



DRINKING WATER DETAILED REPORT 2023

WATER QUALITY TESTING SUMMARY FOR THE DRINKING WATER
PRODUCED BY THE CARY/APEX WATER TREATMENT FACILITY



**WE ARE PLEASED TO PRESENT TO YOU THE
CARY/APEX WATER TREATMENT FACILITY
TEST RESULT SUMMARY FOR 2023.**

This report is a snapshot of last year's water quality. The values contained in this report are based on single measurements or yearly averages depending on the contaminant. The Environmental Protection Agency and/or the State requires us to monitor for certain substances less than once per year because the concentrations of these substances are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. In these cases, the most recent data is included, along with the year in which the sample was taken. It is our constant goal to provide you with a safe and dependable supply of drinking water.

Tiffanie Hawley is a Laboratory Analyst who recently joined the Cary/Apex Water Treatment Facility Laboratory in March of 2024.

WATER TREATMENT DEFINITIONS

Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Hazard Index: A tool the EPA is proposing that water systems use to evaluate combined health risks from 4 different PFAS compounds in drinking water.

Locational Running Annual Average (LRAA):

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 Byproducts Rule.

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG):

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 contamination.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Not-Applicable (N/A): Information not applicable/not required for that particular water system or for that particular rule.

Non-Detects (ND): Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

Parts per billion (ppb) or Micrograms per liter (ug/L):

One part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

Parts per million (ppm) or Milligrams per liter (mg/L):

One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/L): One part per trillion corresponds to one minute in 2,000,000 years or a single penny in \$10,000,000,000.

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

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

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



LEAD AND COPPER

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm) (90th percentile)	2021	60 Samples once every 3 years	AL = 1.3	1.3	0.0988	0/60	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90th percentile)			AL = 15	0	< 0.003	0/60		Corrosion of household plumbing systems, erosion of natural deposits

NITRATE AND NITRITE

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
Nitrate (as Nitrogen) (ppm)	2023	2 Times a week	10	10	< 1	N/A	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)			1	1	< 0.01			Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

ASBESTOS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
Total Asbestos (MF/L)	2020	Once every 9 years	7	7	< 0.19	N/A	No	Decay of asbestos cement water mains; erosion of natural deposits

DISINFECTANTS AND DISINFECTION BYPRODUCTS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
TTHM (ppb) [Total Trihalomethanes]	2023	8 Samples quarterly	80	N/A	47 Maximum LRAA	25–56 Individual sample sites	No	Byproduct of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]		8 Samples quarterly	60	N/A	21 Maximum LRAA	4–34 Individual sample sites		Byproduct of drinking water disinfection
Bromate (ppb)		Once a month	10 Running annual average	0	5 Running annual average	1–6 Individual measurements		Byproduct of drinking water disinfection
Chloramines (ppm)		~137 Samples a month (April to February)	MRDL = 4 Running annual average	MRDLG = 4	2.91 Running annual average	1.12–4.00 Individual sites		Water additive used to control microbes
Chlorine, Free (ppm)		~137 Samples in March	MRDL = 4 Running annual average	MRDLG = 4	2.19 Running annual average	0.52–3.53 Individual sites		Water additive used to control microbes
Total Organic Carbon (removal ratio)		Quarterly	TT	N/A	1.55	1.36–1.86		Naturally present in the environment

TURBIDITY (COMBINED FILTER EFFLUENT TURBIDITY VALUES)

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
Turbidity (NTU)	2023	Every 4 hours	TT = 1 NTU and 95% < 0.3 NTU	N/A	0.09 and 100% < 0.3% NTU	0.03–0.09	No	Soil runoff





Hayden Morehead is a Laboratory Analyst who recently joined the Cary/Apex Water Treatment Facility Laboratory in December of 2023.

RADIOLOGICALS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	VIOLATION	TYPICAL SOURCE
Gross Alpha (pCi/L)	2017	Once every 9 years	15	0	< 3	No	Erosion of natural deposits
Gross Beta (pCi/L)			50		4.2		Decay of natural and man-made deposits
Radium 226 (pCi/L)			3		< 1		Erosion of natural deposits
Radium 228 (pCi/L)			2		< 1		Erosion of natural deposits
Uranium (pCi/L)			20.1		< 0.67		Erosion of natural deposits

MICROBIOLOGICALS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	VIOLATION	TYPICAL SOURCE
Total Coliform Bacteria presence or absence	2023	~137 Samples a month	TT = If greater than 5% of monthly samples are positive in one month, an assessment is required.	N/A	0-1%	N/A	Naturally present in the environment
Fecal Coliform or E. coli presence or absence		~137 Samples a month	0 (Note: 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.)	0	0-1	Yes	Human and animal fecal waste
Cryptosporidium (oocysts/L)	2022	Once	TT = 99 % Removal	0	< 0.010	No	Human and animal fecal waste
Giardia lamblia (cysts/L)		Once	TT = 99 % Removal/ inactivation	0	< 0.010	No	Human and animal fecal waste

Note: During 2023, we received an E. coli MCL violation that covered the time period of May 4-5, 2023. To assure this does not happen again, we implemented the following corrective actions: we replaced the sample station with a brand-new sampling station and we reviewed and amended our standard protocols for verifying proper practices are followed by contractors to prevent contamination. Visit carync.gov/drinkingwaterfaq for more information about this violation.

TRIHALOMETHANES (THMS)

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
Chloroform (ppb)	2023	8 Samples quarterly	11	5-21	No	Byproduct of drinking water chlorination
Bromodichloromethane (ppb)			14	9-21		
Bromoform (ppb)			2	1-6		
Chlorodibromomethane (ppb)			12	8-19		

Note: Not individually regulated. See TTHM on page 5 for compliance information.

HALOACETIC ACIDS (HAAS)

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
Trichloroacetic Acid (ppb)	2023	8 Samples quarterly	6	1-11	No	Byproduct of drinking water chlorination
Dichloroacetic Acid (ppb)			3	ND-5		
Monochloroacetic Acid (ppb)			1	ND-6		
Monobromoacetic Acid (ppb)			1	ND-6		
Dibromoacetic Acid (ppb)			3	ND-5		

Note: Not individually regulated. See TTHM on page 5 for compliance information.



Erin Lee is a Senior Laboratory Analyst that has been employed by the Cary/Apex Water Treatment Facility Laboratory since October 2005.

REGULATED INORGANICS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
Antimony (ppb)	2023	Daily	6	6	< 3	No range	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)			10	0	< 5			Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)			2	2	< 0.4			Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)			4	4	< 2			Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)			5	5	< 1			Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)			100	100	< 20			Discharge from steel and pulp mills; erosion of natural deposits
Cyanide, Total (ppb)		Annually	200	200	< 50	Discharge from steel/metal factories; discharge from plastic and fertilizer factories		
Fluoride (ppm)		Daily	4	4	0.71	ND-0.89		Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (inorganic) (ppb)		Annually	2	2	< 0.4	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland		
Selenium (ppb)		Daily	50	50	< 10	No range		Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium (ppb)	2		0.5	< 1	Leaching from ore processing sites; discharge from electronics, glass, and drug factories			

WATER QUALITY CHARACTERISTICS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION
Alkalinity, Total, as CaCO ₃ (ppm)	2023	Daily	N/A	38.2	29.5–46.5	No
Aluminum (ppm)		Daily	0.20	0.10	0.02–0.46	
Ammonia, Free (ppm)		Daily	N/A	0.02	ND–0.16	
Ammonia, Total (ppm)		Daily	N/A	0.64	ND–1.78	
Calcium (ppm)		Daily	N/A	8.98	7.69–10.18	
Carbon Dioxide (ppm)		Daily	N/A	0.61	0.19–1.49	
Chloride (ppm)		Weekly	250	21.9	16.3–26.5	
Color (CU)		Daily	15	0	0–4	
Conductivity (uS/cm)		Daily	N/A	241	213–274	
Geosmin (ppt)		Daily	N/A	< 1	< 1–6.75	
Hardness, Total, as CaCO ₃ (ppm)		Daily	Classified as “moderately soft”	33.3	29.86–37.32	
Hardness, Total, as CaCO ₃ (grains per gallon)		Daily	Classified as “moderately soft”	1.9	1.75–2.18	
Iron (ppm)		Daily	0.3	< 0.06	< 0.06–0.16	
Magnesium (ppm)		Daily	N/A	2.64	1.75–3.22	
Manganese (ppm)		Daily	0.05	< 0.01	< 0.01–0.02	
Methylisoborneol (MIB) (ppt)		Daily	N/A	< 1	< 1–3.10	
Nickel (ppm)		Daily	N/A	< 0.1	No range	
Ortho-Phosphate as PO ₄ (ppm)	Weekly	N/A	0.61	0.48–0.70		

WATER QUALITY CHARACTERISTICS CONT'D

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION
pH (SU)	2023	Daily	7–9	7.93	7.23–8.87	No
Silica (ppm)	2004	2x/Month	N/A	3.44	< 1.00–7.16	
Sodium (ppm)	2023	Annually	N/A	33	No range	
Sulfate (ppm)	2022	Annually	250	38	No range	
Total Phosphorous as P (ppm)	2023	Weekly	N/A	0.24	0.19–0.30	
Total Dissolved Solids (ppm)	2013	Weekly	500	119	103–140	
Zinc (ppm)	2007	Once	5	< 0.005	No range	

SYNTHETIC ORGANIC CHEMICALS (SOCS) INCLUDING PESTICIDES AND HERBICIDES

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
2,4-D (ppb)	2023	2x Annually	70	70	< 0.1	No range	No	Runoff from herbicide used on row crops
2,4,5-TP (Silvex)(ppb)			50	50	< 0.2			Residue of banned herbicide
Alachlor (ppb)			2	0	< 0.2			Runoff from herbicide used on row crops
Atrazine (ppb)			3	3	< 0.1			Runoff from herbicide used on row crops
Benzo(a)pyrene (PAH) (ppt)			200	0	< 20			Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)			40	40	< 0.9			Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)			2	0	< 0.2			Residue of banned termiticide
Dalapon (ppb)			200	200	< 1			Runoff from herbicide used on rights of way
Bis (2-ethylhexyl) adipate (ppb)			400	400	< 0.6			Discharge from chemical factories
Bis (2-ethylhexyl) phthalate (ppb)			6	0	< 1.32			Discharge from rubber and chemical factories

SYNTHETIC ORGANIC CHEMICALS (SOCS) INCLUDING PESTICIDES AND HERBICIDES

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
1,2-Dibromo-3-chloropropane (DBCP) (ppt)	2023	2x Annually	200	0	< 20	N/A	No	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)			7	7	< 0.2			Runoff from herbicide used on soybeans and vegetables
Endrin (ppb)			2	2	< 0.01			Residue of banned insecticide
Ethylene dibromide (EDB) (ppt); also known as 1,2-Dibromoethane			50	0	< 10			Discharge from petroleum refineries
Heptachlor (ppt)			400	0	< 40			Residue of banned pesticide
Heptachlor epoxide (ppt)			200	0	< 20			Breakdown of heptachlor
Hexachlorobenzene (ppb)			1	0	< 0.1			Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)			50	50	< 0.1			Discharge from chemical factories
Lindane (ppt); also known as gamma-BHC			200	200	< 20			Runoff/leaching from insecticide used on cattle, lumber, and gardens
Methoxychlor (ppb)			40	40	< 0.1			Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock
Oxamyl (vydate) (ppb)			200	200	< 2			Runoff/leaching from insecticide used on apples, potatoes, and tomatoes
Polychlorinated biphenyls (PCBs) (ppt)			500	0	< 100			Runoff from landfills; discharge of waste chemicals
Pentachlorophenol (ppb)			1	0	< 0.04			Discharge from wood preserving factories
Picloram (ppb)			500	500	< 0.1			Herbicide runoff
Simazine (ppb)			4	4	< 0.07			Herbicide runoff
Toxaphene (ppb)	3	0	< 1	Runoff/leaching from insecticide used on cotton and cattle				

Note: All results are below detection limit.

UNREGULATED SOCS INCLUDING PESTICIDES AND HERBICIDES

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AMOUNT DETECTED	RANGE DETECTED	VIOLATION
Aldicarb (ppb)	2022	2x Annually	< 0.5	No range	No
Aldicarb Sulfone (ppb)			< 0.8		
Aldicarb Sulfoxide (ppb)			< 0.5		
Aldrin (ppb)	2015		< 0.2		
Butachlor (ppb)	2013		< 8		
Carbaryl (ppb)	2022		< 4		
Dicamba (ppb)			< 1		
Dieldrin (ppb)	2015		< 0.2		
3-Hydroxycarbofuran (ppb)	2022		< 4		
Methomyl (ppb)			< 4		
Metolachlor (ppb)	2018		< 0.8		
Metribuzin (ppb)	2013		< 0.8		
Propachlor (ppb)		< 6			

Note: All results are below detection limit.

VOLATILE ORGANIC CHEMICALS (VOCS)

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
Benzene (ppb)	2023	Annually	5	0	< 0.5	N/A	No	Runoff from herbicide used on row crops
Carbon tetrachloride (ppb)			5	0	< 0.5			Residue of banned herbicide
Chlorobenzene (ppb)			100	100	< 0.5			Runoff from herbicide used on row crops
1,2 – Dichlorobenzene (ppb) (o-Dichlorobenzene)			600	600	< 0.5			Runoff from herbicide used on row crops
1,4 – Dichlorobenzene (ppb) (p - Dichlorobenzene)			75	75	< 0.5			Leaching from linings of water storage tanks and distribution lines
1,2 – Dichloroethane (ppb)			5	0	< 0.5			Leaching of soil fumigant used on rice and alfalfa
1,1 – Dichloroethene (ppb)			7	7	< 0.5			Residue of banned termiticide
cis – 1,2 – Dichloroethene (ppb) (cis-1,2 -Dichloroethylene)			70	70	< 0.5			Runoff from herbicide used on rights of way
trans-1,2 -Dichloroethene (ppb) (trans-1,2- Dichloroethylene)			100	100	< 0.5			Discharge from chemical factories
1,2 – Dichloropropane (ppb)			5	0	< 0.5			Discharge from rubber and chemical factories
Ethylbenzene (ppb)			700	700	< 0.5			Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Methylene chloride (ppb) (Dichloromethane)			5	0	< 0.5			Runoff from herbicide used on soybeans and vegetables
Styrene (ppb)			100	100	< 0.5			Residue of banned insecticide
Tetrachloroethene (ppb)	5	0	< 0.5	Discharge from petroleum refineries				
1,2,4 – Trichlorobenzene (ppb)	70	70	< 0.5	Residue of banned pesticide				

VOLATILE ORGANIC CHEMICALS (VOCS) CONT'D

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL GOAL (MCLG)	AMOUNT DETECTED	RANGE DETECTED	VIOLATION	TYPICAL SOURCE
1,1,1 – Trichloroethane (ppb)	2023	Annually	200	200	< 0.5	N/A	No	Breakdown of heptachlor
1,1,2 – Trichloroethane (ppb)			5	3	< 0.5			Discharge from metal refineries and agricultural chemical factories
Trichloroethene (ppb)			5	0	< 0.5			Discharge from chemical factories
Toluene (ppm)			1	1	< 0.0005			Runoff/leaching from insecticide used on cattle, lumber, and gardens
Vinyl chloride (ppb)			2	0	< 0.5			Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock
Xylenes, Total (ppm)			10	10	< 0.0005			Runoff/leaching from insecticide used on apples, potatoes, and tomatoes



James Ndon is a Water Treatment Facility Operator. Operators monitor computer trends and perform rounds where they physically look at chemical feed and other processes, as well as test the water at the different stages in the treatment process every hour, 24 hours a day, 365 days a year.

UNREGULATED VOCS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AMOUNT DETECTED	RANGE DETECTED	VIOLATION
Bromobenzene (ppb)	2022	Annually until 2023	< 0.5	No range	No
Bromochloromethane (ppb)			< 0.5		
Bromomethane (ppb)			< 0.5		
n-Butylbenzene (ppb)			< 0.5		
Sec-Butylbenzene (ppb)			< 0.5		
Tert-Butylbenzene (ppb)			< 0.5		
Chloroethane (ppb)			< 0.5		
Chloromethane (ppb)			< 0.5		
2 – Chlorotoluene (ppb)			< 0.5		
4 – Chlorotoluene (ppb)			< 0.5		
Dibromomethane (ppb)			< 0.5		
1,3 – Dichlorobenzene (ppb) (meta-Dichlorobenzene)			< 0.5		
Dichlorodifluoromethane (ppb)			< 0.5		
1,1 – Dichloroethane (ppb)			< 0.5		
1,3 – Dichloropropane (ppb)			< 0.5		
2,2 – Dichloropropane (ppb)			< 0.5		
1,1 – Dichloropropene (ppb)	< 0.5				

UNREGULATED VOCS CONT'D

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AMOUNT DETECTED	RANGE DETECTED	VIOLATION
1,3 – Dichloropropene (ppb)	2022	Annually until 2023	< 0.5	No range	No
Hexachlorobutadiene (ppb)			< 0.5		
Isopropylbenzene (ppb)			< 0.5		
4 – Isopropyltoluene (ppb)			< 0.5		
Methyl-tert-butyl ether (MTBE) (ppb)			< 0.5		
Naphthalene (ppb)			< 0.5		
n-Propylbenzene (ppb)			< 0.5		
1,1,1,2 – Tetrachloroethane (ppb)			< 0.5		
1,1,2,2 – Tetrachloroethane (ppb)			< 0.5		
1,2,3 – Trichlorobenzene (ppb)			< 0.5		
1,2,3 – Trichloropropane (ppb)			< 0.5		
Trichlorofluoromethane (ppb) (Fluorotrichloromethane)			< 0.5		
1,2,4 – Trimethylbenzene (ppb)			< 0.5		
1,3,5 – Trimethylbenzene (ppb)			< 0.5		
trans – 1,3 – Dichloropropylene (ppb)			< 0.5		
1,2,4 – Trimethylbenzene (ppb)	< 0.5				
1,3,5 – Trimethylbenzene (ppb)	< 0.5				

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION	SOURCE
10:2 Fluorotelomer sulfonic acid (10:2 FTS) (ppt)	2022	4 Times	ND	No range	No	Man-made chemicals used for waterproof and stain proof fabrics, nonstick cookware, some food packaging materials, and fire suppression foams
4:2 Fluorotelomer sulfonic acid (4:2 FTS) (ppt)	2023		ND	No range		
6:2 Fluorotelomer sulfonic acid (6:2 FTS) (ppt)			ND	No range		
8:2 Fluorotelomer sulfonic acid (8:2 FTS) (ppt)			ND	No range		
ADONA (ppt)			ND	No range		
F-53B Major (ppt)			ND	No range		
F-53B Minor (ppt)			ND	No range		
GenX (ppt)			ND	No range		
N-ethylperfluorooctane sulfonamide (NEtFOSA) (ppt)			ND	No range		
N-ethylperfluorooctane sulfonamidoethanol (ppt)			ND	No range		
N-methylperfluorooctane sulfonamide (NMeFOSA) (ppt)			ND	No range		
N-methylperfluorooctane sulfonamidoethanol (ppt)			ND	No range		
Perfluorobutanesulfonic acid (PFBS) (ppt)			3.5	2.5–4.7		
Perfluorobutanoic acid (PFBA) (ppt)			4.3	ND–10		
Perfluorodecanoic acid (PFDA) (ppt)			ND	No range		
Perfluoroheptanoic acid (PFHpA) (ppt)			ND	ND–2.9		
Perfluorohexanesulfonic acid (PFHxS) (ppt)			ND	No range		
Perfluorohexanoic acid (PFHxA) (ppt)			6.4	4.1–9.1		
Perfluorolauric acid (PFDoA) (ppt)			ND	No range		
Perfluorononanoic acid (PFNA) (ppt)			ND	No range		

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) CONT'D

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION	SOURCE
Perfluorooctane sulfonate (PFOS) (ppt)	2023	4 Times	ND	No range	No	Man-made chemicals used for waterproof and stain proof fabrics, nonstick cookware, some food packaging materials, and fire suppression foams
N-ethyl Perfluorooctanesulfonamidoacetic acid (NEtFO5S3A7A) (ppt)			ND	No range		
Perfluorobutylsulfonamide (FBSA) (ppt)	2022	1 Time	0.37	No range		
Hydro-EVE Acid (ppt)			ND	No range		
Hydrolyzed PSDA (ppt)			ND	No range		
Nafion 1 (ppt)			ND	No range		
Nafion 2 (ppt)			ND	No range		
Perfluoro(3,5,7,9-tetraoxadecanoic acid (PFO4DA) (ppt)			ND	No range		
Perfluoro(3,5,7-trioxaoctanoic acid (PFO3OA) (ppt)			ND	No range		
Perfluoro(3,5-dioxahexanoic acid (PFO2HxA) (ppt)			ND	No range		
Perfluoro-2-(perfluoromethoxy) propanoic acid (PMPA) (ppt)			ND	No range		
Perfluoro-2-ethoxypropanoic acid (PEPA) (ppt)			ND	No range		
Perfluoro-2-methoxyacetic acid (PFMOAA) (ppt)			ND	No range		
Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid (ppt)			ND	No range		
Perfluoro-3-methoxypropanoic acid (PFMPA) (ppt)			ND	No range		
Perfluoro-4-(2-sulfoethoxy) pentanoic acid (ppt)			ND	No range		
Perfluoroethoxypropanoic acid (EVE Acid) (ppt)	ND	No range				
PFECA-G (ppt)	ND	No range				
R-EVE (ppt)	ND	No range				
R-PSDCA (ppt)	ND	No range				

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) CONT'D

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION	SOURCE
N-methyl Perfluorooctanesulfonamidoacetic acid (NMe5F3O7SAA) (ppt)	2023	4 Times	ND	No range	No	Man-made chemicals used for waterproof and stain proof fabrics, nonstick cookware, some food packaging materials, and fire suppression foams
Perfluorooctanoic acid (PFOA) (ppt)			2.1	ND-3.2		
Perfluorotridecanoic acid (PFTrDA) (ppt)			ND	No range		
Perfluoroundecanoic acid (PFUnA) (ppt)			ND	No range		
Perfluorododecanesulfonic acid (PFDoS) (ppt)			ND	No range		
Perfluorodecanesulfonic acid (PFDS) (ppt)			ND	No range		
Perfluoroheptanesulfonic acid (PFHpS) (ppt)			ND	No range		
Perfluorohexadecanoic acid (PFHxDA) (ppt)			ND	No range		
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) (ppt)			ND	No range		
Perfluoro-4-isopropoxybutanoic acid (ppt)			ND	No range		
Perfluoro-4-methoxybutanoic acid (PFMOBA) (ppt)			ND	No range		
Perfluoro-3-methoxypropanoic acid (PFMOPrA) (ppt)			ND	No range		
Perfluorononanesulfonic acid (PFNS) (ppt)			ND	No range		
Perfluorooctane sulfonamide (PFOSA) (ppt)			ND	No range		
Perfluoropentanoic acid (PFPeA) (ppt)			7.3	5.3-11		
Perfluoropentanesulfonic acid (PFPeS) (ppt)			ND	No range		
Perfluorotetradecanoic acid (PFTeDA) (ppt)	ND	No range				

Note: ND = non-detect, detection levels varied

ANOTHER EMERGING CONTAMINANT

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION	SOURCE
1,4-Dioxane (ppb)	2023	13 Times	< 0.07	< 0.07–0.15	No	Byproduct in paint strippers, dyes, greases, antifreeze, aircraft deicing fluids, deodorants, shampoos, cosmetics, manufacture of pharmaceuticals, and manufacture of PET plastic

UNREGULATED UCMR1 CONTAMINANTS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION
Perchlorate (ppb)	2022	Quarterly	< 4	No range	No
DCPA Acid Metabolites (ppb)			< 1		
MTBE (ppb)			< 5		
Nitrobenzene (ppb)			< 10		
Acetochlor (ppb)			< 2		
2,4 – Dinitrotoluene (ppb)			< 2		
2,6 – Dinitrotoluene (ppb)			< 2		
4,4 – DDE (ppb)			< 0.8		
EPTC (ppb)			< 1		
Molinate (ppb)			< 0.9		
Terbacil (ppb)			< 2		

UNREGULATED UCMR2 CONTAMINANTS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION
Dimethoate (ppb)	2010	Quarterly	< 0.7	No range	No
Terbufos sulfone (ppb)			< 0.4		
2,2',4,4' – tetrabromodiphenyl ether (BDE-47) (ppb)			< 0.3		
2,2',4,4',5 – pentabromodiphenyl ether (BDE-99) (ppb)			< 0.9		
2,2',4,4',5,5' – hexabromobiphenyl (245-HBB) (ppb)			< 0.7		
2,2',4,4',5,5' – hexabromodiphenyl ether (BDE-153) (ppb)			< 0.8		
2,2',4,4',6 – pentabromodiphenyl ether (BDE-100) (ppb)			< 0.5		
1,3 – dinitrobenzene (ppb)			< 0.8		
2,4,6 – trinitrotoluene (TNT) (ppb)			< 0.8		
Hexahydro – 1,3,5 – trinitro – 1,3,5 – triazine (RDX) (ppb)			< 1.0		
Acetochlor (ppb)			< 2.0		
Alachlor (ppb)			< 2.0		
Metolachlor (ppb)			< 1.0		
Acetochlor ethane sulfonic acid (ESA) (ppb)			< 1.0		
Acetochlor oxanilic acid (OA) (ppb)			< 2.0		
Alachlor ESA (ppb)			< 1.0		
Alachlor OA (ppb)			< 2.0		
Metolachlor ESA (ppb)			< 1.0		
Metolachlor OA (ppb)			< 2.0		
N-nitrosodiethylamine (NDEA) (ppb)			< 0.005	2.3–6.5	
N-nitrosodimethylamine (NDMA) (ppt)	4.4				
N-nitrosodi-n-butylamine (NDBA) (ppb)	< 0.004	No range			
N-nitrosodi-n-propylamine (NDPA) (ppb)	< 0.007				
N-nitrosomethylethylamine (NMEA) (ppb)	< 0.003				
N-nitrosopyrrolidine (NPYR) (ppb)	< 0.002				

UNREGULATED UCMR3 CONTAMINANTS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED
Chromium (ppb)	2015	Quarterly		
Distribution			< 1.0	No range
Finished Entry Point			< 1.0	No range
Cobalt (ppb)				
Distribution			64	57–68
Finished Entry Point			59	55–66
Molybdenum (ppb)				
Distribution			< 1.0	No range
Finished Entry Point			< 1.0	No range
Strontium (ppb)				
Distribution			64	57–68
Finished Entry Point			59	55–66
Vanadium (ppb)				
Distribution			0.30	No range
Finished Entry Point			0.20	No range
Hexavalent Chromium (ppb)				
Distribution	0.05	0.04–0.05		
Finished Entry Point	0.03	No range		
Chlorate (ppb)				
Distribution	105	89–120		
Finished Entry Point	113	92–130		
1-4-Dioxane (ppb)				
Finished Entry Point	0.42	0.16–0.77		
Bromochloromethane (ppb)				
Finished Entry Point	< 0.06	No range		

Note: Unregulated contaminants are those of which EPA has not established drinking water standards but for which monitoring is required. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

UNREGULATED UCMR3 CONTAMINANTS CONT'D

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED
Bromomethane (ppb)	2015	Quarterly	< 0.2	No range
Finished Entry Point				
1,3-Butadiene (ppb)				
Finished Entry Point			< 0.1	No range
Chlorodifluoromethane (ppb)				
Finished Entry Point			< 0.08	No range
Chloromethane (ppb)				
Finished Entry Point			< 0.2	No range
1,1-Dichloroethane (ppb)				
Finished Entry Point			< 0.03	No range
1,2,3-Trichloropropane (ppb)				
Finished Entry Point			< 0.03	No range
Perfluorobutanesulfonic acid (PFBS) (ppb)				
Finished Entry Point			< 0.09	No range
Perfluoroheptanoic acid (PFHpA) (ppb)				
Finished Entry Point			< 0.01	< 0.01–0.01
Perfluorohexanesulfonic acid (PFHxS) (ppb)				
Finished Entry Point			< 0.03	No range
Perfluorononanoic acid (PFNA) (ppb)				
Finished Entry Point			< 0.02	No range
Perfluorooctane sulfonate (PFOS) (ppb)				
Finished Entry Point	< 0.04	No range		
Perfluorooctanoic acid (PFOA) (ppb)				
Finished Entry Point	< 0.02	No range		
4-Androstene-3,17-dione (ppb)				
Finished Entry Point	< 0.0003	No range		



View of pulsator sedimentation basins at water treatment facility.

UNREGULATED UCMR3 CONTAMINANTS CONT'D

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED
Equilin (ppb)	2015	Quarterly	< 0.004	No range
Finished Entry Point				
17beta-Estradiol (ppb)				
Finished Entry Point				
Estriol (ppb)				
Finished Entry Point				
Estrone (ppb)				
Finished Entry Point				
17alpha-Ethynyl estradiol (ppb)				
Finished Entry Point				
Testosterone (ppb)	2015	Quarterly	< 0.0008	No range
Finished Entry Point				
17alpha-Ethynyl estradiol (ppb)				
Finished Entry Point				
Testosterone (ppb)				
Finished Entry Point				
Equilin (ppb)				
Finished Entry Point				
17beta-Estradiol (ppb)				
Finished Entry Point				
Estrone (ppb)	2015	Quarterly	< 0.0009	No range
Finished Entry Point				
Equilin (ppb)				
Finished Entry Point				
17beta-Estradiol (ppb)				
Finished Entry Point				
Estrone (ppb)				
Finished Entry Point				
17alpha-Ethynyl estradiol (ppb)				
Finished Entry Point				
Testosterone (ppb)	2015	Quarterly	< 0.0001	No range
Finished Entry Point				
Equilin (ppb)				
Finished Entry Point				
17beta-Estradiol (ppb)				
Finished Entry Point				
Estrone (ppb)				
Finished Entry Point				
17alpha-Ethynyl estradiol (ppb)				
Finished Entry Point				

UNREGULATED UCMR4 CONTAMINANTS

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION	SOURCE
Germanium (ppb)	2020	Quarterly	< 0.300	No range	No	N/A
Manganese (ppb)			5.966	< 0.400–23.3		Naturally occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries, and fireworks; drinking water and wastewater treatment chemical; essential nutrients
alpha-Hexachlorocyclohexane (ppb)			< 0.0100	No range		N/A
Chlorpyrifos (ppb)			< 0.0300	No range		N/A
Dimethipin (ppb)			< 0.200	No range		N/A
Ethoprop (ppb)			< 0.0300	No range		N/A
Oxyfluorfen (ppb)			< 0.0500	No range		N/A
Profenofos (ppb)			< 0.300	No range		N/A
Tebuconazole (ppb)			< 0.200	No range		N/A
Permethrin, cis & trans (ppb)			< 0.0400	No range		N/A
Tribufos (ppb)			< 0.0700	No range		N/A
Butylated hydroxyanisole (ppb)			< 0.0300	No range		N/A
Quinoline (ppb)			< 0.0200	No range		N/A
o-Toluidine (ppb)			< 0.0700	No range		N/A
1-Butano (ppb)			< 2.00	No range		N/A
2-Methoxyethanol (ppb)			< 0.400	No range		N/A
2-Propen-1-ol (ppb)			< 0.500	No range		N/A
Anatoxin-a (ppb)			< 0.0300	No range		N/A
Cylindrospermopsin (ppb)			< 0.0900	No range		N/A
Total Microcystins & Nodularins (ppb)			< 0.300	No range		N/A
HAA6Br (ppb)			15.03	5.73–20.76		Byproduct of drinking water disinfection
HAA9 (ppb)	27.451	13.33–40.7	Byproduct of drinking water disinfection			
Bromide in Jordan Lake (ppb)	83.2	74.7–99.3	N/A			
Total Organic Carbon in Jordan Lake (ppb)	6430	6210–6640	Naturally present in the environment			

PHARMACEUTICALS AND PERSONAL CARE PRODUCTS (PPCPS)

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION	SOURCE
Acesulfame-K (ppb)	2018	2 Times	< 20	No range	No	Calorie-free sugar substitute
Acetaminophen (ppb)			< 5	No range		Nonsteroidal anti-inflammatory drug
Albuterol (ppb)			< 5	No range		Bronchodilator
Amoxicillin (ppb)			< 20	No range		Antibiotic
4-Androstene-3,17-dione (ppb)			< 5	No range		Hormone
Antipyrine (ppb)			< 5	No range		Anti-inflammatory analgesic
Atenolol (ppb)			3.8	< 5–7.6		Beta blocker/Antihypertensive
Atrazine (ppb)			< 5	No range		Herbicide
Azithromycin (ppb)			< 20	No range		Antibiotic
Bendroflumethiazide (ppb)			< 5	No range		Diuretic
Bezafibrate (ppb)			< 5	No range		Lipid regulator
Bisphenol A (ppb)			< 10	No range		Plasticizer
Bromacil (ppb)			< 5	No range		Pesticide
Butalbital (ppb)			< 5	No range		Barbiturate
Butylparaben (ppb)			< 5	No range		Preservative and flavouring agent
Caffeine (ppb)			< 5	No range		Psychostimulant
Carbadox (ppb)			< 5	No range		Growth promoter especially for pigs
Carbamazepine (ppb)			< 5	No range		Anticonvulsant
Carisoprodol (ppb)			< 5	No range		Muscle relaxant
Chloramphenicol (ppb)			< 10	No range		Antibiotic
Chloridazon (ppb)	< 5	No range	Herbicide			
Chlorotoluron (ppb)	< 5	No range	Pesticide			
Cimetidine (ppb)	< 5	No range	H2 blocker acid reducer			
Clofibric acid (ppb)	< 5	No range	Lipid regulator			
Cotinine (ppb)	< 10	No range	Metabolite of nicotine			
Cyanazine (ppb)	< 5	No range	Pesticide			

PHARMACEUTICALS AND PERSONAL CARE PRODUCTS (PPCPS) CONT'D

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION	SOURCE
2,4-D (ppb)	2018	2 Times	< 5	No range	No	Herbicide
DEET (ppb)			< 10	No range		Insect repellent
Dehydronifedipine (ppb)			< 5	No range		Antihypertensive
Desethylatrazine (ppb)			< 5	No range		Herbicide
Desisopropylatrazine (ppb)			< 5	No range		Herbicide
Diaminochlorotriazine (ppb)			< 5	No range		Herbicide
Diazepam (ppb)			< 5	< 5-7.6		Antidepressant
Diclofenac (ppb)			< 5	No range		Nonsteroidal anti-inflammatory drug
Dilantin (ppb)			< 20	No range		Anticonvulsant
Diltiazem (ppb)			< 5	No range		Antihypertensive
1,7-Dimethylxanthine (ppb)			< 10	No range		Caffeine metabolite
Diuron (ppb)			< 5	No range		Herbicide
Erythromycin (ppb)			< 10	No range		Antibiotic
17beta-Estradiol (ppb)			< 5	No range		Hormone
Estrone (ppb)			< 5	No range		Hormone
Ethylparaben (ppb)			< 20	No range		Preservative
17alpha-Ethynyl estradiol (ppb)			< 5	< 5-7.6		Estrogen medication
Flumequine (ppb)			<10	No range		Antibiotic
Fluoxetine (Prozac) (ppb)			<10	No range		Antidepressant
Gemfibrozil (ppb)			< 5	No range		Lipid regulator
Ibuprofen (ppb)	< 10	No range	Nonsteroidal anti-inflammatory drug			
Iohexal (ppb)	17	No range	Contrast agent			
Iopromide (ppb)	< 5	No range	Contrast agent			
Isobutylparaben (ppb)	< 5	No range	Preservative			
Isoproturon (ppb)	< 100	No range	Herbicide			
Ketoprofen (ppb)	< 5	No range	Nonsteroidal anti-inflammatory drug			

PHARMACEUTICALS AND PERSONAL CARE PRODUCTS (PPCPS) CONT'D

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION	SOURCE
Ketorolac (ppb)	2018	2 Times	< 5	No range	No	Nonsteroidal anti-inflammatory drug
Lidocaine (ppb)			< 5	No range		Anesthetic
Lincomycin (ppb)			< 10	No range		Antibiotic
Linuron (ppb)			< 5	No range		Herbicide
Lopressor (ppb)			< 20	No range		Beta blocker/Antihypertensive
Meclofenamic acid (ppb)			< 5	No range		Nonsteroidal anti-inflammatory drug
Meprobamate (ppb)			< 5	< 5-7.6		Antidepressant
Metazochlor (ppb)			< 4	No range		Herbicide
Methylparaben (ppb)			< 20	No range		Preservative
Metolachlor (ppb)			< 5	No range		Herbicide
Naproxen (ppb)			< 10	No range		Nonsteroidal anti-inflammatory drug
Nifedipine (ppb)			< 20	No range		Antihypertensive
4-Nonylphenol (ppb)			325	< 100-650		Detergent metabolite
Norethisterone (ppb)			< 5	No range		Hormone
4-tert-Octylphenol (ppb)			< 50	No range		Endocrine disruptor – estrogenic
Oxolinic acid (ppb)			5	< 10-10		Feed additive in fish farms
Pentoxifylline (ppb)			< 5	No range		Treats poor blood circulation
Primidone (ppb)			< 5	No range		Anticonvulsant
Progesterone (ppb)			< 5	No range		Hormone
Propazine (ppb)			< 5	No range		Herbicide
Propylparaben (ppb)			< 5	No range		Preservative
Quinoline (ppb)			< 10	No range		Flavouring ingredient
Simazine (ppb)			< 5	No range		Herbicide
Sucralose (ppb)			130	No range		Hormone
Sulfachloropyridazine (ppb)			< 5	No range		Antimicrobial
Sulfadiazine (ppb)			< 5	No range		Antibiotic

PHARMACEUTICALS AND PERSONAL CARE PRODUCTS (PPCPS) CONT'D

CONTAMINANT (UNITS)	YEAR SAMPLED	TEST FREQUENCY	AVERAGE AMOUNT DETECTED	RANGE DETECTED	VIOLATION	SOURCE
Sulfadimethoxine (ppb)	2018	2 Times	< 5	No range	No	Antimicrobial
Sulfamerazine (ppb)			< 5	No range		Antibacterial agent
Sulfamethazine (ppb)			< 5	No range		Antibiotic
Sulfamethizole (ppb)			< 5	No range		Antibiotic
Sulfamethoxazole (ppb)			< 5	No range		Antibiotic
Sulfathiazole (ppb)			< 5	No range		Antimicrobial
Testosterone (ppb)			< 5	No range		Hormone
Theobromine (ppb)			< 10	No range		Stimulant found in cacao plant/tea leaves
Theophylline (ppb)			< 20	No range		Respiratory diseases drug
Thiabendazole (ppb)			< 5	No range		Fungicide
Triclocarban (ppb)			< 5	No range		Antibacterial agent in soaps
Triclosan (ppb)			< 10	No range		Antibacterial agent in soaps
Trimethoprim (ppb)			< 5	No range		Antibiotic
Tris(2-carboxyethyl) phosphine (ppb)			< 10	No range		Reducing agent
Tris(1,3-dichloro-2-propyl) phos (ppb)			< 100	No range		Organophosphate
Warfarin (ppb)	< 5	No range	Anticoagulant			

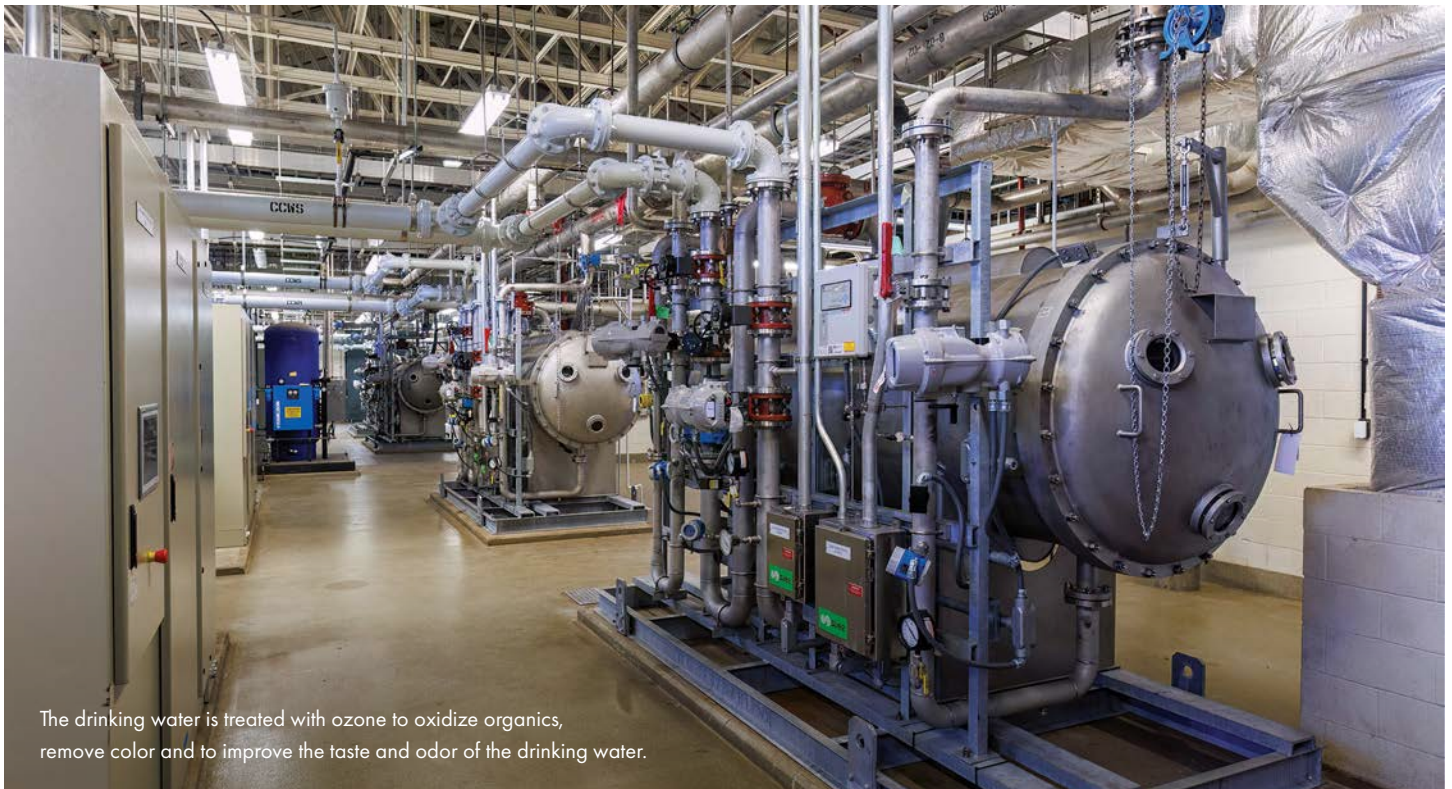


The Cary/Apex Water Treatment Facility began operation in 1993 with the ability to produce 12-million gallons of drinking water a day. The plant was expanded several times as the area's population grew. The most recent expansion occurred in 2019 and resulted in the ability to produce up to 56 million gallons per day (MGD).

TREATMENT PROCESS INFORMATION

The treatment process information contained in the following table does not represent what is in the Finished Drinking Water. The dosages listed for each chemical represent a range of concentrations for that chemical that was used at the Water Plant during 2023 for the water treatment process.

CONTAMINANT (UNITS)	YEAR SAMPLED	AVERAGE DOSAGE	DOSAGE RANGE DETECTED	PURPOSE OF TREATMENT
Ozone (ppm)	2023	3.34	2.36–4.44	Oxidant
Aluminum Sulfate (ppm)		56	51–59	Coagulant
Polymer (ppm)		0.26	0.18–0.32	Coagulant and Filtration aid
Sodium Hydroxide (ppm)		18.6	12.6–27.4	pH control
Carbon (ppm)		22	10–41	Taste and odor control and organics removal
Orthophosphate (ppm)		2.93	2.40–4.26	Corrosion control
Hydrofluorosilicic Acid (ppm)		0.71	0.41–0.89	Fluoride additive for dental health
Chlorine (ppm)		5.53	3.64–4.26	Disinfectant
Ammonia (ppm)		1.00	0.86–1.60	Disinfectant when used in conjunction with chlorine to form chloramines



The drinking water is treated with ozone to oxidize organics, remove color and to improve the taste and odor of the drinking water.



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QUESTIONS?

If you have questions or concerns relating to your drinking water or water service, please contact a citizen advocate by dialing 311 within Cary town limits or (919) 469-4000 outside town limits, or visit our website: carync.gov.

For more information about this report, please contact Rachel Monschein, Water System Laboratory Supervisor, at the Cary/Apex Water Treatment Facility at (919) 362-5507 or rachel.monschein@carync.gov.

