

ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2017



Presented By



Quality First

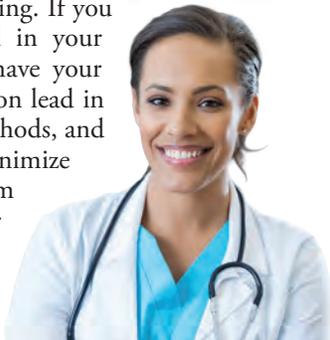
Once again we are pleased to present our annual water quality report. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all of our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Important Health Information

Some people may be more vulnerable to disease causing microorganisms or pathogens 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 can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia*, and other microbial pathogens are available from the Safe Drinking Water Hotline at (800) 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The City of Newburgh Water Department is 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.



Substances That Could Be in Water

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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: Microbial Contaminants; Inorganic Contaminants; Pesticides and Herbicides; Organic Chemical Contaminants; and Radioactive Contaminants.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, the State and the U.S. EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department and the U.S. FDA have regulations that establish limits for contaminants in bottled water that must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Where Does My Water Come From?

Our water source usually originates from Washington Lake and the Silver Stream Reservoirs.

When these two sources are not available, the tap on the NYC Catskill Aqueduct can be used as an emergency supply. The City of Newburgh Water Department is currently drawing water from the NYC Catskill Aqueduct. The water quality is excellent and meets all New York State Department of Health (NYS DOH) standards. NY000217

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Mr. Wayne Vradenburgh, Superintendent of Water, at (845) 565-3356. You may also contact the Orange County Department of Health at (845) 291-2331.

How Is My Water Treated and Purified?

After the water is withdrawn from the source, it undergoes several chemical and physical processes to ensure that potential contaminants are removed and the water is clean and safe for your needs. Prior to distribution, the City's water filtration plant has the ability to treat approximately 8.85 million gallons of water per day, more than two times our average daily consumption. The plant also employs a series of mechanical and chemical treatments to remove color, odor, and tastes along with organic material, dirt, and particles. The water then passes through a series of sand filters and our new granular activated carbon system. Chlorine is then added for disinfection; fluoride is added to help promote sound dental health; and corrosion inhibitors are added to reduce the corrosive effects of water on pipes and plumbing. The water is then pumped to our new baffled above-ground contact tank and our above-ground storage tanks and then into your home or business.

Water treatment is a complex, time-consuming process.

Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Maintaining optimal water chemistry;
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So, the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

Facts and Figures

Our water system serves approximately 29,000 people through 5,675 service connections. We have more than 73 miles of water mains, ranging from 4 inches in diameter all the way up to 30 inches in diameter. More than 800 fire hydrants and approximately 3,500 gate valves are used to turn off water mains in cases of water main breaks or other emergency situations. The total water produced in 2017 was approximately 1.3 billion gallons. The daily average of water treated and distributed was 3.6 million gallons and the highest single day was 4.5 million gallons. The amount of water delivered to customers was approximately 678 million gallons. The difference between the water produced and the water delivered can be attributed to several factors, including, but not limited to, main flushing, firefighting, leaks, unauthorized use, and other non-metered uses. For the last nineteen (19) years, the City's Water Department has conducted a citywide leak detection survey. The leak survey is conducted yearly and, by repairing the leaks found, we prevent wasted water from leaks and help continue our efforts to keep costs down for our customers.

Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.



Water Source Restriction

On May 2, 2016, Newburgh City Manager Michael Ciaravino declared a state of emergency as test results showed levels of PFOS (perfluorooctanesulfonic acid) in our primary drinking water reservoir, Washington Lake. Immediately, Water Department Staff removed Washington Lake from service, and the City began receiving its water from our emergency sources, Browns Pond and the Catskill Aqueduct. The City of Newburgh Water Department has been receiving its water from the Catskill Aqueduct since June 7, 2016.

Facility Modification and System Improvements

The City of Newburgh Water Department employees performed a variety of maintenance tasks associated with the elements of a well-operated and properly maintained water system. We flushed the entire water system twice during the year and continue with repairing and replacing fire hydrants and valves. Through our leak detection survey, we detected 38 leaks and repaired all of them. We continue with repairing and replacing water meters and the newest radio reading devices. Once completed installing these devices, we will have the capability to receive real-time data through AMI technology.

The City of Newburgh Water Department is proud to announce that the new state of the art granular activated carbon (GAC) filtration system has been constructed and has been fully operational since January 5, 2018.



FOG (Fats, Oils, and Grease)

You may not be aware of it, but every time you pour fat, oil, or grease (FOG) down your sink (e.g., bacon grease), you are contributing to a costly problem in the sewer collection system. FOG coats the inner walls of the plumbing in your house as well as the walls of underground piping throughout the community. Over time, these greasy materials build up and form blockages in pipes, which can lead to wastewater backing up into parks, yards, streets, and storm drains. These backups allow FOG to contaminate local waters, including drinking water. Exposure to untreated wastewater is a public health hazard. FOG discharged into septic systems and drain fields can also cause malfunctions, resulting in more frequent tank pump-outs and other expenses.



Communities spend billions of dollars every year to unplug or replace grease-blocked pipes, repair pump stations, and clean up costly and illegal wastewater spills. Here are some tips that you and your family can follow to help maintain a well-run system now and in the future:

NEVER:

- Pour fats, oil, or grease down the house or storm drains.
- Dispose of food scraps by flushing them.
- Use the toilet as a waste basket.

ALWAYS:

- Scrape and collect fat, oil, and grease into a waste container such as an empty coffee can, and dispose of it with your garbage.
- Place food scraps in waste containers or garbage bags for disposal with solid wastes.
- Place a wastebasket in each bathroom for solid wastes like disposable diapers, creams and lotions, and personal hygiene products including nonbiodegradable wipes.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the 2nd and 4th Mondays of each month except in July and August, when we have only one meeting. Meetings take place at 7 p.m. in the Council Chambers at City Hall, 83 Broadway, Newburgh, New York. For more information concerning City Council meetings, contact the Executive Office at (845) 569-7301. There is always an open forum to express your opinions and ideas. Visit the Web site at www.cityofnewburgh-ny.gov.

Fluoridation of Our Water

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.8 to 1.2 ppm. To ensure that the fluoride supplement in your water provides

optimal dental protection, the State

Department of Health requires that we monitor fluoride levels on a daily basis. None of the monitoring results showed fluoride at levels that approach the 2.2 ppm MCL for fluoride.



About Our Violation

During 2017 we were issued a notice of violation due to the failure to collect and maintain 15-minute individual filter effluent turbidity readings on one of our filters for the month of January 2017. The turbidimeter for filter #4 stopped working on 1/12/17. The operators began taking manual monitoring every four hours as allowed by code. The new turbidity meter was ordered and installed, and filter #4 was placed back into service on 2/25/17. The violation was issued for failure to correct the problem within 5 days. Since this occurrence, all individual filter turbidity meters and the combined filter effluent turbidity meter have been replaced with new, state-of-the-art meters.

Non-detected Substances

Following is a list of regulated potential drinking water contaminants for which the City of Newburgh tested but did not detect.

Alachlor, Atrazine, gamma-BHC (Lindane), Butachlor, Chlordane, Dieldrin, Endrin, Picloram, 2,4,5-TP (Silvex), Aidicarb, Aidicarb sulfone, Aidicarb sulfoxide, Carbofuran, 3-Hydroxycarbofuran, Methomyl, Oxamyl, 4-Chlorotoluene, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, Toluene, 1,2,3-Trichlorobenzene, Trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Arsenic, Chromium, Zinc, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Methoxychlor, Metolachlor, PCB (Total), Propachlor, Carbaryl, Aldrin, Benzo(a)pyrene, bis(2-Ethylexyl)adipate, bis(2-Ethylexyl) phthalate, Metribuzin, Benzene, Bromobenzene, Bromochloromethane, cis-1,2-Dichloroethane, trans-1,2-Dichloroethane, 1,2-Dichloropropane, 1,3-Dichloropropane, 2,2-Dichloropropane, 1,1-Dichloropropane, cis-1,3-Dichloropropane, trans-1,3-Dichloropropane, Tetrachloroethane, 1,2,4-Trichlorobenzene, Trichloroethylene, m-Xylene & p-Xylene, o-Xylene, Methyl-tert-butyl ether, Beryllium, Antimony, Selenium, Simazine, Toxaphene, 2,4-D Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Bromomethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, 2-Chlorotoluene, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, p-Isopropyltoluene, Methylene Chloride, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Vinyl Chloride, Iron, Silver, Cadmium, Thallium, Gross Alpha, Radium 226, Radium 228, Total Uranium, Nickel.



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables shows only those substances that were detected between January 1 and December 31, 2017. Remember that detecting a substance does not necessarily 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 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.

REGULATED SUBSTANCES		Contaminant Level Allowed	before health prob.	Goal:Max.				
SUBSTANCE (UNIT OF MEASURE)	DATE SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Barium (ppm)	5/9/2017	2	2	0.007	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Chloride (ppm)	9/6/2017	250	NA	11.3	NA	No	Naturally occurring or indicative of road salt contamination	
Fluoride (ppm)	9/4/2017	2.2	NA	1.33	0.63–1.33	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories	
Haloacetic Acids (ppb)	Quarterly	60	NA	38	11.6–37.1	No	By-product of drinking water disinfection needed to kill harmful organisms	
Nitrate (ppm)	4/11/2017	10	10	0.171	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Sodium (ppm)	9/6/2017	(see footnote 1)	NA	8.85	NA	No	Naturally occurring; Road salt; Water softeners; Animal waste	
TTHMs [Total Trihalomethanes] (ppb)	Quarterly	80	NA	52	19–40.2	No	By-product of drinking water chlorination needed to kill harmful organisms; Formed when source water contains large amounts of organic matter	
Total Coliform Bacteria ² (# Positive samples)	05/02/2017	TT	NA	1	NA	No	Naturally present in the environment	
Total Organic Carbon (removal ratio)	2017	TT: >1.00	NA	1.05	1.00–1.17	No	Naturally occurring	
Turbidity [Distribution System] ³ (NTU)	7/6/2017	TT	NA	0.27	ND–0.27	No	Soil runoff	
Turbidity ⁴ (NTU)	11/16/2017	TT	NA	0.08	0.027–0.08	No	Soil runoff	
Turbidity (Lowest monthly percent of samples meeting limit)	11/16/2017	TT: 95% of samples meet the limit	NA	100%	NA	No	Soil runoff	

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

SUBSTANCE (UNIT OF MEASURE)	DATE SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH% TILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	1/26/2017	1.3	1.3	0.336	<0.01–0.544	0/60	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	3/30/2017	15	0	9.01	0–170	4/60	No	Corrosion of household plumbing systems; Erosion of natural deposits

Goal: Max
before
health prob.

UNREGULATED CONTAMINANT MONITORING RULE - PART 3 (UCMR3) See half way up previous page. UCMR3 is EPA program to collect data for potential further regulations.

SUBSTANCE (UNIT OF MEASURE)	MRL	RAW WATER	FINISHED WATER	DISTRIBUTION SYSTEM
Perfluorobutanesulfonic Acid [PFBS] (ppt)	10/20/2014	NA	<90 -	Washington Lake
Perfluoroheptanoic Acid [PFHpA] (ppt)	10/20/2014	NA	17-21	Washington Lake
Perfluorohexanesulfonic Acid [PFHxS] (ppt)	10/20/2014	NA	57-70	Washington Lake
Perfluorononanoic Acid [PFNA] (ppt)	10/20/2014	NA	<20 -	Washington Lake
Perfluorooctanesulfonate Acid [PFOS] (ppt)	10/21/2014	NA	140-170	Washington Lake
Perfluorooctanoic Acid [PFOA] (ppt)	10/21/2014	NA	<20 -	Washington Lake

Additional Sampling For City of Newburgh (NY3503549)

No context for these numbers. They seem high, but hard to tell.

SUBSTANCES	MRL	RAW WATER	FINISHED WATER	DISTRIBUTION SYSTEM
UCMR-3 SAMPLE RESULTS		Sample dates: 12/30/13, 4/15/14, 6/2/14, 9/17/14 & 10/21/14.		
Raw Source: Washington Lake				
Chlorate	20 ppb	Not Required	97.1 ppb - 179 ppb	83 ppb - 217 ppb
Chromium	200 ppt	Not Required	< 200 ppt - 220 ppt	< 200 ppt - 310 ppt
Chromium-6 (Hexavalent)	30 ppt	Not Required	46 ppt - 65 ppt	47 ppt - 81 ppt
Strontium	0.3 ppb	Not Required	140 ppb - 155 ppb	139 ppb - 175 ppb
Perfluorobutanesulfonic acid (PFBS)	90 ppt	Not Required	< 90 ppt	Not Required
Perfluorohexanesulfonic acid (PFHxS)	30 ppt	Not Required	57 ppt - 70 ppt	Not Required
Perfluoroheptanoic acid (PFHpA)	10 ppt	Not Required	17 ppt - 21 ppt	Not Required
Perfluorooctanoic acid (PFOA)	20 ppt	Not Required	< 20 ppt	Not Required
Perfluorooctanesulfonic acid (PFOS)	40 ppt	Not Required	140 ppt - 170 ppt	Not Required
Perfluorononanoic acid (PFNA)	20 ppt	Not Required	<20 ppt	Not Required
2016 NYSDOH PFC SAMPLE RESULTS		Sample date: 3/31/16		
Raw Source: Washington Lake				
Perfluorobutanesulfonic acid (PFBS)	2 ppt	20.9 ppt	22.8 - 23.3 ppt	NA
Perfluorohexanesulfonic acid (PFHxS)	2 ppt	71.4 ppt	70.9 - 75.6 ppt	NA
Perfluoroheptanoic acid (PFHpA)	2 ppt	21.6 ppt	22.4 ppt	NA
Perfluorooctanoic acid (PFOA)	2 ppt	27.7 ppt	28.0 - 28.3 ppt	NA
Perfluorooctanesulfonic acid (PFOS)	2 ppt	155 ppt	146 - 148 ppt	NA
Perfluorononanoic acid (PFNA)	2 ppt	5.7 ppt	5.5 - 5.6 ppt	NA
2016 NYSDOH PFC SAMPLE RESULTS		Sample date: 5/4/16		
Raw Source: Browns Pond				
Perfluorobutanesulfonic acid (PFBS)	2 ppt	< 2 ppt	< 2 ppt	NA
Perfluorohexanesulfonic acid (PFHxS)	2 ppt	< 2 ppt	< 2 - 2.15 ppt	NA
Perfluoroheptanoic acid (PFHpA)	2 ppt	< 2 ppt	< 2 ppt	NA
Perfluorooctanoic acid (PFOA)	2 ppt	2.27 - 2.35 ppt	4.06 - 4.25 ppt	NA
Perfluorooctanesulfonic acid (PFOS)	2 ppt	2.38 - 2.52 ppt	7.09 - 8.44 ppt	NA
Perfluorononanoic acid (PFNA)	2 ppt	< 2 ppt	< 2 ppt	NA

SUBSTANCES	MRL	RAW WATER	FINISHED WATER	DISTRIBUTION SYSTEM
2016 NYSDOH PFC SAMPLE RESULTS		Sample date: 5/11/16		
Raw Source: Browns Pond				
Perfluorobutanesulfonic acid (PFBS)	2 ppt	< 2 ppt	< 2 ppt	NA
Perfluorohexanesulfonic acid (PFHxS)	2 ppt	< 2 ppt	< 2 ppt	NA
Perfluoroheptanoic acid (PFHpA)	2 ppt	< 2 ppt	< 2 ppt	NA
Perfluorooctanoic acid (PFOA)	2 ppt	2.04 ppt	2.07 - 2.19 ppt	NA
Perfluorooctanesulfonic acid (PFOS)	2 ppt	< 2 ppt	2.33 - 2.50 ppt	NA
Perfluorononanoic acid (PFNA)	2 ppt	< 2 ppt	< 2 ppt	NA
2016 NYSDOH PFC SAMPLE RESULTS		Sample date: 6/16/16		
Raw Source: Catskill Aqueduct				
Perfluorobutanesulfonic acid (PFBS)	2 ppt	< 2 ppt	< 2 ppt	NA
Perfluorohexanesulfonic acid (PFHxS)	2 ppt	< 2 ppt	< 2 ppt	NA
Perfluoroheptanoic acid (PFHpA)	2 ppt	< 2 ppt	< 2 ppt	NA
Perfluorooctanoic acid (PFOA)	2 ppt	< 2 ppt	< 2 ppt	NA
Perfluorooctanesulfonic acid (PFOS)	2 ppt	< 2 ppt	< 2 ppt	NA
Perfluorononanoic acid (PFNA)	2 ppt	< 2 ppt	< 2 ppt	NA

¹Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted sodium diets.

²All resamples taken at the site and in the area tested negative for coliform.

³Turbidity is a measure of the cloudiness of the water. It is tested at the distribution point because it is a good indicator of the effectiveness of the filtration system. The highest measurement of the monthly average distribution results for the year occurred as indicated in the table.

⁴Our highest single turbidity measurement for the year occurred as indicated in the table. State regulations require that turbidity must be at or below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements at or below 0.3 NTU. (Note that the treatment technique, TT, is dependent upon filtration method: conventional, 0.3 NTU; slow sand, 1.0 NTU; or diatomaceous earth filtration, 1.0 NTU.) Although the month as indicated in the Date column was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

Definitions

90th percentile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

AL (Action Level): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that 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 MCLG as possible.

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.

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).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

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