

# MAYWOOD MUTUAL WATER COMPANY #1 2005 ANNUAL WATER QUALITY REPORT

Results are from the most recent testing performed in accordance with state and federal drinking water regulations

## PRIMARY STANDARDS MONITORED AT THE SOURCE-MANDATED FOR PUBLIC HEALTH

ORGANIC CHEMICALS (µg/l)	GROUNDWATER		MWD'S SURFACE WATER		PRIMARY MCL	MCLG or PHG	MAJOR SOURCES IN DRINKING WATER
	AVERAGE	RANGE	AVERAGE	RANGE			
	(a)	(a)	(a)	(a)			
<b>INORGANICS</b> Sampled from 2003 to 2005 (b)							
Aluminum (mg/l)	ND	ND	ND	ND-0.1	1	0.6 (c)	Erosion of natural deposits; residue from surface water treatment processes
Barium (mg/l)	0.14	0.12-0.16	ND	ND-0.1	1	2 (c)	Oil drilling waste and metal refinery discharge; erosion of natural deposits
Fluoride (mg/l)	0.44	0.43-0.44	0.19	0.11-0.27	2.0	1 (c)	Erosion of natural deposits, water additive that promotes strong teeth
Nitrate (mg/l as N)	ND	ND-0.75	0.53	ND-1.1	10	10 (c)	Runoff and leaching from fertilizer use/septic tanks/sewage, natural erosion
<b>RADIOLOGICAL - (pCi/l)</b> Analyzed 4 consecutive quarters every 4 years (results are from 2002 to 2005) (b)							
Gross Alpha (d)	ND	ND-3.4	ND	ND-3.2	15 (e)	0	Erosion of natural deposits
Gross Beta	NA	NA	ND	ND-6.4	50 (e)	0	Decay of natural and man-made deposits

## PRIMARY STANDARDS MONITORED IN THE DISTRIBUTION SYSTEM - MANDATED FOR PUBLIC HEALTH

MICROBIALS	DISTRIBUTION SYSTEM		PRIMARY MCL	MCLG or PHG	
	AVERAGE # POSITIVE	RANGE OF # POSITIVE			
Total Coliform Bacteria	0	0	< 1 positive	0	Naturally present in the environment
Fecal Coliform and <i>E. Coli</i> Bacteria	0	0	0	0	Human and animal fecal waste
No. of Acute Violations	0	0	-	-	
<b>DISINFECTION BY-PRODUCTS (f)</b>					
DISTRIBUTION SYSTEM		PRIMARY MCL	MCLG or PHG		
AVERAGE	RANGE				
Trihalomethanes-TTHMS (µg/l)	56	12-82	80	-	By-product of drinking water chlorination
Haloacetic Acids (µg/l)	21	2-49	60	-	By-product of drinking water disinfection

	DISTRIBUTION SYSTEM		PRIMARY MCL	MCLG or PHG	
	AVERAGE	RANGE			
Turbidity (NTU)	1.8	0.1-3.1	TT	-	Soil runoff
Total Chlorine Residual (mg/l)	0.4	ND-2.5	4.0 (g)	4.0 (h)	Drinking water disinfectant added for treatment

AT THE TAP PHYSICAL CONSTITUENTS 20 sites sampled in 2004	DISTRIBUTION SYSTEM		PRIMARY MCL	MCLG or PHG	
	90%ile	# OF SITES ABOVE THE AL			
Copper (mg/l)	0.21 (i)	0	1.3 AL	0.17 (c)	Internal corrosion of household plumbing, erosion of natural deposits
Lead (µg/l)	7.3 (i)	1	15 AL	2 (c)	Internal corrosion of household plumbing, industrial manufacturer discharges

## SECONDARY STANDARDS MONITORED AT THE SOURCE-FOR AESTHETIC PURPOSES

	GROUNDWATER		MWD'S SURFACE WATER		SECONDARY MCL	MCLG or PHG	
	AVERAGE	RANGE	AVERAGE	RANGE			
Aggressiveness Index (corrosivity)	12.1	12-12.2	NA	NA	Non-corrosive	-	Natural/industrially-influenced balance of hydrogen/carbon/oxygen in water
Aluminum (µg/l) (j)	ND	ND	ND	ND-123	200	600 (c)	Erosion of natural deposits, surface water treatment process residue
Chloride (mg/l)	52	48-56	68	47-85	500	-	Runoff/leaching from natural deposits, seawater influence
Color (color units)	4	3-5	2	1-4	15	-	Naturally-occurring organic materials
Conductivity (umhos/cm)	690	650-730	694	477-876	1,600	-	Substances that form ions when in water, seawater influence
Langlier Index (corrosivity) (SI)	NA	NA	0.24	0.05-0.52	Non-corrosive	-	Natural/industrially-influenced balance of hydrogen/carbon/oxygen in water
<b>Manganese (µg/l)</b>	<b>82</b>	<b>76-90 (k)</b>	<b>ND</b>	<b>ND</b>	<b>50</b>	<b>-</b>	<b>Leaching from natural deposits</b>
Odor (threshold odor number)	1	1	2	2-3	3	-	Naturally-occurring organic materials
Sulfate (mg/l)	98	86-110	139	55-206	500	-	Runoff/leaching from natural deposits, industrial wastes
Total Dissolved Solids (mg/l)	425	400-450	407	270-532	1,000	-	Runoff/leaching from natural deposits
Turbidity (NTU)	0.61	0.29-0.92	0.06	0.04-0.07	5	-	Soil runoff

## SECONDARY STANDARDS MONITORED IN THE DISTRIBUTION SYSTEM-FOR AESTHETIC PURPOSES

GENERAL PHYSICAL CONSTITUENTS	DISTRIBUTION SYSTEM		SECONDARY MCL	MCLG or PHG	
	AVERAGE	RANGE			
Color (color units)	<3	<3	15	-	Naturally-occurring organic materials
Odor (threshold odor number)	1	1	3	-	Naturally-occurring organic materials

## ADDITIONAL CHEMICALS OF INTEREST

	GROUNDWATER		MWD'S SURFACE WATER	
	AVERAGE	RANGE	AVERAGE	RANGE
Alkalinity (mg/l)	175	170-180	89	76-101
Boron (µg/l)	NA	NA	167	130-220
Bromate (µg/l)	NA	NA	NA	ND-8.8
Calcium (mg/l)	75	64-85	40	24-53
Magnesium (mg/l)	18	15-20	18	12-23
N-Nitrosodimethylamine (ng/l)	NA	NA	NA	ND-3.5
Perchlorate (µg/l)	NA	NA	ND	ND-4.1
pH (standard unit)	7.6	7.5-7.7	8.2	8.1-8.4
Potassium (mg/l)	4.7	3.7-5.6	3.5	2.7-4.1
Sodium (mg/l)	54	50-58	70	42-93
Total Hardness (mg/l)	260	220-300	174	109-225
Total Organic Carbon (mg/l)	NA	NA	2.5	1.8-3.2
Vanadium (µg/l)	NA	NA	2.2	ND-3.6

## FOOTNOTES

- (a) Over 50 regulated and unregulated organic chemicals were analyzed. None were detected at or above the reporting limit in groundwater or surface water sources.
- (b) Indicates dates sampled for groundwater sources only.
- (c) California Public Health Goal (PHG). Other advisory levels listed in this column are federal Maximum Contaminant Level Goals (MCLGs).
- (d) Gross alpha standard also includes Radium-226 standard.
- (e) MCL compliance based on 4 consecutive quarters of sampling.
- (f) Running annual average used to calculate average, range, and MCL compliance.
- (g) Maximum Residual Disinfectant Level (MRDL)
- (h) Maximum Residual Disinfectant Level Goal (MRDLG)
- (i) 90th percentile from the most recent sampling at selected customer taps.
- (j) Aluminum has primary and secondary standards.
- (k) The secondary MCL for manganese was exceeded in 1 well in 2005. The manganese MCL is set to protect against unpleasant affects such as color, taste, odor, and staining of laundry/plumbing fixtures. A manganese MCL exceedance does not pose a health risk.

## ABBREVIATIONS

NA = constituent not analyzed	umhos/cm = micromhos per centimeter	mg/l = milligrams per liter or parts per million (equivalent to 1 drop in 42 gallons)
NTU = nephelometric turbidity units	ND = constituent not detected at the reporting limit	µg/l = micrograms per liter or parts per billion (equivalent to 1 drop in 42,000 gallons)
< = less than	SI = saturation index	ng/l = nanograms per liter or parts per trillion (equivalent to 1 drop in 42,000,000 gallons)
	pCi/l = picoCuries per liter	

## DEFINITIONS

- Maximum Contaminant Level (MCL)** : 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.
- Maximum Contaminant Level Goal (MCLG)**: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.
- Maximum Residual Disinfectant Level (MRDL)**: The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.
- Maximum Residual Disinfectant Level Goal (MRDLG)**: The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.
- Public Health Goal (PHG)** : The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
- Treatment Technique (TT)** : A required process intended to reduce the level of a contaminant in drinking water.
- Regulatory Action Level (AL)** : The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- Primary Drinking Water Standard (PDWS)** : MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.