

EBMUD First Half 2024 Data Update

These tables include data for detected water quality parameters from January 1, 2024 to June 30, 2024. EBMUD is providing this semi-annual update in anticipation of new requirements in the America's Water Infrastructure Act of 2018 (AWIA). EBMUD's 2023 report, with data from the entire calendar year, is here: www.ebmud.com/wqr

USL and San Pablo Water Treatment Plants are not included in this update since they were not in service from January 1, 2024 through June 30, 2024.

Units

gpg	grains per gallon
NTU	Nephelometric Turbidity Unit. A measure of the cloudiness of water
ppm	parts per million. One ppm is like 1 second in 11.5 days. (mg/L)
ppb	parts per billion. One ppb is like 1 second in nearly 32 years. (µg/L)
ppt	parts per trillion. One ppt is like 1 second in nearly 32,000 years. (ng/L)
pCi/L	picoCuries per liter
µS/cm	microsiemens per centimeter. A measure of electrical conductance

1	Regulated for public health <i>Primary MCL (Unit)</i>	State or federal goal <i>PHG, MCLG or MRDLG</i>	Highest amount allowed <i>MCL, MRDL or AL</i>	EBMUD Results					Typical sources
				System average	WATER TREATMENT PLANTS (Individual Sample Results)				
				Walnut Creek	Lafayette	Orinda	Sobrante		
Microbiological	Total Coliform, highest % found any month	0	TT ^A	NA	0.3%				Naturally present in the Environment
	Turbidity Max (NTU)	NA	1	0.02	0.10	0.08	0.10	0.10	Soil runoff
	Turbidity ≤0.3 NTU, lowest % of any month (%)	NA	TT ^B	100%	100%	100%	100%	100%	
Inorganic	Aluminum (ppb)	600	1000	ND	ND	ND	ND	ND - 72	Erosion of natural deposits; water treatment residue
	Fluoride ^C (ppm)	1	2	0.7	0.7 - 0.8	0.6 - 0.7	0.7 - 0.8	0.6 - 0.7	Erosion of natural deposits; water additive that promotes strong teeth
Radionuclides	Gross Beta Particle Activity (pCi/L)	0	50 ^D	ND	ND	ND	ND	5 - 17	Decay of natural and man-made deposits
D/DBPs	Bromate (ppb)	0.1	10	1.3 ^E	NA	NA	NA	ND - 2.7	By-product of drinking water disinfection
	Chloramine as chlorine ^G (ppm)	4	4	2.5 ^E	0.07 - 3.73				Drinking water disinfectant added for treatment
	Control of DBP precursors/TOC (NA)	NA	TT ^F	NA	NA	NA	NA	met requirement	Various natural and man-made sources
	Haloacetic acids, 5 species (ppb) ^I	NA	60	49 ^H	20 - 50	22 - 38	19 - 44	30 - 71	By-product of drinking water disinfection
	Trihalomethanes (ppb) ^I	NA	80	61 ^H	33 - 59	26 - 50	36 - 64	36 - 82	By-product of drinking water disinfection

2	Regulated for drinking water aesthetics <i>Secondary MCL (Unit)</i>	State or federal goal <i>PHG, MCLG</i>	Highest amount allowed <i>MCL</i>	EBMUD Results					Typical sources
				System average	WATER TREATMENT PLANTS (Individual Sample Results)				
				Walnut Creek	Lafayette	Orinda	Sobrante		
	Aluminum (ppb)	600	200	ND	ND	ND	ND	ND - 72	Erosion of natural deposits; water treatment residue
	Chloride (ppm)	NA	250	6	4	4	4 - 5	12 - 16	Runoff/leaching from natural deposits
	Specific conductance (µS/cm)	NA	900	94	53	61	57 - 65	270	Substances that form ions when in water
	Sulfate (ppm)	NA	250	7	1 - 2	1 - 2	1 - 4	30 - 38	Runoff/leaching from natural deposits
	Total dissolved solids (ppm)	NA	500	58	ND - 54	43 - 53	ND - 58	140 - 180	Runoff/leaching from natural deposits

Notes

- A** The Treatment Technique for total coliform triggers follow-up actions if percent of samples positive for total coliform in any month exceeds 5%.
- B** The treatment technique for turbidity requires that at least 95% of water samples collected each month at each water treatment plant be less than 0.3 NTU.
- C** See **Pg 10** of 2023 Annual Water Quality Report for additional information about fluoride in drinking water.
- D** The State Water Resources Control Board considers 50 pCi/L to be the level of concern for beta particles. Results are from the most recent sampling event which may have occurred in previous years.
- E** This value is the highest running annual average, on which compliance is based. The values shown under Water Treatment Plants are the range of individual sample results.
- F** Sobrante, USL, and San Pablo water treatment plants are required to remove TOC.
- G** Chloramine residuals in the distribution system are measured as an equivalent quantity of chlorine. When chloramine residual cannot be detected, the sample is further analyzed to ensure that the microbiological water quality is in compliance with regulations.
- H** This value is the highest running annual average at a single location, on which compliance is based.
- I** These data are collected in the distribution system. The sample locations are assigned to the most representative water treatment plant, but the data may also represent water from another plant.

Key Terms

- AL** **Regulatory Action Level.** The concentration which, if exceeded, triggers treatment or other requirements that a water system must follow.
- DBP** **Disinfection By-Products.** These are formed when chlorine and/or ozone reacts with natural constituents in water. Trihalomethanes (THMs), haloacetic acids (HAAs), chlorate, and bromate are disinfection by-products.
- D/DBPs** **Disinfectants and Disinfection By-products.** Disinfectant residuals, disinfection byproducts and byproduct precursors.
- 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 address 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 the USEPA.
- MRDL** **Maximum Residual Disinfectant 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 Disinfectant Level Goal.** 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 contaminants.
- NA** **Not Applicable.**
- ND** **Not Detected.**
- Primary Drinking Water Standard** These standards regulate contaminants that affect health by setting MCLs, MRDLs, and Treatment Techniques (TT) along with their monitoring and reporting requirements.
- PHG** **Public Health Goal.** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.
- TOC** **Total Organic Carbon.** A measure of organic content in the water.
- Turbidity** A measure of the cloudiness of water. Turbidity is monitored because it is a good indication of the effectiveness of our filtration systems.
- TT** **Treatment Technique.** A required process intended to reduce the level of a contaminant in drinking water.

Notes

I These data are collected in the distribution system. The sample locations are assigned to the most representative water treatment plant, but the data may also represent water from another plant.

J Parameters with a notification level.

K Grains per gallon (gpg) is a measure of water hardness. Knowing the amount can help improve the function of dishwasher, cooling equipment and other industrial processes. Refer to your appliance manufacturer's instruction manual for the optimum grains per gallon level.

L Walnut Creek, Lafayette, and Orinda water treatment plants are not required to monitor TOC. Their treated water TOC values are similar to or less than their source water.

3 Unregulated Contaminants <i>No established MCL (Unit)</i>		State Notificatio level	EBMUD Results				
			System average	WATER TREATMENT PLANTS (Individual Sample Results)			
				Walnut Creek	Lafayette	Orinda	Sobrante
UCMR5	Perfluorobutanoic acid - PFBA (ppt)	NA	ND	ND	ND	ND	ND - 5.1
Others ^J	Chlorate (ppb)	800	93	87	140	74 - 93	69 - 200
	N-Nitrosodimethylamine - NDMA ^A (ppt)	10	3.6 ^H	3.1 - 3.6	2 - 3.4	2.5 - 2.8	2.1 - 3.8

4 Other parameters of interest to customers (Unit)		EBMUD Results			
		WATER TREATMENT PLANTS (Individual Sample Results)			
		Walnut Creek	Lafayette	Orinda	Sobrante
Alkalinity, Total as CaCO ₃ (ppm)		19 - 25	20 - 25	20 - 28	67 - 83
Calcium (ppm)		5 - 6	5 - 6	5 - 6	18 - 23
Hardness as CaCO ₃	(gpg) ^K	1	1	1	4 - 5
	(ppm)	16 - 22	16 - 20	16 - 23	69 - 92
Magnesium (ppm)		1	1	1	6 - 8
pH (pH)		9.2 - 9.3	9.2 - 9.3	9.2 - 9.4	8.3 - 8.6
Potassium (ppm)		1	1	1	1
Silica (ppm)		8 - 12	9 - 12	8 - 12	9
TOC in source water (ppm)		1.3 - 1.7	1.3 - 1.7	1.3 - 3.4	3.4 - 5.1
TOC in treated water ^L (ppm)		-	-	-	3.4 - 4.8
Sodium (ppm)		5 - 6	5 - 6	5 - 8	21 - 25