

# Comparison Chart of Drinking Water Standards from around the World



All values are in units of mg/L unless stated otherwise

| Parameter                   | Guidelines for Canadian Drinking Water Quality <sup>1</sup> |                         | National Primary Drinking Water Regulations (USA) <sup>2</sup> |                    | WHO Guidelines for Drinking Water Quality <sup>3</sup> | Drinking Water Directives (EU) <sup>4</sup> |
|-----------------------------|---|-------------------------|--|--------------------|--|---|
|                             | MAC <sup>a</sup>  | AO [or OG] <sup>b</sup> | MCL 1 <sup>c</sup>   | MCL 2 <sup>d</sup> | Guideline Value  | Parametric Value                            |
|                             |   |                         |  |                    |  |   |
| Acrylamide                  |   |                         |  | TT                 | 0.0005   | 0.0001                                      |
| Adipate                     |   |                         | 0.4  |                    |  |   |
| Alachor                     |   |                         | 0.002  |                    | 0.02   |   |
| Aldicarb                    |   |                         |  |                    | 0.01   |   |
| Aldrin and Dieldrin         |   |                         |  |                    | 0.00003  |   |
| Aluminum                    |   | OG:0.1/0.2              |  | 0.05 - 0.2         |  | 0.2   |
| Ammonium                    |   |                         |  |                    |  | 0.5   |
| Antimony                    | 0.006   |                         | 0.006  |                    | 0.02   | 0.005                                       |
| Arsenic                     | 0.01  |                         | 0.01   |                    | 0.01   | 0.01  |
| Atrazine                    | 0.005   |                         | 0.003  |                    | 0.01   |   |
| Azinphos-methyl             | 0.02  |                         |  |                    |  |   |
| Barium                      | 1.0   |                         | 2.0  |                    | 0.7  |   |
| Benzene                     | 0.005   |                         | 0.005  |                    | 0.01   | 0.001                                       |
| Benzo[a]pyrene              | 0.00004   |                         | 0.0002   |                    | 0.0007   | 0.00001                                     |
| Beryllium                   |   |                         | 0.004  |                    |  |   |
| Boron                       | 5.0   |                         |  |                    | 2.4  | 1.00  |
| Bromate                     | 0.01  |                         | 0.01   |                    | 0.01   | 0.01  |
| Bromodichloromethane (BDCM) | 0.016   |                         |  |                    | 0.06   |   |
| Bromoform                   |   |                         |  |                    | 0.1  |   |
| Bromoxynil                  | 0.005   |                         |  |                    |  |   |
| Cadmium                     | 0.005   |                         | 0.005  |                    | 0.003  | 0.005                                       |
| Carbaryl                    | 0.09  |                         |  |                    |  |   |
| Carbofuran                  | 0.09  |                         | 0.04   |                    | 0.007  |   |
| Carbon tetrachloride        | 0.005   |                         | 0.005  |                    | 0.004  |   |
| Chloramines--total          | 3.0   |                         | 4  |                    | 3  |   |
| Chlorate                    | 1.0   |                         |  |                    | 0.7  |   |
| Chlordane                   |   |                         | 0.002  |                    | 0.0002   |   |
| Chloride                    |   | AO:≤250                 |  | 250                |  | 250   |
| Chlorite                    | 1.0   |                         | 1  |                    | 0.7  |   |
| Chloroform                  |   |                         |  |                    | 0.3  |   |
| Chlorotoluron               |   |                         |  |                    | 0.03   |   |
| Chlorpyrifos                | 0.09  |                         |  |                    | 0.03   |   |
| Chromium                    | 0.05  |                         | 0.1  |                    | 0.05   | 0.05  |

|                                |                           |                   |                        |        |        |                           |
|--------------------------------|---------------------------|-------------------|------------------------|--------|--------|---------------------------|
| Coliforms, total               | None detectable per 100mL |                   | less than 1 per 100 mL | 50%    |        |                           |
| Colour                         |                           | AO: $\leq$ 15 TCU |                        |        |        | Inoffensive               |
| Copper                         |                           | AO: $\leq$ 1.0    | 1.3                    | TT 1.3 | 2.0    | 2.0                       |
| Cyanazine                      |                           |                   |                        |        | 0.0006 |                           |
| Cyanide                        | 0.2                       |                   | 0.2                    |        | 0.07   | 0.05                      |
| Cyanobacterial toxins          | 0.0015                    |                   |                        |        | 0.001  |                           |
| Diazinon                       | 0.02                      |                   |                        |        |        |                           |
| Dicamba                        | 0.12                      |                   |                        |        |        |                           |
| 1,2-Dichlorobenzene            | 0.2                       | AO: $\leq$ 0.003  | 0.6                    |        | 1.0    |                           |
| 1,4-Dichlorobenzene            | 0.005                     | AO: $\leq$ 0.001  | 0.075                  |        | 0.3    |                           |
| 1,2-Dichloroethane             | 0.005                     |                   | 0.005                  |        | 0.05   | 0.003                     |
| 1,1-Dichloroethylene           | 0.014                     |                   | 0.007                  |        |        |                           |
| Dichloromethane                | 0.05                      |                   | 0.005                  |        | 0.02   |                           |
| 2,4-Dichlorophenol             | 0.9                       | $\leq$ 0.0003     |                        |        |        |                           |
| 2,4-Dichlorophenoxyacetic acid | 0.1                       |                   | 0.07                   |        | 0.03   |                           |
| DDT and metabolites            |                           |                   |                        |        | 0.001  |                           |
| Di(2-ethylhexyl)phthalate      |                           |                   | 0.006                  |        | 0.008  |                           |
| 1,2-Dichloroethylene           |                           |                   | 0.07                   |        |        |                           |
| 1,2-Dichloropropane            |                           |                   | 0.005                  |        | 0.04   |                           |
| Diclofop-methyl                | 0.009                     |                   |                        |        |        |                           |
| Dimethoate                     | 0.02                      |                   |                        |        | 0.006  |                           |
| Dinoseb                        |                           |                   | 0.007                  |        |        |                           |
| 1,4-Dioxane                    |                           |                   |                        |        | 0.05   |                           |
| Diquat                         | 0.07                      |                   | 0.02                   |        |        |                           |
| Diuron                         | 0.15                      |                   |                        |        |        |                           |
| Eddet acid (EDTA)              |                           |                   |                        |        | 0.6    |                           |
| Endothall                      |                           |                   | 0.1                    |        |        |                           |
| Endrin                         |                           |                   | 0.002                  |        | 0.0006 |                           |
| Epichlorohydrin                |                           |                   |                        | TT     | 0.0004 | 0.0001                    |
| Ethylbenzene                   | 0.14                      | AO: $\leq$ 0.0016 | 0.7                    |        | 0.3    |                           |
| Fenoprop                       |                           |                   |                        |        | 0.009  |                           |
| Fluoride                       | 1.5                       |                   | 4                      | 2.0    | 1.5    | 1.5                       |
| Glyphosate                     | 0.28                      |                   | 0.7                    |        |        |                           |
| Haloacetic Acids-Total (HAAs)  | 0.08                      |                   | 0.06                   |        |        |                           |
| Heptachlor                     |                           |                   | 0.0004                 |        |        |                           |
| Heptachlor epoxide             |                           |                   | 0.0002                 |        |        |                           |
| Hexachlorobenzene              |                           |                   | 0.001                  |        |        |                           |
| Hexachlorobutadiene            |                           |                   |                        |        | 0.0006 |                           |
| Hexachlorocyclopentadiene      |                           |                   | 0.05                   |        |        |                           |
| Hydrogen ion concentration     |                           |                   |                        |        |        | $\geq$ 6.5 and $\leq$ 9.5 |
| Iron                           |                           | AO: $\leq$ 0.3    |                        | 0.3    |        | 0.2                       |
| Isoproturon                    |                           |                   |                        |        | 0.009  |                           |
| Lead                           | 0.01                      |                   | 0.015                  | TTS    | 0.01   | 0.01                      |
| Lindane                        |                           |                   | 0.0002                 |        | 0.002  |                           |
| Malathion                      | 0.19                      |                   |                        |        |        |                           |

|                                  |       |                  |        |      |        |             |
|----------------------------------|-------|------------------|--------|------|--------|-------------|
| Manganese                        |       | AO: $\leq$ 0.05  |        | 0.05 | 0.4    | 0.05        |
| Mercury                          | 0.001 |                  | 0.002  |      | 0.006  | 0.001       |
| Methoxychlor                     |       |                  | 0.04   |      | 0.02   |             |
| Methyl tertiary-butyl ether      |       | 0.015            |        |      |        |             |
| Metolachlor                      | 0.05  |                  |        |      | 0.01   |             |
| Metribuzin                       | 0.08  |                  |        |      |        |             |
| Microcystin-LR                   |       |                  |        |      | 0.001  |             |
| Molinate                         |       |                  |        |      | 0.006  |             |
| Molybdenum                       |       |                  |        |      | 0.07   |             |
| Monochloroacetate                |       |                  |        |      | 0.02   |             |
| Monochlorobenzene                | 0.08  | AO: $\leq$ 0.03  |        |      |        |             |
| N-Nitrosodimethylamine           |       |                  |        |      | 0.0001 |             |
| Nickel                           |       |                  |        |      | 0.07   | 0.02        |
| Nitrate                          | 45    |                  | 10     |      | 50     | 50          |
| Nitrilotriacetic acid (NTA)      | 0.4   |                  |        |      | 0.2    |             |
| Nitrite                          | 3     |                  | 1      |      | 3      | 0.5         |
| Odour                            |       | Inoffensive      |        |      |        | Inoffensive |
| Oxamyl (Vydate)                  |       |                  | 0.2    |      |        |             |
| Paraquat (as dichloride)         | 0.01  |                  |        |      |        |             |
| Pendimethalin                    |       |                  |        |      | 0.02   |             |
| Pentachlorophenol                | 0.06  | AO: $\leq$ 0.030 | 0.001  |      | 0.009  |             |
| Pesticides                       |       |                  |        |      |        | 0.0005      |
| pH                               |       | 7.0-10.5         |        |      |        |             |
| Phorate                          | 0.002 |                  |        |      |        |             |
| Picloram                         | 0.19  |                  | 0.5    |      |        |             |
| Polychlorinated biphenyls (PCBs) |       |                  | 0.0005 |      |        |             |
| Polycyclic aromatic hydrocarbons |       |                  |        |      |        | 0.0001      |
| Pyriproxyfen                     |       |                  |        |      |        |             |
| Selenium                         | 0.05  |                  | 0.05   |      | 0.04   | 0.01        |
| Silver                           |       |                  |        | 0.1  |        |             |
| Simazine                         | 0.01  |                  | 0.004  |      | 0.002  |             |
| Sodium                           |       | AO: $\leq$ 200   |        |      |        | 200         |
| Styrene                          |       |                  | 0.1    |      | 0.02   |             |
| Sulphate                         |       | AO: $\leq$ 500   |        | 250  |        | 250         |
| Sulphide (as H <sub>2</sub> S)   |       | AO: $\leq$ 0.05  |        |      |        |             |
| Taste                            |       | Inoffensive      |        |      |        | Inoffensive |
| Temperature                      |       | AO: $\leq$ 15°C  |        |      |        |             |
| Terbufos                         | 0.001 |                  |        |      |        |             |
| Terbutylazine                    |       |                  |        |      | 0.007  |             |
| Tetrachloroethylene              | 0.01  |                  | 0.005  |      | 0.04   | 0.01        |
| 2,3,4,6-Tetrachlorophenol        | 0.1   | AO: $\leq$ 0.001 |        |      |        |             |
| Thallium                         |       |                  | 0.002  | 500  |        |             |
| Toluene                          | 0.06  | AO: $\leq$ 0.024 | 1.0    |      | 0.7    |             |
| Total dissolved solids (TDS)     |       | AO: $\leq$ 500   |        | 500  |        |             |
| Toxaphene                        |       |                  | 0.003  |      |        |             |
| Trichloroacetate                 |       |                  |        |      | 0.2    |             |
| Trichloroethylene                | 0.005 |                  | 0.005  |      | 0.02   | 0.01        |

|                        |             |                  |              |     |            |             |
|------------------------|-------------|------------------|--------------|-----|------------|-------------|
| 2,4,6-Trichlorophenol  | 0.005       | AO: $\leq$ 0.002 |              |     | 0.2        |             |
| 1,2,4-Trichlorobenzene |             |                  | 0.07         |     |            |             |
| Trifluralin            | 0.045       |                  |              |     | 0.02       |             |
| Trihalomethanes-total  | 0.1         |                  | 0.08         |     |            | 0.1         |
| Trutuim                |             |                  |              |     | 10000 Bq/L | 100 Bq/l    |
| Turbidity              | 0.1-1.0 NTU |                  |              | TT  |            | Inoffensive |
| Uranium                | 0.0s        |                  | 30 $\mu$ g/L |     | 0.03       |             |
| Vinyl chloride         | 0.002       |                  | 0.002        |     | 0.0003     | 0.0005      |
| Xylenes--total         | 0.09        | AO: $\leq$ 0.02  | 10           |     | 0.5        |             |
| Zinc                   |             | AO: $\leq$ 5.0   |              | 5.0 |            |             |

<sup>a</sup> Maximum Acceptable Concentration - guideline is health-based

<sup>b</sup> Aesthetic Objective [or Operational Guidance Value] - based on aesthetic or operational considerations

<sup>c</sup> Primary Maximum Contaminant Level - regulation is health-based

<sup>d</sup> Secondary Maximum Contaminant Level - regulation is based on aesthetic considerations

<sup>1</sup> Health Canada (2017). *Guidelines for Canadian Drinking Water Quality—Summary Table*. Water and Air Quality Bureau, Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario.

Source: [http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/sum\\_guide-res\\_recom/index-eng.php](http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/sum_guide-res_recom/index-eng.php)

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<sup>2</sup> United States Environmental Protection Agency, *National Primary Drinking Water Regulation Table*, Updated May 2009

Source: <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulation-table>  
 Pdf link: [https://www.epa.gov/sites/production/files/2016-06/documents/npwdr\\_complete\\_table.pdf](https://www.epa.gov/sites/production/files/2016-06/documents/npwdr_complete_table.pdf)

<sup>3</sup> World Health Organization. (2011). *Guidelines for drinking-water quality: Fourth edition incorporating the first addendum*

Source: [http://www.who.int/water\\_sanitation\\_health/publications/drinking-water-quality-guidelines-4-including-1st-addendum/en/](http://www.who.int/water_sanitation_health/publications/drinking-water-quality-guidelines-4-including-1st-addendum/en/)

Pdf link: [http://apps.who.int/iris/bitstream/10665/44584/1/9789241548151\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/44584/1/9789241548151_eng.pdf)

<sup>4</sup> Council of the European Union. (1998). *Council Directive 98/83/EC on the Quality of Water Intended for Human Consumption*. (consolidated text of the Directive with its latest amendments including Commission Directive (EU) 2015/1787 of 6-2015)

Source: [http://ec.europa.eu/environment/water/water-drink/legislation\\_en.html](http://ec.europa.eu/environment/water/water-drink/legislation_en.html)

Pdf link: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:01998L0083-20151027&from=EN>