



CENTRAL COAST WATER AUTHORITY
OLONIO PASS WATER TREATMENT PLANT
WATER QUALITY TABLE
 COVERING THE REPORTING PERIOD OF JANUARY-DECEMBER 2021

Please see last page for key to abbreviations.

Parameter	Units	State MCL	PHG (MCLG)	State DLR	Range Average	TREATED CCWA	SOURCE STATE WATER	Major Sources in Drinking Water
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PRIMARY STANDARDS--Mandatory Health-Related Standards

CLARITY (a)

Combined Filter Effluent Turbidity (a)	NTU	TT=<1 NTU every 4 hours TT=95% of samples <0.3 NTU	Range %	0.04 - 0.14 100%	NA NA	Soil runoff
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INORGANIC CHEMICALS

Aluminum	mg/L	1 (b)	0.6	0.05	Range Average	ND - 0.086 0.061	ND - 0.055 0.030	Erosion of natural deposits; residual from some surface water treatment processes
Arsenic, Total	ug/L	10	0.004	2	Range Average	ND ND	2.4 2.4	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride	mg/L	2	1	0.1	Range Average	ND ND	0.1 0.1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

RADIONUCLIDES

Gross Beta Particle	pCi/L	50 (g)	(0)	4	Range Average	ND ND	7.2 7.2	Decay of natural and man-made deposits
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DISTRIBUTION SYSTEM MONITORING

Total Chlorine Residual	mg/L	MRDL = 4.0	MRDLG = 4.0	NA	Range Average	1.37 - 3.58 2.79	NA NA	Drinking water disinfectant added for treatment
Total Coliform Bacteria	--	(c)	(0)	--	Range Average Highest	0 0 0%	NA NA NA	Naturally present in the environment
Fecal Coliform and E.coli (c)	--	0	(0)	--	Range Average Highest	0 0 0%	NA NA NA	Human and animal fecal waste
Total Trihalomethanes (d)	ug/L	80	NA	(0.5)	Range Average Highest LRAA	43 - 58 51 52.8	NA NA NA	By-product of drinking water chlorination
Haloacetic Acids (d)	ug/L	60	NA	(1) (e)	Range Average Highest LRAA	6.3 - 11 9 13.0	NA NA NA	By-product of drinking water chlorination

SECONDARY STANDARDS--Aesthetic Standards

Chloride	mg/L	500 (j)	NA	(1)	Range Average	94 - 147 116	90 - 137 112	Runoff/leaching from natural deposits; seawater influence
Color	ACU	15 (j)	NA	(3)	Range Average	ND ND	10 10	Naturally occurring organic materials
Corrosivity (Aggressivity Index) (i)	SU	non-corrosive	NA	(0.1)	Range Average	12 12	12.6 12.6	
Iron, Total	mg/L	0.3 (j)	NA	(0.01)	Range Average	ND ND	0.010 0.010	Leaching from natural deposits; industrial wastes
Magnesium, Total	mg/L	NA	NA	(0.1)	Range Average	16 16	16 16	Runoff/leaching from natural deposits; seawater influence
Manganese, Total	ug/L	50 (j)	NA	(2)	Range Average	ND ND	8.3 8.3	
Odor Threshold	TON	3 (j)	NA	(1)	Range Average	ND - 2 1	1 - 4 2	Naturally occurring organic materials
Specific Conductance	uS/cm	1600 (j)	NA	NA	Range Average	580 - 802 644	538 - 741 591	Substances that form ions when in water; seawater influence
Sulfate	mg/L	500 (j)	NA	(0.5)	Range Average	84 84	45 45	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	mg/L	1000 (j)	NA	(10)	Range Average	360 360	310 310	Runoff/leaching from natural deposits

						TREATED	SOURCE	
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Turbidity (Monthly) (a)	NTU	5 (j)	NA	(0.1)	Range Average	ND - 0.25 0.06	ND - 4.8 1.24	Soil runoff

ADDITIONAL PARAMETERS (Unregulated)

2-Methylisoborneol	ng/L	NA	NA	(1)	Range Average	ND - 18 5.9	ND - 48 12.2	An organic compound mainly produced by blue-green algae (cyanobacteria)
Alkalinity (Total) as CaCO ₃ equivalents	mg/L	NA	NA	(2)	Range Average	62 - 92 78	70 - 104 90	Runoff/leaching from natural deposits; seawater influence
Anion Sum - Calculated	meq/L	NA	NA	(0.001)	Range Average	6.1 6.1	5.4 5.4	
Bicarbonate Alkalinity as HCO ₃	mg/L	NA	NA	(2)	Range Average	96 96	110 110	
Calcium	mg/L	NA	NA	(1)	Range Average	24 24	24 24	Runoff/leaching from natural deposits; seawater influence
Carbonate as CO ₃	mg/L	NA	NA	(2)	Range Average	ND ND	3.6 3.6	
Cation Sum - Calculated	meq/L	NA	NA	(0.001)	Range Average	6.2 6.2	5.6 5.6	
Chromium, Hexavalent	ug/L	NA	0.02	NA	Range Average	0.13 0.13	0.062 0.062	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Geosmin	ng/L	NA	NA	(1)	Range Average	ND - 17 3.8	ND - 51 19.0	An organic compound mainly produced by bacterial growth in surface water
Hardness (Total) as CaCO ₃	mg/L	NA	NA	(3)	Range Average	98 - 162 123	100 - 166 124	Leaching from natural deposits
Heterotrophic Plate Count (f)	CFU/mL	TT	NA	NA	Range Average	0 - 221 3	NA NA	Naturally present in the environment
Langelier Index @ 25 °C	NONE	NA	NA	(-14)	Range Average	0.075 0.075	0.69 0.69	
Langelier Index @ 60 °C	NONE	NA	NA	(-14)	Range Average	0.51 0.51	1.1 1.1	
Magnesium, Total	mg/L	NA	NA	(0.1)	Range Average	16 16	16 16	Runoff/leaching from natural deposits; seawater influence
pH	SU	NA	NA	(0.1)	Range Average	7.4 - 8.8 8.3	7.7 - 9.5 8.7	Runoff/leaching from natural deposits; seawater influence
Potassium	mg/L	NA	NA	(1)	Range Average	3.6 3.6	3.6 3.6	Runoff/leaching from natural deposits; seawater influence
Sodium	mg/L	NA	NA	(1)	Range Average	83 83	68 68	Runoff/leaching from natural deposits; seawater influence
Total Organic Carbon (TOC) (g)	mg/L	TT	NA	(0.3)	Range Average	1.1 - 4.1 2.2	1.9 - 5.6 3.7	Various natural and man made sources

						TREATED	SOURCE	
Parameter	Units	State MCL	PHG (MCLG)	State DLR	Range Average	CCWA	STATE WATER	Major Sources in Drinking Water

ABBREVIATIONS AND NOTES

Footnotes:

- Turbidity (NTU) is a measure of the cloudiness of the water and it is a good indicator of the effectiveness of our filtration system. Monthly turbidity values are listed in the Secondary Standards section.
- Aluminum has a Secondary MCL of 0.2 ppm.
- Total coliform MCLs: Systems that collect ≥ 40 samples/month no more than 5.0% of the monthly samples may be Total Coliform positive. Systems that collect < 40 samples per month no more than 1 positive sample per month may be Total Coliform positive.
Fecal coliform/E. coli MCLs: The occurrence of 2 consecutive Total Coliform positive samples, one of which contains fecal coliform/E. coli, constitutes an acute MCL violation.
This Water Quality Report reflects changes in drinking water regulatory requirements during 2021. These revisions add the requirements of the federal Revised Total Coliform Rule. The revised rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system. The state Revised Total Coliform Rule became effective July 1, 2021.
- Compliance based on the running quarterly annual average of distribution system samples.
- Monochloroacetic Acid (MCAA) has a DLR of 2.0 ug/L while the other four Haloacetic Acids have DLR's of 1.0 ug/L.
- Pour plate technique
- TOCs are taken at the treatment plant's combined filter effluent.
- State MCL is 45 mg/L as NO_3 , which equals 10 mg/L as N.
- AI ≥ 12.0 = Non-aggressive water
AI (10.0 - 11.9) = Moderately aggressive water
AI ≤ 10.0 = Highly aggressive water
Reference: ANSI/AWWA Standard C400-93 (R98)
- Secondary MCL

Abbreviations

ACU = Apparent Color Units
 CCWA = Central Coast Water Authority
 CFU/ml = Colony Forming Units per milliliter
 DLR = Detection Level for purposes of Reporting
 MCL = Maximum Contaminant Level
 MCLG = Maximum Contaminant Level Goal
 MRDL = Maximum Residual Disinfectant Level
 MRDLG = Maximum Residual Disinfectant Level Goal
 NA = Not Applicable
 ND = Non-detected above detection limit (DLR)
 NTU = Nephelometric Turbidity Units
 pCi/L = PicoCuries per liter
 PHG = Public Health Goal
 ppb = parts per billion, or micrograms per liter ($\mu\text{g/L}$)
 ppm = parts per million, or milligrams per liter (mg/L)
 TON = Threshold Odor Number
 TT = Treatment Technique
 LRAA = Locational Running Annual Average