**APPENDIX F: PARAMETERS AND CRITERIA** (Updated on March 16, 2015)

The following list all of the constituents that have MUN water quality evaluation criteria. This list does not include all drinking water evaluation criteria. All constituents were evaluated against MCLs specified in provisions of Title 22 of the California Code of Regulations, the CTR, and other evaluation criteria/guideline listed for constituents without a MCL or CTR criteria. Evaluation criteria were obtained from the State Water Board's Water Quality Goals Database. Please note that not all of these constituents were tested for due to scan variations provided by each laboratory.

After staff review, corrections have been made to some CTR and MCL values that contained unit conversion errors. California Department of Public Health (DPH) was changed to the State Water Resources Control Board's Division of Drinking Water (DDW) to reflect current programs. Other evaluation criteria/guidelines have been removed unless the constituent does not have a MCL or CTR criteria to reduce confusion. An acronym key was added for clarification.

| Analyte | Primary MCL | Secondary MCL | CTR | Other Evaluation Criteria/Guidelines (if applicable) |
|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.200 mg/L | | | |
| 1,1,2,2-Tetrachloroethane | 0.001 mg/L | | 0.00017 mg/L | |
| 1,1,2,Trichloro-1,2,2-Trifluoroethane (Freon 113) | 1.2 mg/L | | | |
| 1,1,2-Trichloroethane | 0.005 mg/L | | 0.0006 mg/L | |
| 1,1-Dichloroethane | 0.005 mg/L | | | |
| 1,1-Dichloroethylene | 0.006 mg/L | | 0.000057 mg/L | |
| 1,2,4-Trichlorobenzene | 0.005 mg/L | | | |
| 1,2,4-Trimethylbenzene | | | | 0.33 mg/L [DDW Notification Level for drinking water] |
| 1,2-Dibromo-3chloropropane (DBCP) | 0.0002 mg/L | | | |
| 1,2-Dibromoethane (Ethylene Dibromide) (EDB) | 0.00005 mg/L | | | |
| 1,2-Dichlorobenzene | 0.6 mg/L | | 2.7 mg/L | |
| 1,2-Dichloroethane (Ethylene dichloride) | 0.0005 mg/L | | 0.00038 mg/L | |
| 1,2-Dichloropropane | 0.005 mg/L | | 0.00052 mg/L | |
| 1,2-Diphenylhydrazine | | | 0.000040 mg/L | |
| 1,3 Dichlorobenzene | | | 0.400 mg/L | |

| Analyte | Primary MCL | Secondary MCL | CTR | Other Evaluation Criteria/Guidelines (if applicable) |
|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | | | | 0.33 mg/L [DDW Notification Level for drinking water] |
| 1,3-Dichloropropene | 0.0005 mg/L | | 0.01 mg/L | |
| 1,4-Dichlorobenzene | 0.005 mg/L | | 0.400 mg/L | |
| 2,3,7,8-TCDD (Dioxin) | 3 x 10-8 mg/L | | 1.3 x 10-11 mg/L | |
| 2,4,5-TP (Silvex) | 0.05 mg/L | | | |
| 2,4,6-Trichlorophenol | | | 0.0021 mg/L | |
| 2,4-Dichlorophenol | | | 0.093 mg/L | |
| 2,4-Dichlorophenoxyacetic acid (2,4-D) | 0.07 mg/L | | | |
| 2,4-Dichlorophenoxybutyric acid (2,4-DB) | | | | 0.056 mg/L [USEPA IRIS Reference Dose] |
| 2,4-Dimethylphenol | | | 0.540 mg/L | |
| 2,4-Dinitrophenol | | | 0.070 mg/L | |
| 2,4-Dinitrotoluene | | | 0.00011 mg/L | |
| 2-Chloronaphthalene | | | 1.7 mg/L | |
| 2-Chlorophenol | | | 0.120 mg/L | |
| 2-Methyl-4,6-Dinitrophenol | | | 0.0134 mg/L | |
| 3,3'-Dichlorobenzidine | | | 0.00004 mg/L | |
| 4,4'-DDD | | | 0.00000083 mg/L | |
| 4,4'-DDE | | | 0.00000059 mg/L | |
| 4,4'-DDT | | | 0.00000059 mg/L | |
| Acenaphthene | | | 1.2 mg/L | |
| Acrolein | | | 0.320 mg/L | |
| Acrylonitrile | | | 0.000059 mg/L | |
| Alachlor | 0.002 mg/L | | | |
| Aldrin | | | 0.00000013 mg/L | |
| Alpha-BHC (alpha-Benzene hexachloride) | | | 0.0000039 mg/L | |
| Aluminum | 1.0 mg/L | 0.2 mg/L | | |
| Ammonia | | | | 1.5 mg/L [Odor Threshold (Amoore and Hautala)] |

| Analyte | Primary MCL | Secondary MCL | CTR | Other Evaluation Criteria/Guidelines (if applicable) |
|---|---|---|---|---|
| Anthracene | | | 9.6 mg/L | |
| Antimony | 0.006 mg/L | | 0.014 mg/L | |
| Arsenic | 0.010 mg/L | | | |
| Asbestos | 7 Million Fibers per Liter | | 7 Million Fibers/Liter | |
| Atrazine | 0.001 mg/L | | | |
| Barium | 1.0 mg/L | | | |
| Bentazon | 0.018 mg/L | | | |
| Benzene | 0.001 mg/L | | 0.0012 mg/L | |
| Benzidine | | | 0.00000012 mg/L | |
| Benzo(a)Anthracene [1,2-Benzanthracene] | | | 0.0000044 mg/L | |
| Benzo(a)pyrene | 0.0002 mg/L | | 0.0000044 mg/L | |
| Benzo(b)Fluoranthene [3,4-Benzofluoranthene] | | | 0.0000044 mg/L | |
| Benzo(k)Fluoranthene | | | 0.0000044 mg/L | |
| Beryllium | 0.004 mg/L | | | |
| Beta/photon emitters | 4 millirem/year annual dose equivalent to the total body or any internal organ | | | |
| Beta-BHC (beta-Benzene hexachloride) | | | 0.000014 mg/L | |
| Bis(2-Chloroethyl)Ether | | | 0.000031 mg/L | |
| Bis(2-Chloroisopropyl)Ether | | | 1.400 mg/L | |
| Boron | | | | 1 mg/L [DDW Notification Level for Drinking Water] |
| Bromoform | | | 0.0043 mg/L | |
| Butylbenzyl Phthalate | | | 3.0 mg/L | |
| Cadmium | 0.005 mg/L | | | |
| Carbofuran | 0.018 mg/L | | | |
| Carbon Tetrachloride | 0.0005 mg/L | | 0.00025 mg/L | |
| Chlordane | 0.0001 mg/L | | 0.00000057 mg/L | |

| Analyte | Primary MCL | Secondary MCL | CTR | Other Evaluation Criteria/Guidelines (if applicable) |
|---|---|---|---|---|
| Chloride | | 250 mg/L | | |
| Chlorobenzene (Monochlorobenzene) | 0.070 mg/L | | 0.680 mg/L | |
| Chlorodibromomethane | | | 0.000401 mg/L | |
| Chloroform | | | | 0.0018 mg/L [CalEPA Cancer Potency Factor as a drinking water level (assume 70kg body weight & 2 liters per day drinking water consumption] |
| Chlorpyrifos | | | | 0.002 mg/L [USEPA, OPP Drinking Water Health Advisory - non-cancer] |
| Chromium | 0.05 mg/L | | | |
| Chromium VI (Hexavalent Chromium) | 0.010 mg/L | | | |
| Chrysene | | | 0.0000044 mg/L | |
| Cis1,2-Dichloroethylene | 0.006 mg/L | | | |
| Color | | 15 Units | | |
| Copper | | 1.0 mg/L | 1.3 mg/L | |
| Cyanide | 0.15 mg/L | | 0.700 mg/L | |
| Dalapon | 0.2 mg/L | | | |
| Di(2-ethylhexyl)adipate | 0.4 mg/L | | | |
| Di(2-ethylhexyl)phthalate (DEHP) (Bis(2-ethylhexyl) phthalate) | 0.004 mg/L | | | |
| Diazinon | | | | 0.0012 mg/L [DDW Notification Level for drinking water] |
| Dibenzo(ah)Anthracene | | | 0.0000044 mg/L | |
| Dichlorobromomethane | | | 0.00056 mg/L | |
| Dichloromethane (Methylene Chloride) | 0.005 mg/L | | 0.0047 mg/L | |
| Dieldrin | | | 0.00000014 mg/L | |
| Diethyl Phthalate | | | 23 mg/L | |
| Di-isopropyl ether (Isopropyl ether) (DIPE) | | | | 0.0008 mg/L [Odor Threshold (Amoore and Hautala)] |
| Dimethyl Phthalate | | | 313 mg/L | |

| Analyte | Primary MCL | Secondary MCL | CTR | Other Evaluation Criteria/Guidelines (if applicable) |
|---|---|---|---|---|
| Di-n-Butyl Phthalate | | | 2.7 mg/L | |
| Dinoseb | 0.007 mg/L | | | |
| Diquat | 0.02 mg/L | | | |
| *E. coli* | | | | 235 MPN/100 mL [USEPA Recreational Guideline for Designated Beach Areas (Upper 75% Confidence Level)] |
| Endosulfan I (Alpha-Endosulfan) | | | 0.110 mg/L | |
| Endosulfan II (Beta-Endosulfan) | | | 0.110 mg/L | |
| Endosulfan Sulfate | | | 0.110 mg/L | |
| Endothall | 0.1 mg/L | | | |
| Endrin | 0.002 mg/L | | 0.00076 mg/L | |
| Endrin Aldehyde | | | 0.00076 mg/L | |
| Ethylbenzene | 0.3 mg/L | | 3.1 mg/L | |
| Fluoranthene | | | 0.3 mg/L | |
| Fluorene | | | 1.3 mg/L | |
| Fluoride | 2.0 mg/L | | | |
| Foaming Agents (MBAS) | | 0.5 mg/L | | |
| Gamma-BHC (gamma-Benzene hexachloride) (Lindane) | 0.0002 mg/L | | 0.000019 mg/L | |
| Glyphosate | 0.7 mg/L | | | |
| Gross Alpha particle activity (excluding radon and uranium) | 15 pCi/L | | | |
| Haloacetic acids (HAAs) | 0.060 mg/L | | | |
| Heptachlor | 0.0004 mg/L | | 0.00001 mg/L | |
| Heptachlor Epoxide | 0.0002 mg/L | | 0.00001mg/L | |
| Hexachlorobenzene | 0.001 mg/L | | 0.00000075 mg/L | |
| Hexachlorobutadiene | | | 0.00044 mg/L | |
| Hexachlorocyclopentadiene | 0.05 mg/L | | 0.240 mg/L | |
| Hexachloroethane | | | 0.0019 mg/L | |
| Indeno(1,2,3-cd) Pyrene | | | 0.0000044 mg/L | |
| Iron | | 0.3 mg/L | | |

| Analyte | Primary MCL | Secondary MCL | CTR | Other Evaluation Criteria/Guidelines (if applicable) |
|---|---|---|---|---|
| Isophorone | | | 0.0084 mg/L | |
| Lead | 0.015 mg/L | | | |
| Manganese | | 0.05 mg/L | | |
| Mercury | 0.002 mg/L | | 0.000050 mg/L | |
| Methoxychlor | 0.03 mg/L | | | |
| Methyl Bromide (Bromomethane) | | | 0.048 mg/L | |
| Methyl-tert-butyl ether (MTBE) | 0.013 mg/L | 0.005 mg/L | | |
| Molinate | 0.02 mg/L | | | |
| Nickel | 0.100 mg/L | | 0.61 mg/L | |
| Nickel | 0.1 mg/L | | 0.610 mg/L | |
| Nitrate (as NO3) | 45 mg/L | | | |
| Nitrate+Nitrite (sum as nitrogen) | 10 mg/L | | | |
| Nitrite (as Nitrogen) | 1.0 mg/L | | | |
| Nitrobenzene | | | 0.017 mg/L | |
| N-Nitrosodimethylamine (NDMA) | | | 0.00000069 mg/L | |
| N-Nitrosodi-n-Propylamine | | | 0.000005 mg/L | |
| N-Nitrosodiphenylamine | | | 0.005 mg/L | |
| Odor | | 3 TON (Threshold units) | | |
| Oxamyl | 0.05 mg/L | | | |
| Pentachlorophenol | 0.001 mg/L | | 0.00028 mg/L | |
| Perchlorate | 0.006 mg/L | | | |
| pH | | 6.5 - 8.5 units | | |
| Phenol | | | 21.0 mg/L | |
| Picloram | 0.5 mg/L | | | |
| Polychlorinated Biphenyls (PCBs) | 0.0005 mg/L | | 0.00000017 mg/L | |
| Pyrene | | | 0.960 mg/L | |
| Radium-226 | 5 pCi/L (combined radium-226 & -228) | | | |
| Radium-228 | 5 pCi/L (combined radium-226 & -228) | | | |

| Analyte | Primary MCL | Secondary MCL | CTR | Other Evaluation Criteria/Guidelines (if applicable) |
|---|---|---|---|---|
| Selenium | 0.05 mg/L | | | |
| Silver | | 0.1 mg/L | | |
| Simazine | 0.004 mg/L | | | |
| Sodium | | | | 20 mg/L [USEPA Drinking Water Advisory (for persons on restricted sodium diet)] |
| Specific Conductance | | 900 µS/cm | | |
| Strontium-90 | 8 pCi/L (=4 millirem/yr dose to bone marrow) | | | |
| Styrene | 0.1 mg/L | | | |
| Sulfate | | 250 mg/L | | |
| Tetrachloroethylene (Tetrachloroethene) (PCE) | 0.005 mg/L | | 0.0008 mg/L | |
| Thallium | 0.002 mg/L | | 0.0017 mg/L | |
| Thiobencarb | 0.07 mg/L | 0.001 mg/L | | |
| Toluene | 0.15 mg/L | | 6.800 mg/L | |
| Total Dissolved Solids | | 500 mg/L | | |
| Total Triahlomethanes | 0.080 mg/L | | | |
| Toxaphene | 0.003 mg/L | | 0.00000073 mg/L | |
| Trans-1,2-Dichloroethylene | 0.01 mg/L | | 0.700 mg/L | |
| Trichloroethylene (TCE) | 0.005 mg/L | | 0.0027 mg/L | |
| Trichlorofluoromethane (Freon 11) | 0.15 mg/L | | | |
| Tritium | 20000 pCi/L (=4 millirem/yr dose to total body) | | | |
| Turbidity | | 5 NTU | | |
| Uranium | 20 pCi/L | | | |
| Vanadium | | | | 0.05 mg/L [DDW Notification Level for drinking water] |
| Vinyl Chloride | 0.0005 mg/L | | 0.002 mg/L | |
| Xylenes | 1.750 mg/L | | | |
| Zinc | | 5.0 mg/L | | |

**Acronyms**

| | |
|---|---|
| CalEPA | California Environmental Protection Agency |
| CTR | California Toxics Rule |
| DDW | Division of Drinking Water |
| IRIS | Integrated Risk Information System |
| MCL | Maximum Contaminant Level |
| OPP | Office of Pesticide Programs |
| USEPA | United States Environmental Protection Agency |