

SUMMARY OF 2002 WATER QUALITY CONSUMER CONFIDENCE TEST RESULTS

The tables below list all the drinking water contaminants detected during the 2002 calendar year. Thousands of water quality tests were performed last year on your drinking water. **Many other compounds were tested for and not found.** The results in this report show that your water met, and in most cases exceeded, all of the stringent state (California Department of Health Services) and federal (U.S. Environmental Protection Agency) water quality standards relating to public health and aesthetics, such as taste, odor and color. Unless otherwise noted, the data in the following tables reflect testing from Jan. 1, 2002, through Dec. 31, 2002. The monitoring of certain contaminants is not required annually since they are not expected to vary significantly from year to year. Therefore, though representative of the water quality, some of the data may be more than one year old.

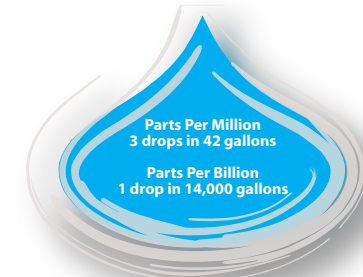
| Parameter | Units | State MCL [MRDL] | PHG (MCLG) [MRDLG] | State DLR | Filtration Plant Effluent | | Source Water | | Major Sources in Drinking Water |
|--|----------|------------------|--------------------|-----------|---|-------------|---|---------|--|
| | | | | | Combined Skinner Plants Range | Average | Lake Skinner Outlet Range | Average | |
| Percent State Project Water | % | -- | -- | -- | 22-32 | 27 | 22-32 | 27 | |
| PRIMARY STANDARDS--Mandatory Health-Related Standards - Data provided by Metropolitan Water District of Southern California (MWD) | | | | | | | | | |
| CLARITY | | | | | | | | | |
| Combined Filter Effluent Turbidity | NTU % | 0.3 - 95(a) | NA | -- | Highest % < 0.3 | 0.11 100 | -- | -- | Soil runoff |
| MICROBIOLOGICAL (7 Contaminants were tested in this parameter) | | | | | | | | | |
| Total Coliform Bacteria | % | 5.0 (b) | (0) | -- | 0 - 0.12% | 0.02% | NA | NA | Naturally present in the environment |
| Fecal Coliform & E. coli | (c) | (c) | (0) | -- | 0 positives | 0 positives | | | Human and animal fecal waste |
| VOLATILE ORGANIC COMPOUNDS (28 Contaminants were tested in this parameter + 6 semi-volatile organic compounds were also tested) | | | | | | | | | |
| Methyl-tert-butyl-ether (MTBE) (e,f) | ppb | 13 | 13 | 3 | ND-1.4 | 0.6 | ND-1.3 | 0.7 | Leaking underground gasoline storage tanks and pipelines |
| INORGANIC CHEMICALS (19 Contaminants were tested in this parameter - in addition 29 organic chemicals-pesticides/PCCBs were also tested) | | | | | | | | | |
| Arsenic | ppb | 50 | NA | 2 | ND | ND | 2.1-2.8 | 2.4 | Natural deposits erosion, glass and electronics production wastes |
| Fluoride | ppm | 2 | 1 | 0.1 | 0.19-0.26 | 0.24 | 0.21-0.28 | 0.25 | Erosion of natural deposits; water additive for tooth health |
| RADIOLOGICALS (g) (6 Contaminants were tested in this parameter) | | | | | | | | | |
| Gross Alpha Particle Activity | pCi/L | 15 | NA | 1 | ND-5.53 | 3.99 | ND-6.22 | 4.05 | Erosion of natural deposits |
| Gross Beta Particle Activity | pCi/L | 50 | NA | 4 | ND-7.48 | 5.24 | 4.18-7.42 | 5.52 | Decay of natural and man-made deposits |
| Combined Radium (h) | pCi/L | 5 | NA | 0.5 | ND-2.36 | 1.01 | ND-1.25 | 0.60 | Erosion of natural deposits |
| Uranium | pCi/L | 20 | 0.5 | 2 | ND-3.18 | 2.61 | ND-3.67 | 2.55 | Erosion of natural deposits |
| DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS (4 Contaminants were tested in this parameter) | | | | | | | | | |
| Total Trihalomethanes (TTHM) (i) | ppb | 80 | NA | 0.5 | 37-58 | 49 | NC | NC | By-product of drinking water chlorination |
| Haloacetic Acids (five) (HAA5) (i,j) | ppb | 60 | NA | 1 (j) | 14-29 | 20 | NC | NC | By-product of drinking water chlorination |
| Total Chlorine Residual | ppm | [4] | [4] | -- | 2.35 - 2.46 | 2.40 | NC | NC | Drinking water disinfectant added For treatment |
| SECONDARY STANDARDS--Aesthetic Standards - Data provided by MWD (17 Contaminants were tested in this parameter) | | | | | | | | | |
| Chloride | ppm | 500 | NA | -- | 78-92 | 83 | 71-85 | 75 | Runoff/leaching from natural deposits; seawater influence |
| Color | Units | 15 | NA | -- | 1-3 | 2 | 3-7 | 5 | Naturally occurring organic materials |
| Corrosivity | SI | non-corrosive | NA | -- | 0.25-0.42 | 0.33 | -- | -- | Elemental balance in water; affected by temperature, other factors |
| Methyl-tert-butyl-ether (MTBE) (e,f) | ppb | 5 | 13 | 3 | ND-1.4 | 0.6 | ND-1.3 | 0.7 | Leaking underground gasoline storage tanks and pipelines |
| Odor Threshold (k) | Units | 3 | NA | -- | (k) | (k) | (k) | (k) | Naturally occurring organic materials |
| Specific Conductance | umho/cm | 1600 | NA | -- | 830-902 | 852 | 814-888 | 836 | Substances that form ions in water; seawater influence |
| Sulfate | ppm | 500 | NA | 0.5 | 162-191 | 179 | 167-189 | 179 | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids (TDS) | ppm | 1000 | NA | -- | 495-543 | 509 | 485-531 | 500 | Runoff/leaching from natural deposits; seawater influence |
| Turbidity (Monthly) | NTU | 5 | NA | -- | 0.05-0.08 | 0.06 | 0.66-2.1 | 1.1 | Soil runoff |
| UNREGULATED CHEMICALS REQUIRING MONITORING - Data provided by MWD (9 Contaminants were tested in this parameter) | | | | | | | | | |
| Boron | ppb | NA | AL=1,000 | 100 | 110-140 | 130 | 120-140 | 130 | Runoff/leaching from natural deposits; industrial wastes |
| Perchlorate | ppb | NA | AL=4 | 4 | ND-5 | ND | ND-5 | ND | Industrial waste discharge |
| Vanadium | ppb | NA | AL=50 | 3 | ND | ND | 3 | 3 | Naturally-occurring; industrial waste discharge |
| ADDITIONAL PARAMETERS - ICR DISINFECTION BY-PRODUCTS (Data is from 8/97 to 12/98) - Data provided by MWD (6 Contaminants were tested in this parameter) | | | | | | | | | |
| Chloral Hydrate | ppb | NA | NA | 0.5 | 3.5 - 7.0 | 5.1 | NC | NC | By-product of drinking water chlorination |
| Cyanogen Chloride | ppb | NA | NA | 0.5 | 2.3 - 5.5 | 3.4 | NC | NC | By-product of drinking water chlorination |
| Haloacetonitriles | ppb | NA | NA | 0.5 | 5.6 - 17 | 8.7 | NC | NC | By-product of drinking water chlorination |
| Haloketones | ppb | NA | NA | 0.5 | 1.3 - 2.2 | 1.6 | NC | NC | By-product of drinking water chlorination |
| Total Organic Halides | ppb | NA | NA | 50 | 115 - 157 | 138 | NC | NC | By-product of drinking water chlorination |
| MICROBIAL CONTAMINANTS (4 Contaminants were tested in this parameter) | | | | | | | | | |
| Heterotrophic Plate Count (d) | CFU/mL | TT | NA | -- | <1-8 | <1 | NC | NC | Naturally present in the environment |
| OTHER PARAMETERS - Detected Unregulated Chemicals That May be of Interest to Consumers (9 Contaminants were tested in this parameter) | | | | | | | | | |
| Alkalinity | ppm | NA | NA | -- | 114-123 | 119 | 112-124 | 120 | |
| Calcium | ppm | NA | NA | -- | 54-59 | 57 | 53-59 | 57 | |
| Hardness (total hardness) | ppm | NA | NA | -- | 230-250 | 241 | 229-252 | 241 | |
| Magnesium | ppm | NA | NA | -- | 23.0-25.0 | 24.0 | 23.0-25.5 | 24.0 | |
| pH | pH Units | NA | NA | -- | 8.02-8.08 | 8.06 | 8.15-8.56 | 8.36 | |
| Potassium | ppm | NA | NA | -- | 3.9-4.1 | 3.9 | 3.8-4.1 | 3.9 | |
| Sodium | ppm | NA | NA | -- | 76-86 | 79 | 73-82 | 77 | |
| TOC (l) | ppm | TT | NA | -- | 2.1-2.8 | 2.4 | 2.7-3.5 | 3.1 | Various natural and man-made sources |
| DATA PROVIDED BY VALLECITOS WATER DISTRICT - Summary of Water Quality Tests within distribution system | | | | | | | | | |
| Total Coliform Bacteria (m) | % | 5.0 (b) | (0) | -- | 1 positive | -- | | | Naturally present in the environment (1,053 samples taken) |
| Fecal Coliform & E. coli | (c) | (c) | (0) | -- | 0 positive | 0 positive | | | Human and animal fecal waste |
| Total Trihalomethanes (TTHM) (n) | ppb | 80 | NA | 0.5 | 38-53 | 46.3 | | | By-product of drinking water chlorination |
| Haloacetic Acids (five) (HAA5) (o) | ppb | 60 | NA | 1 (o) | 15.8-34.0 | 21.9 | | | By-product of drinking water chlorination |
| General Physical Sampling (p) | (p) | (p) | (p) | (p) | Secondary Standards testing required by DHS (aesthetics) within VWD's Distribution system | | | | |
| MONITORED AT CUSTOMER'S TAP | | | | | | | | | |
| Copper | ppm | AL = 1.3 | 0.17 | -- | NC | NC | The District is required to sample every three years. Our next sample period is scheduled for June of 2004. The District was in compliance with this rule for 2002. | | |
| Lead | ppm | AL = 15 | 2 | -- | NC | NC | | | |

*This report lists only the detected contaminants, which are required by law to be published. However, more than 144 contaminants are monitored. If you would like a copy of the full report, including the non-detected contaminants, such as Chromium 6, Cryptosporidium, and Giarda, call the District at (760) 744-0460.

ABBREVIATIONS AND FOOTNOTES

Abbreviations

| | | | |
|--------|--|---------|---|
| AL | California Action Level | ND | None Detected |
| CFU/ml | Colony Forming Units per milliliter | NTU | Nephelometric Turbidity Units |
| DBP | Disinfection By-Products | pCi/l | picoCuries per liter |
| DLR | Detection Limits for purposes of Reporting | PHG | Public Health Goal |
| HAA5 | Haloacetic Acids (five) | ppb | parts per billion or micrograms per liter (ug/L) |
| ICR | Information Collection Rule | ppm | parts per million or milligrams per liter (mg/L) |
| MCL | Maximum Contaminant Level | ppq | parts per quadrillion or picograms per liter (pg/L) |
| MCLG | Maximum Contaminant Level Goal | ppt | parts per trillion or nanograms per liter (ng/L) |
| MFL | Million Fibers per Liter | Si | Saturation Index (Langelier) |
| MPN | Most Probable Number | TOC | Total Organic Carbon |
| MRDL | Maximum Residual Disinfectant Level | TTHM | Total Trihalomethanes |
| MRDLG | Maximum Residual Disinfectant Level Goal | TT | Treatment Technique |
| NA | Not Applicable | umho/cm | micromho per centimeter |
| NC | Not Collected | | |



Footnotes

- The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. Turbidity is a measure of the cloudiness of the water and is a good indicator of water quality and filtration performance. The monthly averages and ranges of turbidity are listed in the Secondary Standards section.
- 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 filtration plants. In 2002, 11,119 samples were analyzed. The MCL was not violated.
- Fecal coliform/E.coli MCLs: The occurrence of 2 consecutive total coliform-positive samples, one of which contains fecal coliform/E. coli, constitutes an acute MCL violation. The MCL was not violated in 2002.
- Monthly averages. The disinfectant residual entering the distribution system shall not be less than 0.2 mg/L. The presence of HPC less than or equal to 500 CFU/mL shall be equivalent to a detectable disinfectant residual. In 2002, all total chlorine residuals were above 0.2 mg/L.
- Aluminum, copper, MTBE, and thiobencarb have both primary and secondary standards
- MTBE reporting level is 0.5 ppb.
- Results are for the 1998/99 4-quarter radiological monitoring program except for gross alpha and uranium values at Lake Mathews and San Jacinto Tunnel West Portal where there is a monthly discretionary monitoring program.
- Standard is for Radium-226 and -228 combined.
- Calculated from the filtration plant effluent samples taken weekly for TTHM and monthly for HAA5. In 2002, Metropolitan was in compliance with all provisions of the Stage 1 disinfection/ Disinfection By-Products (D/DBP) Rule. Of the more than 40 quarterly distribution samples collected, the 2002 running annual average for TTHM was 53 ppb and 21 ppb for HAA5. Metropolitan was also in compliance with the DBP precursor control portion of the Stage 1 regulation.
- DLR = 1.0 ppb for each HAA5 analyte (dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb.
- Metropolitan has developed a flavor-profile analysis method that can more accurately detect odor occurrences. For more information, contact MWD at (213) 217-6850.
- TOCs at the filtration plants were taken at the filter effluents.
- The District tested more samples than required by the State (936 were required, 1,053 taken). All samples tested negative for Fecal/E. coli bacteria. The sample that tested positive for Total Coliform was re-sampled with negative results. The positive sample was determined to have been caused by a contaminated sample point and not the water itself. The District was in compliance with both the Total Coliform MCL and the Fecal/E. coli MCL for 2002.
- The MCL for Total Trihalomethane is determined by using a running average of the last four quarterly tests. The District was in compliance with the regulations concerning Trihalomethanes for 2002.
- The MCL for Haloacetic Acids (HAA5) is determined by using a running average of the last four quarterly tests. The District was in compliance with the regulations concerning Haloacetic Acids (HAA5) for 2002.
- The Department of Health Services - Office of Drinking Water requested the District to begin taking General Physical samples in September of 1994. The District was required to take twenty (20) general physical samples per month in the year 2002. These samples were tested for Turbidity, Odor, and Color. The District was in compliance with the Secondary Standards for these tests in 2002.