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 2020 Consumer Confidence Report

ABOUT THIS REPORT

The City of Perris is proud to provide its 2020 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 2020, 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.
For any questions regarding this report please contact
Bryant K. Hill, Director of Public Works
951-657-3280

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 2020 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 2020 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.

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).

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/FDBPrograms/FoodSafetyProgram/Water.aspx).

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 2020, with NO exceeded limits found. During 2020, there were NO violations of any Federal or State water quality standards.

Results of monitoring for the period of January 1 to December 31, 2020, 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.

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

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.

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 2020.

Also listed is 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.

Contact Information.

If you have specific questions about the quality of the drinking water supplied to you, please contact:

Bryant K. Hill Director of Public Works

951-657-3280

Nitrates in Drinking Water.

Nitrate in drinking water at levels above 10 mg/L (As Nitrogen) is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L (As Nitrogen) may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

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.

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 1/1/20-12/31/20)	0 (from 1/1/20-12/31/20)	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	9.3-33.0	22.8	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	ND-14.9	10.10	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]	1.03-1.64	1.3	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	0.1-0.9	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) September 2018 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) September 2018 Sampling.	AL=1300	300	230	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	1	Naturally occurring organic materials	N/A
Turbidity (NTU)	(5)	NA	0.1-0.8	ND	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.

2020 Water Quality Report to Member Agencies—The Metropolitan Water District of Southern California

Parameter	Units	State or Federal MCL	PHG	State DLR	Range Average	Mills Plant (MWD)	Major Sources in Drinking Water
CLARITY							
Combined Filter	NTU	TT = 1			Highest	0.06	
Effluent Turbidity	%	TT (a)	NA	NA	% ≤ 0.3	100	Soil runoff
MICROBIOLOGICAL							
Total Coliform Bacteria (b)					Range	0	
State Total Coliform Rule	%	5.0	MCLG = 0	NA	Average	0	Naturally present in the environment
E. coli (Acute Total Coliform)						0	
State Total Coliform Rule	(c)	(c)	MCLG = 0	NA			Human and animal fecal waste
Total Coliform Bacteria					Range	0	
Federal Revised Total Coliform Rule	%	TT (d)	NA	NA	Average	0	Naturally present in the environment
E. coli							
Federal Revised Total Coliform Rule	(e)	(e)	MCLG = 0	NA		0	Human and animal fecal waste
Heterotrophic Plate Count					Range	0-1	
(HPC) (f)	CFU/mL	TT	NA	NA	Average	ND	Naturally present in the environment
	oocysts/				Range	ND	
Cryptosporidium	200 L	TT	MCLG = 0	NA	Average	ND	Human and animal fecal waste
	cysts/				Range	ND	
Giardia	200 L	TT	MCLG = 0	NA	Average	ND	Human and animal fecal waste
ORGANIC CHEMICALS							
Semi-Volatile Organic Compounds (g)							
					Range	TT	
Acrylamide	NA	TT	MCLG = 0	NA	Average	TT	Water treatment chemical impurities
					Range	TT	
Epichlorohydrin	NA	TT	MCLG = 0	NA	Average	TT	Water treatment chemical impurities
INORGANIC CHEMICALS							
					Range	ND-93	Residue from water treatment process;
Aluminum	ppb	1,000	600	50	Highest RAA	54	natural deposits erosion
					Range	ND	Natural deposits erosion, glass and electronics
Arsenic	ppb	10	0.004	2	Average	ND	production wastes
					Control Range	0.6–0.9	
					Optimal Fluoride Level	0.8	
Fluoride (k)					Range	0.1-0.9	Erosion of natural deposits;
Treatment-related	ppm	2.0	1	0.1	Average	0.7	water additive that promotes strong teeth
					Range		
					Range	0.4-1.1	Runoff and leaching from fertilizer use; septic tank
Nitrate (as Nitrogen)	ppm	10	10	0.4	Average	0.6	and sewage; natural deposits erosion

RADIOLOGICALS (m)							
Gross Alpha Particle Activity	pCi/L	15	MCLG = 0	3	Range Average	ND–4 ND	Erosion of natural deposits
Uranium	pCi/L	20	0.43	1	Range Average	ND–2 ND	Erosion of natural deposits
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS							
Total Trihalomethanes (TTHM)	ppb	80	NA	1.0	Range Highest LRAA	14-22 18	Byproduct of drinking water chlorination
Haloacetic Acids (five) (HAA5)	ppb	60	NA	1.0	Range Highest LRAA	2.2-14 9.1	Byproduct of drinking water chlorination
Total Chlorine Residual	ppm	MRDL = 4.0	MRDLG = 4.0	NA	Range Highest RAA	1.4-3.0 2.9	Drinking water disinfectant added for treatment
Bromate (q)	ppb	10	0.1	1.0	Range Highest RAA	ND-12 4.3	Byproduct of drinking water ozonation
DBP Precursors Control as Total Organic Carbon (TOC)	ppm	TT	NA	0.30	Range Average	1.7-3.1 2.1	Various natural and man-made sources; TOC as a medium for the formation of disinfection byproducts
SECONDARY STANDARDS—Aesthetic Standards							
Aluminum	ppb	200	600	50	Range Highest RAA	ND-94 ND	Residue from water treatment process; natural deposits erosion
Chloride	ppm	500	NA	NA	Range Average	60-62 61	Runoff/leaching from natural deposits; seawater influence
Color	Color Units	15	NA	NA	Range Average	1 1	Naturally occurring organic materials
Odor Threshold	TON	3	NA	1	Range Average	2 2	Naturally occurring organic materials
Specific Conductance	µS/cm	1,600	NA	NA	Range Average	435-455 447	Substances that form ions in water; seawater influence
Sulfate	ppm	500	NA	0.5	Range Average	41-43 42	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	ppm	1,000	NA	NA	Range Average	163-196 180	Runoff/leaching from natural deposits; seawater influence

OTHER PARAMETERS							
MICROBIOLOGICAL							
HPC (f')	CFU/mL	NA	NA	NA	Range Median	ND ND	Naturally present in the environment
Total Coliform Bacteria (r)	%	NA	NA	NA	Range Average	ND ND	Naturally present in the environment
E. coli (r)	%	NA	NA	NA	Range Average	ND ND	Human and animal fecal waste
CHEMICAL							
Alkalinity (as $CaCO_3$)	ppm	NA	NA	NA	Range Average	75-76 76	
Boron	ppb	NL = 1,000	NA	100	Range Average	160 160	Runoff/leaching from natural deposits; industrial wastes
Calcium	ppm	NA	NA	NA	Range Average	21-22 22	
Chlorate	ppb	NL = 800	NA	20	Range Average	27 27	Byproduct of drinking water chlorination; industrial processes
Corrosivity (s) (as Aggressiveness Index)	AI	NA	NA	NA	Range Average	11.9-12.1 12.0	Elemental balance in water; affected by temperature, other factors
Corrosivity (t) (as Saturation Index)	SI	NA	NA	NA	Range Average	0.15-0.31 0.23	Elemental balance in water; affected by temperature, other factors
Hardness (as $CaCO_3$)	ppm	NA	NA	NA	Range Average	84-94 89	
Magnesium	ppm	NA	NA	NA	Range Average	9.7-10 10	
pH	pH Units	NA	NA	NA	Range Average	8.3-8.5 8.4	
Potassium	ppm	NA	NA	NA	Range Average	2.5-2.6 2.5	
Sodium	ppm	NA	NA	NA	Range Average	51-55 53	
Vanadium	ppb	NL = 50	NA	3	Range Average	ND ND	Naturally occurring; industrial waste discharge
N-Nitrosodimethylamine (NDMA)	ppt	NL = 10	3	2	Range Average	ND ND	Byproduct of drinking water chloramination; industrial processes

Footnotes			
a)	As a Primary Standard, the turbidity levels of the filtered water were less than or equal to 0.3 NTU in 95% of the online measurements taken each month and did not exceed 1 NTU for more than one hour. Turbidity, a measure of the cloudiness of the water, is an indicator of treatment performance. The turbidity levels for grab samples at these locations were in compliance with the Secondary Standard.	(i)	Metropolitan's chromium VI reporting level is 0.03 ppb, which is below the state DLR of 1 ppb. Data above Metropolitan's reporting level but below the DLR are reported as ND in this report. These data are available upon request.
		(j)	As a wholesaler, Metropolitan has no retail customers and is not required to collect samples at the consumers' tap under the Lead and Copper Rule. Results are based from annual compliance monitoring.
b)	Total coliform MCL: No more than 5.0% total coliform-positive samples in a month. Compliance is based on the combined distribution system sampling from all of the treatment plants. Three total coliform-positive samples were found out of the 7,106 samples analyzed in 2020. The MCL was not violated.	(k)	Metropolitan was in compliance with all provisions of the State's Fluoridation System Requirements.
		(l)	Metropolitan's perchlorate reporting level is 0.1 ppb, which is below the state DLR of 4 ppb. Data above Metropolitan's reporting level but below the DLR are reported as ND in this report. These data are available upon request.
c)	Acute total coliform (*E. coli)* MCL: The occurrence of two consecutive total coliform-positive samples, one of which contains *E. coli*, constitutes an acute MCL violation. No samples were *E. coli*-positive and the MCL was not violated.	(m)	Data are from samples collected (triennially) during four consecutive quarters of monitoring in 2014 and reported for three years until the next samples are collected.
d)	Total coliform TT trigger, Level 1 assessments, and total coliform TT violations: More than 5.0% total coliform-positive samples in a month trigger Level 1 assessments. Failure to conduct assessments and correct findings within 30 days is a total coliform violation. No triggers, Level 1 assessments, or violations occurred.	(n)	SWRCB considers 50 pCi/L to be the level of concern for beta particles.
		(o)	These data represent the treatment plant specific core locations per the State approved monitoring plan. For the Jensen service area, the data for the B-5 location were excluded when served by the Weymouth treatment plant.
e)	*E. coli* MCL and Level 2 TT triggers for assessments: Routine and repeat samples are total coliform-positive and either sample is *E. coli*-positive, or system fails to collect all repeat samples following an *E. coli*-positive sample or fails to test for *E. coli* when the repeat sample is total coliform-positive. No samples were *E. coli* positive. No MCLs violations or no assessments occurred.	(p)	These data represent the Locational Running Annual Average (LRAA) of all data collected at distribution system-wide monitoring locations.
		(q)	No MCL exceedance occurred. Compliance with State and Federal Bromate MCL is based on RAA.
		(r)	Noncompliance monthly percentage of coliform-positive samples analyzed at each treatment plant.
f)	All distribution system samples collected had detectable total chlorine residuals and no HPC was required. (f') HPC reporting level is 1 CFU/mL. Values are based on monthly median per State guidelines and recommendations.	(s)	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)
g)	Data are from samples collected in 2015. Metropolitan's required triennial monitoring (2020-2020) will be performed in 2020.		
h)	Data are from samples collected in 2011 and reported once every nine-year compliance cycle until the next samples are collected.	(t)	Positive SI index = non-corrosive; tendency to precipitate and/or deposit scale on pipes Negative SI index = corrosive; tendency to dissolve calcium carbonate

WELLS-MORENO & PERRIS 2020 CCR				
WELLS, 57 Blend WELL-DETECTED CONSTITUENTS (Well 59 Treatment as of Jan2021)				
Constituent	Units	DLR Value	Range	AVERAGE FOR REPORT
Aggressive Index (Corrosivity)	units	null	No-Range	11.2
Alkalinity, Total as CaCO3	mg/L	null	115-120	120
Barium	ug/L	100	No-Range	150
Bicarbonate (HCO3)	mg/L	null	No-Range	150
Boron	ug/L	100	No-Range	330
Calcium	mg/L	null	87-89	88
Chloride	mg/L	null	No-Range	220
EC - Specific Conductance*	umhos/cm	null	960-1300	1100
Fluoride	mg/L	0.1	No-Range	0.24
Hardness	mg/L	null	No-Range	310
Langelier Index	units	null	No-Range	-0.68
Magnesium	mg/L	null	No-Range	22
Nitrate as N	mg/L	0.4	3.2-5.1	3.6
Odor at 60 degrees C	TON	null	No Range	1
pH, Laboratory	pH unit	null	No-Range	7.3
Silica	mg/L	null	No-Range	26
Sodium	mg/L	null	No-Range	88
Sulfate	mg/L	0.5	No-Range	51
Total Dissolved Solids*	mg/L	null	580-860	690
Turbidity, Laboratory	NTU	0.1	No-Range	0.1

* - Well 57 is treated on site for TDS and EC by blending with system water. TDS, EC and Nitrate are tested after blending.

WATER-PERRIS WATER FILTRATION PLANT 2020 CCR

Combined Filter Effluent Turbidity	NTU and %
Highest NTU	**0.25**
%<=0.1	99.97

Detected Constituents				
Constituent Name	Units	DLR Value	Range	AVERAGE FOR REPORT
Aggressive Index (Corrosivity)	units	null	11.1-12.6	11.8
Alkalinity, Total as CaCO3	mg/L	null	68-120	87
Arsenic	ug/L	2	No Range	2.8
Bicarbonate (HCO3)	mg/L	null	68-150	110
Boron	ug/L	100	130-240	150
Calcium	mg/L	null	18-72	33
Chloride	mg/L	null	55-110	82
EC - Specific Conductance	umhos/cm	null	360-940	560
Fluoride	mg/L	0.1	ND-0.33	0.12
HAA5 - Haloacetic Acids (Five)	ug/L	1	5.6-38	11
Hardness	mg/L	null	58-280	130
Hardness	gr/gal	null	3.4-16	7.6
Langelier Index	units	null	-0.97-0.73	-0.063
Magnesium	mg/L	null	8.1-25	13
Nitrate as N	mg/L	0.4	ND-1.2	0.49
Odor at 60 degrees C	TON	null	No Range	1
pH, Field	pH unit	null	7.2-8.6	8.0
Silica	mg/L	null	ND-49	7.4
Sodium	mg/L	null	43-93	64
Sulfate	mg/L	0.5	35-200	62
Total Dissolved Solids	mg/L	null	200-620	340
Total Inorganic Nitrogen	mg/L	null	No Range	1
Total Organic Carbon (TOC)	mg/L	0.3	1.6-3.7	2.2
Total Trihalomethanes (TTHM)	ug/L	1	15-29	20
Turbidity, Laboratory	NTU	0.1	ND-1	0.2
Uranium	pCi/L	1	No Range	1.9

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)		