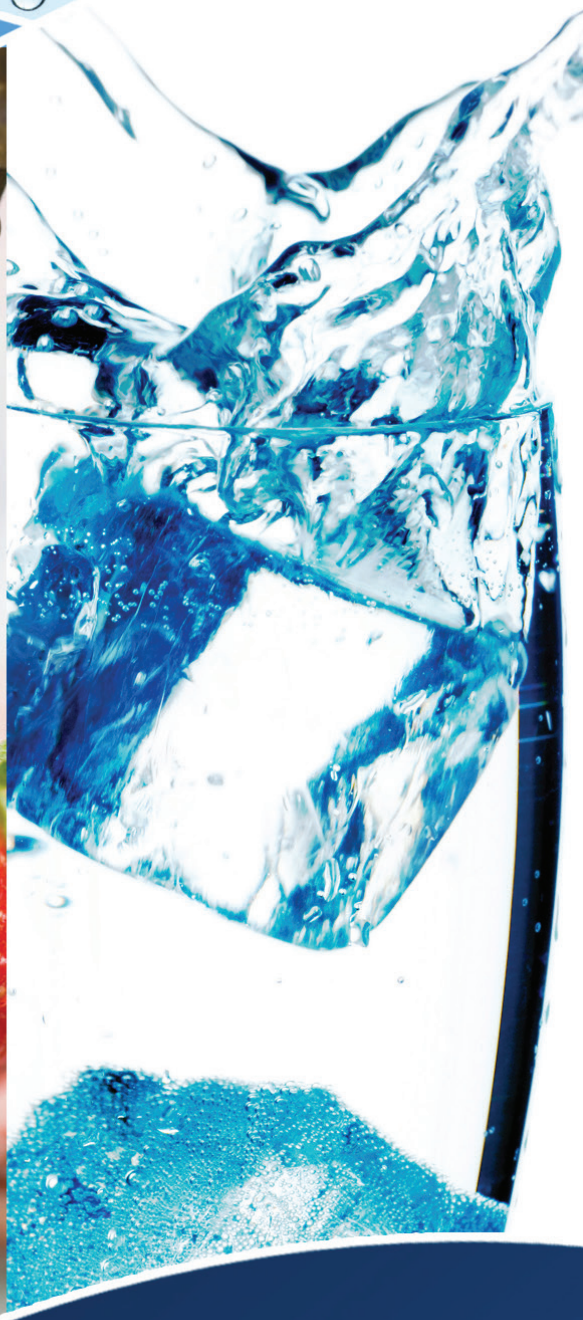
ANNUAL WATER QUALITY REPORT

Water Testing Performed in 2014



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。**

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

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 مهمّة تتعلق بمياه الشفة (أو الشرب).
ترجم التقرير, أو تكلم مع شخص يستطيع أن يفهم التقرير."

Presented By

CRANBERRY TOWNSHIP

PWS ID#: 5100094

Our Mission Continues

We are proud to present once again our annual water quality report covering all testing performed between January 1 and December 31, 2014. Most notably, last year marked the 40th anniversary of the Safe Drinking Water Act (SDWA). This rule was created to protect public health by regulating the nation's drinking water supply. We celebrate this milestone as we continue to manage our water system with a mission to deliver the best-quality drinking water. By striving to meet the requirements of SDWA, we are ensuring a future of healthy, clean drinking water for years to come.

Please let us know if you ever have any questions or concerns about your water.

Community Participation

We encourage 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 public comment is always welcome. Check the Cranberry Township Web site—www.cranberrytownship.org—or call the Customer Service Center at 724-776-4806 to confirm meeting times.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those 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.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations also establishes limits for contaminants in bottled water that 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.

Squeezing the Last Drop of Value from Our Water Supply

Water quality is very important to Cranberry. But so is water quantity.

Cranberry Township buys all its municipal drinking water from the West View Water Authority. As the Authority's single biggest customer, we have been able to negotiate their best rates. Even so, those rates just saw a significant increase as the Authority prepares to meet future capacity requirements. So we spend a lot of money buying water—about $2.5 million for 850 million gallons last year—and that was before the rates went up. As a result, water is a high-value commodity, and we've put an aggressive program of conservation in place to make sure our residents get the most value from the water we buy.

For example, we use well water, rather than purchased water, to irrigate the athletic fields of Graham Park. And we have enacted grading ordinances designed to help recharge that aquifer so that our water table will always remain at a healthy level. We use effluent from the wastewater treatment plant—water that would otherwise be discharged into Brush Creek—to keep our Cranberry Highlands Golf Course green.

We carefully meter the volume of water consumed by our annual line-flushing program and limit its use to conserve supply. Twice a year, every year, we have a contractor come in to check for leaks in our water delivery system. And whenever one is detected, we immediately dispatch a crew to repair it.

We've adopted building codes that require water-conserving fixtures in new construction. We offer residents free leak checks and pressure checks. We distribute water conservation kits at no charge. And we're moving ahead with the idea of replacing our older water meters with electronic ones to improve reading accuracy and to alert us to unusually high water-use situations that require the homeowner's immediate attention.

Those efforts are producing results. Last year, for example, our loss ratio—the percentage of the water we buy that never gets metered or billed—was under 10 percent. Region-wide, that water loss ratio has been estimated to be as high as 18 percent, so we are doing significantly better than average. When you make global comparisons, it gets even more dramatic. While the UK's loss stands at 19%, in France it's 26%, in Mexico it's 51%, and in Lagos, Nigeria, it's a staggering 96%.

A different way of looking at it would be the average number of gallons per day used by each Cranberry resident. That number has continued to decline, not because people aren't bathing as much, but because all the changes we've been talking about allow them to make more efficient use of the water they buy. In 1990, for example, the average use per individual was 55 gallons. By last year, it was just 43 gallons.

Over time, we anticipate that that use number will continue to decline, although perhaps more slowly than before. And we are confident that these steps will help to assure Cranberry's high quality of life, as well as an ample supply of fresh water, far into the future.

Cranberry Township Board of Supervisors

Where Does My Water Come From?

Our water comes from the Ohio River. Cranberry Township purchased its entire water supply—821 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 as its source of 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.

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.

Our Water Source

Cranberry buys all its water from the West View Water Authority, which it draws from the Ohio River and treats at a plant on Neville Island. Pennsylvania's Department of Environmental Protection conducts periodic assessments of public drinking water sources throughout the state to determine any risks of contamination that could potentially affect them. In addition to informing the public, DEP's goal is to promote the development of local, voluntary source water protection. The agency's most recent assessment determined that the Ohio is potentially susceptible to degradation from a variety of sources including various forms of river traffic, combined sewer overflows, road deicing, and salt storage, as well as residential development, auto repair shops, utility substations, and truck terminals. It concluded that the risk of significant contamination was moderate. A complete report is available on the DEP's website.

Lead in Your Drinking Water

Elevated levels of lead in drinking water can result in serious health problems, particularly for pregnant women and young children. If lead is found, federal law requires water suppliers to announce that finding to their customers. No such warning has ever been issued to water customers in Cranberry Township.

Lead was commonly used as an alloy in home water lines 100-150 years ago. If water stands in those pipes for an extended period, small amounts of lead could leech into it. However, Cranberry didn't introduce municipal water service until 60 years ago, by which time pipe composition had changed. National standards regulating the use of lead in plumbing lines, fixtures, solder, and flux were enacted in 1986. Today, water lines in Cranberry are made of either copper or plastic, neither of which contains lead.

Even so, Cranberry tests its water for lead, as required by federal law, using the same methodology as our supplier, the West View Water Authority. Nothing above normal levels of contaminants has ever been found. But if you are concerned about lead in your water, whether in Cranberry or elsewhere, you should feel free to have that water tested. Information on lead in drinking water, as well as testing methods and steps you can take to minimize exposure, is available from the Safe Drinking Water hotline or at www.epa.gov/safewater/lead.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not themselves pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen and disinfectant levels, and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at such times. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water, to prevent sediment accumulation in your hot water tank.

Please contact us at 724-776-4806 if you have any questions or if you would like more information on our water main flushing schedule.

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.

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water.

Except where otherwise stated, Cranberry's water tests are based on samples drawn at the pump station in Thorn Hill Industrial Park, which is where water from The West View Water Authority enters the Township's distribution system. In this report, it is referred to as Entry Point.

The state allows 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[1]

				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)	2014	2	2	NA	NA	0.04	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chloramines [Distribution] (ppm)	2014	[4]	[4]	0.65	0.2–1.11	1.04	0.74–1.04	No	Water additive used to control microbes
Chloramines [Entry Point][2] (ppm)	2014	MinRDL: SW=0.2/GW=0.4	NA	0.21	0.21–1.48	0.92	0.92–2.01	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chlorine [Distribution] (ppm)	2014	[4]	[4]	0.10	0.10–2.20	1.41	0.63–1.41	No	Water additive used to control microbes
Chlorine [Entry Point][2] (ppm)	2014	MinRDL: SW=0.2/GW=0.4	NA	0.16	0.16–2.02	1.04	1.04–1.96	No	Water additive used to control microbes
Fluoride (ppm)	2014	2	2	0.45	NA	0.07	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2014	60	NA	14.19	9.97–19.51	11.2	7.7–14.8	No	By-product of drinking water disinfection
Nitrate (ppm)	2014	10	10	NA	NA	0.9	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2014	80	NA	50.27	29.78–98.56	42	16.1–62	No	By-product of drinking water disinfection
Total Organic Carbon (% removal)	2014	TT	NA	NA	NA	35%	34%–53%	No	Naturally present in the environment
Turbidity[3] (NTU)	2014	TT	NA	NA	NA	0.059	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2014	TT	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	0.0085	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

[1] West View Water Authority was requried to sample for Synthetic Organic Chemicals (SOCs) during May and August of 2014. Instead, they were taken in August and December of 2014. The results indicated that West View Water Authority is meeting drinking water standards.

[2] The amount-detected value represents the lowest level that was detected.

[3] 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.

Definitions

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

GW: Groundwater source.

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

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

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).

SW: Surface water source.

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