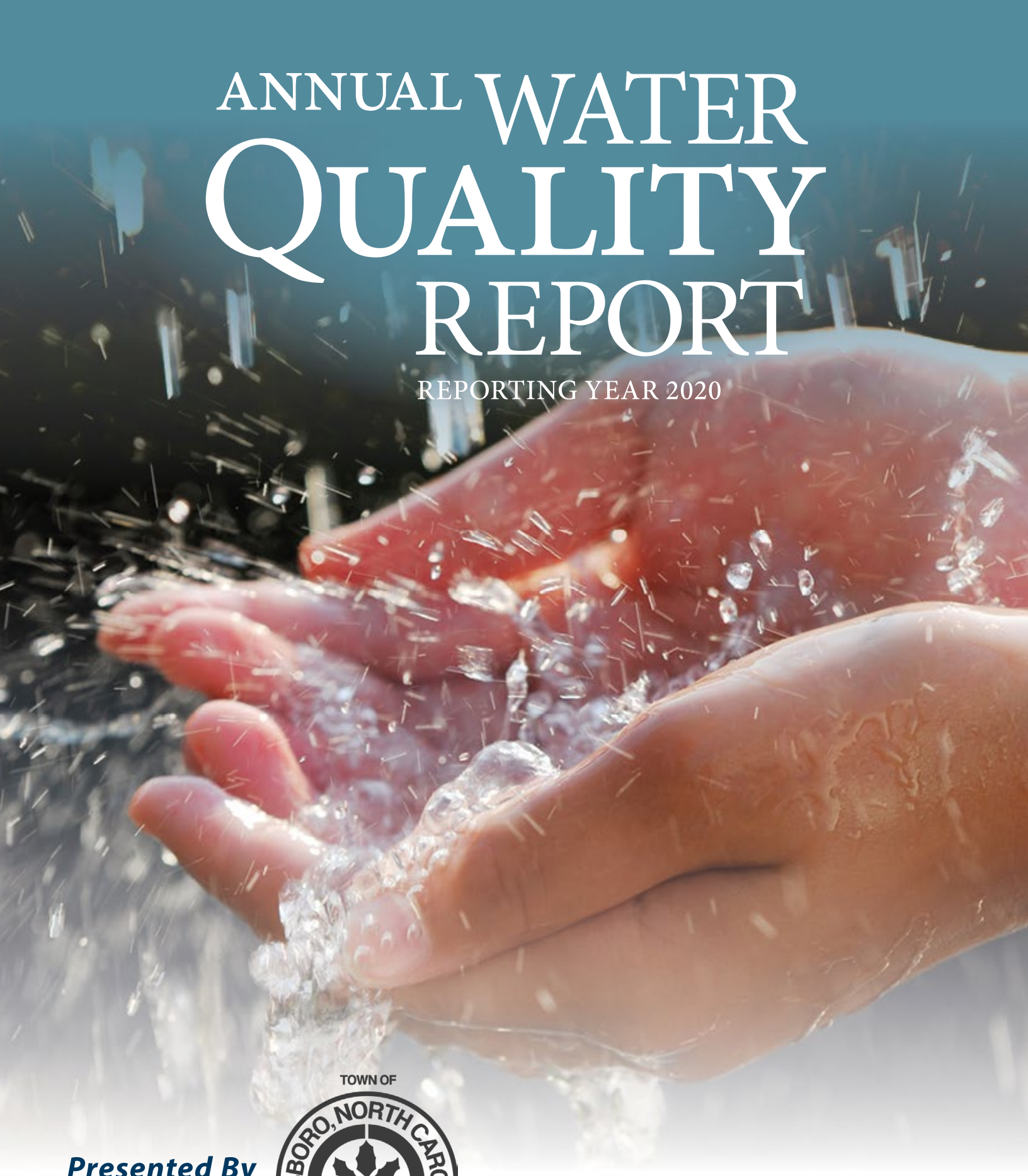

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Presented By

TOWN OF PITTSBORO, NORTH CAROLINA 1787

PWS ID#: 0319015

Quality First

Once again, 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, and community outreach and education while continuing to serve the needs of all 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.

For more information about this report, or for any questions relating to your drinking water, please call John Poteat, Public Works and Utilities Director, at (919) 542-2530 or Adam Pickett, Pittsboro Water Plant Superintendent, at (919) 542-3530.

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.

Testing For Cryptosporidium

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Monitoring of source water and/or finished water indicates the presence of these organisms. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Source Water Assessment

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information, and a relative susceptibility rating of Higher, Moderate, or Lower.

The relative susceptibility rating of each source was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area. The assessment findings are summarized in the table below:

SUSCEPTIBILITY OF SOURCES TO POTENTIAL CONTAMINANT SOURCES (PCSS)

SOURCE NAME	SUSCEPTIBILITY RATING	SWAP REPORT DATE
Well #1	moderate	September 10, 2020

The complete SWAP Assessment report may be viewed on the Web at https://www.ncwater.org/?page=600. Enter the PWSID number from the front page of this Consumer Confidence Report (CCR). Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this Web site may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the Web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@ncdenr.gov. Please indicate your system name and number, and provide your name, mailing address, and phone number. If you have any questions about the SWAP report, please contact the Source Water Assessment staff by phone at (919) 707-9098.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the second and fourth Mondays of each month, beginning at 7 p.m., at Town Hall, 635 East St., Pittsboro, North Carolina.

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 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.

Where Does My Water Come From?

The Town of Pittsboro's raw water is taken from the Haw River and treated at Pittsboro's Water Treatment Plant. The treatment process consists of a series of steps. First, raw water is drawn from the raw water source and delivered to the Water Treatment Plant. The raw water is rapidly mixed with polyaluminum chloride and ferric sulfate. The addition of these substances causes small particles to adhere to one another, called floc, making them heavy enough to settle into a basin from which the sediment is removed. At this point, the water is filtered through layers of anthracite coal and silicate sand. As smaller, suspended particles are removed, the cloudiness of the water disappears and clear water emerges. Chloramines are then added as a precaution against any bacteria that may be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of the water without compromising taste.) A sodium hydroxide solution is used to adjust the final pH and alkalinity. Fluoride (used to prevent tooth decay) and orthophosphate (pipe corrosion inhibitor) are added before the water is pumped into the distribution system, water towers, and into your home or business.

Test Results

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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
1,1,1-Trichloroethane (ppb)	2020	200	200	ND	5–200	No	Discharge from metal degreasing sites and other factories
1,1-Dichloroethylene (ppb)	2020	7	7	ND	5–7	No	Discharge from industrial chemical factories
1,2,4-Trichlorobenzene (ppb)	2020	70	70	ND	0.5–70	No	Discharge from textile-finishing factories
1,2-Dichloroethane (ppb)	2020	5	0	ND	0.5–5	No	Discharge from industrial chemical factories
1,2-Dichloropropane (ppb)	2020	5	0	ND	0.5–5	No	Discharge from industrial chemical factories
Alachlor (ppb)	2020	2	0	ND	0.2–2	No	Runoff from herbicide used on row crops
Arsenic (ppb)	2020	10	0	ND	5–10	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Atrazine (ppb)	2020	3	3	ND	1–3	No	Runoff from herbicide used on row crops
Barium (ppm)	2020	2	2	ND	0.400–2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Benzene (ppb)	2020	5	0	ND	0.5–5	No	Discharge from factories; Leaching from gas storage tanks and landfills
Cadmium (ppb)	2020	5	5	ND	1–5	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Carbofuran (ppb)	2020	40	40	ND	0.9–40	No	Leaching of soil fumigant used on rice and alfalfa
Carbon Tetrachloride (ppb)	2020	5	0	ND	0.5–5	No	Discharge from chemical plants and other industrial activities
Chloramines (ppm)	2020	[4]	[4]	3.3	2.0–4.0	No	Water additive used to control microbes
Chlorine (ppm)	2020	[4]	[4]	3.0	2.0–4.0	No	Water additive used to control microbes
Chlorobenzene (ppb)	2020	100	100	ND	0.5–100	No	Discharge from chemical and agricultural chemical factories
Chromium (ppb)	2020	100	100	ND	20–100	No	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide (ppb)	2020	200	200	ND	50–200	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Dalapon (ppb)	2020	200	200	ND	1–200	No	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) Adipate (ppb)	2020	400	400	ND	0.6–400	No	Discharge from chemical factories
Dichloromethane (ppb)	2020	5	0	ND	0.5–5	No	Discharge from pharmaceutical and chemical factories
Dinoseb (ppb)	2020	7	7	ND	0.2–7	No	Runoff from herbicide used on soybeans and vegetables
E. coli (# positive samples)	2020	see footnote 1	0	0	NA	No	Human and animal fecal waste
Endrin (ppb)	2020	2	2	ND	0.01–2	No	Residue of banned insecticide
Ethylbenzene (ppb)	2020	700	700	ND	0.5–700	No	Discharge from petroleum refineries
Fluoride (ppm)	2020	4	4	0.65	0.30–1.0	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2020	60	NA	8	10–60	No	By-product of drinking water disinfection
Heptachlor (ppt)	2020	400	0	ND	40–400	No	Residue of banned pesticide

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Hexachlorocyclopentadiene (ppb)	2020	50	50	ND	0.1–50	No	Discharge from chemical factories
Methoxychlor (ppb)	2020	40	40	ND	0.1–40	No	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Nitrate (ppm)	2020	10	10	ND	1–10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	2020	1	1	ND	0.10–1	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Oxamyl [Vydate] (ppb)	2020	200	200	ND	1.0–200	No	Runoff/leaching from insecticide used on apples, potatoes, and tomatoes
Picloram (ppb)	2020	500	500	ND	0.1–500	No	Herbicide runoff
Simazine (ppb)	2020	4	4	ND	0.047–4	No	Herbicide runoff
Styrene (ppb)	2020	100	100	ND	0.5–100	No	Discharge from rubber and plastic factories; Leaching from landfills
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2020	80	NA	45	10–80	No	By-product of drinking water disinfection
Tetrachloroethylene (ppb)	2020	5	0	ND	0.5–5	No	Discharge from factories and dry cleaners
Toluene (ppm)	2020	1	1	ND	0.0005–1.0	No	Discharge from petroleum factories
Total Coliform Bacteria (Positive samples)	2020	TT	NA	0	NA	No	Naturally present in the environment
Total Organic Carbon [TOC][2] (removal ratio)	2020	TT	NA	1.4	1.0–3.0	No	Naturally present in the environment
Toxaphene (ppb)	2020	3	0	ND	1–3	No	Runoff/leaching from insecticide used on cotton and cattle
Trichloroethylene (ppb)	2020	5	0	ND	0.5–5	No	Discharge from metal degreasing sites and other factories
Turbidity[3] (NTU)	2020	TT = 1 NTU	NA	0.25	0.02–0.25	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2020	TT = 95% of samples meet the limit	NA	NA	NA	No	Soil runoff
Vinyl Chloride (ppb)	2020	2	0	ND	0.5–2	No	Leaching from PVC piping; Discharge from plastics factories
Xylenes (ppm)	2020	10	10	ND	0.0005–10	No	Discharge from petroleum factories; Discharge from chemical factories
cis-1,2-Dichloroethylene (ppb)	2020	70	70	ND	0.5–70	No	Discharge from industrial chemical factories
o-Dichlorobenzene (ppb)	2020	600	600	ND	5–600	No	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	2020	75	75	ND	5–75	No	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	2020	100	100	ND	0.5–100	No	Discharge from industrial chemical factories

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Color (ppm)	2020	15	NA	4	1–15	No	Naturally occurring organic materials
Fluoride (ppm)	2020	2.0	NA	65	40–80	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Iron (ppb)	2020	300	NA	20	10–50	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2020	50	NA	10	1–50	No	Leaching from natural deposits
pH (Units)	2020	6.5–8.5	NA	7.5	7.2–8.0	No	Naturally occurring

[1] Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.

[2] Depending on the TOC in our source water, the system MUST have a certain percentage removal of TOC or must achieve alternative compliance criteria. If we do not achieve that percentage removal, there is an alternative percentage removal. If we fail to meet the alternative percentage removal, we are in violation of a Treatment Technique.

[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. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

Definitions

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 under the Stage 2 Disinfectants and Disinfection By-products Rule.

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.

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.

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

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