

# About this Table

There is a lot of information in this table, and it can be difficult to interpret. Here are some tips to help to understand what it all means:

- Sample results are included for all parameters that EBMUD monitored during the calendar year or most recent sampling year. The list of parameters is much longer than the list shown in our Annual Water Quality Report. That's because we are required by law to only include the parameters we detected, not the parameters we analyzed for in our Annual Water Quality Report. In most cases, we analyze for a parameter, and we don't find anything. No news is good news in the Annual Water Quality Report! For this table, parameters that we sampled for but didn't detect, are shown as "ND" which means Not Detected.
- Many compounds have regulatory standards, but some do not. For those without regulatory standards, the regulation column shows "NA" for Not Applicable.
- Some parameters are regulated with a "Treatment Technique" instead of a numeric value; these are shown with "TT" in the table. Treatment Techniques are used when the parameter is difficult or impossible to measure. We are required to ensure that we're treating for the parameter even though we can't measure it. One example is the pathogen (disease causing microorganism) called *Cryptosporidium*. This pathogen often occurs in open waters like rivers and lakes, and can cause disease at extremely low concentrations. There is no practical way to sample and analyze enough water to ensure the absence of *Cryptosporidium*. However, studies have shown that filters operated to remove turbidity also remove *Cryptosporidium*. So, we are required to ensure that our filters always remove turbidity, and then we know that they're also removing *Cryptosporidium*.
- Some parameters appear more than once in the table. This is because they have more than one regulatory standard, for example a "primary" or health-based standard and a "secondary" or aesthetic-based standard.



# EBMUD List of All Water Quality Results<sup>A,B</sup> (Units)<sup>C</sup>

Microbiological Constituents (units)	EBMUD Range	MCL (AL)	PHG (MCLG)
<i>Cryptosporidium</i> (oocysts/L) at source water	ND	TT <sup>D</sup>	(0)
<i>E. coli</i> (Positive)	ND	0	(0)
<i>Giardia</i> (cysts/L) at source water	ND - 0.1	TT	(0)
<i>Legionella</i>	Met TT	TT	(0)
Total Coliform (Positive)	0.3%	TT	(0)
Combined Filter Effluent Turbidity (NTU)	0.01 - 0.10	TT	(0)
Combined Filter Effluent Turbidity (95% <0.3 NTU)	100%	TT	(0)
Heterotrophic Plate Count	Met TT	TT	N/A

Inorganic Chemicals (units)	EBMUD Range	MCL (AL)	PHG (MCLG)
Aluminum (ug/L)	ND - 128	1,000	600
Antimony (ug/L)	ND	6	1
Arsenic (ug/L)	ND	10	0.004
Asbestos (MFL)	ND	7	7
Barium (ug/L)	ND	1	2
Beryllium (ug/L)	ND	4	1
Cadmium (ug/L)	ND	5	0.04
Chromium (ug/L)	ND	50	(100)
Copper (mg/L), at water treatment plant effluents	ND	(1.3)	0.3
Cyanide (mg/L)	ND	150	150
Fluoride in source water (mg/L)	ND - 0.1	2	1
Fluoride in treated water (mg/L)	ND - 0.8	2	1
Hexavalent chromium (ug/L)	ND - 0.2	10	0.02
Lead (ug/L) at water treatment plant effluents	ND	(15)	0.2
Mercury (ug/L)	ND	2	1.2
Nickel (ug/L)	ND	100	12
Nitrate as N (mg/L)	ND	10	10
Nitrate + Nitrite Total as N (mg/L)	ND	10	10
Nitrite as N (mg/L)	ND	1	1
Perchlorate (ug/L)	ND	6	1
Selenium (ug/L)	ND	50	30
Thallium (ug/L)	ND	2	1

Lead and Copper Rule	EBMUD Value	AL	PHG
Lead (ug/L), 90 <sup>th</sup> percentile at customer taps	ND	15	0.2
Copper (mg/L), 90 <sup>th</sup> percentile at customer taps	ND	1.3	0.3

Volatile Organic Chemicals (units)	EBMUD Range	MCL (AL)	PHG (MCLG)
Benzene (ug/L)	ND	1	0.15
Carbon Tetrachloride (ng/L)	ND	500	100
1,2-Dichlorobenzene (ug/L)	ND	600	600
1,4-Dichlorobenzene (ug/L)	ND	5	6
1,1-Dichloroethane (ug/L)	ND	5	3
1,1-Dichloroethylene (ug/L)	ND	6	10
cis-1,2-Dichloroethylene (ug/L)	ND	6	13
trans-1,2-Dichloroethylene (ug/L)	ND	10	60
Dichloromethane (ug/L)	ND	5	4
1,2-Dichloropropane (ug/L)	ND	5	0.5
1,3-Dichloropropene (ng/L)	ND	500	200
Ethylbenzene (ug/L)	ND	300	300
Methyl-tert-butyl ether (ug/L)	ND	13	13
Monochlorobenzene (ug/L)	ND	70	70
Styrene (ug/L)	ND	100	0.5
1,1,2,2-Tetrachloroethane (ug/L)	ND	1	0.1
Tetrachloroethylene (ug/L)	ND	5	0.06
Toluene (ug/L)	ND	150	150
1,2,4-Trichlorobenzene (ug/L)	ND	5	5
1,1,1-Trichloroethane (ug/L)	ND	200	1000
1,1,2-Trichloroethane (ug/L)	ND	5	0.3
Trichloroethylene (ug/L)	ND	5	1.7
Trichlorofluoromethane (ug/L)	ND	150	1300
1,1,2 Trichloro -1,2,2 Trifluoroethane (mg/L)	ND	1.2	4
Vinyl Chloride (ng/L)	ND	500	50
Xylenes (mg/L)	ND	1.750	1.8

Synthetic Organic Chemicals (units)	EBMUD Range	MCL (AL)	PHG (MCLG)
1,2-Dibromo-3-chloropropane - DBCP (ug/L)	ND	0.2	0.0017
2,3,7,8-TCDD - Dioxin (pg/L)	ND	30	0.05
2,4,5-TP - Silvex (ug/L)	ND	50	3
2,4-D (ug/L)	ND	70	20
Acrylamide	Met TT	TT	(0)
Alachlor - Alanex (ug/L)	ND	2	4
Atrazine - Aatrex (ug/L)	ND	1	0.15
Bentazon - Basagran (ug/L)	ND	18	200
Benzo(a)pyrene (ug/L)	ND	0.2	0.007
Bis(2-ethylhexyl)phthalate - DEHP (ug/L)	ND	4	12
Carbofuran (ug/L)	ND	18	0.7
Chlordane (ug/L)	ND	0.1	0.03
Dalapon (ug/L)	ND	200	790
Di(2-ethylhexyl)adipate (ug/L)	ND	400	200
Dinoseb - DNBP (ug/L)	ND	7	14
Diquat (ug/L)	ND	20	6
Endothall (ug/L)	ND	100	94
Endrin (ug/L)	ND	2	0.3
Epichlorohydrin	Met TT	TT	0
Ethylene dibromide - EDB (ug/L)	ND	0.05	0.01
Glyphosate (ug/L)	ND	700	900
Heptachlor (ug/L)	ND	0.01	0.008
Heptachlor Epoxide (ug/L)	ND	0.01	0.006
Hexachlorobenzene (ug/L)	ND	1	0.03
Hexachlorocyclopentadiene (ug/L)	ND	50	2
Lindane -Gamma BHC (ug/L)	ND	0.2	0.032
Methoxychlor (ug/L)	ND	30	0.09
Molinate (ug/L)	ND	20	1
Oxamyl - Vydate (ug/L)	ND	50	26
PCB's (ug/L)	ND	0.5	0.09
Pentachlorophenol - PCP (ug/L)	ND	1	0.3
Picloram (ug/L)	ND	500	166
Simazine (ug/L)	ND	4	4
Thiobencarb (ug/L)	ND	70	42
Toxaphene (ug/L)	ND	3	0.03
1,2,3-Trichloropropane (ug/L)	ND	0.005	0.0007

Radioactive Contaminants (units)	EBMUD Range	MCL	PHG (MCLG)
Gross Alpha (pCi/L)	ND	15	(0)
Gross Beta (pCi/L)	ND - 17	50	(0)
Radium 226 + 228 (pCi/L)	ND	5	(0)
Strontium-90 (pCi/L)	ND	8	0.35
Tritium (pCi/L)	ND	20,000	400
Uranium (pCi/L)	ND	20	0.43

Disinfection By-Products -DBPs (units)	EBMUD Data	MCL [MRDL]	PHG [MRDLG]
Bromate (ug/L)	1.3 <sup>E</sup>	10	0.1
Chloramine as chlorine (mg/L)	2.5 <sup>E</sup>	[4.0]	[4]
Haloacetic acids, 5 species (ug/L)	49 <sup>F</sup>	60	NA
Trihalomethane (ug/L)	58 <sup>F</sup>	80	NA
Chlorite (mg/L)	ND	1	0.05
Control of DBP Precursor (TOC)	Met TT	TT	NA

Secondary Standards (units)	EBMUD Range	Secondary MCL
Aluminum (ug/L)	ND - 128	200
Chloride (mg/L)	4 - 16	250
Color (Units)	ND	15
Copper (ug/L) at water treatment plant effluents	ND	1,000
Foaming agents (MBAS)	ND	500
Iron (ug/L)	ND	300
Manganese (ug/L)	ND	50
Methyl tertiary butyl ether [MTBE] (ug/L)	ND	5
Odor Threshold [TON] (Units)	ND	3
Silver (ug/L)	ND	100
Specific Conductance (uS/cm)	53 - 270	900
Sulfate (mg/L)	1 - 39	250
Thiobencarb (ug/L)	ND	1
Total dissolved solids (mg/L)	ND - 180	500
Turbidity (NTU)	0.01 - 0.10	5
Zinc (ug/L)	ND	5,000

Parameters with Notification Level (units)	EBMUD Range	NL
Boron (mg/L)	ND	1
Chlorate (ug/L)	69 - 210	800
Manganese (ug/L)	ND	500
N-Nitrosodiethylamine [NDEA] (ug/L)	ND	10
N-Nitrosodimethylamine [NDMA] (ng/L)	ND - 4.9	10
N-Nitrosodi-n-propylamine [NDPA] (ng/L)	ND	10
Perfluorobutane sulfonic acid [PFBS] <sup>G, H</sup> (ng/L)	ND	500
Perfluorohexane Sulfonic Acid [PFHxS] <sup>G, H</sup> (ng/L)	ND	3
Perfluorooctanoic Acid [PFOA] <sup>G, H</sup> (ng/L)	ND	5.1
Perfluorooctanesulfonic Acid [PFOS] <sup>G, H</sup> (ng/L)	ND	6.5

Other PFAS (units)	EBMUD Range
Hexafluoropropylene oxide dimer acid [HFPO-DA] [GenX] <sup>G, H</sup> (ng/L)	ND
Perfluorononanoic acid [PFNA] <sup>G, H</sup> (ng/L)	ND
Perfluorobutanoic acid [PFBA] <sup>G, I</sup> (ng/L)	ND
Perfluorohexanoic acid [PFHxA] <sup>G</sup> (ng/L)	ND
Perfluorodecanoic acid [PFDA] <sup>G</sup> (ng/L)	ND
11-Chloroeicosafluoro-3-oxaundecanes-1-sulfonic acid [11Cl-PF3OUdS] <sup>G</sup> (ng/L)	ND
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid [8:2 FTS] <sup>G</sup> (ng/L)	ND
1H, 1H, 2H, 2H-perfluorohexane sulfonic acid [4:2 FTS] <sup>G</sup> (ng/L)	ND
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid [6:2 FTS] <sup>G</sup> (ng/L)	ND
4,8-dioxa-3H-perfluorononanoic acid [ADONA] <sup>G</sup> (ng/L)	ND
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid [9Cl-PF3ONS] <sup>G</sup> (ng/L)	ND
nonafluoro-3,6-dioxaheptanoic acid [NFDHA] <sup>G</sup> (ng/L)	ND
perfluoro(2-ethoxyethane) sulfonic acid [PFEEA] <sup>G</sup> (ng/L)	ND
perfluoro-3-methoxypropanoic acid [PFMPA] <sup>G</sup> (ng/L)	ND
perfluoro-4-methoxybutanoic acid [PFMBA] <sup>G</sup> (ng/L)	ND
perfluorododecanoic acid [PFDoA] <sup>G</sup> (ng/L)	ND
perfluoroheptanesulfonic acid [PFHpS] <sup>G</sup> (ng/L)	ND
perfluoroheptanoic acid [PFHpA] <sup>G</sup> (ng/L)	ND
perfluoropentanesulfonic acid [PFPeS] <sup>G</sup> (ng/L)	ND
perfluoropentanoic acid <sup>G</sup> [PFPeA] (ng/L)	ND
perfluorodecanoic acid [PFUnA] <sup>G</sup> (ng/L)	ND
n-ethyl perfluorooctanesulfonamidoacetic acid [NEtFOSAA] <sup>G</sup> (ng/L)	ND
n-methyl perfluorooctanesulfonamidoacetic acid [NMeFOSAA] <sup>G</sup> (ng/L)	ND
perfluorotetradecanoic acid [PFTA] <sup>G</sup> (ng/L)	ND
perfluorotridecanoic acid [PFTrDA] <sup>G</sup> (ng/L)	ND

Other Parameters of Interest to Customer	EBMUD Range
Alkalinity, Total as CaCO <sub>3</sub> (mg/L)	17 - 85
Calcium (mg/L)	4 - 23
Hardness as CaCO <sub>3</sub> (gpg)	1 - 6
Hardness as CaCO <sub>3</sub> (mg/L)	12 - 96
Magnesium (mg/L)	1 - 8
pH (unit)	8.3 - 9.5
Potassium (mg/L)	1
Silica (mg/L)	8 - 12
TOC in source water (mg/L)	1.3 - 5.1
TOC in treated water (mg/L)	Max 3.1
Sodium (mg/L)	4 - 26
Lithium <sup>G</sup> (ug/L)	ND

## Notes

- A. EBMUD is not required to monitor for all parameters listed in these tables every year. Some parameters were monitored in previous years and values shown represent the most recent monitoring result.
- B. Abbreviations: NA = not applicable, ND = not detected (i.e. value is below regulatory detection limit), TT = Treatment Technique (see footnote D), TCR = Total Coliform Rule, MCL = Maximum Contaminant Level.  
AL = Action Level, PHG = Public Health Goal, MCLG = Maximum Contaminants Goal, MRDL = Maximum Residual Disinfectant Level, MRDLG = Maximum Residual Disinfectant Level Goal
- C. Units: mg/L = milligram per liter, ug/L = microgram per liter, ng/L = nanogram per liter, pg/L = picogram per liter, MFL= million fibers (asbestos) per liter, pCi/L = picocuries per liter, µS/cm = microsiemens per centimeter, gpg (grain per gallon).
- D. Treatment Technique (TT)
- *Cryptosporidium*: 99% removal.
  - *Giardia lamblia*: 99.9% removal/inactivation
  - Viruses: 99.99% removal/inactivation
  - *Legionella*: controlled by meeting disinfection requirements in the treatment plant and distribution system.
  - Turbidity: performance standards per Title 22, Chapter 17
  - Heterotrophic Plate Count: Monitoring required when no chlorine residual detected.
  - Acrylamide: 0.05% monomer in polyacrylamide dose of 1 ppm
  - Epichlorohydrin: 0.01% residual of epichlorohydrin in dose of 20 mg/L.
- E. Highest running annual average
- F. Highest locational running annual average
- G. Thirty compounds are monitored for the 5th Unregulated Contaminants Monitoring Rule (UCMR5). EPA uses the UCMR to collect data for contaminants that are suspected to be present in drinking water and do not yet have health-based standards set under the Safe Drinking Water Act (SDWA). EPA uses data from the UCMR to inform regulatory decisions.
- H. Six PFAS are included in new USEPA regulations finalized April 10, 2024. These are PFOA, PFOS, PFHxS, PFNA, HFPO-DA, and PFBS. For more information on this regulation, see [www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas](https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas)
- I. PFBA was detected in 2023 as part of UCMR5, but EBMUD continued quarterly sampling in 2024 and it was not detected this year. The 2023 detection will be published in the Annual Water Quality Report for five years per UCMR reporting requirements. PFBA is not one of the newly regulated PFAS compounds and it does not have an MCL.