Comparison Chart of Drinking Water Guidelines, Regulations, and Directives from around the World

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

Parameter	Guidelines for Canadian Drinking Water Quality[1]		National Primary Drinking Water Regulations (USA)[2]		Secondary Drinking Water Standards[3]	WHO Guidelines for Drinking Water Quality[4]	Drinking Water Directives (EU)[5]
	MAC[a]	AO [or OG][b]	MCLG[c]	MCL[d]	MCL 2[e]	Guideline Value	Parametric Value
Acrylamide			0	TT[f]		0.0005	0.0001
Adipate			0.4	0.4			
Alachlor			0	0.002		0.02	
Aldicarb						0.01	
Aldrin and Dieldrin						0.00003	0.00003
Aluminum		OG:0.1/0.2			0.05 to 0.2		0.2
Ammonium							0.5
Antimony	0.006		0.006	0.006		0.02	0.005
Arsenic	0.01		0	0.010		0.01	0.01
Atrazine	0.005		0.003	0.003		0.1	
Azinphos-methyl	0.02						
Barium	1.0		2	2		1.3	
Benzene	0.005		0	0.005		0.01	0.001
Benzo[a]pyrene	0.00004		0	0.0002		0.0007	0.00001
Beryllium			0.004	0.004			
Boron	5					2.4	1.0
Bromate	0.01		0	0.010		0.01	0.01
Bromodichloromethane (BDCM)	0.016		0			0.06	
Bromoform			0			0.1	

Bromoxynil	0.005						
Cadmium	0.005		0.005	0.005		0.003	0.005
Carbaryl	0.09						
Carbofuran	0.09		0.04	0.04		0.007	
Carbon tetrachloride	0.002		0	0.005		0.004	
Chloramines-total	3.0		4	4.0		3	
Chlorate	1					0.7	
Chlordane			0	0.002		0.0002	
Chloride		AO:≤250			250		250
Chlorite	1		0.8	1		0.7	
Chloroform			0.07			0.3	
Chlorotoluron						0.03	
Chlorpyrifos	0.09					0.03	
Chromium	0.05		0.1	0.1		0.05	0.05
Coliforms, total	None detectable per 100mL		0	5.0%			0/100 ml
Colour		AO:≤15 TCU			15 color units		Acceptable to consumers and no abnormal change
Copper	2	AO:≤1	1.3	TT 1.3	1.0	2	2.0
Cyanazine						0.0006	
Cyanide	0.2		0.2	0.2			0.05
Cyanobacterial toxins	0.0015					0.001	
Diazinon	0.02						
Dicamba	0.12						
o-Dichlorobenzene			0.6	0.6			
p-Dichlorobenzene			0.075	0.075			
1,2-Dichlorobenzene	0.2	AO:≤0.003				1	
1,4-Dichlorobenzene	0.005	AO:≤0.001				0.3	
1,2-Dichloroethane	0.005		0	0.005		0.03	0.003
1,1-Dichloroethylene	0.014		0.007	0.007			
Dichloromethane	0.05		0	0.005		0.02	
2,4-Dichlorophenol	0.9	≤0.0003					

2,4-Dichlorophenoxyacetic acid	0.1					0.03	
DDT and metabolites						0.001	
Di(2-ethylhexyl)phthalate			0	0.006		0.008	
1,2-Dichloroethylene			0.07	0.07			
1,2-Dichloropropane			0	0.005		0.04	
Diclofop-methyl	0.009						
Dimethoate	0.02					0.006	
Dinoseb			0.007	0.007			
1,4-Dioxane						0.05	
Diquat	0.07		0.02	0.02			
Diuron	0.15						
Edetic acid (EDTA)						0.6	
Endothall			0.1	0.1			
Endrin			0.002	0.002		0.0006	
Epichlorohydrin			0	TT		0.0004	0.0001
Ethylbenzene	0.14	AO:0.0016	0.7	0.7		0.3	
Fenoprop						0.009	
Fluoride	1.5		4.0	4.0	2.0	1.5	1.5
Glyphosate	0.28		0.7	0.7			
Haloacetic Acids-Total (HAAs)	0.08		n/a	0.06			
Heptachlor			0	0.0004			0.00003
Heptachlor epoxide			0	0.0002			0.00003
Hexachlorobenzene			0	0.001			
Hexachlorobutadiene						0.0006	
Hexachlorocyclopentadiene			0.05	0.05			
Iron		AO:≤0.3			0.3		0.2
Isoproturon						0.009	
Lead	0.005		0	TT; Action Level=0.015		0.01	0.01
Lindane			0.0002	0.0002		0.002	
Malathion	0.19						
Manganese	0.12	AO:≤0.02			0.05		0.05
Mercury	0.001		0.002	0.002		0.006	0.001
Methoxychlor			0.04	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							
Monochloroacetate						0.02	
Monochlorobenzene	0.08	AO:≤0.03					
N -Nitrosodimethylamine						0.0001	
Nickel						0.07	0.02
Nitrate	45		10	10		50	50
Nitrilotriacetic acid (NTA)	0.4					0.2	
Nitrite	3		1	1		3	0.5
Odour		Inoffensive			3 TON (threshold odor number)		Acceptable to consumers and no abnormal change
Oxamyl (Vydate)			0.2	0.2			
Paraquat (as dichloride)	0.01						
Pendimethalin						0.02	
Pentachlorophenol	0.06	AO:≤0.03	0	0.001		0.009	
Pesticides-total							0.0005
pH		7.0-10.5			6.5-8.5		≥6.5 and ≤9.5
Phorate	0.002						
Picloram	0.19		0.5	0.5			
Polychlorinated biphenyls (PCBs)			0	0.0005			
Polycyclic aromatic hydrocarbons							0.0001
Pyriproxyfen							
Selenium	0.05		0.05	0.05		0.04	0.01
Silver					0.1		
Simazine	0.01		0.004	0.004		0.002	
Sodium		AO:≤200				50	200
Styrene			0.1	0.1		0.02	
Sulphate		AO:≤500			250		250
Sulphide (as H_2S)		AO:≤0.05					

Taste		Inoffensive					Acceptable to consumers and no abnormal change
Temperature		AO:≤15°C					
Terbufos	0.001						
Terbuthylazine						0.007	
Tetrachloroethene/Tetrachloroethylene	0.01		0	0.005		0.04	0.01 minus concentration of trichloroethene
2,3,4,6-Tetrachlorophenol	0.1	AO:≤0.001					
Thallium			0.0005	0.0002			
Toluene	0.06	AO:≤0.024	1	1		0.7	
Total dissolved solids (TDS)		AO:≤500			500		
Toxaphene			0	0.003			
Trichloroacetate						0.2	
Trichloroethene/Trichloroethylene	0.005		0	0.005		0.02	0.01 minus concentration of tetrachloroethene
2,4,6-Trichlorophenol	0.005	AO:≤0.002				0.2	
1,2,4-Trichlorobenzene			0.07	0.07			
Trifluralin	0.045					0.02	
Trihalomethanes-total	0.1		n/a	0.080			0.1
Turbidity	0.1-1.0 NTU		n/a	TT			Acceptable to consumers and no abnormal change
Uranium	0.02		0	30 µg/L		0.03	
Vinyl chloride	0.002		0	0.002		0.0003	0.00050
Xylenes-total	0.09	AO:0.02	10	10		0.5	
Zinc		AO:≤5.0			5		

[a] Maximum Acceptable Concentration - guideline is health-based

[b] Aesthetic Objective [or Operational Guidance Value] - based on aesthetic or operational considerations

[c] 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 allow for a margin of safety and are non-enforceable public health goals.

[d] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.

[e] National Secondary Drinking Water Regulations - Non-mandatory water quality standards for 15 contaminants. EPA does not enforce these "secondary maximum contaminant levels". They are established for aesthetic considerations.

[f] Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

[1] Health Canada (2017). *Guidelines for Canadian Drinking Water Quality—Summary Table* . Water Quality - Reports and Publications. Source: www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html

[2] United States Environmental Protection Agency (2018). *National Primary Drinking Water Regulations.* Source: www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations

[3] United States Environmental Protection Agency (2017). *Secondary Drinking Water Standards: Guidance for Nuisance Chemicals.* Source: www.epa.gov/dwstandardsregulations/secondary-drinking-water-standards-guidance-nuisance-chemicals

[4] World Health Organization. (2017). *Guidelines for drinking-water quality, 4th edition, incorporating the 1st addendum* Source: www.who.int/water_sanitation_health/publications/drinking-water-quality-guidelines-4-including-1st-addendum/en/

[5] Council of the European Union. (2015). *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 October 2015) Source: eur-lex.europa.eu/eli/dir/1998/83/2015-10-27