

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Presented By



Letter from the Board of Supervisors

When you turn on the tap or shower, you expect clean, clear water to flow.

It has been our goal for decades to ensure our residents and businesses are receiving the highest quality water. It is a mission that never stops, and the results of state-mandated water tests for 2020 confirm we are succeeding.

Our water is excellent, exceeding state and federal standards. But that doesn't mean our efforts are complete. Trust that we continue to work on projects that aim to ensure quality while also keeping our system functioning at the highest possible level.

That starts with our highly trained staff, who have begun the process of developing a long-range infrastructure improvement plan. Driving that plan is the goal of improving water quality even further and identifying ways to ensure projects are completed efficiently.

Staff also continues to protect recent investments in our system, keeping it functioning at the highest level. While line breaks and repairs have been minimal in the past year, staff have used their skills to identify and repair the issues before they become larger. They've been aided by outside contractors who have helped further expedite the process.

Our water provider, West View Water Authority, joins us in our mission to provide a high-quality product to our residents. The Authority commissioned a new plant in January 2020 that will improve not only their distribution system but Cranberry's as well.

We pride ourselves on providing our residents with the best water possible, and we take that task very seriously. In the coming years, we will continue to work with our team of experts, consisting of water quality specialists, lab scientists, and plant operators who are committed to delivering the safest and highest quality water to the residents of Cranberry Township.

We are proud to serve you and pleased to continue to set the bar to levels succeeding your high expectations.

Sincerely, the Cranberry Township Board of Supervisors.

Community Participation

Cranberry Township is always eager to hear about matters concerning our water and wastewater systems. Meetings of the Board of Supervisors are normally scheduled for 6:30 p.m. on the first and last Thursdays of the month. An opportunity for public comment is always on the agenda, so please use this opportunity to engage with Township officials.

QUESTIONS? We encourage you to share your thoughts with us on the information contained in this report. We believe well-informed customers are important to the success of a community.

If you have questions or concerns, call Michael Sedon, Cranberry Township Plant Operations Manager, at (724) 776-4806, ext. 1300.

This report, along with those from previous years, is posted online at www.cranberrytownship.org/WaterQualityReport. Printed copies are also available upon request.

Quality First

We are pleased to present our annual Water Quality Report covering all testing performed between January 1 and December 31, 2020.

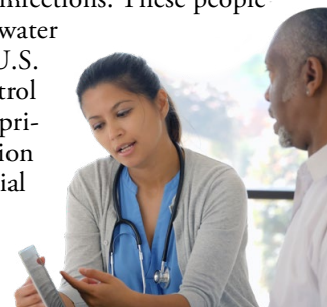
As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, community outreach, and education while continuing to serve the needs of all our water users. We are honored to have the opportunity to serve you and your family.

Lead in Home Plumbing

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 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>.



Water Treatment Process

Before water arrives in Cranberry, it undergoes a series of treatments at the West View Water Authority's plants (Baden and Neville Island).

After screening at the plant's intake, the water is pumped from the intake building to the treatment facility, passing through an inline static mixer where various chemicals are added to adjust the pH, remove additional iron and manganese, help with the coagulation process, and provide chlorination treatment.

The treated water is then directed into two flocculation tanks followed by passage through two plate settler clarification units. The effluent of the sedimentation basins is directed to six dual media gravity filters, combined and sent through two UV disinfection units, and then sent into two clearwell tanks. The effluent of the clearwell tanks is combined, pH is adjusted for corrosion control, and the water is treated with chlorine for final disinfection. It is passed through a static mixer before powerful pumps send the water on its way to Cranberry.

Customer Portal

Cranberry Township's customer portal gives in-depth data related to water usage. Customers can compare usage to other time periods, set usage limits and alerts, and get up-to-date information that could help identify leaks, breaks, or excessive usage.

Visit CranberryTownship.org/CustomerPortal to sign up.

Where Does My Water Come From?

Cranberry Township purchases its entire water supply – 924 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 – an amount we are comfortably below. The Township's water supply, which accounts for growth over the coming years – is secured through a 25-year agreement with West View. We are proud to be West View's largest customer.

West View operates two treatment plants (Neville Island and Baden), both of which utilize water taken from the Ohio River. A Source Water Assessment by the PA Department of Environmental Protection found the source is potentially most susceptible to transportation corridors, bridges, boating, marinas, barge traffic, auto repair shops, truck terminals, utility substations, residential developments, combined sewer overflows, road deicing, and salt storage. Overall, the Ohio River as a source has a high risk of significant contamination. It is important to understand that this susceptibility rating does not imply poor water quality, only the system's potential to become contaminated within the assessment area.

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 prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water can be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA and the Pennsylvania 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 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.



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only 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 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.

We participated in the 4th stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling 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. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	Cranberry Township		West View Water Authority-Baden Plant		West View Water Authority-Neville Plant		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Chloramines [Distribution] (ppm)	2020	[4]	[4]	0.31	0.31–1.62	NA	NA	NA	NA	No	Water additive used to control microbes
Chloramines [Entry Point]¹ (ppm)	2020	MinRDL: SW=0.2/GW=0.4	NA	0.67	0.67–1.9	1.3	1.3–1.8	1.4	1.4–1.8	No	Water additive used to control microbes
Chlorine [Distribution] (ppm)	2020	[4]	[4]	0.2	0.2–1.89	1.6	0.9–1.6	1.7	1.1–1.7	No	Water additive used to control microbes
Chlorine [Entry Point] (ppm)	2020	MinRDL: SW=0.2/GW=0.4	NA	1.2	1.2–2.76	0.8	0.8–2.0	1.4	1.4–2.2	No	Water additive used to control microbes
Fluoride (ppm)	2020	2	2	NA	NA	0.558	NA	0.557	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2020	60	NA	<6.0	<6.0–<6.0	20.5	0–19.4	20.5	0–19.4	No	By-product of drinking water disinfection
Nitrate (ppm)	2020	10	10	NA	NA	<0.005	NA	< 1.4	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2020	80	NA	8.3	2.3–10.6	59.5	0–102	59.5	1.0–102	No	By-product of drinking water disinfection

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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Cranberry Township				West View Water Authority- Baden Plant		West View Water Authority- Neville Plant		VIOLATION	TYPICAL SOURCE
		AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES		
Copper (ppm)	2019	1.3	1.3	0.0507	0/30	0.09 ²	0/61 ²	0.09	0/61	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2019	15	0	0	0/30	5.6 ²	0/61 ²	5.6	0/61	No	Lead services lines; Corrosion of household plumbing systems including fittings and fixtures; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	West View Water Authority-Baden Plant		West View Water Authority-Neville Plant		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Manganese (ppb)	2018	50	NA	1.62	0-1.62	1.62	0-1.62	No	Leaching from natural deposits

UNREGULATED CONTAMINANT MONITORING RULE PART 4 (UCMR4) WEST VIEW WATER AUTHORITY - BADEN PLANT

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
HAA6Br (ppb)	2018	11.0	4.1-24.3	By-product of drinking water disinfection
HAA9 (ppb)	2018	21.8	12.0-42.0	By-product of drinking water disinfection

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

² Sampled in 2020.

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 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

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

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.

SW: Surface water source.

