

Borough of Matawan  
Water & Sewer Department  
201 Broad Street  
Matawan, New Jersey 07747

**OPEN IMMEDIATELY**  
*ANNUAL DRINKING  
WATER REPORT*

# Annual Drinking Water Quality Report 2023 (2022 Data)

Matawan Water Department  
PWSID# NJ1329001



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*We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of our water and services we deliver to you every day. Our continuous goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts Matawan Water Department makes to improve the water treatment process along with protecting our water resources. We are committed to ensuring the quality of your drinking water.*

*These health and safety standards are set by the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP). We're at work 24 hours a day, 365 days a year to provide you and your family with top quality water. We regularly test water samples to be sure that your water meets the safety standards. All the test results are on file with the NJDEP, the agency that monitors and regulates drinking water quality in our state. Both the EPA and the NJDEP require water suppliers to send a Consumer Confidence Report (CCR) to customers on an annual basis.*

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## Landlord Distribution

Landlords must distribute this information to every tenant as soon as practicable, but no later than three business days after receipt. Delivery must be done by hand, mail, or email, and by posting the information in a prominent location at the entrance of each rental premises, pursuant to section 3 of P.L. 2021, c. 82 (C.58:12A-12.4 et seq.).

## Lead Service Line Information

A copy of the Lead Service Line inventory can be found at <https://www.matawanborough.com/matawan/>. If the service line at your address is listed as unknown, please give us a call at **732-290-2011** to find out more information on how to identify your service line material.

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## Where does my water come from?

Matawan's ground water treatment plant produces an average of 150 million gallons of water each year, and another 120 million gallons is purchased from New Jersey American Water. In the Table of Detected Contaminants, you will find contaminants that were identified in the water produced by the Matawan plant and purchased from New Jersey American. Customers wishing to view the entire New Jersey American Report can follow a link on [www.matawanborough.com](http://www.matawanborough.com) or go directly to New Jersey American's web page <https://www.amwater.com/ccr/coastalnorth.pdf>

The source of the ground water produced by the Matawan Water Plant is the Old Bridge Sands Strata of the Potomac-Raritan-Magothy (PRM) Aquifer. Water received from New Jersey American may be a blend of water taken from the PRM or surface water from the Manasquan or Swimming River Reservoirs.

We are pleased to report that during 2022 the water delivered to our customers from each of these sources met, or exceeded, all state and federal water quality standards.

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## How do drinking water sources become polluted?

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which 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 contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline (1-800-426-4791)**.

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 activity.

Contaminants 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, and wildlife. can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

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## Description of Water Treatment Process

Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc," which attract the dirt particles. Flocculation (the formation of larger flocs from smaller flocs) is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through sand, gravel, charcoal, or other filters that remove even smaller particles. A small amount of chlorine or other disinfection method is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before it is stored and distributed to homes and businesses in the community.

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## Important Information About Your Drinking Water

We are required to monitor your drinking water for optimal values of corrosion control additives on a regular basis. Results of regular monitoring are an indicator of whether corrosion control additives are maintained at optimal levels set by the NJDEP. During the monitoring period of 07/01/2022 to 12/31/2022 we failed to meet treatment technique requirements for orthophosphate. You have been previously notified with a letter that was distributed on April 5th, 2023. Corrective action has been taken by changing laboratory procedures and increased dosing controls. This was not an emergency. If it had been, you would have been notified within 24 hours.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

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## Contact Information

Contact information for all the members of Matawan's governing body and department heads may be found on the Matawan web site, [www.matawanborough.com](http://www.matawanborough.com). If you would like to discuss issues in person, the regular meeting of the mayor and council typically takes place the first and third Tuesday of every month.

Specific questions or concerns about the water system can be directed to **Eric Frye. 732-290-2011** or [eric.frye@matawanborough.com](mailto:eric.frye@matawanborough.com)

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## Lead Notice

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. **Matawan Water Department** is responsible for providing high quality drinking water, but 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 is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Call us at **732-290-2011** to find out how to get your water tested for lead. Testing is essential because you cannot see, taste, or smell lead in drinking water.

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## Source Water Assessments

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at <http://www.nj.gov/dep/watersupply/swap/index.html>, or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550 or [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov).

The table provides the number of wells that have either a high (H), medium (M), or low (L) susceptibility rating for each of eight contaminant categories.

If a water system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, the DEP may change existing monitoring schedules based upon susceptibility ratings.

**Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

**Nutrients:** Compounds, minerals and elements (both naturally occurring and man-made) that aid plant growth. Examples include nitrogen and phosphorus.

**Pesticides:** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.

**Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

**Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

**Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

**Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to <http://www.nj.gov/dep/rpp/radon/index.htm> or call 800-648-0394.

**Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants used to kill pathogens (usually chlorine) react with dissolved organic material (leaves, etc.) in surface water.

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors		
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 2			2			2			2			2			2		2			2			2	

### People with Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons 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 about drinking water from their health care providers. EPA / CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### Matawan's 2022 Table of Detected Contaminants

Radioactive Contaminants	MCLG	MCL	Level Detected	Violation	Typical Source
Combined Radium -226 & -228 Test Results Year 2018	0 pCi/L	5 pCi/L	Range: 1.5 – 1.5 Highest: 1.5	N	Erosion of natural deposits
Lead and Cooper	Action Level	MCLG	Level Detected	Violation	Typical Source
Copper Test Results Year 2020	1.3 ppm	1.3 ppm	Detected at 90th percentile 0.1 Sample > AL: 0 of 20	N	Corrosion of household plumbing
Lead Test Results Year 2020	15 ppb	0 ppb	Detected at 90th percentile <2 Sample > AL: 0 of 20	N	Corrosion of household plumbing
Disinfectants	MRDL	MRDLG	Level Detected	Violation	Typical Source
Chlorine Test Results Year 2022	4 ppm	4 ppm	Range: 0.19 - 1.87 Average: 1.13	N	Water additive to control microbes
Disinfection By-Products	MCL	MCLG	Level Detected	Violation	Typical Source
Total Haloacetic Acids Test Results Year 2022	60 ppb	N/A	Range: 6.49 - 25.4 Highest LRAA: 22	N	Byproduct of drinking water disinfection
Total Trihalomethanes Test Results Year 2022	80 ppb	N/A	Range: 9.49 - 92.1 Highest LRAA: 51	N	Byproduct of drinking water disinfection
Inorganics	MCL	MCLG	Level Detected	Violation	Typical Source
Cadmium Test Results Year 2021	5 ppb	5 ppb	Range: 0.3 – 0.3 Highest: 0.3	N	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints

Secondary Contaminants	RUL	Level Found	Violation	Likely Source
Aluminum Test Results Year 2021	0.2 ppm	Range: 0.006 – 0.006 Highest: 0.006	N	Erosion of natural deposits
Alkalinity Test Results Year 2022	N/A	Range: 44 - 64 Highest: 64	N	
Chloride Test Results Year 2021	250 ppm	Range: 7.5 – 7.5 Highest: 7.5	N	Erosion of natural deposits
Foaming Agents (Surfactants) Test Results Year 2021	0.5 ppm	Range: 0.05 – 0.05 Highest: 0.05	N	Surfactants from detergents and cleansers
Hardness, Carbonate Test Results Year 2021	250 ppm	Range: 96 - 96 Highest: 96	N	Naturally present in the environment
Sulfate Test Results Year 2021	250 ppm	Range: 17.8 – 18 Highest: 18	N	Erosion from natural deposits; Industrial wastes
Total Dissolved Solids (TDS) Test Results Year 2021	500 ppm	Range: 90 -90 Highest: 90	N	Erosion of natural deposits
Zinc Test Results Year 2021	5 ppm	Range: 0.2 -0.2 Highest: 0.2	N	Erosion of natural deposits

Microbiologicals-Revised Total Coliform Rule (RTC)	Number Required	Number Completed	Corrective Actions Required	Corrective Actions Completed
Level 1 Assessment - Total Coliform	0	0	0	0

Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Matawan had 0 positive results for coliform bacteria in 120 samples.

### NJ American Water Coastal North (NJ1345001) - 2022 Water Quality Results

#### DISINFECTANTS - Collected at the Treatment Plants

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Chloramines (ppm) (Surface Water)	2022	Yes	N/A	TT: Results $\geq$ 0.2	1.25 <sup>1</sup>	1.25 - 2.99	Water additive used to control microbes.

<sup>1</sup> - Data represents the lowest residual entering the distribution system from our surface water treatment plant.

#### DISINFECTION BYPRODUCTS - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Bromate (ppb)	2022	Yes	N/A	10	0	ND	By-product of drinking water disinfection.

#### TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant<sup>1</sup>

Substance	Year Sampled	Compliance Achieved	MCLG	MCL	Lowest Compliance Result	Range Detected	Typical Source
Total Organic Carbon (TOC)	2022	Yes	N/A	TT: > 35% removal	30%	30% - 64%	Naturally present in the environment.
Ratio of Actual / Required TOC Removal	2022	Yes	N/A	TT: Running annual average > 1	1	1.0 - 1.5	Naturally present in the environment.

<sup>1</sup> - Annual average of ratio removal compliance based on annual present of ratio removal. (Running annual average)

#### TURBIDITY - Collected at the Treatment Plant<sup>1</sup>

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Turbidity (NTU)	2022	Yes	N/A	TT: Results > 1 NTU	0.17	0.05 - 0.17	Soil runoff.
	2022	Yes	N/A	TT: At least 95% of samples <0.3 NTU	100%	N/A	Soil runoff.

<sup>1</sup>. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

#### REGULATED SUBSTANCES - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Barium (ppm)	2022	Yes	2	2	ND	N/A	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Nitrate (ppm)	2022	Yes	10	10	0.40	ND - 0.40	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Fluoride (ppm)	2022	Yes	N/A	2	0.44	ND - 0.44	Erosion of natural deposits; water additive that promotes strong teeth

PERFLUORINATED COMPOUNDS						
Substance (with units)	Year Sampled	Compliance Achieved	MCL	Highest Compliance Result	Range Detected	Typical Source
Perfluorononanoic acid (PFNA) (ppt)	2021	Yes	13	ND	ND	Manmade chemical; used in products for stain, grease, heat and water resistance
Perfluorooctanoic Acid (PFOA) (ppt)	2021	Yes	14	6.1	5.2 - 6.1	Used for its emulsifier and surfactant properties in or as fluoropolymers (such as Teflon), fire fighting foams, cleaners, cosmetics, lubricants, paints, polishes, adhesives and photographic films
Perfluoropentanoic Acid (PFOS) (ppt)	2021	Yes	13	3	2.2 - 3.0	Manmade chemical; used in products for stain, grease, heat and water resistance

2018-2019 UCMR (Coastal North AM2 schedule was quarterly from Nov 2018, Feb 2021, May 2019 and Aug 2019-- these results are from entire sampling schedule of 2018-2019)

ADDITIONAL WATER QUALITY PARAMETERS OF INTEREST - Water Leaving the Treatment Facility				
Parameter	Units	Average Result	Range Detected	Typical Source
2-Methoxyethanol	ppb	ND	NA	Used as a solvent in varnishes, dyes, resins, airplane de-icing solutions. It is also used in organometallic chemistry synthesis.
Manganese*	ppb	15.1	ND - 73	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element.

\* Manganese has a Secondary MCL of 50 ppb.

Source Water Monitoring Monitoring Period 2015-2017					
Substance (2015-2017)	Units	Swimming River Plant	Jumping Brook Plant	Oak Glen Plant	Typical Source
Cryptosporidium	Oocysts/L	ND - 0.100	ND	ND	Microbial pathogens found in surface waters throughout the United States.
Giardia	Cysts/L	ND - 0.558	ND - 0.089	ND - 0.558	Microbial pathogens found in surface waters throughout the United States.

REGULATED SUBSTANCES - Collected at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Barium (ppm)	2022	Yes	2	2	ND	N/A	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Nitrate (ppm)	2022	Yes	10	10	0.40	ND - 0.40	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Fluoride (ppm)	2022	Yes	N/A	2	0.44	ND - 0.44	Erosion of natural deposits; water additive that promotes strong teeth

OTHER SUBSTANCES OF INTEREST - Collected at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Recommended Limit	Highest Result	Range Detected	Comments
Aluminum <sup>1</sup> (ppm)	2022	N/A	N/A	0.2	0.03	ND - 0.03	Erosion of natural deposits
Iron <sup>1, 2</sup> (ppm)	2022	N/A	N/A	0.3	0.10	ND - 0.10	Naturally Occurring
Manganese <sup>1, 3</sup> (ppm)	2022	N/A	N/A	0.05	ND	ND	Naturally Occurring
Sodium <sup>4</sup> (ppm)	2022	N/A	N/A	50	75	34.5 - 75	Erosion of natural deposits

1 - Substances with Secondary MCLs do not have MCLGs and are not legally enforceable; these limits are primarily established to address aesthetic concerns.

2 - The recommended upper limit for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

3 - The recommended upper limit for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

4 - For healthy individuals the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

USEPA's Health Advisories are non-enforceable and provide technical guidance to states agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination

Those substances not listed in this table were not found in the treated water supply.



## Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Pick up after your pets.
- Properly dispose of pharmaceuticals.
- Dispose of chemicals properly; take used motor oil to a recycling center
- Eliminate excess use of lawn and garden fertilizers and pesticides. They contain hazardous chemicals that can reach your drinking water source.
- Volunteer in your community. Find a watershed or well-head protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed Information Network's How to Start a Watershed Team.

## Water Conservation Tips

- Fix leaking faucets & toilets: A single dripping faucet can waste hundreds or thousands of dollars per year
- 50-70% of household water is used outdoors on average. Water lawns wisely & turn off the hose when washing the car
- Install low flow shower heads
- Turn off faucet when brushing your teeth

## Facts About Water Usage

The **water meter** is an important part of your water service. It measures the exact amount of water you use, and its readings serve as the basis for your water consumption charge.

These readings also allow us to compare total water use registered by all meters versus total water pumped from the wells. Variations in these figures could indicate underground leaks and unaccounted water usage.

You are billed for water consumption on a quarterly basis. The bill will reflect the previous three months of consumption and will include a quarterly service charge based on the size of your meter.

Have you ever wondered how much water you use in the appliances around your home? The following list reflects the average daily water use of certain appliances and fixtures within the home.

Washing Machine	25-50 gallons
Bathtub	25-35 gallons
Dishwasher	15-30 gallons
<u>Toilet</u>	4-6 gallons
Shower	3-5 gallons (per minute)
Sink Faucet	2-3 gallons (per minute)
Outside Faucet	3-5 gallons (per minute)

## Definitions

<b>ppm</b> <b>Parts Per Million:</b> equivalent of one second in 12 days	<b>MCL</b> <b>Maximum Contaminant Level:</b> The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.	<b>MRDL</b> <b>Maximum Residual Disinfection Level</b> The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for
<b>ppb</b> <b>Parts Per Billion:</b> equivalent of one second in 32 years		
<b>ppt</b> <b>Parts Per Trillion:</b> equivalent of one second in 32,000 years		
<b>NA</b> <b>Not Applicable</b>	<b>MCLG</b> <b>Maximum Contaminant Level Goal:</b> The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.	<b>MRDLG</b> <b>Maximum Residual Disinfection Level Goal</b> The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefit of the use of disinfectants to
<b>RUL</b> <b>Recommended Upper Limit</b>		
<b>ND</b> <b>Not Detected</b>		
<b>RAA</b> <b>Running Annual Average</b>	<b>AL</b> <b>Action Level</b> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.	<b>Primary Standards:</b> Federal drinking water regulations for substances that are health-related. Water suppliers must meet all primary drinking water standards.
<b>LRAA</b> <b>Locational Running Annual Average</b>		<b>Secondary Standards:</b> Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as taste, odor and appearance. Secondary standards are recommenda-
<b>TT</b> <b>Treatment Technique:</b> A required process intended to reduce the level of a contaminant in drinking water.	<b>CU</b> <b>Color Unit</b> <b>pCi/L</b> <b>Picocuries Per Liter:</b> equivalent of one second in 32 million years	