



ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2016

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.

“هذا التقرير يحتوي على معلومات مهمة تتعلق بجودة المياه (لـ الشرب).
ترجم التقرير، أو تكلم مع شخص يستطيع أن يفهم التقرير.”

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。

Presented By



CRANBERRY
TOWNSHIP.

PWS ID#: 5100094

Come On In - The Water's Fine

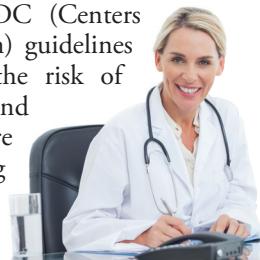
Once again we are proud to present you with our annual water quality report. This one covers the full year 2016. As in prior years, the results of our water tests are very good; they meet or exceed every government-established standard. Look them over; they should give you confidence in using Cranberry's tap water for any purpose. At the same time, however, you should also know that those findings are not just a matter of luck; they are the results of hard work, sound policies, and continuous investment in our water treatment, storage, management, and distribution systems, both by Cranberry and by The West View Water Authority, our system's sole supplier of fresh water. Our shared goal is to provide Cranberry residents with a continuous supply of high-quality drinking water for years to come. And we feel that the conclusions of this report help to confirm our progress toward that goal.

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 Thursday of each month at 6:30 p.m. in the Cranberry Township Municipal Center, 2525 Rochester Road. 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.

Vulnerable Populations

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>.



It's the Law

To ensure that tap water is safe to drink, the U.S. EPA and State 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 that 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 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, are by-products of industrial processes and petroleum production which 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.

Letter from Cranberry's Supervisors

To our customers:

Water, as you know from your own travels, doesn't taste the same everywhere. It doesn't work the same way in a shower or washing machine, either. That's because there's no such thing as "pure" water in nature. Water is a universal solvent, and it's actually pretty aggressive when it comes into contact with salts, metals, minerals, and organics. So it always contains other materials, and the mix of those materials differs depending on where the water comes from.

That's natural, and it's not necessarily a problem. But it can become one if high levels of the wrong sorts of materials are either dissolved or suspended in that water.

The federal government has set standards for drinking water to identify acceptable levels of various materials. And they've established elaborate protocols for sampling that water. That's why we're constantly checking our water, and the results of those tests for 2016 are reported here. In essence, they confirm that our water is fine to use for any purpose.

At the same time, however, there has been a lot of news about lead in Pittsburgh's water, and people wonder whether that problem affects Cranberry, too. The short answer is no, it doesn't. Here's why: There is virtually no lead in the rivers whose water we use. But Pittsburgh's water system is a lot older than ours. When it was built, lead was a commonly used material in water mains, pipelines, and home plumbing as well as in the solder used to connect pipe sections. By the time most of Cranberry's homes and water lines were built, lead was no longer in use. Even so, Cranberry complied with the required tri-annual lead and copper water testing program last year; the findings are included in this report.

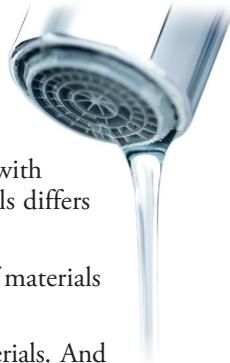
Beyond that, the West View Water Authority -- which is Cranberry's sole water supplier -- treats the pH in their water to stabilize it and reduce its corrosive properties so that it's less likely to pick up new contaminants such as lead on its way from their Neville Island plant to Cranberry.

Once it gets here, we take more water samples to check for bacteria, but we don't just take them at our Thorn Hill pump house. Last year, we developed a new sampling program to make sure that our customers at the outermost limits of our distribution system -- which is where bacteria issues are theoretically most likely to occur -- have the appropriate levels of disinfectant. And we tweaked the cycling of water in our storage tanks to make sure that everyone's water is as fresh as possible.

At the same time, improvements to our water system and its management procedures are ongoing. For example, the next year or two will see new water meters, new system alerts, and new extensions of our distribution lines. These changes are all designed to secure a healthy and abundant supply of water for generations to come.

We take the responsibility of providing you with safe, clean water very seriously. Thanks for giving us that opportunity.

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, 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.



Where Does My Water Come From?

Our water comes from the Ohio River. Cranberry Township purchased its entire water supply - 880 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.



What type of container is best for storing water?

Consumer Reports has consistently advised that glass or BPA-free plastics such as polyethylene are the safest choices. To be on the safe side, do not use any container with markings on the recycle symbol showing "7 PC" (code for BPA). You could also consider using stainless steel or aluminum with BPA-free liners.

How much emergency water should I keep?

Typically, 1 gallon per person per day is recommended. For a family of four, that would be 12 gallons for 3 days. Humans can survive without food for 1 month, but can survive only 1 week without water.

How long can I store drinking water?

The disinfectant in drinking water will eventually dissipate, even in a closed container. If that container housed bacteria before it was filled with tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

How long does it take water to pass through the treatment process?

It could take up to 45 minutes to produce a single glass of drinking water.

How many community water systems are there in the U.S.?

About 53,000 public water systems across the United States process 34 billion gallons of water per day for home and commercial use. Eighty-five percent of the population is served by these systems.

Lead in Home Plumbing

Lead is not a problem with Cranberry's water supply. However, if it were 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 or at www.epa.gov/lead.

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 monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents only those substances that were detected; our goal is to keep all detects below their respective maximum allowed levels. The State recommends monitoring for certain substances less often 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.

Last year we participated in the 3rd stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

Reporting and Monitoring Violation

Cranberry is required to test its water for trihalomethanes and haloacetic acids every quarter. During the second quarter of last year, we drew samples in April, but they weren't analyzed quickly enough, so we resampled in May and reported those results to the State's Department of Environmental Protection. There was never any problem with the water, but the incident was considered a breach of protocol, so we were cited for a Reporting and Monitoring violation and required to report that to you.

| Regulated Substances Tested For | | | | | | | | | |
|---|--------------|------------------------------------|--------------------|-----------------|----------------|---------------------------|----------------|-----------|--|
| Substance (Unit of Measure) | Year Sampled | MCL [MRDL] | Cranberry Township | | | West View Water Authority | | | |
| | | | MCLG [MRDLG] | Amount Detected | Range Low-High | Amount Detected | Range Low-High | Violation | Typical Source |
| Barium (ppm) | 2016 | 2 | 2 | NA | NA | 0.036 | NA | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Chloramines [Distribution] (ppm) | 2016 | [4] | [4] | 0.20 | 0.20–1.36 | 1.04 | 0.74–1.04 | No | Water additive used to control microbes |
| Chloramines [Entry Point] ¹ (ppm) | 2016 | MinRDL: SW=0.2/GW=0.4 | NA | 0.896 | 0.896–1.053 | 0.92 | 0.92–2.01 | No | Water additive used to control microbes |
| Chlorine [Distribution] (ppm) | 2016 | [4] | [4] | 0.05 | 0.05–2.11 | 1.38 | 0.70–1.38 | No | Water additive used to control microbes |
| Chlorine [Entry Point] ¹ (ppm) | 2016 | MinRDL: SW=0.2/GW=0.4 | NA | 0.917 | 0.917–1.353 | 1.11 | 1.11–1.96 | No | Water additive used to control microbes |
| Di(2-ethylhexyl) Phthalate (ppb) | 2016 | 6 | 0 | NA | NA | <0.6 | NA | No | Discharge from rubber and chemical factories |
| Fluoride (ppm) | 2016 | 2 | 2 | NA | NA | 0.7 | NA | No | Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Haloacetic Acids [HAAs] | 2016 | 60 | NA | 14.45 | 6–20.5 | NA | NA | No | By-product of drinking water disinfection |
| Nitrate (ppm) | 2016 | 10 | 10 | NA | NA | 0.7 | NA | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Nitrite (ppm) | 2016 | 1 | 1 | NA | NA | 0 | NA | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| TTHMs [Total Trihalomethanes] (ppb) | 2016 | 80 | NA | 40.85 | 16.2–56.2 | 44.0 | 20.3–74.8 | No | By-product of drinking water disinfection |
| Total Organic Carbon (% removal) | 2016 | TT | NA | NA | NA | NA | 36%–71% | No | Naturally present in the environment |
| Turbidity ² (NTU) | 2016 | TT | NA | NA | NA | 0.078 | 0–0.078 | No | Soil runoff |
| Turbidity (Lowest monthly percent of samples meeting limit) | 2016 | TT = 95% of samples meet the limit | NA | NA | NA | 100 | NA | No | Soil runoff |

Tap water samples were collected for lead and copper analyses from sample sites throughout Cranberry and West View.

| | | | | 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 | 0/32 | 11.6 | 4/54 | No | Corrosion of household plumbing systems; Erosion of natural deposits |

UNREGULATED AND OTHER SUBSTANCES - WEST VIEW WATER AUTHORITY

| Substance (Unit of Measure) | Year Sampled | Amount Detected | Range Low-High | Typical Source |
|-----------------------------|--------------|-----------------|----------------|---|
| Bromide (ppb) | 2016 | 46 | 21–93 | Naturally occurring element; Used in hydraulic fracturing to extract natural gas from shale |
| Chromium-6 (ppb) | 2016 | 0.05 | 0.04–0.06 | NA |
| Nickel (ppb) | 2016 | 1.7 | NA | Manufacturing by-product; Runoff from fertilizer use |
| Strontium (ppb) | 2015 | 110 | 110–110 | NA |

¹The amount-detected values represent the lowest level that was detected.

²Turbidity 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 that, 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

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.