ATTACHMENT 7

Consumer Confidence Report
Certification Form

(to be submitted with a copy of the CCR)

Water System Name: FOOTHILL MUNICIPAL WATER DISTRICT

Water System Number: 1910032

The water system named above hereby certifies that its Consumer Confidence Report was distributed on March 20, 2013 to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the California Department of Public Health.

Certified by: Name: Karen Oblak

Signature: Karen Oblak

Title: Administrative Manager

Phone Number: (818) 790-4036 Date: March 20, 2013

To summarize report delivery used and good-faith efforts taken, please complete the below by checking all items that apply and fill-in where appropriate:

☐ CCR was distributed by mail or other direct delivery methods (attach description of other direct delivery methods used).

X CCR was distributed using electronic delivery methods described by the February 2013, CCR Delivery Memorandum (water systems utilizing electronic delivery methods must complete the second page).

☐ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

- ☐ Posting the CCR at the following URL: www._____
- ☐ Mailing the CCR to postal patrons within the service area (attach zip codes used)
- ☐ Advertising the availability of the CCR in news media (attach copy of press release)
- ☐ Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)
- ☐ Posted the CCR in public places (attach a list of locations)
- ☐ Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools
- ☐ Delivery to community organizations (attach a list of organizations)
- ☐ Other (attach a list of other methods used)

☐ *For systems serving at least 100,000 persons*: Posted CCR on a publicly-accessible internet site at the following URL: www._____

☐ *For privately-owned utilities*: Delivered the CCR to the California Public Utilities Commission

This form is provided as a convenience and may be used to meet the certification requirement of section 64483(c), California Code of Regulations.

Consumer Confidence Report
Electronic Delivery Certification

Water systems utilizing electronic distribution methods for CCR delivery must complete the below by checking all items that apply and fill-in where appropriate.

- ☐ Water system mailed a notification that the CCR is available and provides a direct URL to the CCR on a publicly available website where it can be viewed (attach a copy of the mailed CCR notification). URL: www._____
- ☐ Water system emailed a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet where it can be viewed (attach a copy of the emailed CCR notification). URL: www._____
- X Water system emailed the CCR as an electronic file email attachment.
- ☐ Water system emailed the CCR text and tables inserted or embedded into the body of an email, not as an attachment (attach a copy of the emailed CCR).
- ☐ *Requires prior CDPH review and approval.* Water system utilized an additional electronic delivery method that meets the direct delivery requirement.

Provide a brief description of the water system's electronic delivery procedures and include how the water system ensures delivery to customers unable to receive electronic delivery.

The CCR and all corresponding spreadsheets regarding influent and effluent figures were emailed to Foothill's seven water-taking Retail Agencies on March 20, 2013. These emails were directed to each agency's General Manager's email address, all of which are well-known to Foothill's staff.

Have also included the email from MWD (Foothill's water provider) to the Member Agency Managers so that they have access to the other informational links provided for the entire CCR process.

A link connecting directly to the Metropolitan Water District Annual Water Quality Report has also been placed on our website at www.fmwd.com even though the number of persons served through our retail agencies is less than 100,000. This link will show the MWD Water Quality Report for 2012 once MWD has finalized and uploaded it to their site. Currently, the link directs to the 2011 report.

2012 Water Quality Report to MWD Member Agencies--The Metropolitan Water District of Southern California

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Source Water ‡ Colorado River Lake Havasu	Colorado River Lake Mathews	State Project Water Castaic Lake	State Project Water Silver-wood Lake	State Project Water Lake Perris	Blended Diamond Valley Lake	Blended Lake Skinner	Major Sources In Drinking Water
Percent State					Range	0	0	100	100	100	68 - 95	42 - 81	
Project Water	%	NA	NA	NA	Average	0	0	100	100	100	84	63	
PRIMARY STANDARDS--Mandatory Health-Related Standards													
ORGANIC CHEMICALS													
Pesticides/PCBs													
					Range	ND	ND	ND	ND	ND	ND	ND	
Alachlor	ppb	2	4	1	Average	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops
Atrazine	ppb	1	0.15	0.5	Average	ND	ND	ND	ND	ND	ND	ND	and along highways
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from herbicide used on rice,
Bentazon	ppb	18	200	2	Average	ND	ND	ND	ND	ND	ND	ND	alfalfa, and grapes
					Range	ND	ND	ND	ND	ND	ND	ND	Leaching of soil fumigant used on rice, alfalfa,
Carbofuran	ppb	18	1.7	5	Average	ND	ND	ND	ND	ND	ND	ND	and grapes
					Range	ND	ND	ND	ND	ND	ND	ND	
Chlordane	ppt	100	30	100	Average	ND	ND	ND	ND	ND	ND	ND	Residue of banned insecticide
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops,
2,4-D	ppb	70	20	10	Average	ND	ND	ND	ND	ND	ND	ND	rangeland, lawns, and aquatic weeds
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used on rights-of-way,
Dalapon	ppb	200	790	10	Average	ND	ND	ND	ND	ND	ND	ND	crops, and landscapes
Dibromochloropropane					Range	ND	ND	ND	ND	ND	ND	ND	Banned nematocide that may still be present
(DBCP)	ppt	200	1.7	10	Average	ND	ND	ND	ND	ND	ND	ND	in soils
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used on soybeans,
Dinoseb	ppb	7	14	2	Average	ND	ND	ND	ND	ND	ND	ND	vegetables, and fruits
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used for terrestrial
Diquat	ppb	20	15	4	Average	ND	ND	ND	ND	ND	ND	ND	and aquatic weeds
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide used for terrestrial
Endothall	ppb	100	580	45	Average	ND	ND	ND	ND	ND	ND	ND	and aquatic weeds
					Range	ND	ND	ND	ND	ND	ND	ND	
Endrin	ppb	2	1.8	0.1	Average	ND	ND	ND	ND	ND	ND	ND	Residue of banned insecticide and rodenticide
Ethylene Dibromide					Range	ND	ND	ND	ND	ND	ND	ND	Petroleum refinery discharges, underground
(EDB)	ppt	50	10	20	Average	ND	ND	ND	ND	ND	ND	ND	gas tank leaks
					Range	ND	ND	ND	ND	ND	ND	ND	
Glyphosate	ppb	700	900	25	Average	ND	ND	ND	ND	ND	ND	ND	Runoff from herbicide use
					Range	ND	ND	ND	ND	ND	ND	ND	
Heptachlor	ppt	10	8	10	Average	ND	ND	ND	ND	ND	ND	ND	Residue of banned insecticide
					Range	ND	ND	ND	ND	ND	ND	ND	
Heptachlor Epoxide	ppt	10	6	10	Average	ND	ND	ND	ND	ND	ND	ND	Breakdown product of heptachlor
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from insecticide used on cattle,
Lindane	ppt	200	32	200	Average	ND	ND	ND	ND	ND	ND	ND	lumber, and gardens
					Range	ND	ND	ND	ND	ND	ND	ND	
Methoxychlor	ppb	30	0.09	10	Average	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from insecticide uses
					Range	ND	ND	ND	ND	ND	ND	ND	
Molinate (Ordram)	ppb	20	1	2	Average	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from herbicide used on rice
					Range	ND	ND	ND	ND	ND	ND	ND	
Oxamyl (Vydate)	ppb	50	26	20	Average	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from insecticide uses
					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from wood preserving factories
Pentachlorophenol	ppb	1	0.3	0.2	Average	ND	ND	ND	ND	ND	ND	ND	other insecticidal and herbicidal uses
					Range	ND	ND	ND	ND	ND	ND	ND	
Picloram	ppb	500	500	1	Average	ND	ND	ND	ND	ND	ND	ND	Herbicide runoff
Polychlorinated					Range	ND	ND	ND	ND	ND	ND	ND	
Biphenyls (PCBs)	ppt	500	90	500	Average	ND	ND	ND	ND	ND	ND	ND	Runoff from landfills; discharge of waste chemicals
					Range	ND	ND	ND	ND	ND	ND	ND	
Simazine	ppb	4	4	1	Average	ND	ND	ND	ND	ND	ND	ND	Herbicide runoff
					Range	ND	ND	ND	ND	ND	ND	ND	
Thiobencarb (a)	ppb	70	70	1	Average	ND	ND	ND	ND	ND	ND	ND	Runoff leaching from rice herbicide
2,4,5-TP					Range	ND	ND	ND	ND	ND	ND	ND	
(Silvex)	ppb	50	25	1	Average	ND	ND	ND	ND	ND	ND	ND	Residue of banned herbicide
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from insecticide used on
Toxaphene	ppb	3	0.03	1	Average	ND	ND	ND	ND	ND	ND	ND	cotton and cattle
Semi-Volatile Organic Compounds													
					Range	ND	ND	ND	ND	ND	ND	ND	Leaching from water storage tank linings
Benzo(a)pyrene	ppt	200	7	100	Average	ND	ND	ND	ND	ND	ND	ND	and distribution lines

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					Range	ND	ND	ND	ND	ND	ND	ND	
Di(2-ethylhexyl)adipate	ppb	400	200	5	Average	ND	ND	ND	ND	ND	ND	ND	Discharge from chemical factories
					Range	ND	ND	ND	ND	ND	ND	ND	Chemical factory discharge; inert ingredient
Di(2-ethylhexyl)phthalate	ppb	4	12	3	Average	ND	ND	ND	ND	ND	ND	ND	in pesticides
					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from metal refineries & agrochemicals
Hexachlorobenzene	ppb	1	0.03	0.5	Average	ND	ND	ND	ND	ND	ND	ND	factories; wastewater chlorination reaction by-product
					Range	ND	ND	ND	ND	ND	ND	ND	
Hexachlorocyclopentadiene	ppb	50	50	1	Average	ND	ND	ND	ND	ND	ND	ND	Discharge from chemical factories
2,3,7,8-TCDD					Range	ND	ND	ND	ND	ND	ND	ND	Waste incineration emissions, chemical factory
(Dioxin)	ppq	30	0.05	5	Average	ND	ND	ND	ND	ND	ND	ND	discharge
Volatile Organic Compounds													
					Range	ND	ND	ND	ND	ND	ND	ND	Plastics factory discharge; gas tanks
Benzene	ppb	1	0.15	0.5	Average	ND	ND	ND	ND	ND	ND	ND	and landfill leaching
					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from chemical plants and other industrial
Carbon Tetrachloride	ppt	500	100	500	Average	ND	ND	ND	ND	ND	ND	ND	waste
					Range	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	ppb	600	600	0.5	Average	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
					Range	ND	ND	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	ppb	5	6	0.5	Average	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
					Range	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane	ppb	5	3	0.5	Average	ND	ND	ND	ND	ND	ND	ND	Extraction and degreasing solvent; fumigant
					Range	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloroethane	ppt	500	400	500	Average	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
					Range	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethylene	ppb	6	10	0.5	Average	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
					Range	ND	ND	ND	ND	ND	ND	ND	Industrial chemical factory discharge;
cis-1,2-Dichloroethylene	ppb	6	100	0.5	Average	ND	ND	ND	ND	ND	ND	ND	by-product of TCE and PCE biodegradation
					Range	ND	ND	ND	ND	ND	ND	ND	Industrial chemical factory discharge;
trans-1,2-Dichloroethylene	ppb	10	60	0.5	Average	ND	ND	ND	ND	ND	ND	ND	by-product of TCE and PCE biodegradation
Dichloromethane					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from pharmaceutical
(Methylene Chloride)	ppb	5	4	0.5	Average	ND	ND	ND	ND	ND	ND	ND	and chemical factories
					Range	ND	ND	ND	ND	ND	ND	ND	Industrial chemical factory discharge;
1,2-Dichloropropane	ppb	5	0.5	0.5	Average	ND	ND	ND	ND	ND	ND	ND	primary component of some fumigants
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from nematocide used on
1,3-Dichloropropene	ppt	500	200	500	Average	ND	ND	ND	ND	ND	ND	ND	croplands
					Range	ND	ND	ND	ND	ND	ND	ND	Petroleum refinery discharges; industrial
Ethylbenzene	ppb	300	300	0.5	Average	ND	ND	ND	ND	ND	ND	ND	chemical factories
Methyl-tert-butyl ether					Range	ND	ND	ND	ND	ND	ND	ND	
(MTBE) (a,b)	ppb	13	13	3	Average	ND	ND	ND	ND	ND	ND	ND	Gasoline discharge from watercraft engines
					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial, agricultural, and chemical
Monochlorobenzene	ppb	70	200	0.5	Average	ND	ND	ND	ND	ND	ND	ND	factories, and dry cleaners
					Range	ND	ND	ND	ND	ND	ND	ND	Rubber and plastics factories discharges;
Styrene	ppb	100	0.5	0.5	Average	ND	ND	ND	ND	ND	ND	ND	landfill leaching
					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial, agricultural, and chemical
1,1,2,2-Tetrachloroethane	ppb	1	0.1	0.5	Average	ND	ND	ND	ND	ND	ND	ND	factories; solvent uses
Tetrachloroethylene					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from factories, dry cleaners,
(PCE)	ppb	5	0.06	0.5	Average	ND	ND	ND	ND	ND	ND	ND	and auto shops
					Range	ND	ND	ND	ND	ND	ND	ND	
Toluene	ppb	150	150	0.5	Average	ND	ND	ND	ND	ND	ND	ND	Discharge from petroleum and chemical refineries
					Range	ND	ND	ND	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	ppb	5	5	0.5	Average	ND	ND	ND	ND	ND	ND	ND	Discharge from textile-finishing factories
					Range	ND	ND	ND	ND	ND	ND	ND	Metal degreasing site discharge; manufacture
1,1,1-Trichloroethane	ppb	200	1,000	0.5	Average	ND	ND	ND	ND	ND	ND	ND	of food wrappings
					Range	ND	ND	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	ppb	5	0.3	0.5	Average	ND	ND	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
Trichloroethylene					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from metal degreasing sites and
(TCE)	ppb	5	1.7	0.5	Average	ND	ND	ND	ND	ND	ND	ND	other factories
Trichlorofluoromethane					Range	ND	ND	ND	ND	ND	ND	ND	Industrial factory discharge; degreasing solvent;
(Freon-11)	ppb	150	700	5	Average	ND	ND	ND	ND	ND	ND	ND	propellant
1,1,2-Trichloro-1,2,2-					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from metal degreasing sites and other
trifluoroethane (Freon-113)	ppm	1.2	4	0.01	Average	ND	ND	ND	ND	ND	ND	ND	factories; dry cleaning solvent; refrigerant
					Range	ND	ND	ND	ND	ND	ND	ND	Leaching from PVC piping; plastic factory
Vinyl Chloride	ppt	500	50	500	Average	ND	ND	ND	ND	ND	ND	ND	discharge; by-product of TCE and PCE biodegradation

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					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from petroleum and chemical refineries;
Xylenes	ppm	1.750	1.8	0.0005	Average	ND	ND	ND	ND	ND	ND	ND	fuel solvent
INORGANIC CHEMICALS													
					Range	ND	ND	ND	ND	ND	ND	ND	Residue from water treatment process;
Aluminum (a)	ppb	1,000	600	50	Average	ND	ND	ND	ND	ND	ND	ND	natural deposits erosion
					Range	ND	ND	ND	ND	ND	ND	ND	Petroleum refinery discharges; fire retardants;
Antimony	ppb	6	20	6	Average	ND	ND	ND	ND	ND	ND	ND	solder; electronics
					Range	2.4	2.2	ND	ND	ND	2.2	2.3	Natural deposits erosion; glass and electronics
Arsenic	ppb	10	0.004	2	Average	2.4	2.2	ND	ND	ND	2.2	2.3	production wastes
					Range	ND	ND	ND	ND	ND	ND	ND	Asbestos cement pipes internal corrosion;
Asbestos	MFL	7	7	0.2	Average	ND	ND	ND	ND	ND	ND	ND	natural deposits erosion
					Range	110	120	ND	ND	ND	ND	ND	Oil and metal refineries discharges;
Barium	ppb	1,000	2,000	100	Average	110	120	ND	ND	ND	ND	ND	natural deposits erosion
					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from metal refineries, aerospace,
Beryllium	ppb	4	1	1	Average	ND	ND	ND	ND	ND	ND	ND	and defense industries
					Range	ND	ND	ND	ND	ND	ND	ND	Internal corrosion of galvanized pipes;
Cadmium	ppb	5	0.04	1	Average	ND	ND	ND	ND	ND	ND	ND	natural deposits erosion
					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from steel and pulp mills;
Chromium	ppb	50	(100)	10	Average	ND	ND	ND	ND	ND	ND	ND	natural deposits erosion
					Range	ND	ND	ND	ND	ND	ND	ND	Internal corrosion of household pipes;
Copper (a,c)	ppm	AL = 1.3	0.3	0.05	Average	ND	ND	ND	ND	ND	ND	ND	natural deposits erosion
					Range	ND	ND	ND	ND	ND	ND	ND	Discharge from steel/metal, plastic, and
Cyanide	ppb	150	150	100	Average	ND	ND	ND	ND	ND	ND	ND	fertilizer factories
Fluoride					Range	0.3	0.3	0.1	ND	0.1	0.1	0.2	Erosion of natural deposits; discharge from
(naturally-occurring)	ppm	2.0	1	0.1	Average	0.3	0.3	0.1	ND	0.1	0.1	0.2	fertilizer and aluminum factories
					Range	ND	ND	ND	ND	ND	ND	ND	House pipes internal corrosion;
Lead (c)	ppb	AL = 15	0.2	5	Average	ND	ND	ND	ND	ND	ND	ND	erosion of natural deposits
					Range	ND	ND	ND	ND	ND	ND	ND	Erosion of natural deposits; factory discharge;
Mercury	ppb	2	1.2	1	Average	ND	ND	ND	ND	ND	ND	ND	landfill runoff
					Range	ND	ND	ND	ND	ND	ND	ND	Erosion of natural deposits; discharge from
Nickel	ppb	100	12	10	Average	ND	ND	ND	ND	ND	ND	ND	metal factories
					Range	0.4	ND	ND	0.5	ND	ND	ND	Runoff and leaching from fertilizer use; septic tank
Nitrate (as N) (d)	ppm	10	10	0.4	Average	0.4	ND	ND	0.5	ND	ND	ND	and sewage; natural deposits erosion
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff and leaching from fertilizer use; septic tank
Nitrite (as N)	ppm	1	1	0.4	Average	ND	ND	ND	ND	ND	ND	ND	and sewage; natural deposits erosion
					Range	ND	ND	ND	ND	ND	ND	ND	
Perchlorate (e)	ppb	6	6	4	Average	ND	ND	ND	ND	ND	ND	ND	Industrial waste discharge
					Range	ND	ND	ND	ND	ND	ND	ND	Refineries, mines, and chemical
Selenium	ppb	50	30	5	Average	ND	ND	ND	ND	ND	ND	ND	waste discharge; runoff from livestock lots
					Range	ND	ND	ND	ND	ND	ND	ND	Leaching from ore processing; electronics
Thallium	ppb	2	0.1	1	Average	ND	ND	ND	ND	ND	ND	ND	factory discharge
RADIOLOGICALS (f)													
Gross Alpha					Range	3 - 6	3 - 5	ND	ND	ND - 3	ND	ND - 3	
Particle Activity	pCi/L	15	(0)	3	Average	4	4	ND	ND	ND	ND	ND	Erosion of natural deposits
Gross Beta					Range	ND - 5	ND - 7	ND - 5	ND - 4	ND	ND - 4	ND - 6	
Particle Activity (g)	pCi/L	50	(0)	4	Average	ND	6	ND	ND	ND	ND	ND	Decay of natural and man-made deposits
					Range	ND	ND	ND	ND	ND	ND	ND	
Radium-226	pCi/L	NA	0.05	1	Average	ND	ND	ND	ND	ND	ND	ND	Erosion of natural deposits
					Range	ND	ND	ND	ND	ND	ND	ND	
Radium-228	pCi/L	NA	0.019	1	Average	ND	ND	ND	ND	ND	ND	ND	Erosion of natural deposits
Combined					Range	ND	ND	ND	ND	ND	ND	ND	
Radium-226 + 228 (h)	pCi/L	5	(0)	NA	Average	ND	ND	ND	ND	ND	ND	ND	Erosion of natural deposits
					Range	ND	ND	ND	ND	ND	ND	ND	
Strontium-90	pCi/L	8	0.35	2	Average	ND	ND	ND	ND	ND	ND	ND	Decay of natural and man-made deposits
					Range	ND	ND	ND	ND	ND	ND	ND	
Tritium	pCi/L	20,000	400	1,000	Average	ND	ND	ND	ND	ND	ND	ND	Decay of natural and man-made deposits
					Range	2 - 3	2 - 3	1 - 2	ND -1	ND - 2	1 - 2	ND - 2	
Uranium	pCi/L	20	0.43	1	Average	2	3	1	1	1	1	1	Erosion of natural deposits
SECONDARY STANDARDS--Aesthetic Standards (i)													
					Range	ND	ND	ND	ND	ND	ND	ND	Residue from water treatment process;
Aluminum (a)	ppb	200	600	50	Average	ND	ND	ND	ND	ND	ND	ND	natural deposits erosion
					Range	76 - 82	82 - 87	47 - 61	76 - 80	64 - 72	64 - 65	67 - 68	Runoff/leaching from natural deposits;
Chloride	ppm	500	NA	NA	Average	79	84	54	78	68	64	68	seawater influence
					Range	3 - 6	2	6 - 7	7 - 8	6 - 7	5	4	
Color	Units	15	NA	NA	Average	4	2	6	8	6	5	4	Naturally-occurring organic materials
					Range	ND	ND	ND	ND	ND	ND	ND	Internal corrosion of household pipes; natural
Copper (a,c)	ppm	1.0	0.3	0.05	Average	ND	ND	ND	ND	ND	ND	ND	deposits erosion; wood preservatives leaching
Foaming Agents					Range	ND	ND	ND	ND	ND	ND	ND	

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(MBAS)	ppb	500	NA	NA	Average	ND	ND	ND	ND	ND	ND	ND	Municipal and industrial waste discharges
					Range	ND	ND	ND	ND	ND	ND	ND	
Iron	ppb	300	NA	100	Average	ND	ND	ND	ND	ND	ND	ND	Leaching from natural deposits, industrial wastes
					Range	ND	ND	ND	23	ND	ND	ND	
Manganese	ppb	50	NL = 500	20	Average	ND	ND	ND	23	ND	ND	ND	Leaching from natural deposits
					Range	ND	ND	ND	ND	ND	ND	ND	
MTBE (a,b)	ppb	5	13	3	Average	ND	ND	ND	ND	ND	ND	ND	Gasoline discharge from watercraft engines
					Range	20	12	6	12	12	8	12	
Odor Threshold	TON	3	NA	1	Average	20	12	6	12	12	8	12	Naturally-occurring organic materials
					Range	ND	ND	ND	ND	ND	ND	ND	
Silver	ppb	100	NA	10	Average	ND	ND	ND	ND	ND	ND	ND	Industrial discharges
					Range	910 - 930	930 - 940	380 - 470	430 - 500	430 - 460	500 - 510	630 - 640	Substances that form ions in water;
Specific Conductance	µS/cm	1,600	NA	NA	Average	920	930	420	470	440	500	630	seawater influence
					Range	220	210 - 220	43 - 49	19 - 37	19 - 41	61 - 70	100	Runoff/leaching from natural deposits;
Sulfate	ppm	500	NA	0.5	Average	220	220	46	28	30	66	100	industrial wastes
					Range	ND	ND	ND	ND	ND	ND	ND	
Thiobencarb (a)	ppb	1	70	1	Average	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from rice herbicide
Total Dissolved Solids					Range	570 - 600	570 - 580	230 - 270	230 - 270	230 - 250	280 - 300	360	Runoff/leaching from natural deposits;
(TDS)	ppm	1,000	NA	NA	average	580	570	250	250	240	290	360	seawater influence
					Range	0.5 - 0.5	0.3 - 0.5	0.7 - 0.8	1	0.7 - 1	0.3 - 0.4	0.5 - 0.8	
Turbidity (i)	NTU	5	NA	0.1	Average	0.5	0.4	0.8	1	1	0.3	0.6	Soil runoff
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from natural deposits;
Zinc	ppm	5.0	NA	0.05	Average	ND	ND	ND	ND	ND	ND	ND	industrial wastes
OTHER PARAMETERS													
MICROBIOLOGICAL													
Total Coliform	CFU/				Range	5 - 1,900	ND - 8,600	NC	31 - 11,000	420 - 24,000	19 - 2,700	29 - 1,800	
Bacteria (k)	100 mL	NA	NA	NA	Median	160	500	NC	1,800	4,700	280	540	Naturally present in the environment
	CFU/				Range	ND - 1	ND - 32	NC	ND - 8	1 - 120	ND - 7	1 - 12	
E. coli (k)	100 mL	NA	NA	NA	Median	ND	1	NC	3	20	ND	5	Human and animal fecal waste
CHEMICAL													
					Range	130 - 140	120	72 - 81	68 - 77	66 - 76	78 - 81	93 - 96	
Alkalinity	ppm	NA	NA	NA	Average	130	120	76	72	71	80	94	
					Range	120	130	170	140	140	140	120	Runoff/leaching from natural deposits;
Boron	ppb	NL = 1,000	NA	100	Average	120	130	170	140	140	140	120	industrial wastes
					Range	71	64 - 65	23 - 29	15 - 21	15 - 22	27 - 28	38	
Calcium	ppm	NA	NA	NA	Average	71	64	24	18	18	28	38	
					Range	ND	ND	ND	ND	ND	ND	ND	Runoff/leaching from natural deposits;
Chromium VI (l)	ppb	NA	0.02	1	Average	ND	ND	ND	ND	ND	ND	ND	discharge from industrial waste factories
					Range	280	260 - 270	100 - 110	84 - 100	84 - 100	120	160	
Hardness	ppm	NA	NA	NA	Average	280	270	110	94	93	120	160	
					Range	24 - 23	24 - 25	11	11 - 12	11	12 - 13	16	
Magnesium	ppm	NA	NA	NA	Average	24	24	11	12	11	12	16	
	pH				Range	8.0 - 8.1	8.2 - 8.4	7.8 - 7.9	8.0 - 8.4	7.9	7.9 - 8.0	8.2 - 8.3	
pH	Units	NA	NA	NA	Average	8.0	8.3	7.8	8.2	7.9	7.9	8.3	
					Range	4.2 - 4.4	4.4 - 4.5	2.4 - 2.5	2.5 -2.9	2.4 -2.7	3.1 - 3.2	3.4 - 3.5	
Potassium	ppm	NA	NA	NA	Average	4.3	4.4	2.4	2.7	2.6	3.2	3.4	
					Range	ND	ND	ND	ND	ND	ND	ND	
Radon (f)	pCi/L	NA	NA	100	Average	ND	ND	ND	ND	ND	ND	ND	
					Range	81 - 84	85 - 88	39 - 47	49 - 56	47 - 48	51 - 52	58 - 60	
Sodium	ppm	NA	NA	NA	Average	82	86	43	52	48	52	59	
					Range	3.0	2.9 - 3.2	2.4 - 2.5	2.6 - 3.1	2.6 - 3.7	2.5	2.8	
TOC	ppm	TT	NA	0.30	Average	3.0	3.1	2.4	2.9	3.1	2.5	2.8	Various natural and man-made sources
					Range	ND	ND	ND	ND	3	ND	ND	
Vanadium	ppb	NL = 50	NA	3	Average	ND	ND	ND	ND	3	ND	ND	Naturally-occurring; industrial waste discharge
Dichlorodifluoromethane					Range	ND	ND	ND	ND	ND	ND	ND	
(Freon 12)	ppb	NL = 1,000	NA	0.5	Average	ND	ND	ND	ND	ND	ND	ND	Industrial waste discharge
Ethyl-*tert*-butyl ether					Range	ND	ND	ND	ND	ND	ND	ND	
(ETBE)	ppb	NA	NA	3	Average	ND	ND	ND	ND	ND	ND	ND	Used as gasoline additive
tert-Amyl-methyl ether					Range	ND	ND	ND	ND	ND	ND	ND	
(TAME)	ppb	NA	NA	3	Average	ND	ND	ND	ND	ND	ND	ND	Used as gasoline additive
tert-Butyl alcohol					Range	ND	ND	ND	ND	ND	ND	ND	MTBE breakdown product, used as gasoline
(TBA)	ppb	NL = 12	NA	2	Average	ND	ND	ND	ND	ND	ND	ND	additive

2012 Water Quality Report to MWD Member Agencies--The Metropolitan Water District of Southern California

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Source Water ‡							Major Sources in Drinking Water
						Colorado River		State Project Water			Blended		
						Lake Havasu	Lake Mathews	Castaic Lake	Silver-wood Lake	Lake Perris	Diamond Valley Lake	Lake Skinner	

ABBREVIATIONS AND FOOTNOTES

Abbreviations

AL	Action Level	N	Nitrogen	ppb	parts per billion or micrograms per liter (µg/L)
CDPH	California Department of Public Health	NA	Not Applicable	ppm	parts per million or milligrams per liter (mg/L)
CFU	Colony-Forming Units	NC	Not Collected	ppq	parts per quadrillion or picograms per liter (pg/L)
DLR	Detection Limits for purposes of Reporting	ND	Not Detected	ppt	parts per trillion or nanograms per liter (ng/L)
MBAS	Methylene Blue Active Substances	NL	Notification Level	TOC	Total Organic Carbon
MCL	Maximum Contaminant Level	NTU	Nephelometric Turbidity Units	TT	Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water
MCLG	Maximum Contaminant Level Goal	pCi/L	picoCuries per Liter		
MFL	Million Fibers per Liter	PHG	Public Health Goal	µS/cm	microSiemen per centimeter; or micromho per centimeter (µmho/cm)

‡ As a wholesale water system, Metropolitan provides its member agencies with relevant source water information and monitoring results that they may need for their annual water quality report. Metropolitan's compliance with state or federal regulations is determined at the treatment plant effluent locations.

Footnotes

(a) Aluminum, copper, MTBE, and thiobencarb have both primary and secondary standards.

(b) MTBE was not detected at Metropolitan's reporting level of 0.5 ppb, which is below the state DLR of 3 ppb.

(c) As a wholesaler, Metropolitan is not required to collect samples at the consumers' tap under the Lead and Copper Rule.

(d) State MCL is 45 mg/L as nitrate, which equals 10 mg/L as N.

(e) Perchlorate was not detected at Metropolitan's reporting level of 2 ppb, which is below the state DLR of 4 ppb. Results for Lake Havasu (1 ppb) and Lake Mathews (0.7 ppb) are based on Metropolitan's reporting level of 0.1 ppb for these source waters only.

(f) Data are from samples collected (triennially) during four consecutive quarters of monitoring in 2011 and reported for three years until the next samples are collected.

(g) CDPH considers 50 pCi/L to be the level of concern for beta particles; the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ

(h) State MCL is 5 pCi/L for combined radium-226 and -228.

(i) State Secondary Standards apply to water supplied to the public by community water systems; annual monitoring is required for approved surface water sources or distribution system entry points representative of the effluent of source water treatment.

(j) Per 2012 Consumer Confidence Report Guidance, the state DLR for turbidity is 0.1 NTU.

(k) Reporting level is 1 CFU/100mL for total coliform and *E. coli*. Values are based on monthly median per State guidelines and recommendations.

(l) Metropolitan's chromium VI reporting level is 0.03 ppb, which is below the state DLR of 1 ppb. Annual source water concentrations were ND for the Colorado River sources and Lake Perris, 0.06 ppb for Castaic Lake, 0.12 ppb for Silverwood Lake, and 0.04 ppb for the blended sources.

2012 Water Quality Report to MWD Member Agencies--The Metropolitan Water District of Southern California

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Treatment Plant Influent ‡ Wey-mouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	Major Sources In Drinking Water
Percent State					Range	7 - 99	9 - 98	100	33 - 84	100	
Project Water	%	NA	NA	NA	Average	46	43	100	63	100	
PRIMARY STANDARDS--Mandatory Health-Related Standards											
MICROBIOLOGICAL											
Total Coliform	CFU/				Range	15 - 3,900	ND - 1,600	14 - 2,200	29 - 1,800	150 - 5,000	
Bacteria (a)	100 mL	NA	NA	NA	Median	970	70	110	540	600	Naturally present in the environment
	CFU/				Range	ND - 2	ND - 1	ND - 9	1 - 12	ND - 51	
E. coli (a)	100 mL	NA	NA	NA	Median	1	ND	ND	5	1	Human and animal fecal waste
INORGANIC CHEMICALS											
					Range	ND	ND	ND	NC	ND	Residue from water treatment process;
Aluminum (b)	ppb	1,000	600	50	Average	ND	ND	ND	NC	ND	natural deposits erosion
					Range	ND	ND	ND	NC	ND	Petroleum refinery discharges, fire retardants;
Antimony	ppb	6	20	6	Average	ND	ND	ND	NC	ND	solder; electronics
					Range	ND	ND	ND	NC	ND	Natural deposits erosion; glass and electronics
Arsenic	ppb	10	0.004	2	Average	ND	ND	ND	NC	ND	production wastes
					Range	ND	ND	ND	NC	ND	Oil and metal refineries discharges;
Barium	ppb	1,000	2,000	100	Average	ND	ND	ND	NC	ND	natural deposits erosion
					Range	ND	ND	ND	NC	ND	Discharge from metal refineries, aerospace,
Beryllium	ppb	4	1	1	Average	ND	ND	ND	NC	ND	and defense industries
					Range	ND	ND	ND	NC	ND	Internal corrosion of galvanized pipes;
Cadmium	ppb	5	0.04	1	Average	ND	ND	ND	NC	ND	natural deposits erosion
					Range	ND	ND	ND	NC	ND	Discharge from steel and pulp mills;
Chromium	ppb	50	(100)	10	Average	ND	ND	ND	NC	ND	natural deposits erosion
					Range	ND	ND	ND	NC	ND	Internal corrosion of household pipes;
Copper (b,c)	ppm	AL = 1.3	0.3	0.05	Average	ND	ND	ND	NC	ND	natural deposits erosion
Fluoride					Range	0.1 - 0.3	0.1 - 0.3	0.1 - 0.2	0.1 - 0.2	0.1	Erosion of natural deposits; discharge from
(naturally-occurring)	ppm	2.0	1	0.1	Average	0.2	0.2	0.2	0.2	0.1	fertilizer and aluminum factories
					Range	ND	ND	ND	NC	ND	House pipes internal corrosion;
Lead (c)	ppb	AL = 15	0.2	5	Average	ND	ND	ND	NC	ND	erosion of natural deposits
					Range	ND	ND	ND	NC	ND	Erosion of natural deposits; factory discharge;
Mercury	ppb	2	1.2	1	Average	ND	ND	ND	NC	ND	landfill runoff
					Range	ND	ND	ND	NC	ND	Erosion of natural deposits; discharge from
Nickel	ppb	100	12	10	Average	ND	ND	ND	NC	ND	metal factories
					Range	ND	ND	ND	ND	ND	
Perchlorate (d)	ppb	6	6	4	Average	ND	ND	ND	ND	ND	Industrial waste discharge
					Range	ND	ND	ND	NC	ND	Refineries, mines, and chemical
Selenium	ppb	50	30	5	Average	ND	ND	ND	NC	ND	waste discharge; runoff from livestock lots
					Range	ND	ND	ND	NC	ND	Leaching from ore processing, electronics
Thallium	ppb	2	0.1	1	Average	ND	ND	ND	NC	ND	factory discharge
SECONDARY STANDARDS--Aesthetic Standards (e)											
					Range	ND	ND	ND	NC	ND	Residue from water treatment process;
Aluminum (b)	ppb	200	600	50	Average	ND	ND	ND	NC	ND	natural deposits erosion
					Range	ND	ND	ND	NC	ND	Internal corrosion of household pipes; natural
Copper (b,c)	ppm	1.0	0.3	0.05	average	ND	ND	ND	NC	ND	deposits erosion; wood preservatives leaching
					Range	ND	ND	ND	NC	ND	
Iron	ppb	300	NA	100	Average	ND	ND	ND	NC	ND	Leaching from natural deposits; industrial wastes
					Range	ND	ND	ND	NC	ND	
Manganese	ppb	50	NL = 500	20	Average	ND	ND	ND	NC	ND	Leaching from natural deposits
					Range	ND	ND	ND	NC	ND	
Silver	ppb	100	NA	10	Average	ND	ND	ND	NC	ND	Industrial discharges
					Range	NC	NC	380 - 470	440 - 840	350 - 570	Substances that form ions in water;
Specific Conductance	µS/cm	1,600	NA	NA	Average	NC	NC	420	620	460	seawater influence
					Range	0.2 - 1	0.3 - 2	0.2 - 1	0.2 - 4	0.3 - 5	
Turbidity (f)	NTU	5	NA	0.1	Average	0.4	0.7	0.7	0.7	0.7	Soil runoff
					Range	ND	ND	ND	NC	ND	Runoff/leaching from natural deposits;
Zinc	ppm	5.0	NA	0.05	Average	ND	ND	ND	NC	ND	industrial wastes

2012 Water Quality Report to MWD Member Agencies--The Metropolitan Water District of Southern California

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Treatment Plant Influent ‡ Wey-mouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	Major Sources In Drinking Water
OTHER PARAMETERS											
MICROBIOLOGICAL											
	Oocysts/				Range	ND	ND	ND	ND	ND	
Cryptosporidium	10 L	TT	(0)	NA	Average	ND	ND	ND	ND	ND	Human and animal fecal waste
	Cysts/				Range	ND	ND	ND	ND	ND	
Giardia	10 L	TT	(0)	NA	Average	ND	ND	ND	ND	ND	Human and animal fecal waste
CHEMICAL											
					Range	66 -130	78 - 120	72 - 84	74 - 120	64 - 85	
Alkalinity	ppm	NA	NA	NA	Highest RAA	100	110	80	95	74	
					Range	130	130	170	NC	140	Runoff/leaching from natural deposits,
Boron	ppb	NL = 1,000	NA	100	Average	130	130	170	NC	140	industrial wastes
					Range	ND	ND	ND	NC	ND	Runoff/leaching from natural deposits,
Chromium VI (g)	ppb	NA	0.02	1	Average	ND	ND	ND	NC	ND	discharge from industrial waste factories
					Range	80 - 270	140 - 270	98 - 110	110 - 230	80 - 110	
Hardness	ppm	NA	NA	NA	Average	200	210	100	170	100	
	pH				Range	8.1 - 8.5	8.0 - 8.5	7.4 - 8.1	7.5 - 8.4	7.7 - 8.6	
pH	Units	NA	NA	NA	Average	8.3	8.3	7.8	8.1	8.1	
					Range	2.4 - 3.1	2.6 - 3.2	2.2 - 2.6	2.4 - 3.2	2.4 - 3.6	
TOC	ppm	TT	NA	0.30	Highest RAA	2.8	2.9	2.4	2.8	2.9	Various natural and man-made sources
					Range	ND	ND	ND	NC	3.1	
Vanadium	ppb	NL = 50	NA	3	Average	ND	ND	ND	NC	3.1	Naturally-occurring; industrial waste discharge

ABBREVIATIONS AND FOOTNOTES

Abbreviations

AL	Action Level	NC	Not Collected	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
CFU	Colony-Forming Units	ND	Not Detected		
DLR	Detection Limits for purposes of Reporting	NL	Notification Level		
MCL	Maximum Contaminant Level	NTU	Nephelometric Turbidity Units	TOC	Total Organic Carbon
MCLG	Maximum Contaminant Level Goal	PHG	Public Health Goal	TT	Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water
NA	Not Applicable	ppb	parts per billion or micrograms per liter (µg/L)		
		ppm	parts per million or milligrams per liter (mg/L)	µS/cm	microSiemen per centimeter; or micromho per centimeter umho/cm)

‡ As a wholesale water system, Metropolitan provides its member agencies with relevant source water information and monitoring results that they may need for their annual water quality report. Metropolitan's compliance with state or federal regulations is determined at the treatment plant effluent locations.

Footnotes

(a) Reporting level is 1 CFU/100 mL for total coliform and *E. coli*. Values are based on monthly median per State guidelines and recommendations.

(b) Aluminum and copper have both primary and secondary standards.

(c) As a wholesaler, Metropolitan is not required to collect samples at the consumers' tap under the Lead and Copper Rule.

(d) Perchlorate was not detected at Metropolitan's reporting level of 2 ppb, which is below the state DLR of 4 ppb.

(e) State Secondary Standards apply to water supplied to the public by community water systems; annual monitoring is required for approved surface water sources or distribution system entry points representative of the effluent of source water treatment.

(f) Per 2012 Consumer Confidence Report Guidance, the state DLR for turbidity is 0.1 NTU.

(g) Metropolitan's chromium VI reporting level is 0.03 ppb, which is below the state DLR of 1 ppb. Annual treatment plant influent concentrations were 0.13 ppb for Weymouth, ND for Diemer, 0.06 ppb for Jensen, and 0.20 ppb for Mills.

2012 Water Quality Report to MWD Member Agencies--The Metropolitan Water District of Southern California

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Treatment Plant Effluent: Wey-mouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	Major Sources in Drinking Water
Percent State					Range	7 - 99	9 - 98	100	33 - 84	100	
Project Water	%	NA	NA	NA	Average	46	43	100	63	100	
PRIMARY STANDARDS--Mandatory Health-Related Standards											
CLARITY											
Combined Filter	NTU	TT=1			Highest	0.04	0.04	0.06	0.06	0.07	
Effluent Turbidity	%	TT (a)	NA	NA	% ≤ 0.3	100	100	100	100	100	Soil runoff
MICROBIOLOGICAL											
Total Coliform					Range	Distribution System-wide:			ND - 0.5		
Bacteria (b)	%	5.0	(0)	NA	Average	Distribution System-wide:			0.1		Naturally present in the environment
E. coli	(c)	(c)	(0)	NA		Distribution System-wide.			ND		Human and animal fecal waste
Heterotrophic Plate Count					Range	Distribution System-wide:			TT		
(HPC) (d)	CFU/mL	TT	NA	NA	Average	Distribution System-wide:			TT		Naturally present in the environment
	Oocysts/				Range	ND	ND	ND	ND	ND	
Cryptosporidium	200 L	TT	(0)	NA	Average	ND	ND	ND	ND	ND	Human and animal fecal waste
	Cysts/				Range	ND	ND	ND	ND	ND	
Giardia	200 L	TT	(0)	NA	Average	ND	ND	ND	ND	ND	Human and animal fecal waste
ORGANIC CHEMICALS											
Pesticides/PCBs											
					Range	ND	ND	ND	ND	ND	
Alachlor	ppb	2	4	1	Average	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops
					Range	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops
Atrazine	ppb	1	0.15	0.5	Average	ND	ND	ND	ND	ND	and along highways
					Range	ND	ND	ND	ND	ND	Runoff/leaching from herbicide used on rice,
Bentazon	ppb	18	200	2	Average	ND	ND	ND	ND	ND	alfalfa, and grapes
					Range	ND	ND	ND	ND	ND	Leaching of soil fumigant used on rice, alfalfa,
Carbofuran	ppb	18	1.7	5	Average	ND	ND	ND	ND	ND	and grapes
					Range	ND	ND	ND	ND	ND	
Chlordane	ppt	100	30	100	Average	ND	ND	ND	ND	ND	Residue of banned insecticide
					Range	ND	ND	ND	ND	ND	Runoff from herbicide used on row crops,
2,4-D	ppb	70	20	10	Average	ND	ND	ND	ND	ND	rangeland, lawns, and aquatic weeds
					Range	ND	ND	ND	ND	ND	Runoff from herbicide used on rights-of-way,
Dalapon	ppb	200	790	10	Average	ND	ND	ND	ND	ND	crops, and landscapes
Dibromochloropropane					Range	ND	ND	ND	ND	ND	Banned nematocide that may still be present
(DBCP)	ppt	200	1.7	10	Average	ND	ND	ND	ND	ND	in soils
					Range	ND	ND	ND	ND	ND	Runoff from herbicide used on soybeans,
Dinoseb	ppb	7	14	2	Average	ND	ND	ND	ND	ND	vegetables, and fruits
					Range	ND	ND	ND	ND	ND	Runoff from herbicide used for terrestrial
Diquat	ppb	20	15	4	Average	ND	ND	ND	ND	ND	and aquatic weeds
					Range	ND	ND	ND	ND	ND	Runoff from herbicide used for terrestrial
Endothall	ppb	100	580	45	Average	ND	ND	ND	ND	ND	and aquatic weeds
					Range	ND	ND	ND	ND	ND	
Endrin	ppb	2	1.8	0.1	Average	ND	ND	ND	ND	ND	Residue of banned insecticide and rodenticide
Ethylene Dibromide					Range	ND	ND	ND	ND	ND	Petroleum refinery discharges, underground
(EDB)	ppt	50	10	20	Average	ND	ND	ND	ND	ND	gas tank leaks
					Range	ND	ND	ND	ND	ND	
Glyphosate	ppb	700	900	25	Average	ND	ND	ND	ND	ND	Runoff from herbicide use
					Range	ND	ND	ND	ND	ND	
Heptachlor	ppt	10	8	10	Average	ND	ND	ND	ND	ND	Residue of banned insecticide
					Range	ND	ND	ND	ND	ND	
Heptachlor Epoxide	ppt	10	6	10	Average	ND	ND	ND	ND	ND	Breakdown product of heptachlor
					Range	ND	ND	ND	ND	ND	Runoff/leaching from insecticide used on cattle,
Lindane	ppt	200	32	200	Average	ND	ND	ND	ND	ND	lumber, and gardens
					Range	ND	ND	ND	ND	ND	
Methoxychlor	ppb	30	0.09	10	Average	ND	ND	ND	ND	ND	Runoff/leaching from insecticide uses
					Range	ND	ND	ND	ND	ND	
Molinate (Ordram)	ppb	20	1	2	Average	ND	ND	ND	ND	ND	Runoff/leaching from herbicide used on rice
					Range	ND	ND	ND	ND	ND	
Oxamyl (Vydate)	ppb	50	26	20	Average	ND	ND	ND	ND	ND	Runoff/leaching from insecticide uses
					Range	ND	ND	ND	ND	ND	Discharge from wood preserving factories
Pentachlorophenol	ppb	1	0.3	0.2	Average	ND	ND	ND	ND	ND	other insecticidal and herbicidal uses
					Range	ND	ND	ND	ND	ND	
Picloram	ppb	500	500	1	Average	ND	ND	ND	ND	ND	Herbicide runoff

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Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR		Treatment Plant Effluent: Wey-mouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	Major Sources in Drinking Water
Polychlorinated Biphenyls (PCBs)	ppt	500	90	500	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Runoff from landfills; discharge of waste chemicals
Simazine	ppb	4	4	1	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Herbicide runoff
Thiobencarb (e)	ppb	70	70	1	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Runoff leaching from rice herbicide
2,4,5-TP (Silvex)	ppb	50	25	1	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Residue of banned herbicide
Toxaphene	ppb	3	0.03	1	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Runoff/leaching from insecticide used on cotton and cattle
Semi-Volatile Organic Compounds											
Acrylamide	NA	TT	(0)	NA	Range	TT	TT	TT	TT	TT	
					Average	TT	TT	TT	TT	TT	Water treatment chemical impurities
Benzo(a)pyrene	ppt	200	7	100	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Leaching from water storage tank linings and distribution lines
Di(2-ethylhexyl)adipate	ppb	400	200	5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from chemical factories
Di(2-ethylhexyl)phthalate	ppb	4	12	3	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Chemical factory discharge; inert ingredient in pesticides
Epichlorohydrin	NA	TT	(0)	NA	Range	TT	TT	TT	TT	TT	
					Average	TT	TT	TT	TT	TT	Water treatment chemical impurities
Hexachlorobenzene	ppb	1	0.03	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from metal refineries & agrichemicals factories; wastewater chlorination reaction by-product
Hexachlorocyclopentadiene	ppb	50	50	1	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from chemical factories
2,3,7,8-TCDD (Dioxin)	ppq	30	0.05	5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Waste incineration emissions; chemical factory discharge
Volatile Organic Compounds											
Benzene	ppb	1	0.15	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Plastics factory discharge; gas tanks and landfill leaching
Carbon Tetrachloride	ppt	500	100	500	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from chemical plants and other industrial waste
1,2-Dichlorobenzene	ppb	600	600	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
1,4-Dichlorobenzene	ppb	5	6	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
1,1-Dichloroethane	ppb	5	3	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Extraction and degreasing solvent; fumigant
1,2-Dichloroethane	ppt	500	400	500	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
1,1-Dichloroethylene	ppb	6	10	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene	ppb	6	100	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Industrial chemical factory discharge; by-product of TCE and PCE biodegradation
trans-1,2-Dichloroethylene	ppb	10	60	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Industrial chemical factory discharge, by-product of TCE and PCE biodegradation
Dichloromethane (Methylene Chloride)	ppb	5	4	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	ppb	5	0.5	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Industrial chemical factory discharge; primary component of some fumigants
1,3-Dichloropropene	ppt	500	200	500	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Runoff/leaching from nematocide used on croplands
Ethylbenzene	ppb	300	300	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Petroleum refinery discharge, industrial chemical factories
Methyl-*tert*-butyl ether (MTBE) (e,f)	ppb	13	13	3	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Gasoline discharge from watercraft engines
Monochlorobenzene	ppb	70	200	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from industrial, agricultural, and chemical factories, and dry cleaners
Styrene	ppb	100	0.5	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Rubber and plastics factories discharge, landfill leaching
1,1,2,2-Tetrachloroethane	ppb	1	0.1	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from industrial, agricultural, and chemical factories; solvent uses
Tetrachloroethylene (PCE)	ppb	5	0.06	0.5	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Discharge from factories, dry cleaners, and auto shops

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					Range	ND	ND	ND	ND	ND	
Toluene	ppb	150	150	0.5	Average	ND	ND	ND	ND	ND	Discharge from petroleum and chemical refineries
					Range	ND	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	ppb	5	5	0.5	Average	ND	ND	ND	ND	ND	Discharge from textile-finishing factories
					Range	ND	ND	ND	ND	ND	Metal degreasing site discharge; manufacture
1,1,1-Trichloroethane	ppb	200	1,000	0.5	Average	ND	ND	ND	ND	ND	of food wrappings
					Range	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	ppb	5	0.3	0.5	Average	ND	ND	ND	ND	ND	Discharge from industrial chemical factories
Trichloroethylene					Range	ND	ND	ND	ND	ND	Discharge from metal degreasing sites and
(TCE)	ppb	5	1.7	0.5	Average	ND	ND	ND	ND	ND	other factories
Trichlorofluoromethane					Range	ND	ND	ND	ND	ND	Industrial factory discharge; degreasing solvent;
(Freon-11)	ppb	150	700	5	Average	ND	ND	ND	ND	ND	propellant
1,1,2-Trichloro-1,2,2-					Range	ND	ND	ND	ND	ND	Discharge from metal degreasing sites and other
trifluoroethane (Freon-113)	ppm	1.2	4	0.01	Average	ND	ND	ND	ND	ND	factories; dry cleaning solvent; refrigerant
					Range	ND	ND	ND	ND	ND	Leaching from PVC piping; plastic factory
Vinyl Chloride	ppt	500	50	500	Average	ND	ND	ND	ND	ND	discharge; by-product of TCE and PCE biodegradation
					Range	ND	ND	ND	ND	ND	Discharge from petroleum and chemical refineries;
Xylenes	ppm	1.750	1.8	0.0005	Average	ND	ND	ND	ND	ND	fuel solvent
INORGANIC CHEMICALS											
					Range	ND - 210	ND - 340	60 - 110	ND	55 - 160	Residue from water treatment process;
Aluminum (e)	ppb	1,000	600	50	Highest RAA	120	150	83	ND	120	natural deposits erosion
					Range	ND	ND	ND	ND	ND	Petroleum refinery discharges; fire retardants;
Antimony	ppb	6	20	6	Average	ND	ND	ND	ND	ND	solder; electronics
					Range	ND	ND	ND	ND	ND	Natural deposits erosion; glass and electronics
Arsenic	ppb	10	0.004	2	Average	ND	ND	ND	ND	ND	production wastes
					Range	ND	ND	ND	ND	ND	Asbestos cement pipes internal corrosion;
Asbestos	MFL	7	7	0.2	Average	ND	ND	ND	ND	ND	natural deposits erosion
					Range	ND	ND	ND	ND	ND	Oil and metal refineries discharge;
Barium	ppb	1,000	2,000	100	Average	ND	ND	ND	ND	ND	natural deposits erosion
					Range	ND	ND	ND	ND	ND	Discharge from metal refineries; aerospace;
Beryllium	ppb	4	1	1	Average	ND	ND	ND	ND	ND	and defense industries
					Range	ND	ND	ND	ND	ND	Internal corrosion of galvanized pipes;
Cadmium	ppb	5	0.04	1	Average	ND	ND	ND	ND	ND	natural deposits erosion
					Range	ND	ND	ND	ND	ND	Discharge from steel and pulp mills;
Chromium	ppb	50	(100)	10	Average	ND	ND	ND	ND	ND	natural deposits erosion
					Range	ND	ND	ND	ND	ND	Internal corrosion of household pipes;
Copper (e,g)	ppm	AL = 1.3	0.3	0.05	Average	ND	ND	ND	ND	ND	natural deposits erosion
					Range	ND	ND	ND	ND	ND	Discharge from steel/metal, plastic, and
Cyanide	ppb	150	150	100	Average	ND	ND	ND	ND	ND	fertilizer factories
					Control Range	0.7 - 1.3	0.7 - 1.3	0.7 - 1.3	0.7 - 1.3	0.6 - 1.2	
					Optimal Fluoride Level	0.8	0.8	0.8	0.8	0.7	
Fluoride (h)					Range	0.6 - 1.1	0.7 - 0.8	0.7 - 0.8	0.7 - 0.9	0.3 - 0.9	Erosion of natural deposits;
Treatment-related	ppm	2.0	1	0.1	Average	0.8	0.8	0.8	0.8	0.7	water additive that promotes strong teeth
					Range	Distribution System-wide:		0.4 - 1.1			
					Range	ND	ND	ND	ND	ND	House pipes internal corrosion;
Lead (g)	ppb	AL = 15	0.2	5	Average	ND	ND	ND	ND	ND	erosion of natural deposits
					Range	ND	ND	ND	ND	ND	Erosion of natural deposits; factory discharge;
Mercury	ppb	2	1.2	1	Average	ND	ND	ND	ND	ND	landfill runoff
					Range	ND	ND	ND	ND	ND	Erosion of natural deposits; discharge from
Nickel	ppb	100	12	10	Average	ND	ND	ND	ND	ND	metal factories
					Range	ND	ND	ND	ND	0.7	Runoff and leaching from fertilizer use; septic tank
Nitrate (as N) (i)	ppm	10	10	0.4	Average	ND	ND	ND	ND	0.7	and sewage; natural deposits erosion
					Range	ND	ND	ND	ND	ND	Runoff and leaching from fertilizer use; septic tank
Nitrite (as N)	ppm	1	1	0.4	Average	ND	ND	ND	ND	ND	and sewage; natural deposits erosion
					Range	ND	ND	ND	ND	ND	
Perchlorate (i)	ppb	6	6	4	Average	ND	ND	ND	ND	ND	Industrial waste discharge
					Range	ND	ND	ND	ND	ND	Refineries, mines, and chemical
Selenium	ppb	50	30	5	Average	ND	ND	ND	ND	ND	waste discharge; runoff from livestock lots
					Range	ND	ND	ND	ND	ND	Leaching from ore processing; electronics
Thallium	ppb	2	0.1	1	Average	ND	ND	ND	ND	ND	factory discharge
RADIOLOGICALS (k)											
Gross Alpha					Range	ND - 3	ND - 3	ND	ND - 3	ND	
Particle Activity	pCi/L	15	(0)	3	Average	ND	3	ND	ND	ND	Erosion of natural deposits
Gross Beta					Range	ND - 6	ND - 4	ND - 4	ND - 5	ND	
Particle Activity (l)	pCi/L	50	(0)	4	Average	4	ND	ND	ND	ND	Decay of natural and man-made deposits

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					Range	ND	ND	ND	ND	ND	
Radium-226	pCi/L	NA	0.05	1	Average	ND	ND	ND	ND	ND	Erosion of natural deposits
					Range	ND	ND	ND	ND	ND	
Radium-228	pCi/L	NA	0.019	1	Average	ND	ND	ND	ND	ND	Erosion of natural deposits
Combined					Range	ND	ND	ND	ND	ND	
Radium-226 + 228 (m)	pCi/L	5	(0)	NA	Average	ND	ND	ND	ND	ND	Erosion of natural deposits
					Range	ND	ND	ND	ND	ND	
Strontium-90	pCi/L	8	0.35	2	Average	ND	ND	ND	ND	ND	Decay of natural and man-made deposits
					Range	ND	ND	ND	ND	ND	
Tritium	pCi/L	20,000	400	1,000	Average	ND	ND	ND	ND	ND	Decay of natural and man-made deposits
					Range	1 - 2	2	ND - 2	ND - 2	ND - 1	
Uranium	pCi/L	20	0.43	1	Average	2	2	1	1	1	Erosion of natural deposits
DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCT PRECURSORS (n)											
Total Trihalomethanes					Range	42 - 48	40 - 50	8.0 - 19	10 - 19	12 - 18	
(TTHM) (o)	ppb	80	NA	1.0	Average	45	45	11	14	15	By-product of drinking water chlorination
Total Trihalomethanes					Range	Distribution System-wide			7.6 - 70		
(TTHM) (o)	ppb	80	NA	1.0	RAA	Distribution System-wide:			35		By-product of drinking water chlorination
Haloacetic Acids (five)					Range	12 - 18	11 - 19	1.1 - 3.2	1.4 - 6.1	1.5 - 5.6	
(HAA5) (p)	ppb	60	NA	1.0	Average	14	16	2.2	2.7	3.6	By-product of drinking water chlorination
Haloacetic Acids (five)					Range	Distribution System-wide			1.3 - 23		
(HAA5) (p)	ppb	60	NA	1.0	RAA	Distribution System-wide:			16		By-product of drinking water chlorination
					Range	Distribution System-wide			1.5 - 2.8		
Total Chlorine Residual	ppm	[4.0]	[4.0]	NA	Highest RAA	Distribution System-wide:			2.3		Drinking water disinfectant added for treatment
					Range	NA	NA	3.7 - 6.9	1.2 - 11	ND - 11	
Bromate (q)	ppb	10	0.1	1.0	Highest RAA	NA	NA	5.2	6.5	3.4	By-product of drinking water ozonation
DBP Precursors Control					Range	TT	TT	TT	TT	TT	
(TOC)	ppm	TT	NA	0.30	Average	TT	TT	TT	TT	TT	Various natural and man-made sources
SECONDARY STANDARDS--Aesthetic Standards											
					Range	ND - 210	ND - 340	60 - 110	ND	65 - 160	Residue from water treatment process;
Aluminum (e)	ppb	200	600	50	Highest RAA	120	150	63	ND	120	natural deposits erosion
					Range	85 - 95	87 - 95	50 - 63	75 - 77	90 - 100	Runoff/leaching from natural deposits;
Chloride	ppm	500	NA	NA	Average	90	90	56	76	92	seawater influence
					Range	1	1	1 - 2	1	1	
Color	Units	15	NA	NA	Average	1	1	2	1	1	Naturally-occurring organic materials
					Range	ND	ND	ND	ND	ND	Internal corrosion of household pipes, natural
Copper (e,g)	ppm	1.0	0.3	0.05	Average	ND	ND	ND	ND	ND	deposits erosion; wood preservatives leaching
Foaming Agents					Range	ND	ND	ND	ND	ND	
(MBAS)	ppb	500	NA	NA	Average	ND	ND	ND	ND	ND	Municipal and industrial waste discharges
					Range	ND	ND	ND	ND	ND	
Iron	ppb	300	NA	100	Average	ND	ND	ND	ND	ND	Leaching from natural deposits; industrial wastes
					Range	ND	ND	ND	ND	ND	
Manganese	ppb	50	NL = 500	20	Average	ND	ND	ND	ND	ND	Leaching from natural deposits
					Range	ND	ND	ND	ND	ND	
MTBE (e,f)	ppb	5	13	3	Average	ND	ND	ND	ND	ND	Gasoline discharge from watercraft engines
					Range	2	2	2	1 - 2	2	
Odor Threshold (r)	TON	3	NA	1	Average	2	2	2	2	2	Naturally-occurring organic materials
					Range	ND	ND	ND	ND	ND	
Silver	ppb	100	NA	10	Average	ND	ND	ND	ND	ND	Industrial discharges
					Range	350 - 930	340 - 930	400 - 500	440 - 780	380 - 600	Substances that form ions in water;
Specific Conductance	uS/cm	1,600	NA	NA	Average	740	780	440	640	490	seawater influence
					Range	130 - 160	160	46 - 50	96 - 120	27 - 44	Runoff/leaching from natural deposits;
Sulfate	ppm	500	NA	0.5	Average	140	160	48	110	36	industrial wastes
					Range	ND	ND	ND	ND	ND	
Thiobencarb (e)	ppb	1	70	1	Average	ND	ND	ND	ND	ND	Runoff/leaching from rice herbicide
Total Dissolved Solids					Range	450 - 490	490 - 500	240 - 280	360 - 400	280 - 290	Runoff/leaching from natural deposits;
(TDS)	ppm	1,000	NA	NA	Average	470	500	260	380	290	seawater influence
					Range	ND	ND	ND - 0.1	ND - 0.1	ND	
Turbidity (a)	NTU	5	NA	0.1	Average	ND	ND	ND	ND	ND	Soil runoff
					Range	ND	ND	ND	ND	ND	Runoff/leaching from natural deposits;
Zinc	ppm	5.0	NA	0.05	Average	ND	ND	ND	ND	ND	industrial wastes
FEDERAL UNREGULATED CONTAMINANTS MONITORING RULE (UCMR2) (s)											
List 1 - Assessment Monitoring											
					Range	ND	ND	ND	ND	ND	Runoff from insecticide used on crops
Dimethoate	ppb	NA	NA	0.7	Average	ND	ND	ND	ND	ND	and residential uses

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Terbufos sulfone	ppb	NA	NA	0.4	Range	ND	ND	ND	ND	ND	Runoff/leaching from breakdown product of terbufos
					Average	ND	ND	ND	ND	ND	used as soil fumigant and nematocide
2,2',4,4'-tetrabromodiphenyl ether	ppb	NA	NA	0.3	Range	ND	ND	ND	ND	ND	Discharge from industrial chemical factories;
					Average	ND	ND	ND	ND	ND	use of flame retardant additives
2,2',4,4',5-pentabromodiphenyl ether	ppb	NA	NA	0.9	Range	ND	ND	ND	ND	ND	Discharge from industrial chemical factories;
					Average	ND	ND	ND	ND	ND	use of flame retardant additives
2,2',4,4',5,5'-hexabromodiphenyl ether	ppb	NA	NA	0.8	Range	ND	ND	ND	ND	ND	Discharge from industrial chemical factories;
					Average	ND	ND	ND	ND	ND	use of flame retardant additives
2,2',4,4,6'-pentabromodiphenyl ether	ppb	NA	NA	0.5	Range	ND	ND	ND	ND	ND	Discharge from industrial chemical factories;
					Average	ND	ND	ND	ND	ND	use of flame retardant additives
2,2',4,4',5,5'-hexabromobiphenyl	ppb	NA	NA	0.7	Range	ND	ND	ND	ND	ND	Discharge from industrial chemical factories;
					Average	ND	ND	ND	ND	ND	use of flame retardant additives
2,4,6-trinitrotoluene (TNT)	ppb	NA	NA	0.8	Range	ND	ND	ND	ND	ND	Runoff/residue from explosives, dyes, and chemical
					Average	ND	ND	ND	ND	ND	manufacturing and applications
1,3-dinitrobenzene	ppb	NA	NA	0.8	Range	ND	ND	ND	ND	ND	Runoff/residue from explosives, dyes, and chemical
					Average	ND	ND	ND	ND	ND	manufacturing and applications; TNT by-product
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	ppb	NA	NA	1	Range	ND	ND	ND	ND	ND	Runoff/residue from explosives industrial applications;
					Average	ND	ND	ND	ND	ND	also used as a rodenticide
List 2 - Screening Survey											
Acetochlor	ppb	NA	NA	2	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Herbicide runoff
Alachlor	ppb	NA	NA	2	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Herbicide runoff
Metolachlor	ppb	NA	NA	1	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Herbicide runoff
Acetochlor ethane sulfonic acid	ppb	NA	NA	1	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Breakdown product of acetochlor
Acetochlor oxanilic acid	ppb	NA	NA	2	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Breakdown product of acetochlor
Alachlor ethane sulfonic acid	ppb	NA	NA	1	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Breakdown product of alachlor
Alachlor oxanilic acid	ppb	NA	NA	2	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Breakdown product of alachlor
Metolachlor ethane sulfonic acid	ppb	NA	NA	1	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Breakdown product of metolachlor
Metolachlor oxanilic acid	ppb	NA	NA	2	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	Breakdown product of metolachlor
N-Nitrosodiethylamine (NDEA)	ppb	NA	NA	0.005	Range	ND	ND	ND	ND	ND	By-product of drinking water chloramination;
					Average	ND	ND	ND	ND	ND	industrial processes
N-Nitrosodimethylamine (NDMA)	ppb	NA	NA	0.002	Range	ND - 0.003	ND	ND - 0.005	ND - 0.004	ND - 0.01	By-product of drinking water chloramination;
					Average	ND	ND	0.003	ND	0.004	industrial processes
N-Nitroso-di-n-butylamine (NDBA)	ppb	NA	NA	0.004	Range	ND	ND	ND	ND	ND	By-product of drinking water chloramination;
					Average	ND	ND	ND	ND	ND	industrial processes
N-Nitroso-di-n-propylamine (NDPA)	ppb	NA	NA	0.007	Range	ND	ND	ND	ND	ND	By-product of drinking water chloramination;
					Average	ND	ND	ND	ND	ND	Industrial processes
N-Nitrosomethylethylamine (NMEA)	ppb	NA	NA	0.003	Range	ND	ND	ND	ND	ND	By-product of drinking water chloramination;
					Average	ND	ND	ND	ND	ND	Industrial processes
N-Nitrosopyrrolidine (NPYR)	ppb	NA	NA	0.002	Range	ND	ND	ND	ND	ND	By-product of drinking water chloramination;
					Average	ND	ND	ND	ND	ND	Industrial processes
OTHER PARAMETERS											
MICROBIOLOGICAL											
HPC (d)	CFU/mL	TT	NA	NA	Range	ND - 1	ND - 1	ND	ND - 1	ND - 1	
					Median	ND	ND	ND	ND	ND	Naturally present in the environment
CHEMICAL											
Alkalinity	ppm	NA	NA	NA	Range	81 - 120	53 - 130	72 - 83	75 - 110	64 - 85	
					Average	95	98	79	93	75	
Boron	ppb	NL = 1,000	NA	100	Range	130	130	170	130	150	Runoff/leaching from natural deposits;
					Average	130	130	170	130	150	industrial wastes
Calcium	ppm	NA	NA	NA	Range	45 - 48	49 - 53	23 - 24	34 - 41	16 - 23	
					Average	48	51	24	38	20	
Chlorate	ppb	NL = 800	NA	20	Range	66	55	ND	50	27	By-product of drinking water chlorination;
					Range	Distribution System-wide.			ND - 80		Industrial processes
Chromium VI (t)	ppb	NA	0.02	1	Range	ND	ND	ND	ND	ND	Runoff/leaching from natural deposits;
					Average	ND	ND	ND	ND	ND	discharge from industrial waste factories

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Corrosivity (u) (as Aggressiveness Index)	AI	NA	NA	NA	Range	12.1	12.2	11.9 - 12.0	12.2 - 12.3	11.9 - 12.1	Elemental balance in water; affected by temperature, other factors
					Average	12.1	12.2	12.0	12.2	12.0	
Corrosivity (v) (as Saturation Index)	SI	NA	NA	NA	Range	0.24 - 0.32	0.35 - 0.38	0.19 - 0.22	0.35 - 0.50	0.19 - 0.25	Elemental balance in water; affected by temperature, other factors
					Average	0.28	0.36	0.20	0.42	0.22	
Hardness	ppm	NA	NA	NA	Range	80 - 270	84 - 270	98 - 110	120 - 220	78 - 110	
					Average	200	210	100	170	100	
Magnesium	ppm	NA	NA	NA	Range	19 - 20	21	11	15 - 17	12 - 13	
					Average	20	21	11	16	12	
pH	pH Units	NA	NA	NA	Range	7.9 - 8.8	7.9 - 8.4	7.9 - 8.4	8.1 - 8.5	8.2 - 8.6	
					Average	8.1	8.1	8.3	8.3	8.4	
Potassium	ppm	NA	NA	NA	Range	3.7 - 4.1	4.0	2.3 - 2.5	3.4 - 3.6	2.8 - 2.9	
					Average	3.9	4.0	2.4	3.5	2.8	
Radon (k)	pCi/L	NA	NA	100	Range	ND	ND	ND	ND	ND	
					Average	ND	ND	ND	ND	ND	
Sodium	ppm	NA	NA	NA	Range	74 - 82	80 - 81	43 - 53	65 - 66	60 - 67	
					Average	78	80	48	66	64	
TOC	ppm	TT	NA	0.30	Range	1.8 - 2.6	2.0 - 2.7	1.7 - 2.1	1.8 - 2.3	1.7 - 2.5	Various natural and man-made sources
					Highest RAA	2.3	2.4	1.9	2.1	2.1	
Vanadium	ppb	NL = 50	NA	3	Range	ND	ND	ND	ND	ND	Naturally-occurring, industrial waste discharge
					Average	ND	ND	ND	ND	ND	
N-Nitrosodimethylamine (NDMA)	ppt	NL = 10	3	2	Range	ND - 2.5	ND	ND - 2.0	ND - 2.8	ND - 5.8	By-product of drinking water chloramination; Industrial processes
					Range	Distribution System-wide: ND - 6.7					
Dichlorodifluoromethane (Freon 12)	ppb	NL = 1,000	NA	0.5	Range	ND	ND	ND	ND	ND	Industrial waste discharge
					Average	ND	ND	ND	ND	ND	
Ethyl-*tert*-butyl ether (ETBE)	ppb	NA	NA	3	Range	ND	ND	ND	ND	ND	Used as gasoline additive
					Average	ND	ND	ND	ND	ND	
tert-Amyl-methyl ether (TAME)	ppb	NA	NA	3	Range	ND	ND	ND	ND	ND	Used as gasoline additive
					Average	ND	ND	ND	ND	ND	
tert-Butyl alcohol (TBA)	ppb	NL = 12	NA	2	Range	ND	ND	ND	ND	ND	MTBE breakdown product; used as gasoline additive
					Average	ND	ND	ND	ND	ND	

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Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Treatment Plant Effluent: Wey-mouth Plant	Diemer Plant	Jensen Plant	Skinner Plant	Mills Plant	Major Sources in Drinking Water

ABBREVIATIONS AND FOOTNOTES

Abbreviations

AI	Aggressiveness Index
AL	Action Level
CDPH	California Department of Public Health
CFU	Colony-Forming Units
DBP	Disinfection By-Products
DLR	Detection Limits for purposes of Reporting
MBAS	Methylene Blue Active Substances
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MFL	Million Fibers per Liter
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
N	Nitrogen
NA	Not Applicable
ND	Not Detected
NL	Notification Level
NTU	Nephelometric Turbidity Units
pCi/L	picoCuries per Liter
PHG	Public Health Goal
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 (pg/L)
ppt	parts per trillion or nanograms per liter (ng/L)
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
SI	Saturation Index (Langelier)
TOC	Total Organic Carbon
TON	Threshold Odor Number
TT	Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water
µS/cm	microSiemen per centimeter; or micromho per centimeter (µmho/cm)

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. Per 2012 Consumer Confidence Report Guidance, the state DLR for turbidity is 0.1 NTU.

(b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution system sampling from all the treatment plants. In 2012, 8,037 samples were analyzed and six samples were positive for total coliforms. The MCL was not violated.

(c) *E. coli* MCL: The occurrence of two consecutive total coliform-positive samples, one of which contains *E. coli*, constitutes an acute MCL violation. The MCL was not violated.

(d) All distribution system samples collected had detectable total chlorine residuals and no HPC was required. HPC reporting level is 1 CFU/mL. Values are based on monthly median per State guidelines and recommendations.

(e) Aluminum, copper, MTBE, and thiobencarb have both primary and secondary standards.

(f) MTBE was not detected at Metropolitan's reporting level of 0.5 ppb, which is below the state DLR of 3 ppb.

(g) As a wholesaler, Metropolitan is not required to collect samples at the consumers' tap under the Lead and Copper Rule.

(h) Metropolitan was in compliance with all provisions of the State's Fluoridation System Requirements.

(i) State MCL is 45 mg/L as nitrate, which is the equivalent of 10 mg/L as N.

(j) Perchlorate was not detected at Metropolitan's reporting level of 2 ppb, which is below the state DLR of 4 ppb.

(k) Data are from samples collected (triennially) during four consecutive quarters of monitoring in 2011 and reported for three years until the next samples are collected.

(l) CDPH considers 50 pCi/L to be the level of concern for beta particles; the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ.

(m) State MCL is 5 pCi/L for combined radium-226 and -228.

(n) Metropolitan was in compliance with all provisions of the Stage 1 and Stage 2 Disinfectants and Disinfection By-Products Rules (D/DBPR). Stage 2 D/DBPR monitoring began in the 2nd quarter of 2012. Compliance was based on the RAA.

(o) Metropolitan's reporting level is 0.5 ppb for each of the trihalomethanes (bromodichloromethane, bromoform, chloroform, and dibromochloromethane) which is lower than the state DLR of 1.0 ppb.

(p) State DLR is 1.0 ppb for each of the following: dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid; and 2.0 ppb for monochloroacetic acid.

(q) Metropolitan used EPA method 326.0 which has a state DLR of 1.0 ppb. Compliance was based on the RAA.

(r) In May 2012, monitoring frequency for Skinner was reduced from quarterly to annual when RAA returned to <3 TON. Per CDPH requirements, quarterly monitoring was conducted following a secondary MCL exceedance in April 2008.

(s) Data were collected from February 2009 to August 2009 and reported per UCMR guidance. Minimum reporting levels are as stipulated in the Federal UCMR 2. List 1 - Assessment Monitoring consists of 10 chemical contaminants for which standard analytical methods were available. List 2 - Screening Survey consists of 15 contaminants for which new analytical methods were used. All analyses conducted by contract laboratories. Values listed in state DLR column are federal minimum reporting levels.

(t) Metropolitan's chromium VI reporting level is 0.03 ppb, which is below the state DLR of 1 ppb. Annual treatment plant effluent concentrations were 0.14 ppb for Weymouth, 0.07 ppb for Diemer, 0.06 ppb for Jensen, 0.06 ppb for Skinner and 0.19 ppb for Mills.

(u) AI <10.0 = Highly aggressive and very corrosive water
AI ≥12.0 = Non-aggressive water
AI (10.0 - 11.9) = Moderately aggressive water

(v) Positive SI index = non-corrosive; tendency to precipitate and/or deposit scale on pipes
Negative SI index = corrosive; tendency to dissolve calcium carbonate