Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

City of Perris Annual Water Quality 2023 Consumer Confidence Report

ABOUT THIS REPORT

The City of Perris is proud to provide its 2023 Water Quality Report, which contains valuable information about the quality of its drinking water and the efforts made to continue providing the highest quality water to the community it serves. **In 2023, The City of Perris drinking water met all drinking water health standards of the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Water Board).**

Contact Information:
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The City of Perris encourages public participation in decisions that may affect the quality of the water supply. The City Council meets every second Tuesday and the last Tuesday of each month. Questions for the City Council can be presented to the City Administrative Department. Call (951) 943-6100. Este **informe contiene informacion importante con respecto a su calidad del agua. Si usted desea obtener informacion en espanol, visitenos en www.cityofperris.org o llame (951) 956-2120.**

The USEPA, the State Water Board and the California Public Utilities Commission (CPUC) are the agencies responsible for establishing drinking water quality standards. The drinking water delivered to your homes and businesses meets standards established by all three agencies. The City of Perris uses independent, state-certified water quality laboratories for testing. In some cases, the City goes beyond what is required to monitor for constituents that have known health risks. Unregulated contaminant monitoring helps USEPA determine where certain contaminants occur and whether it needs to regulate those contaminants.

This year's report, which contains water quality and supply information for 2023 complies with the regulations of the 1996 Safe Drinking Water Act reauthorization that charges USEPA with updating and strengthening the tap water regulatory program.

SOURCES OF WATER SUPPLY

Water supplied to The City of Perris comes from both ground and surface water and is supplied by the Eastern Municipal Water District (EMWD).

The 2023 Consumer Confidence Report for EMWD water supplied to the City of Perris can be obtained by calling (951) 928-3777 Ext 6337 or at www.emwd.org

The blended water quality and any contaminant levels found to be present are also listed in this report for contaminants which are of the most health risk.

In general, sources of drinking water (both tap 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 that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- *Radioactive contaminants* that can be naturally occurring or the result of oil and gas production and mining activities.

WATER QUALITY MONITORING

The City of Perris routinely monitors for contaminants in its drinking water in accordance with Federal and State laws. To minimize the presence of harmful bacteria or other pathogens, the City of Perris is also required to continuously monitor the disinfection levels in the water system. The disinfection levels of the water system are checked daily to ensure the quality of the water. Bacteria, which may indicate potential health risks, are monitored weekly. Over 150 bacteria tests were conducted during 2023, with no months that exceeded limits with zero Total Coliform Positive samples in 2023. During 2023, there were NO violations of any Federal or State water quality standards.

Results of monitoring for the period of January 1 to December 31, 2023, are identified in the tables located on the following pages. These tables contain chemicals and constituents that have primary MCLs. The following definitions are provided for terms and abbreviations contained in the tables that might be unfamiliar.

To ensure that tap water is safe to drink, USEPA and the State Water Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

Additional information on bottled water is available on the California Department of Public Health website (https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/F DBPrograms/FoodSafetyProgram/Water.aspx).

Additional Information

Fluoride

All drinking water naturally contains some fluoride. Community water fluoridation is the process of adjusting the naturally occurring fluoride level to the optimum level for preventing tooth decay. Fluoride levels in drinking water are limited under California state regulations at a maximum level of 2.0 parts per million (ppm).
The City of Perris receives its water from the Eastern Municipal Water District. EMWD adds Fluoride levels to the water that are below the regulation limit and are within the optimal range of 0.7 to 0.8 ppm.

Lead in Drinking Water

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. The City of Perris 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/lead.

E. Coli in Drinking Water

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterbourne pathogens may be present or that a potential pathway exists though which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

WATER QUALITY TABLES AND ATTACHED DATA

The first column of each water quality table that follows lists the chemical/constituent detected in the water. The next columns list the average concentration and range of concentrations of the detected chemical. All chemicals and constituents were monitored from either the EMWD Supply or from the City of Perris water distribution system during 2023.

Included in the tables are the PHG (or MCLG, if applicable) established for each chemical/constituent. The last two columns describe the likely source(s) of each contaminant detected in the drinking water and any health effects.

Also attached is the Eastern Municipal Water Quality Data for testing at various water treatment sites that may contribute to your supplied water.

ACRONYMS AND ABBREVIATIONS

- ***AL = Regulatory Action Level:*** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ***MCL = Maximum Contaminant Level:*** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.
- ***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 are set by USEPA.
- ***MRDL = Maximum Residual Disinfection 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 Disinfection Level Goal:* The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by USEPA. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- *N/A = Not Applicable*: Monitoring requirements may vary between sources.
- *ND = Not Detected:* Laboratory analysis indicates that the constituent is not present at detectable levels.
- *NM = Not Monitored:* The source was not monitored for the constituent.
- *NS = No Standard:* No existing federal or state drinking water standard has been established.
- *NTU* = Nephelometric Turbidity Units
- *PDWS = Primary Drinking Water Standard:* MCLs or MRDLs for contaminants that affect health, along with their monitoring and reporting requirements and water treatment requirements.
- *PHG = Public Health Goal*: The level of a contaminant in drinking water below which there is no known or expected health risk PHGs are set by the California Environmental Protection Agency.
- *pCi/L* = picocuries per liter (a measure of radioactivity)
- *ppb* = parts per billion, or micrograms per liter (µg/L)
- *ppm* = parts per million, or milligrams per liter (mg/L)
- *ppq* = parts per quadrillion, or picograms per liter
- *ppt* = parts per trillion, or nanograms per liter
- *RAA* = running annual average
- *LRAA* = locational running annual average
- *TT* = Treatment Technique

Primary Standards – Mandatory Health Related Standards – Regulated Contaminants

Table 1.

Microbiological Contaminants						
Chemical or Constituent (reporting units)	**MCL (AL)**	**PHG (MCLG)**	**EMWD Supply Highest # of positive samples**	**City of Perris System Highest # of positive samples**	**Major Sources in Drinking Water**	**Health Effects Language**
Total Coliform Bacteria (number of positive samples in any one month) (State Total Coliform Rule)	No more than 1 positive sample in a month	(0)	0	0	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.
Fecal Coliform and *E. coli* *(number of positive samples during the year.* *(State Total Coliform Rule)*	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. coli positive	(0)	0	0	Human and animal fecal waste	Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
E. coli (Federal Revised Total Coliform Rule)	(a)	0	0 (from 1/1/23-12/31/23)	0 (from 1/1/23-12/31/23)	Human and animal fecal waste	E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

(a) 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.

Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproducts Precursors

Chemical or Constituent (reporting units)	MCL (AL) [MRDL]	PHG (MCLG) [MRDLG]	City of Perris System		Major Sources in Drinking Water	Health Effects Language
			Range	Highest LRAA		
Total Trihalomethanes (TTHMs) (ppb)	80	N/A	17.8 - 78.3	51.4	By-product of drinking water chlorination	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney or central nervous system problems, and may have an increased risk of getting cancer.
Haloacetic Acids (HAA5s) (ppb)	60	N/A	4.9-14.5	11.7	By-product of drinking water chlorination	Some people who drink water containing halocetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Total Chlorine Residual (ppm)	**[MRDL]** [4 as Cl2]	**MRDLG** [4 as Cl2]	0.85-2.43	1.697	Drinking water disinfectant added for treatment	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Inorganic Chemicals

Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	City of Perris System		Major Sources in Drinking Water	Health Effects Language
			Range	Average		
Fluoride (ppm) Treatment Related	2	1	0.6-0.8	0.7	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 mg/L may get mottled teeth.

Table 2. Lead and Copper (Testing is completed at Customers Taps)

Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	City of Perris System		Major Sources in Drinking Water	Health Effects Language
			90th Percentile	# of samples >AL		
Lead (ppb) August 2021 Sampling	AL= 15	2	ND	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.
Copper (ppb) August 2021 Sampling.	AL=1300	300	740	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Table 3. Regulated Contaminants with Secondary MCLs and Other Parameters

Chemical or Constituent (reporting units)	MCL (Secondary MCL)	PHG (MCLG)	City of Perris System		Major Sources in Drinking Water	Health Effects Language There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.
			Range	Average		
Odor Threshold (units)	(3)	NA	1 - 2	1	Naturally occurring organic materials	N/A
Turbidity (NTU)	(5)	NA	ND-0.99	0.14	Soil Runoff	Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

2023 Water Quality Report to Member Agencies—The Metropolitan Water District of Southern California
Treatment Plant Effluents and Distribution System (PWS ID: 1910087)

Parameter	Units	State MCL	PHG	State DLR/ CCRDL (RL)	Range Average	Treatment Plant Effluent *						Major Sources in Drinking Water
						Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant	Distribution System	
Percent State Water Project	%	NA	NA	NA	Range	0 - 100	100	100	0 - 67	0 - 100		Not applicable
PRIMARY STANDARDS—Mandatory Health-Related Standards												
CLARITY												
Combined Filter Effluent (CFE) Turbidity (a)	NTU	TT	NA	NA	Highest	0.08	0.07	0.07	0.07	0.06		Soil runoff
	%				% <= 0.3	100	100	100	100	100		
MICROBIOLOGICAL (b)												
Total Coliform Bacteria (c)	% Positive Monthly Samples	TT	MCLG = 0	NA	Range						0 - 0.3	Naturally present in the environment
					Average						0.07	
Escherichia coli (E. coli) (d)	Number of Positive Samples	1	MCLG = 0	NA	Number of Positive Samples						0	Human and animal fecal waste
Heterotrophic Plate Count (HPC) Bacteria (e)	CFU/mL	TT	NA	(1)	Range	ND	ND	ND	ND	ND		Naturally present in the environment
					Median							
Cryptosporidium	oocysts/200 L	TT	MCLG = 0	(1)	Range	ND	ND	ND	ND	ND		Human and animal fecal waste
					Average							
Giardia	cysts/200 L	TT	MCLG = 0	(1)	Range	ND	ND	ND	ND	ND		Human and animal fecal waste
					Average							
ORGANIC CHEMICALS												
Synthetic Organic Compounds (f)												
1,2,3-Trichloropropane (1,2,3-TCP)	ppt	5	0.7	5	Range	ND	ND	ND	ND	ND		Discharge from industrial and agrichemical factories; byproduct of producing other compounds and pesticides; leaching from hazardous waste sites
					Average							
2,4,5-TP (Silvex)	ppb	50	3	1	Range	ND	ND	ND	ND	ND		Residue of banned herbicide
					Average							
2,4-D	ppb	70	20	10	Range	ND	ND	ND	ND	ND		Runoff from herbicide used on row crops, rangeland, lawns, and aquatic weeds
					Average							
Acrylamide (g)	ppm	TT	MCLG = 0	NA	Range	NA	NA	NA	NA	NA		Water treatment chemical impurities
					Average							
Alachlor	ppb	2	4	1	Range	ND	ND	ND	ND	ND		Runoff from herbicide used on row crops
					Average							
Atrazine	ppb	1	0.15	0.5	Range	ND	ND	ND	ND	ND		Runoff from herbicide used on row crops and along railroad and highway right-of-ways
					Average							
Bentazon	ppb	18	200	2	Range	ND	ND	ND	ND	ND		Runoff/leaching from herbicide used on beans, peppers, corn, peanuts, rice, and ornamental grasses
					Average							
Benzo(a)pyrene	ppt	200	7	100	Range	ND	ND	ND	ND	ND		Leaching from linings and coatings of water storage tanks and distribution mains
					Average							
Carbofuran	ppb	18	0.7	5	Range	ND	ND	ND	ND	ND		Leaching of soil fumigant used on rice, alfalfa, and grape vineyards
					Average							
Chlordane	ppt	100	30	100	Range	ND	ND	ND	ND	ND		Residue of banned insecticide
					Average							
Dalapon	ppb	200	790	10	Range	ND	ND	ND	ND	ND		Runoff from herbicide used on right-of-ways, and crops and landscape maintenance
					Average							
Di(2-ethylhexyl)adipate	ppb	400	200	5	Range	ND	ND	ND	ND	ND		Discharge from chemical factories
					Average							
Di(2-ethylhexyl)phthalate	ppb	4	12	3	Range	ND	ND	ND	ND	ND		Discharge from rubber and chemical factory; inert ingredient in pesticides
					Average							
Dibromochloropropane (DBCP)	ppt	200	3	10	Range	ND	ND	ND	ND	ND		Banned nematocide that may still be present in soils due to runoff/leaching
					Average							

Parameter	Units	State MCL	PHG	State DLR/ CCRDL (RL)	Range Average	Treatment Plant Effluent *						Major Sources in Drinking Water
						Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant	Distribution System	
Dinoseb	ppb	7	14	2	Range	ND	ND	ND	ND	ND		Runoff from herbicide used on soybeans, vegetables, and fruits
					Average							
Dioxin (2,3,7,8-TCDD)	ppq	30	0.05	5	Range	ND	ND	ND	ND	ND		Waste incineration emissions; chemical factory discharge
					Average							
Diquat	ppb	20	6	4	Range	ND	ND	ND	ND	ND		Runoff from herbicide used for terrestrial and aquatic weeds
					Average							
Endothall	ppb	100	94	45	Range	ND	ND	ND	ND	ND		Runoff from herbicide used for terrestrial and aquatic weeds; defoliant
					Average							
Endrin	ppb	2	0.3	0.1	Range	ND	ND	ND	ND	ND		Residue of banned insecticide and rodenticide
					Average							
Epichlorohydrin (g)	ppm	TT	MCLG = 0	NA	Range	NA	NA	NA	NA	NA		Water treatment chemical impurities
					Average							
Ethylene Dibromide (EDB)	ppt	50	10	20	Range	ND	ND	ND	ND	ND		Petroleum refinery discharges; underground gas tank leaks; banned nematocide that may still be present in soils due to runoff and leaching
					Average							
Glyphosate	ppb	700	900	25	Range	ND	ND	ND	ND	ND		Runoff from herbicide use
					Average							
Heptachlor	ppt	10	8	10	Range	ND	ND	ND	ND	ND		Residue of banned insecticide
					Average							
Heptachlor Epoxide	ppt	10	6	10	Range	ND	ND	ND	ND	ND		Breakdown product of heptachlor
					Average							
Hexachlorobenzene	ppb	1	0.03	0.5	Range	ND	ND	ND	ND	ND		Discharge from metal refineries and agrichemicals factories; wastewater chlorination reaction byproduct
					Average							
Hexachlorocyclopentadiene	ppb	50	2	1	Range	ND	ND	ND	ND	ND		Discharge from chemical factories
					Average							
Lindane	ppt	200	32	200	Range	ND	ND	ND	ND	ND		Runoff/leaching from insecticide used on cattle, lumber, and gardens
					Average							
Methoxychlor	ppb	30	0.09	10	Range	ND	ND	ND	ND	ND		Runoff/leaching from insecticide uses on fruits, vegetables, alfalfa, and livestock
					Average							
Molinate (Ordram)	ppb	20	1	2	Range	ND	ND	ND	ND	ND		Runoff/leaching from herbicide used on rice
					Average							
Oxamyl (Vydate)	ppb	50	26	20	Range	ND	ND	ND	ND	ND		Runoff/leaching from insecticide uses
					Average							
Pentachlorophenol	ppb	1	0.3	0.2	Range	ND	ND	ND	ND	ND		Discharge from wood preserving factories, and other insecticidal and herbicidal uses
					Average							
Picloram	ppb	500	166	1	Range	ND	ND	ND	ND	ND		Herbicide runoff
					Average							
Polychlorinated Biphenyls (PCBs)	ppt	500	90	500	Range	ND	ND	ND	ND	ND		Runoff from landfills; discharge of waste chemicals
					Average							
Simazine	ppb	4	4	1	Range	ND	ND	ND	ND	ND		Herbicide runoff
					Average							
Thiobencarb	ppb	70	42	1	Range	ND	ND	ND	ND	ND		Runoff/leaching from herbicide used on rice
					Average							
Toxaphene	ppb	3	0.03	1	Range	ND	ND	ND	ND	ND		Runoff/leaching from insecticide used on cotton and cattle
					Average							
Volatile Organic Compounds												
1,1,1-Trichloroethane	ppb	200	1,000	0.5	Range	ND	ND	ND	ND	ND		Metal degreasing site discharge; manufacture of food wrappings
					Average							
1,1,2,2-Tetrachloroethane	ppb	1	0.1	0.5	Range	ND	ND	ND	ND	ND		Discharge from industrial and agrichemical factories; solvent used in production of TCE, pesticides, varnish, and lacquers
					Average							

Parameter	Units	State MCL	PHG	State DLR/ CCRDL (RL)	Range Average	Treatment Plant Effluent *						Major Sources in Drinking Water
						Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant	Distribution System	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	ppm	1.2	4	0.01	Range	ND	ND	ND	ND	ND		Discharge from metal degreasing sites and other factories; dry cleaning solvent; refrigerant
					Average							
1,1,2-Trichloroethane	ppb	5	0.3	0.5	Range	ND	ND	ND	ND	ND		Discharge from industrial chemical factories
					Average							
1,1-Dichloroethane	ppb	5	3	0.5	Range	ND	ND	ND	ND	ND		Extraction and degreasing solvent; fumigant
					Average							
1,1-Dichloroethylene	ppb	6	10	0.5	Range	ND	ND	ND	ND	ND		Discharge from industrial chemical factories
					Average							
1,2,4-Trichlorobenzene	ppb	5	5	0.5	Range	ND	ND	ND	ND	ND		Discharge from textile-finishing factories
					Average							
1,2-Dichlorobenzene	ppb	600	600	0.5	Range	ND	ND	ND	ND	ND		Discharge from industrial chemical factories
					Average							
1,2-Dichloroethane	ppt	500	400	500	Range	ND	ND	ND	ND	ND		Discharge from industrial chemical factories
					Average							
1,2-Dichloropropane	ppb	5	0.5	0.5	Range	ND	ND	ND	ND	ND		Industrial chemical factory discharge; primary component of some fumigants
					Average							
1,3-Dichloropropene	ppt	500	200	500	Range	ND	ND	ND	ND	ND		Runoff/leaching from nematocide used on croplands
					Average							
1,4-Dichlorobenzene	ppb	5	6	0.5	Range	ND	ND	ND	ND	ND		Discharge from industrial chemical factories
					Average							
Benzene	ppb	1	0.15	0.5	Range	ND	ND	ND	ND	ND		Plastics factory discharge; gas tanks and landfill leaching
					Average							
Carbon Tetrachloride	ppt	500	100	500	Range	ND	ND	ND	ND	ND		Discharge from chemical plants and other industrial waste
					Average							
cis -1,2-Dichloroethylene	ppb	6	13	0.5	Range	ND	ND	ND	ND	ND		Industrial chemical factory discharge; byproduct of TCE and PCE biodegradation
					Average							
Dichloromethane (Methylene Chloride)	ppb	5	4	0.5	Range	ND	ND	ND	ND	ND		Discharge from pharmaceutical and chemical factories; insecticide
					Average							
Ethylbenzene	ppb	300	300	0.5	Range	ND	ND	ND	ND	ND		Petroleum refinery discharge; industrial chemical factories
					Average							
Methyl-*tert* -butyl ether (MTBE)	ppb	13	13	3	Range	ND	ND	ND	ND	ND		Gasoline discharge from watercraft engines
					Average							
Monochlorobenzene	ppb	70	70	0.5	Range	ND	ND	ND	ND	ND		Discharge from industrial and agrichemical factories, and dry cleaners
					Average							
Styrene	ppb	100	0.5	0.5	Range	ND	ND	ND	ND	ND		Rubber and plastics factories discharge; landfill leaching
					Average							
Tetrachloroethylene (PCE)	ppb	5	0.06	0.5	Range	ND	ND	ND	ND	ND		Discharge from factories, dry cleaners, and auto shops
					Average							
Toluene	ppb	150	150	0.5	Range	ND	ND	ND	ND	ND		Discharge from petroleum and chemical refineries
					Average							
trans -1,2-Dichloroethylene	ppb	10	50	0.5	Range	ND	ND	ND	ND	ND		Industrial chemical factory discharge; byproduct of TCE and PCE biodegradation
					Average							
Trichloroethylene (TCE)	ppb	5	1.7	0.5	Range	ND	ND	ND	ND	ND		Discharge from metal degreasing sites and other factories
					Average							
Trichlorofluoromethane (Freon-11)	ppb	150	1,300	5	Range	ND	ND	ND	ND	ND		Industrial factory discharge; degreasing solvent; propellant and refrigerant
					Average							
Vinyl Chloride	ppt	500	50	500	Range	ND	ND	ND	ND	ND		Leaching from PVC piping; plastic factory discharge; byproduct of TCE and PCE biodegradation
					Average							

Parameter	Units	State MCL	PHG	State DLR/ CCRDL (RL)	Range Average	Treatment Plant Effluent *						Major Sources in Drinking Water
						Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant	Distribution System	
Xylenes, Total	ppm	1.750	1.8	0.0005	Range	ND	ND	ND	ND	ND		Discharge from petroleum and chemical refineries; fuel solvent
					Average							
INORGANIC CHEMICALS												
Aluminum (h)	ppb	1,000	600	50	Range	ND - 70	ND - 83	ND - 68	ND - 110	ND - 71		Residue from water treatment process; runoff and leaching from natural deposits
					Highest RAA	105	ND	60	113	115		
Antimony	ppb	6	1	6	Range	ND	ND	ND	ND	ND		Petroleum refinery discharges; fire retardants; solder; electronics
					Average							
Arsenic	ppb	10	0.004	2	Range	ND	ND	ND	ND	ND		Natural deposits erosion, glass and electronics production wastes
					Average							
Asbestos (i)	MFL	7	7	0.2	Range	ND	ND	ND	ND	ND		Asbestos cement pipes internal corrosion; runoff and leaching from natural deposits
					Average							
Barium	ppb	1,000	2,000	100	Range	ND	ND	ND	116	ND		Oil and metal refineries discharge; natural deposits erosion
					Average							
Beryllium	ppb	4	1	1	Range	ND	ND	ND	ND	ND		Discharge from metal refineries, aerospace, and defense industries
					Average							
Cadmium	ppb	5	0.04	1	Range	ND	ND	ND	ND	ND		Internal corrosion of galvanized pipes; discharge from electroplating, industrial factories, and metal refineries; runoff from waste batteries and paints; natural deposits erosion
					Average							
Chromium	ppb	50	MCLG = 100	10	Range	ND	ND	ND	ND	ND		Discharge from steel and pulp mills; natural deposits erosion
					Average							
Copper (j)	ppm	AL = 1.3	0.3	0.05	Range	ND	ND	ND	ND	ND		Internal corrosion of household pipes; runoff/leaching from natural deposits; wood preservatives leaching
					Average							
Cyanide	ppb	150	150	100	Range	ND	ND	ND	ND	ND		Discharge from steel/metal, plastic, and fertilizer factories
					Average							
Fluoride (k)	ppm	2.0	1	0.1	Range	0.6 - 0.8	0.6 - 0.8	0.6 - 0.8	0.6 - 0.8	0.6 - 0.8	0.5 - 0.8	Runoff and leaching from natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
					Average	0.7	0.7	0.7	0.7	0.7	0.7	
Lead (j)	ppb	AL = 15	0.2	5	Range	ND	ND	ND	ND	ND		Internal corrosion of household water plumbing systems; industrial manufacturers' discharge; runoff and leaching from natural deposits
					Average							
Mercury	ppb	2	1.2	1	Range	ND	ND	ND	ND	ND		Erosion of natural deposits; factory discharge; landfill runoff
					Average							
Nickel	ppb	100	12	10	Range	ND	ND	ND	ND	ND		Erosion of natural deposits; discharge from metal factories
					Average							
Nitrate (as Nitrogen)	ppm	10	10	0.4	Range	0.7	1.0	0.8	ND	0.8		Runoff and leaching from fertilizer use; septic tank and sewage; natural deposits erosion
					Average							
Nitrite (as Nitrogen)	ppm	1	1	0.4	Range	ND	ND	ND	ND	ND		Runoff and leaching from fertilizer use; septic tank and sewage; natural deposits erosion
					Average							
Perchlorate	ppb	6	1	2	Range	ND	ND	ND	ND	ND		Naturally-occurring in arid regions; industrial waste discharge
					Average							
Selenium	ppb	50	30	5	Range	ND	ND	ND	ND	ND		Refineries, mines, and chemical waste discharge; runoff from livestock lots
					Average							
Thallium	ppb	2	0.1	1	Range	ND	ND	ND	ND	ND		Leaching from ore processing; discharge from electronics, glass, and pharmaceutical factories
					Average							
RADIOLOGICALS (l)												
Gross Alpha Particle Activity	pCi/L	15	MCLG = 0	3	Range	ND - 5	ND	ND	ND - 4	ND		Runoff/leaching from natural deposits
					Average	ND			ND			
Gross Beta Particle Activity	pCi/L	50	MCLG = 0	4	Range	ND - 6	ND	ND - 4	ND - 8	ND - 6		Decay of natural and man-made deposits
					Average	ND		ND	ND	ND		
Radium-226	pCi/L	NA	0.05	1	Range	ND	ND	ND	ND	ND		Erosion of natural deposits
					Average							

Parameter	Units	State MCL	PHG	State DLR/ CCRDL (RL)	Range Average	Treatment Plant Effluent *						Major Sources in Drinking Water
						Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant	Distribution System	
Radium-228	pCi/L	NA	0.019	1	Range	ND	ND	ND - 1	ND	ND		Erosion of natural deposits
					Average			ND				
Combined Radium-226 + 228	pCi/L	5	MCLG = 0	NA	Range	ND	ND	ND - 1	ND	ND		Erosion of natural deposits
					Average			ND				
Strontium-90	pCi/L	8	0.35	2	Range	ND	ND	ND	ND	ND		Decay of natural and man-made deposits
					Average							
Tritium	pCi/L	20,000	400	1,000	Range	ND	ND	ND	ND	ND		Decay of natural and man-made deposits
					Average							
Uranium	pCi/L	20	0.43	1	Range	ND - 3	2 - 3	ND	ND - 3	ND - 3		Erosion of natural deposits
					Average	1	2		2	ND		
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS (m)												
Total Trihalomethanes (TTHM) (n) (Plant Core Locations and Distribution System)	ppb	80	NA	1.0	Range	29 - 68	16 - 56	18 - 67	21 - 37	18 - 34	16 - 74	Byproducts of drinking water chlorination
					Highest LRAA	45	32	50	31	26	50	
Sum of Five Haloacetic Acids (HAA5) (n) (Plant Core Locations and Distribution System)	ppb	60	NA	1.0	Range	5.0 - 32	2.8 - 7.1	ND - 32	1.7 - 26	ND - 8.9	ND - 33	
					Highest LRAA	19	6.3	14	15	6.2	19	
Total Chlorine Residual	ppm	MRDL = 4.0	MRDL = 4.0	(0.05)	Range						1.2 - 3.0	Drinking water disinfectant added for treatment
					Highest RAA						2.5	
Bromate	ppb	10	0.1	1.0	Range	ND - 6.3	ND - 14	ND - 20	ND - 2.6	ND - 12		Byproduct of drinking water ozonation
					Highest RAA	ND	7.6	6.7	ND	2.4		
Total Organic Carbon (TOC)	ppm	TT	NA	0.30	Range	2.1 - 3.0	1.4 - 2.6	1.8 - 2.7	2.3 - 3.0	1.8 - 3.0		Various natural and man-made sources; TOC is a precursor for the formation of disinfection byproducts
					Highest RAA	2.4	2.1	2.2	2.6	2.4		
SECONDARY STANDARDS—Aesthetic Standards												
Aluminum (h)	ppb	200	600	50	Range	ND - 70	ND - 83	ND - 68	ND - 110	ND - 71		Residue from water treatment process; runoff and leaching from natural deposits
					Highest RAA	105	ND	60	113	115		
Chloride	ppm	500	NA	(2)	Range	42 - 91	48 - 58	38 - 44	72 - 110	34 - 55		Runoff/leaching from natural deposits; seawater influence
					Average	66	53	41	91	44		
Color	Color Units	15	NA	(1)	Range	1 - 2	1	1	1	1		Naturally-occurring organic materials
					Average	2						
Copper (j)	ppm	1.0	0.3	0.05	Range	ND	ND	ND	ND	ND		Internal corrosion of household pipes; runoff/leaching from natural deposits; wood preservatives leaching
					Average							
Foaming Agents - Methylene Blue Active Substances (MBAS)	ppb	500	NA	(50)	Range	ND	ND	ND	ND	ND		Municipal and industrial waste discharges
					Average							
Iron	ppb	300	NA	100	Range	ND	ND	ND	ND	ND		Leaching from natural deposits; industrial wastes
					Average							
Manganese	ppb	50	NL = 500	(5)	Range	ND	ND	ND	ND	ND		Leaching from natural deposits
					Average							
MTBE	ppb	5	13	3	Range	ND	ND	ND	ND	ND		Gasoline discharge from watercraft engines
					Average							
Odor Threshold	TON	3	NA	1	Range	2	2	2	2	2		Naturally-occurring organic materials
					Average							
Silver	ppb	100	NA	10	Range	ND	ND	ND	ND	ND		Industrial discharges
					Average							
Specific Conductance	µS/cm	1,600	NA	NA	Range	424 - 859	578 - 604	357 - 359	664 - 1,040	357 - 507		Substances that form ions in water; seawater influence
					Average	642	591	358	852	432		
Sulfate	ppm	500	NA	0.5	Range	70 - 175	95 - 112	32 - 50	113 - 236	51 - 72		Runoff/leaching from natural deposits; industrial wastes
					Average	122	104	41	174	62		
Thiobencarb	ppb	1	42	1	Range	ND	ND	ND	ND	ND		Runoff/leaching from rice herbicide
					Average							

Parameter	Units	State MCL	PHG	State DLR/ CCRDL (RL)	Range Average	Treatment Plant Effluent *						Major Sources in Drinking Water
						Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant	Distribution System	
Total Dissolved Solids, Filterable (TDS) (o)	ppm	1,000	NA	(2)	Range	253 - 534	357 - 367	200 - 207	401 - 670	209 - 296		Runoff/leaching from natural deposits
					Average	394	362	204	536	252		
Turbidity	NTU	5	NA	0.1	Range	ND	ND	ND	ND	ND		Soil runoff
					Average							
Zinc	ppm	5.0	NA	0.05	Range	ND	ND	ND	ND	ND		Runoff/leaching from natural deposits; industrial wastes
					Average							
OTHER PARAMETERS												
General Minerals												
Alkalinity, Total (as $CaCO_3$)	ppm	NA	NA	(1)	Range	66 - 102	85 - 102	57 - 64	92 - 125	65 - 78		Runoff/leaching of natural deposits; carbonate, bicarbonate, hydroxide, and occasionally borate, silicate, and phosphate
					Average	84	94	60	108	72		
Calcium	ppm	NA	NA	(0.1)	Range	25 - 52	39 - 40	17 - 20	39 - 72	20 - 28		Runoff/leaching from natural deposits
					Average	38	40	18	56	24		
Hardness, Total (as $CaCO_3$)	ppm	NA	NA	(1)	Range	99 - 220	138 - 153	79 - 80	165 - 291	81 - 122		Runoff/leaching from natural deposits; sum of polyvalent cations, generally magnesium and calcium present in the water
					Average	160	146	80	228	102		
Magnesium	ppm	NA	NA	(0.01)	Range	9.6 - 21	10 - 12	7.8 - 8.9	15 - 27	7.8 - 13		Runoff/leaching from natural deposits
					Average	15	11	8.4	21	10		
Potassium	ppm	NA	NA	(0.2)	Range	2.6 - 4.3	2.4 - 2.6	2.5	3.6 - 4.8	2.6 - 3.0		Salt present in the water; naturally-occurring
					Average	3.4	2.5		4.2	2.8		
Sodium	ppm	NA	NA	(1)	Range	47 - 91	60 - 68	39 - 40	69 - 103	39 - 55		Salt present in the water; naturally-occurring
					Average	69	64	40	86	47		
Unregulated Contaminants												
Boron	ppb	NL = 1,000	NA	100	Range	130	190	130	130	140		Runoff/leaching from natural deposits; industrial wastes
					Average							
Chlorate	ppb	NL = 800	NA	(10)	Range	19	ND	ND	17	19		Byproduct of drinking water chlorination; industrial processes
					Average							
Chromium VI	ppb	NA	0.02	1	Range	ND	ND	ND	ND	ND		Runoff/leaching from natural deposits; discharge from industrial wastes
					Average							
Lithium	ppb	NA	NA	(10)	Range	ND - 30	ND - 10	ND	18 - 43	ND - 13		Naturally-occurring; used in electrochemical cells, batteries, and organic syntheses and pharmaceuticals
					Average	15	ND		30	ND		
Vanadium	ppb	NL = 50	NA	3	Range	3.1	3.9	3.3	ND	3.4		Naturally-occurring; industrial waste discharge
					Average							
Dichlorodifluoromethane (Freon-12)	ppb	NL = 1,000	NA	0.5	Range	ND	ND	ND	ND	ND		Industrial waste discharge
					Average							
Ethyl-*tert* -butyl ether (ETBE)	ppb	NA	NA	3	Range	ND	ND	ND	ND	ND		Used as gasoline additive
					Average							
tert -Amyl-methyl ether (TAME)	ppb	NA	NA	3	Range	ND	ND	ND	ND	ND		Used as gasoline additive
					Average							
tert -Butyl alcohol (TBA)	ppb	NL = 12	NA	2	Range	ND	ND	ND	ND	ND		MTBE breakdown product; used as gasoline additive
					Average							
Nitrosamine Compounds												
N-Nitrosodimethylamine (NDMA)	ppt	NL = 10	3	(2)	Range	ND	3.5	ND	3.2	ND	ND - 5.3	Byproducts of drinking water chloramination; industrial processes
					Average						2.2	
N-Nitrosodiethylamine (NDEA)	ppt	NL = 10	NA	(2)	Range	ND	ND	ND	ND	ND	ND	
					Average							
N-Nitrosodi-n-propylamine (NDPA)	ppt	NL = 10	NA	(2)	Range	ND	ND	ND	ND	ND	ND	
					Average							
N-Nitrosomethylethylamine (NMEA)	ppt	NA	NA	(2)	Range	ND	ND	ND	ND	ND	ND	
					Average							

Parameter	Units	State MCL	PHG	State DLR/ CCRDL (RL)	Range Average	Treatment Plant Effluent *						Major Sources in Drinking Water
						Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant	Distribution System	
N-Nitrosodi-n-butylamine (NDBA)	ppt	NA	NA	(2)	Range	ND	ND	ND	ND	ND	ND	Byproducts of drinking water chloramination; industrial processes
					Average							
N-Nitrosopyrollidine (NPYR)	ppt	NA	NA	(2)	Range	ND	ND	ND	ND	ND	ND	
					Average							
N-Nitrosopiperidine (NPIP)	ppt	NA	NA	(2)	Range	ND	ND	ND	ND	ND	ND	
					Average							
N-Nitrosomorpholine (NMOR)	ppt	NA	NA	(2)	Range	ND	ND	ND	ND	ND	ND	Industrial processes
					Average							
Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) Analyzed by EPA Methods 533 and 537.1 (p, q)												
Perfluorooctanoic Acid (PFOA)	ppt	NL=5.1	NA	4	Range	ND	ND	ND	ND	ND		Industrial chemical factory discharges; runoff/leaching from landfills; used in fire-retarding foams and various industrial processes
					Average							
Perfluorooctanesulfonic Acid (PFOS)	ppt	NL=6.5	NA	4	Range	ND	ND	ND	ND	ND		
					Average							
Perfluorobutanesulfonic acid (PFBS)	ppt	NL=500	NA	3	Range	ND	ND	ND	ND	ND		
					Average							
Perfluorononanoic acid (PFNA)	ppt	NA	NA	4	Range	ND	ND	ND	ND	ND		
					Average							
Perfluorohexanesulfonic acid (PFHxS)	ppt	NL=3	NA	3	Range	ND	ND	ND	ND	ND		
					Average							
Perfluoroheptanoic acid (PFHpA)	ppt	NA	NA	3	Range	ND	ND	ND	ND	ND		
					Average							
Perfluorodecanoic acid (PFDA)	ppt	NA	NA	3	Range	ND	ND	ND	ND	ND		
					Average							
Perfluorododecanoic acid (PFDoA)	ppt	NA	NA	3	Range	ND	ND	ND	ND	ND		
					Average							
Perfluorohexanoic Acid (PFHxA)	ppt	NA	NA	3	Range	ND	ND	ND	ND	ND		
					Average							
Perfluoroundecanoic acid (PFUnA)	ppt	NA	NA	2	Range	ND	ND	ND	ND	ND		
					Average							
4,8-dioxa-3H-perfluorononanoate (ADONA)	ppt	NA	NA	3	Range	ND	ND	ND	ND	ND		
					Average							
F-53B Major (11Cl-PF3OUdS)	ppt	NA	NA	5	Range	ND	ND	ND	ND	ND		
					Average							
F-53B Minor (9Cl-PF3ONS)	ppt	NA	NA	2	Range	ND	ND	ND	ND	ND		
					Average							
GenX (HFPO-DA)	ppt	NA	NA	5	Range	ND	ND	ND	ND	ND		
					Average							
Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) Analyzed by EPA Method 533 Only (p)												
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	ppt	NA	NA	3	Range	ND	ND	ND	ND	ND		Industrial chemical factory discharges; runoff/leaching from landfills; used in fire-retarding foams and various industrial processes
					Average							
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	ppt	NA	NA	5	Range	ND	ND	ND	ND	ND		
					Average							
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	ppt	NA	NA	5	Range	ND	ND	ND	ND	ND		
					Average							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ppt	NA	NA	4	Range	ND	ND	ND	ND	ND		
					Average							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ppt	NA	NA	3	Range	ND	ND	ND	ND	ND		
					Average							

Parameter	Units	State MCL	PHG	State DLR/ CCRDL (RL)	Range Average	Treatment Plant Effluent *					Distribution System	Major Sources in Drinking Water
						Diemer Plant	Jensen Plant	Mills Plant	Skinner Plant	Weymouth Plant		
Perfluorobutanoic acid (PFBA)	ppt	NA	NA	5	Range	ND	ND	ND	2.0	ND		Industrial chemical factory discharges; runoff/leaching from landfills; used in fire-retarding foams and various industrial processes
					Average							
Perfluoroheptanesulfonic acid (PFHpS)	ppt	NA	NA	3	Range	ND	ND	ND	ND	ND		
					Average							
Perfluoropentanesulfonic acid (PFPeS)	ppt	NA	NA	4	Range	ND	ND	ND	ND	ND		
					Average							
Perfluoropentanoic acid (PFPeA)	ppt	NA	NA	3	Range	ND	ND	ND	ND	ND		
					Average							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ppt	NA	NA	20	Range	ND	ND	ND	ND	ND		
					Average							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ppt	NA	NA	3	Range	ND	ND	ND	ND	ND		
					Average							
Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) Analyzed by EPA Method 537.1 Only (p)												
Perfluorotetradecanoic acid (PFTA)	ppt	NA	NA	8	Range	ND	ND	ND	ND	ND		Industrial chemical factory discharges; runoff/leaching from landfills; used in fire-retarding foams and various industrial processes
					Average							
Perfluorotridecanoic acid (PFTrDA)	ppt	NA	NA	7	Range	ND	ND	ND	ND	ND		
					Average							
N-ethyl Perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ppt	NA	NA	5	Range	ND	ND	ND	ND	ND		
					Average							
N-methyl Perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ppt	NA	NA	6	Range	ND	ND	ND	ND	ND		
					Average							
Miscellaneous (r)												
Calcium Carbonate Precipitation Potential (CCPP) (s) (as $CaCO_3$)	ppm	NA	NA	NA	Range	1.4 - 9.7	1.2 - 7.9	0.6 - 4.1	4.2 - 10	1.3 - 9.4		
					Average	5.7	4.1	2.3	7.1	4.2		
Corrosivity (as Aggressiveness Index) (t)	AI	NA	NA	NA	Range	12.1 - 12.6	12.2 - 12.6	11.9 - 12.1	12.5	12.1 - 12.4		Measures of the balance between pH and calcium carbonate saturation in the water
					Average	12.4	12.4	12.0		12.2		
Corrosivity (as Saturation Index) (u)	SI	NA	NA	NA	Range	0.25 - 0.83	0.19 - 0.79	0.13 - 0.42	0.62 - 0.75	0.21 - 0.58		
					Average	0.54	0.49	0.28	0.68	0.39		
pH	pH Units	NA	NA	NA	Range	8.5	8.2 - 8.6	8.5 - 8.7	8.2 - 8.5	8.6		Not applicable
					Average		8.4	8.6	8.4			
Radon (l)	pCi/L	NA	NA	100	Range	ND	ND	ND	ND	ND		Gas produced by the decay of naturally-occurring uranium in soil and water
					Average							
Total Dissolved Solids, Calculated (TDS) (v)	ppm	1,000	NA	NA	Range	230 - 642	305 - 366	153 - 300	378 - 642	210 - 641		Runoff/leaching from natural deposits
					Average	433	347	228	501	357		
Sum of Five Haloacetic Acids (HAA5) (w)	ppb	60	NA	1.0	Range	5.8 - 21	3.9 - 5.1	4.6 - 25	8.2 - 21	ND - 5.9		Byproducts of drinking water chlorination
					Average	14	4.4	11	13	4.1		
Total Trihalomethanes (TTHM) (w)	ppb	80	NA	1.0	Range	23 - 57	11 - 78	16 - 76	13 - 76	13 - 68		
					Average	38	23	49	30	23		

DEFINITION OF TERMS AND FOOTNOTES

*** As a wholesale water system, Metropolitan provides its member agencies with relevant treated water information and monitoring results that they may need for their annual water quality report. Metropolitan's compliance with state or federal regulations is determined at the treatment plant effluent locations and/or distribution system, or plant influent per frequency stipulated in Metropolitan's State-approved monitoring plan, and is based on TT, RAA, or LRAA, as appropriate. Data above Metropolitan's laboratory reporting limit (RL) but below the State DLR are reported as ND in this report; these data are available upon request. Metropolitan was in compliance with all primary and secondary drinking water regulations for the current monitoring period.**

Note: Metropolitan monitors the distribution system for constituents under the Revised Total Coliform Rule (RTCR), Water Fluoridation Standards, and Disinfectants/Disinfection Byproduct Rule (TTHMs, HAA5, and total chlorine residual), including NDMA. Constituents with grayed out areas in the distribution system column are routinely monitored at treatment plant effluents and not in the distribution system.

(µmho/cm)

Definition of Terms:

AI	Aggressiveness Index
AL	Action Level
Average	Arithmetic mean
$CaCO_3$	Calcium Carbonate
CCPP	Calcium Carbonate Precipitation Potential Consumer
CCRDL	Confidence Report Detection Level Combined Filter
CFE	Effluent
CFU	Colony-Forming Units
DLR	Detection Limit for Purposes of Reporting Environmental
EPA	Protection Agency
HPC	Heterotrophic Plate Count
LRAA	Locational Running Annual Average; highest LRAA is the highest of all LRAAs calculated as an average of all samples collected within a 12-month period
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MFL	Million Fibers per Liter
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
MRL	Minimum Reporting Level
NA	Not Applicable
ND	Not Detected at or above DLR or RL
NL	Notification Level to SWRCB
NTU	Nephelometric Turbidity Units
pCi/L	picoCuries per Liter
PHG	Public Health Goal
ppb	parts per billion or micrograms per liter (µg/L)
ppm	parts per million or milligrams per liter (mg/L)
ppq	parts per quadrillion or picograms per liter (pg/L)
ppt	parts per trillion or nanograms per liter (ng/L)
PWS ID	Public Water System Identification
RAA	Running Annual Average; highest RAA is the highest of all RAAs calculated as an average of all the samples collected within a 12-month period
Range	Minimum and maximum values; range and average values are the same if a single value is reported for samples collected once or twice annually
SI	Saturation Index (Langelier)
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TON	Threshold Odor Number
TT	Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water
UCMR5	Fifth Unregulated Contaminant Monitoring Rule
µS/cm	microSiemen per centimeter; or micromho per centimeter (µmho/cm)

(a) Metropolitan monitors turbidity at the CFE locations using continuous and grab samples. Turbidity, a measure of cloudiness of the water, is an indicator of treatment performance. Turbidity was in compliance with the TT primary drinking water standard and the secondary drinking water standard of less than 5 NTU.

(b) Per the state's Surface Water Treatment Rule, treatment techniques that remove or inactivate Giardia cysts will also remove HPC bacteria, Legionella , and viruses. Legionella and virus monitoring is not required.

(c) Compliance is based on monthly samples from the distribution system.

(d) The E. coli MCL is based on routine and repeat samples testing positive for coliforms and/or E. coli , or failure to analyze required repeat samples. No E. coli were detected in the water treatment system and distribution system. No Level 1 assessment or MCL violations occurred.

(e) Metropolitan analyzes HPC bacteria in plant effluent to monitor treatment process efficacy.

(f) Data are from samples collected in 2021 and reported once every three-year compliance cycle until the next required triennial monitoring in 2024.

(g) Metropolitan uses acrylamide for water treatment processes and was in compliance with the treatment technique requirements regarding its use when treating drinking water. Metropolitan does not use any epichlorohydrins.

(h) Compliance with the State MCL for aluminum is based on RAA. No secondary standard MCL exceedance occurred.

(i) Data are from samples collected in 2020 for the required 9-year monitoring cycle (2020-2028).

(j) As a wholesaler, Metropolitan has no retail customers and is not required to collect samples at consumers' taps. However, compliance monitoring under Title 22 is required at plant effluents.

(k) Metropolitan was in compliance with all provisions of the State's fluoridation requirements. Fluoride feed systems were temporarily out of service during treatment plant shutdowns and/or maintenance work in 2023, resulting in occassional fluoride levels below 0.7 mg/L.

(l) Samples are collected quarterly for gross beta particle activity, and annually for tritium and strontium-90. Gross alpha particle activity, radium, and uranium data are from samples collected quarterly in 2023 for the required triennial monitoring (2023-2025). Radon is also monitored voluntarily with the triennial radionuclides.

(m) Compliance with the State and Federal MCLs is based on RAA or LRAA, as appropriate. Plant core locations for TTHM and HAA5 are service connections specific to each of the treatment plant effluents.

(n) PHG assigned for each THM analyte (bromodichloromethane, bromoform, chloroform, and dibromochloromethane) as 0.06 ppb, 0.5 ppb, 0.4 ppb, and 0.1 ppb, accordingly; and for each HAA5 analyte (monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid) as 53 ppb, 0.2 ppb, 0.1 ppb, 25 ppb, and 0.03 ppb, respectively. Health risk varies with different combinations and ratios of the other THMs and HAA5 in a particular sample.

(o) Metropolitan's TDS compliance data are based on flow-weighted monthly composite samples collected twice per year (April and October). The 12-month statistical summary of flow-weighted data is reported in the "Other Parameters" section.

(p) CCRDL is based on the EPA UCMR5 MRLs for the 29 constituents detected by EPA Methods 533 and 537.1. Results below CCRDLs are considered "ND". PFAS results below the CCRDLs but above the RLs are included in this report.

(q) Data are the average of the results from the two analytical methods.

(r) Data are from voluntary monitoring of constituents and are provided for informational purposes.

(s) Positive CCPP indicates non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative CCPP indicates corrosive; tendency to dissolve calcium carbonate. Reference: Standard Method 2330

(t) AI ≥ 12.0 indicates non-aggressive water; AI 10.0-11.9 indicates moderately aggressive water; AI ≤ 10.0 indicates highly aggressive water. Reference: ANSI/AWWA Standard C400-93 (R98)

(u) Positive SI indicates non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative SI indicates corrosive; tendency to dissolve calcium carbonate. Reference: Standard Method 2330

(v) Statistical summary represents 12 months of flow-weighted data and values may be different than the TDS reported to meet compliance with secondary drinking water standards. Metropolitan's calculated TDS goal is 500 mg/L

(w) HAA5 and TTHM noncompliance samples were collected at the treatment plant effluents.

2023 PERRIS WELLS 56, 57, 59

NOTE: Well is inactive, Well 57 offline in 2023

DETECTED CONSTITUENTS			2023	2023
Constituent	**Units**	**DLR Value**	**Range**	**Average**
PRIMARY STANDARDS				
Arsenic	µg/L	2	No Range	2.2
Barium	µg/L	100	No Range	215
Fluoride	mg/L	0.1	No Range	0.4
Gross Alpha	pCi/L	3	No Range	5.2
Gross Beta	pCi/L	4	No Range	9.6
Nitrate as N	mg/L	0.4	5.4 - 6.1	5.7
Perchlorate	µg/L	2	No Range	2.4
Uranium	pCi/L	1	No Range	1.8
SECONDARY STANDARDS				
Chloride	mg/L	null	No Range	232
EC - Specific Conductance	µmhos/cm	null	No Range	1110
Sulfate	mg/L	0.5	No Range	51
Total Dissolved Solids	mg/L	null	776 - 848	812
OTHER PARAMETERS				
Aggressive Index (Corrosivity)	units	null	No Range	11.3
Alkalinity, Total as CaCO3	mg/L	null	No Range	122
Bicarbonate (HCO3)	mg/L	null	No Range	149
Boron	µg/L	100	No Range	372
Calcium	mg/L	null	No Range	90
Hardness	mg/L	null	No Range	336
Hardness	gr/gal	null	No Range	20
Langelier Index	units	null	No Range	-0.60
Magnesium	mg/L	null	No Range	27
Odor at 60 degrees C	TON	null	No Range	1
pH, field	pH unit	null	No Range	6.9
Potassium	mg/L	null	No Range	3.0
Silica	mg/L	null	No Range	47
Sodium	mg/L	null	No Range	98
Total Organic Carbon (TOC)	mg/L	0.3	No Range	0.3

NON-DETECTED CONSTITUENTS			2023	2023
Constituent	**Units**	**DLR Value**	**Range**	**Average**
1,1-Dichloroethane	µg/L	0.5	No Range	ND
1,1-Dichloroethene	µg/L	0.5	No Range	ND
1,1,1-Trichloroethane	µg/L	0.5	No Range	ND
1,1,2-Trichloroethane	µg/L	0.5	No Range	ND
1,1,2,2-Tetrachloroethane	µg/L	0.5	No Range	ND
1,2-Dibromo-3-Chloropropane	µg/L	0.01	No Range	ND
1,2-Dichlorobenzene	µg/L	0.5	No Range	ND

PERRIS WELLS

NON-DETECTED CONSTITUENTS			2023	2023
Constituent	**Units**	**DLR Value**	**Range**	**Average**
1,2-Dichloroethane	µg/L	0.5	No Range	ND
1,2-Dichloropropane	µg/L	0.5	No Range	ND
1,2,3-Trichloropropane (TCP)	µg/L	0.005	No Range	ND
1,2,4-Trichlorobenzene	µg/L	0.5	No Range	ND
1,3-Dichloropropene (Total)	µg/L	0.5	No Range	ND
1,4-Dichlorobenzene	µg/L	0.5	No Range	ND
2,3,7,8-TCDD (Dioxin)	pg/L	5	No Range	ND
2,4-D	µg/L	10	No Range	ND
2,4,5-TP	µg/L	1	No Range	ND
Alachlor	µg/L	1	No Range	ND
Aluminum	µg/L	50	No Range	ND
Antimony	µg/L	6	No Range	ND
Atrazine	µg/L	0.5	No Range	ND
Bentazon	µg/L	2	No Range	ND
Benzene	µg/L	0.5	No Range	ND
Benzo (a) pyrene	µg/L	0.1	No Range	ND
Beryllium	µg/L	1	No Range	ND
Bis(2-ethylhexyl)adipate	µg/L	5	No Range	ND
Bis(2-ethylhexyl)phthalate	µg/L	3	No Range	ND
Cadmium	µg/L	1	No Range	ND
Carbofuran	µg/L	5	No Range	ND
Carbonate (CO3)	mg/L	null	No Range	ND
Carbon Tetrachloride	µg/L	0.5	No Range	ND
Chlordane	µg/L	0.1	No Range	ND
Chlorobenzene	µg/L	0.5	No Range	ND
Chromium (Total)	µg/L	10	No Range	ND
cis-1,2-Dichloroethene	µg/L	0.5	No Range	ND
Color - Apparent	units	3	No Range	ND
Copper	µg/L	50	No Range	ND
Cyanide	µg/L	100	No Range	ND
Dalapon	µg/L	10	No Range	ND
Dinoseb	µg/L	2	No Range	ND
Diquat	µg/L	4	No Range	ND
Endothall	µg/L	45	No Range	ND
Endrin	µg/L	0.1	No Range	ND
Ethylbenzene	µg/L	0.5	No Range	ND
Ethylene Dibromide (EDB)	µg/L	0.02	No Range	ND
Foaming Agents (MBAS)	mg/L	null	No Range	ND
gamma-BHC (Lindane)	µg/L	0.2	No Range	ND
Glyphosate	µg/L	25	No Range	ND
Heptachlor	µg/L	0.01	No Range	ND

NON-DETECTED CONSTITUENTS			2023	2023
Constituent	**Units**	**DLR Value**	**Range**	**Average**
Heptachlor epoxide	µg/L	0.01	No Range	ND
Hexachlorobenzene	µg/L	0.5	No Range	ND
Hexachlorocyclopentadiene	µg/L	1	No Range	ND
Hydroxide (OH)	mg/L	null	No Range	ND
Iron	µg/L	100	No Range	ND
Lead	µg/L	5	No Range	ND
Manganese	µg/L	20	No Range	ND
Mercury	µg/L	1	No Range	ND
Methoxychlor	µg/L	10	No Range	ND
Methyl-Tert-Butyl-Ether (MTBE)	µg/L	3	No Range	ND
Methylene Chloride	µg/L	0.5	No Range	ND
Molinate	µg/L	2	No Range	ND
Nickel	µg/L	10	No Range	ND
Nitrite as N	mg/L	0.4	No Range	ND
Oxamyl	µg/L	20	No Range	ND
PCBs-Total	µg/L	0.5	No Range	ND
Pentachlorophenol	µg/L	0.2	No Range	ND
Picloram	µg/L	1	No Range	ND
Radium 226	pCi/L	1	No Range	ND
Radium 228	pCi/L	1	No Range	ND
Selenium	µg/L	5	No Range	ND
Silver	µg/L	10	No Range	ND
Simazine	µg/L	1	No Range	ND
Styrene	µg/L	0.5	No Range	ND
Tetrachloroethene	µg/L	0.5	No Range	ND
Thallium	µg/L	1	No Range	ND
Thiobencarb	µg/L	1	No Range	ND
Toluene	µg/L	0.5	No Range	ND
Toxaphene	µg/L	1	No Range	ND
trans-1,2-Dichloroethene	µg/L	0.5	No Range	ND
Trichloroethene	µg/L	0.5	No Range	ND
Trichlorofluoromethane	µg/L	5	No Range	ND
Trichlorotrifluoroethane	µg/L	10	No Range	ND
Turbidity, Laboratory	NTU	0.1	No Range	ND
Vinyl Chloride	µg/L	0.5	No Range	ND
Xylenes (Total)	µg/L	0.5	No Range	ND
Zinc	µg/L	50	No Range	ND

PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES					
Constituent	**Abbreviation**	**Units**	**CCRDL (ng/L)**	**Range**	**Average**
11-chloroeicosafluoro-3oxaundecane-1-sulfonic acid	11Cl-PF3OUds	ng/L	5	No Range	ND
1H,1H, 2H, 2H-Perfluorodecane sulfonic a	8:2FTS	ng/L	5	No Range	ND
1H,1H, 2H, 2H-Perfluorohexane sulfonic a	4:2FTS	ng/L	3	No Range	ND
1H,1H, 2H, 2H-Perfluorooctane sulfonic a	6:2FTS	ng/L	5	No Range	ND
4,8-dioxa-3H-perfluorononanoic acid	ADONA	ng/L	3	No Range	ND
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9Cl-PF3ONS	ng/L	2	No Range	ND
Hexafluoropropylene oxide dimer acid	HFPO-DA (GenX)	ng/L	5	No Range	ND
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	ng/L	5	No Range	ND
N-methyl perfluorooctanesulfonamidoacetic acid	NMEFOSAA	ng/L	6	No Range	ND
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	ng/L	20	No Range	ND
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	ng/L	3	No Range	ND
Perfluoro-3-methoxypropanoic acid	PFMPA	ng/L	4	No Range	ND
Perfluoro-4-methoxybutanoic acid	PFMBA	ng/L	3	No Range	ND
Perfluorobutanesulfonic acid	PFBS	ng/L	3	ND - 13	ND
Perfluorobutanoic acid	PFBA	ng/L	5	ND - 32	21
Perfluorodecanoic Acid	PFDA	ng/L	4	No Range	ND
Perfluorododecanoic acid	PFDoA	ng/L	4	No Range	ND
Perfluoroheptanesulfonic acid	PFHpS	ng/L	3	No Range	ND
Perfluoroheptanoic acid	PFHpA	ng/L	3	ND - 4.6	ND
Perfluorohexane sulfonic acid	PFHxS	ng/L	3	No Range	ND
Perfluorohexanoic acid	PFHxA	ng/L	3	ND - 82	18
Perfluorononanoic acid	PFNA	ng/L	4	No Range	ND
Perfluorooctane sulfonic acid	PFOS	ng/L	4	No Range	ND
Perfluorooctanoic Acid	PFOA	ng/L	4	No Range	ND
Perfluoropentanesulfonic acid	PFPeS	ng/L	4	No Range	ND
Perfluoropentanoic acid	PFPeA	ng/L	3	ND - 100	41
Perfluorotetradecanoic Acid	PFTA	ng/L	8	No Range	ND
Perfluorotridecanoic acid	PFTrDA	ng/L	7	No Range	ND
Perfluoroundecanoic acid	PFUnA	ng/L	2	No Range	ND
*CCRDL: Consumer Confidence Report Detection Levels					
**PFAS data from compliance point after treatment, Well 59 Train AB Efluent					

UCMR5			**2023**	**2023**
Constituent	**Units**	**DLR Value**	**Range**	**Average**
Lithium	µg/L	9	No Range	13

2023 PERRIS WATER FILTRATION PLANT

Combined Filter Effluent Turbidity	2023
Highest NTU	0.88
% < = 0.1	99.36

DETECTED CONSTITUENTS			2023	2023
Constituent	**Units**	**DLR Value**	**Range**	**Average**
PRIMARY STANDARDS				
Arsenic	µg/L	2	No Range	2.3
Fluoride	mg/L	0.1	ND - 0.33	0.11
Gross Alpha	pCi/L	3	No Range	4.2
Gross Beta	pCi/L	4	No Range	7.1
Nitrate as N	mg/L	0.4	ND - 0.91	0.32
SECONDARY STANDARDS				
Chloride	mg/L	null	54 - 116	93
EC - Specific Conductance	µmhos/cm	null	374 - 1080	694
Sulfate	mg/L	0.5	26 - 229	90
Total Dissolved Solids	mg/L	null	214 - 691	413
OTHER PARAMETERS				
Aggressive Index (Corrosivity)	units	null	11.3 - 12.7	12.1
Alkalinity, Total as CaCO3	mg/L	null	66 - 143	110
Bicarbonate (HCO3)	mg/L	null	81 - 174	134
Boron	µg/L	100	107 - 201	169
Calcium	mg/L	null	19 - 78	41
HAA5 - Haloacetic Acids (Five)	µg/L	1	ND - 29	9.6
Hardness	mg/L	null	82 - 307	170
Hardness	gr/gal	null	4.8 - 18	9.9
Langelier Index	units	null	-0.51 - 0.77	0.25
Magnesium	mg/L	null	8.7 - 28	17
Odor at 60 degrees C	TON	null	No Range	1
pH, Field	pH unit	null	7.8 - 8.7	8.1
Potassium	mg/L	null	2.5 - 5.6	4.1
Silica	mg/L	null	2.2 - 13	8.0
Sodium	mg/L	null	39 - 115	77
Total Organic Carbon (TOC)	mg/L	0.3	2.2 - 3.4	2.8
Total Trihalomethanes (TTHM)	µg/L	1	15 - 51	32

NON-DETECTED CONSTITUENTS			2023	2023
Constituent	**Units**	**DLR Value**	**Range**	**Average**
1,1-Dichloroethane	µg/L	0.5	No Range	ND
1,1-Dichloroethene	µg/L	0.5	No Range	ND
1,1,1-Trichloroethane	µg/L	0.5	No Range	ND
1,1,2-Trichloroethane	µg/L	0.5	No Range	ND
1,1,2,2-Tetrachloroethane	µg/L	0.5	No Range	ND
1,2-Dibromo-3-Chloropropane	µg/L	0.01	No Range	ND
1,2-Dichlorobenzene	µg/L	0.5	No Range	ND

NON-DETECTED CONSTITUENTS			2023	2023
Constituent	**Units**	**DLR Value**	**Range**	**Average**
1,2-Dichloroethane	µg/L	0.5	No Range	ND
1,2-Dichloropropane	µg/L	0.5	No Range	ND
1,2,3-Trichloropropane (TCP)	µg/L	0.005	No Range	ND
1,2,4-Trichlorobenzene	µg/L	0.5	No Range	ND
1,3-Dichloropropene (Total)	µg/L	0.5	No Range	ND
1,4-Dichlorobenzene	µg/L	0.5	No Range	ND
2,3,7,8-TCDD (Dioxin)	pg/L	5	No Range	ND
2,4-D	µg/L	10	No Range	ND
2,4,5-TP	µg/L	1	No Range	ND
Alachlor	µg/L	1	No Range	ND
Aluminum	µg/L	50	No Range	ND
Antimony	µg/L	6	No Range	ND
Atrazine	µg/L	0.5	No Range	ND
Barium	µg/L	100	No Range	ND
Bentazon	µg/L	2	No Range	ND
Benzene	µg/L	0.5	No Range	ND
Benzo (a) pyrene	µg/L	0.1	No Range	ND
Beryllium	µg/L	1	No Range	ND
Bis(2-ethylhexyl)adipate	µg/L	5	No Range	ND
Bis(2-ethylhexyl)phthalate	µg/L	3	No Range	ND
Cadmium	µg/L	1	No Range	ND
Carbofuran	µg/L	5	No Range	ND
Carbonate (CO3)	mg/L	null	No Range	ND
Carbon Tetrachloride	µg/L	0.5	No Range	ND
Chlordane	µg/L	0.1	No Range	ND
Chlorobenzene	µg/L	0.5	No Range	ND
Chromium (Total)	µg/L	10	No Range	ND
cis-1,2-Dichloroethene	µg/L	0.5	No Range	ND
Color - Apparent	units	3	No Range	ND
Copper	µg/L	50	No Range	ND
Cyanide	µg/L	100	No Range	ND
Dalapon	µg/L	10	No Range	ND
Dinoseb	µg/L	2	No Range	ND
Diquat	µg/L	4	No Range	ND
Endothall	µg/L	45	No Range	ND
Endrin	µg/L	0.1	No Range	ND
Ethylbenzene	µg/L	0.5	No Range	ND
Ethylene Dibromide (EDB)	µg/L	0.02	No Range	ND
Foaming Agents (MBAS)	mg/L	null	No Range	ND
gamma-BHC (Lindane)	µg/L	0.2	No Range	ND
Glyphosate	µg/L	25	No Range	ND
Heptachlor	µg/L	0.01	No Range	ND
Heptachlor epoxide	µg/L	0.01	No Range	ND
Hexachlorobenzene	µg/L	0.5	No Range	ND
Hexachlorocyclopentadiene	µg/L	1	No Range	ND

NON-DETECTED CONSTITUENTS			2023	2023
Constituent	**Units**	**DLR Value**	**Range**	**Average**
Hydroxide (OH)	mg/L	null	No Range	ND
Iron	µg/L	100	No Range	ND
Lead	µg/L	5	No Range	ND
Manganese	µg/L	20	No Range	ND
Mercury	µg/L	1	No Range	ND
Methoxychlor	µg/L	10	No Range	ND
Methyl-Tert-Butyl-Ether (MTBE)	µg/L	3	No Range	ND
Methylene Chloride	µg/L	0.5	No Range	ND
Molinate	µg/L	2	No Range	ND
Nickel	µg/L	10	No Range	ND
Nitrite as N	mg/L	0.4	No Range	ND
Oxamyl	µg/L	20	No Range	ND
PCBs-Total	µg/L	0.5	No Range	ND
Pentachlorophenol	µg/L	0.2	No Range	ND
Perchlorate	µg/L	2	No Range	ND
Picloram	µg/L	1	No Range	ND
Radium 226	pCi/L	1	No Range	ND
Radium 228	pCi/L	1	No Range	ND
Selenium	µg/L	5	No Range	ND
Silver	µg/L	10	No Range	ND
Simazine	µg/L	1	No Range	ND
Styrene	µg/L	0.5	No Range	ND
Tetrachloroethene	µg/L	0.5	No Range	ND
Thallium	µg/L	1	No Range	ND
Thiobencarb	µg/L	1	No Range	ND
Toluene	µg/L	0.5	No Range	ND
Toxaphene	µg/L	1	No Range	ND
trans-1,2-Dichloroethene	µg/L	0.5	No Range	ND
Trichloroethene	µg/L	0.5	No Range	ND
Trichlorofluoromethane	µg/L	5	No Range	ND
Trichlorotrifluoroethane	µg/L	10	No Range	ND
Turbidity, Laboratory	NTU	0.1	No Range	ND
Uranium	pCi/L	1	No Range	ND
Vinyl Chloride	µg/L	0.5	No Range	ND
Xylenes (Total)	µg/L	0.5	No Range	ND
Zinc	µg/L	50	No Range	ND

PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES					
Constituent	**Abbreviation**	**Units**	**CCRDL (ng/L)**	**Range**	**Average**
11-chloroeicosafluoro-3oxaundecane-1-sulfonic acid	11Cl-PF3OUds	ng/L	5	No Range	ND
1H,1H, 2H, 2H-Perfluorodecane sulfonic a	8:2FTS	ng/L	5	No Range	ND
1H,1H, 2H, 2H-Perfluorohexane sulfonic a	4:2FTS	ng/L	3	No Range	ND
1H,1H, 2H, 2H-Perfluorooctane sulfonic a	6:2FTS	ng/L	5	No Range	ND
4,8-dioxa-3H-perfluorononanoic acid	ADONA	ng/L	3	No Range	ND
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9Cl-PF3ONS	ng/L	2	No Range	ND

PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES					
Constituent	**Abbreviation**	**Units**	**CCRDL (ng/L)**	**Range**	**Average**
Hexafluoropropylene oxide dimer acid	HFPO-DA (GenX)	ng/L	5	No Range	ND
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	ng/L	5	No Range	ND
N-methyl perfluorooctanesulfonamidoacetic acid	NMEFOSAA	ng/L	6	No Range	ND
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	ng/L	20	No Range	ND
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	ng/L	3	No Range	ND
Perfluoro-3-methoxypropanoic acid	PFMPA	ng/L	4	No Range	ND
Perfluoro-4-methoxybutanoic acid	PFMBA	ng/L	3	No Range	ND
Perfluorobutanesulfonic acid	PFBS	ng/L	3	No Range	ND
Perfluorobutanoic acid	PFBA	ng/L	5	ND - 5.3	ND
Perfluorodecanoic Acid	PFDA	ng/L	4	No Range	ND
Perfluorododecanoic acid	PFDoA	ng/L	4	No Range	ND
Perfluoroheptanesulfonic acid	PFHpS	ng/L	3	No Range	ND
Perfluoroheptanoic acid	PFHpA	ng/L	3	No Range	ND
Perfluorohexane sulfonic acid	PFHxS	ng/L	3	No Range	ND
Perfluorohexanoic acid	PFHxA	ng/L	3	No Range	ND
Perfluorononanoic acid	PFNA	ng/L	4	No Range	ND
Perfluorooctane sulfonic acid	PFOS	ng/L	4	No Range	ND
Perfluorooctanoic Acid	PFOA	ng/L	4	No Range	ND
Perfluoropentanesulfonic acid	PFPeS	ng/L	4	No Range	ND
Perfluoropentanoic acid	PFPeA	ng/L	3	No Range	ND
Perfluorotetradecanoic Acid	PFTA	ng/L	8	No Range	ND
Perfluorotridecanoic acid	PFTrDA	ng/L	7	No Range	ND
Perfluoroundecanoic acid	PFUnA	ng/L	2	No Range	ND
*CCRDL: Consumer Confidence Report Detection Levels					

UCMR5			**2023**	**2023**
Constituent	**Units**	**DLR Value**	**Range**	**Average**
Lithium	µg/L	9	No Range	ND

DEFINITION OF TERMS					
AI	Aggressiveness Index	MCL	Maximum Contaminant Level	ppq	parts per quadrillion or picograms per liter (pg/L)
AL	Action Level	MCLG	Maximum Contaminant Level Goal	ppt	parts per trillion or nanograms per liter (ng/L)
Average	Result based on arithmetic mean	MFL	Million Fibers per Liter	RAA	Running Annual Average; highest RAA is the highest of all Running Annual Averages calculated as average of all the samples collected within a 12-month period
$CaCO_3$	Calcium Carbonate	MRDL	Maximum Residual Disinfectant Level		
CFU	Colony-Forming Units	MRDLG	Maximum Residual Disinfectant Level Goal		
DBP	Disinfection Byproducts	NA	Not Applicable	Range	Results based on minimum and maximum values
DLR	Detection Limits for Purposes of Reporting	ND	Not Detected	SI	Saturation Index (Langelier)
LRAA	Locational Running Annual Average: highest LRAA is the highest of all Locational Running Annual Averages calculated as average of all samples collected within a 12-month period	NL	Notification Level to SWRCB	SWRCB	State Water Resources Control Board
		NTU	Nephelometric Turbidity Units	TON	Threshold Odor Number
		pCi/L	picoCuries per Liter	TT	Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water
		PHG	Public Health Goal		
		ppb	parts per billion or micrograms per liter (µg/L)	µS/cm	microSiemen per centimeter; or micromho per centimeter (µmho/cm)
MBAS	Methylene Blue Active Substances	ppm	parts per million or milligrams per liter (mg/L)		