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.

Pardee Reservoir

EBMUD List of All Water Quality Results[A,B] (Units)[C]

Microbiological Constituents (units)	EBMUD Range	MCL (AL)	PHG (MCLG)
Cryptosporidium (oocysts/L) at source water	ND - 0.2	TT[D]	(0)
E. coli (Positive)	ND	0	(0)
Giardia (cysts/L) at source water	ND - 0.2	TT	(0)
Legionella	Met TT	TT	(0)
Total Coliform (Positive)	0.3%	TT	(0)
Combined Filter Effluent Turbidity (NTU)	0.02 - 0.11	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 (mg/L)	ND	1	0.6
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)	0.6 - 0.8	2	1
Hexavalent chromium (ug/L)	ND	NA	NA
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), 90th percentile at customer taps	ND	15	0.2
Copper (mg/L), 90th percentile at customer taps	ND	1.3	0.3

Disinfection By-Products -DBPs (units)	EBMUD Data	MCL [MRDL]	PHG [MRDLG]
Bromate (ug/L)	1.8[E]	10	0.1
Chloramine as chlorine (mg/L)	2.5[E]	[4.0]	[4]
Haloacetic acids, 5 species (ug/L)	46[F]	60	NA
Trihalomethane (ug/L)	58[F]	80	NA
Chlorite (mg/L)	ND	1	0.05
Control of DBP Precursor (TOC)	Met TT	TT	NA

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-Dichlorethylene (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

Secondary Standards (units)	EBMUD Range	Secondary MCL
Aluminum (ug/L)	ND	200
Chloride (mg/L)	4 - 18	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 - 1	3
Silver (ug/L)	ND	100
Specific Conductance (uS/cm)	76 - 340	900
Sulfate (mg/L)	1 - 50	250
Thiobencarb (ug/L)	ND	1
Total dissolved solids (mg/L)	40 - 240	500
Turbidity (NTU)	0.02 - 0.11	5
Zinc (ug/L)	ND	5,000

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	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

Parameters with Notification Level (units)	EBMUD Range	NL
Boron (mg/L)	ND	1
Chlorate (ug/L)	76 - 290	800
Manganese (ug/L)	ND	500
N-Nitrosodiethylamine [NDEA] (ug/L)	ND	10
N-Nitrosodimethylamine [NDMA] (ng/L)	ND - 9.6	10
N-Nitrosodi-n-propylamine [NDPA] (ng/L)	ND	10
Perfluorobutane sulfonic acid [PFBS] (ng/L)	ND - 1.4	500
Perfluorohexane Sulfonic Acid [PFHxS] (ng/L)	ND - 1.1	3
Perfluorooctanoic Acid [PFOA] (ng/L)	ND - 4.7	5.1
Perfluorooctanesulfonic Acid [PFOS] (ng/L)	ND - 4.9	6.5

Other PFAS (units)	EBMUD Range	NL
1-Chloroeicosafluoro-3-oxaundecanes ulfonic acid (ng/L)	ND	NA
4,8-Dioxa-3H-perfluorononanoic acid [ADONA] (ng/L)	ND	NA
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid (ng/L)	ND	NA
Hexafluoropropylene oxide dimer acid [HFPO-DA] (ng/L)	ND	NA
NEtFOSAA (ng/L)	ND	NA
NMeFOSAA (ng/L)	ND	NA
Perfluorododecanoic acid [PFDoA] (ng/L)	ND	NA
Perfluoro-n-decanoic acid [PFDA] (ng/L)	ND - 1.1	NA
Perfluoro-n-heptanoic acid [PFHpA] (ng/L)	ND - 1.8	NA
Perfluoro-n-hexanoic acid [PFHxA] (ng/L)	ND - 3.8	NA
Perfluoro-n-nonanoic acid [PFNA] (ng/L)	ND - 1.5	NA
Perfluorotetradecanoic acid [PFTeDA] (ng/L)	ND	NA
Perfluorotridecanoic acid [PFTrDA] (ng/L)	ND	NA
Perfluoroundecanoic acid [PFUnA] (ng/L)	ND	NA

Other Parameters of Interest to Customers	EBMUD Range
Alkalinity, Total as CaCO3 (mg/L)	19 - 110
Calcium (mg/L)	5 - 29
Hardness as CaCO3 (gpg)	1 - 6
Hardness as CaCO3 (mg/L)	14 - 110
Magnesium (mg/L)	1 - 10
pH (unit)	8.0 - 9.4
Potassium (mg/L)	1 - 2
Silica (mg/L)	7 - 14
TOC in source water (mg/L)	1.6 - 6.8
TOC in treated water (mg/L)	Max 4.2
Sodium (mg/L)	5 - 32

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*: No limit, but USEPA believes that if *Giardia* and viruses are removed/inactivated, *Legionella* will also be controlled.
- Total Coliform: 348–435 samples are collected each month from 125 locations throughout the treated water distribution system. When a sample is positive for total coliform, it must be further analyzed for *E.coli*, and repeat sampling must be conducted. Additional positive results trigger further action.
- 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