

Users are advised to consult the Canadian Environmental Quality Guidelines introductory text, factsheet, and/or protocols for specific information and implementation guidance pertaining to each environmental quality guideline.

		Water Quality Guidelines for the Protection of Aquatic Life					
		Freshwater			Marine		
		Concentration (µg/L)	Concentration (µg/L)	Date	Concentration (µg/L)	Concentration (µg/L)	Date
Chemical name	Chemical groups	Short Term	Long Term		Short Term	Long Term	
1,1,1-Trichloroethane  CASRN 71556	Organic Halogenated aliphatic compounds Chlorinated ethanes	No data	Insufficient data	1991	No data	Insufficient data	1991
1,1,2,2- Tetrachloroethene PCE (Tetrachloroethylene) CASRN 127184	Organic Halogenated aliphatic compounds Chlorinated ethenes	No data	110	1993	No data	Insufficient data	1993
1,1,2,2-Tetrachlorethane  CASRN 79345	Organic Halogenated aliphatic compounds Chlorinated ethanes	No data	Insufficient data	1991	No data	Insufficient data	1991
1,1,2-Trichloroethene TCE (Trichloroethylene) CASRN 79-01-6	Organic Halogenated aliphatic compounds Chlorinated ethenes	No data	21	1991	No data	Insufficient data	1991
1,2,3,4-Tetrachlorobenzene  CASRN 634662	Organic Monocyclic aromatic compounds Chlorinated benzenes	No data	1.8	1997	No data	Insufficient data	1997
1,2,3,5-Tetrachlorobenzene	Organic Monocyclic aromatic compounds Chlorinated benzenes	No data	Insufficient data	1997	No data	Insufficient data	1997
1,2,3-Trichlorobenzene  CASRN 87616	Organic Monocyclic aromatic compounds Chlorinated benzenes	No data	8	1997	No data	Insufficient data	1997

1,2,4,5-Tetrachlorobenzene	Organic Monocyclic aromatic compounds Chlorinated benzenes	<i>No data</i>	Insufficient data	1997	<i>No data</i>	Insufficient data	1997
1,2,4-Trichlorobenzene <b>CASRN 120801</b>	Organic Monocyclic aromatic compounds Chlorinated benzenes	<i>No data</i>	24	1997	<i>No data</i>	5.4	1997
1,2-Dichlorobenzene <b>CASRN 95501</b>	Organic Monocyclic aromatic compounds Chlorinated benzenes	<i>No data</i>	0.7	1997	<i>No data</i>	42	1997
1,2-Dichloroethane <b>CASRN 1070602</b>	Organic Halogenated aliphatic compounds Chlorinated ethanes	<i>No data</i>	100	1991	<i>No data</i>	Insufficient data	1991
1,3,5-Trichlorobenzene	Organic Monocyclic aromatic compounds Chlorinated benzenes	<i>No data</i>	Insufficient data	1997	<i>No data</i>	Insufficient data	1997
1,3-Dichlorobenzene <b>CASRN 541731</b>	Organic Monocyclic aromatic compounds Chlorinated benzenes	<i>No data</i>	150	1997	<i>No data</i>	Insufficient data	1997
1,4-Dichlorobenzene <b>CASRN 106467</b>	Organic Monocyclic aromatic compounds Chlorinated benzenes	<i>No data</i>	26	1997	<i>No data</i>	Insufficient data	1997
1,4-Dioxane		NRG	NRG	2008	NRG	NRG	2008
3-Iodo-2-propynyl butyl carbamate IPBC <b>CASRN 55406-53-6</b>	Organic Pesticides Carbamate pesticides	<i>No data</i>	1.9	1999	<i>No data</i>	<i>No data</i>	<i>No data</i>
Acenaphthene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	<i>No data</i>	5.8	1999	<i>No data</i>	Insufficient data	1999

Acenaphthylene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	No data	No data	1999	No data	No data	1999
Acridine PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	No data	4.4	1999	No data	Insufficient data	1999
Aldicarb <b>CASRN 116063</b>	Organic Pesticides Carbamate pesticides	No data	1	1993	No data	0.15	1993
Aldrin	Organic Pesticides Organochlorine compounds	No data	0.004	1987	No data	No data	No data
Aluminium	Inorganic Metals	No data	Variable	1987	No data	No data	No data
Ammonia (total)	Inorganic Inorganic nitrogen compounds	No data	Table	2001	No data	No data	No data
Ammonia (un-ionized) <b>CASRN 7664417</b>	Inorganic Inorganic nitrogen compounds	No data	19	2001	No data	No data	No data
Aniline <b>CASRN 62533</b>	Organic	No data	2.2	1993	No data	Insufficient data	1993
Anthracene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	No data	0.012	1999	No data	Insufficient data	1999
Arsenic <b>CASRN none</b>	Inorganic Metals	No data	5	1997	No data	12.5	1997
Atrazine <b>CASRN 1912249</b>	Organic Pesticides Triazine compounds	No data	1.8	1989	No data	No data	No data
Benz(a)anthracene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	No data	0.018	1999	No data	Insufficient data	1999

Benzene <b>CASRN 71432</b>	Organic Monocyclic aromatic compounds	<i>No data</i>	370	1999	<i>No data</i>	110	1999
Benzo(a)pyrene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	<i>No data</i>	0.015	1999	<i>No data</i>	Insufficient data	1999
Boron	Inorganic Metals	29,000µg/L or 29mg/L	1,500µg/L or 1.5mg/L	2009	NRG	NRG	2009
Bromacil <b>CASRN 314409</b>	Organic Pesticides	<i>No data</i>	5	1997	<i>No data</i>	Insufficient data	1997
Bromoxynil	Organic Pesticides Benzonitrile compounds	<i>No data</i>	5	1993	<i>No data</i>	Insufficient data	1993
Cadmium <b>CASRN 7440439</b>	Inorganic Metals	1.0	0.09	2014	NRG	0.12	2014
Captan <b>CASRN 133062</b>	Organic Pesticides	<i>No data</i>	1.3	1991	<i>No data</i>	<i>No data</i>	<i>No data</i>
Carbamazepine 5H-Dibenzo[b,f]azepine-5- carboxamide; CBZ		NRG	10	2018	NRG	NRG	2018
Carbaryl <b>CASRN 63252</b>	Organic Pesticides Carbamate pesticides	3.3	0.2	2009	5.7	0.29	2009
Carbofuran <b>CASRN 1564662</b>	Organic Pesticides Carbamate pesticides	<i>No data</i>	1.8	1989	<i>No data</i>	<i>No data</i>	<i>No data</i>
Chlordane	Organic Pesticides Organochlorine compounds	<i>No data</i>	<del>0.006</del>	1987	<i>No data</i>	<i>No data</i>	<i>No data</i>
Chloride	Inorganic	640,000 µg/L or 640 mg/L	120,000 µg/L or 120 mg/L	2011	NRG	NRG	2011

Chlorothalonil <b>CASRN 1897456</b>	Organic Pesticides	No data	0.18	1994	No data	0.36	1994
Chlorpyrifos <b>CASRN 2921882</b>	Organic Pesticides Organophosphorus compounds	0.02	0.002	2008	NRG	0.002	2008
Chromium, hexavalent (Cr(VI)) <b>CASRN 7440473</b>	Inorganic Metals	No data	1	1997	No data	1.5	1997
Chromium, trivalent (Cr(III)) <b>CASRN 7440473</b>	Inorganic Metals	No data	8.9	1997	No data	56	1997
Chrysene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	No data	Insufficient data	1999	No data	Insufficient data	1999
Colour <b>CASRN N/A</b>	Physical	No data	Narrative	1999	No data	Narrative	1999
Copper	Inorganic Metals	No data	Equation	1987	No data	No data	No data
Cyanazine <b>CASRN 2175462</b>	Organic Pesticides Triazine compounds	No data	2	1990	No data	No data	No data
Cyanide	Inorganic	No data	5 (as free CN)	1987	No data	No data	No data
Debris <b>CASRN N/A</b>	Physical	No data	No data	No data	No data	Narrative	1996
Deltamethrin <b>CASRN 52918635</b>	Organic Pesticides	No data	0.0004	1997	No data	Insufficient data	1997
Deposited bedload sediment	Physical Turbidity, clarity and suspended solids Total particulate matter	No data	Insufficient data	1999	No data	Insufficient data	1999

Di(2-ethylhexyl) phthalate <b>CASRN 117817</b>	Organic Phthalate esters	<i>No data</i>	16	1993	<i>No data</i>	Insufficient data	1993
Di-n-butyl phthalate <b>CASRN 84742</b>	Organic Phthalate esters	<i>No data</i>	19	1993	<i>No data</i>	Insufficient data	1993
Di-n-octyl phthalate <b>CASRN 117840</b>	Organic Phthalate esters	<i>No data</i>	Insufficient data	1993	<i>No data</i>	Insufficient data	1993
Dibromochloromethane	Organic Halogenated aliphatic compounds Halogenated methanes	<i>No data</i>	Insufficient data	1992	<i>No data</i>	Insufficient data	1992
Dicamba <b>CASRN 1918009</b>	Organic Pesticides Aromatic Carboxylic Acid	<i>No data</i>	10	1993	<i>No data</i>	<i>No data</i>	<i>No data</i>
Dichloro diphenyl trichloroethane; 2,2-Bis(p-chlorophenyl)-1,1,1- trichloroethane DDT (total)	Organic Pesticides Organochlorine compounds	<i>No data</i>	0.001	1987	<i>No data</i>	<i>No data</i>	<i>No data</i>
Dichlorobromomethane	Organic Halogenated aliphatic compounds Halogenated methanes	<i>No data</i>	Insufficient data	1992	<i>No data</i>	Insufficient data	1992
Dichloromethane Methylene chloride <b>CASRN 75092</b>	Organic Halogenated aliphatic compounds Halogenated methanes	<i>No data</i>	98.1	1992	<i>No data</i>	Insufficient data	1992
Dichlorophenols	Organic Monocyclic aromatic compounds Chlorinated phenols	<i>No data</i>	0.2	1987	<i>No data</i>	<i>No data</i>	<i>No data</i>
Diclofop-methyl <b>CASRN 51338273</b>	Organic Pesticides	<i>No data</i>	6.1	1993	<i>No data</i>	<i>No data</i>	<i>No data</i>
Didecyl dimethyl ammonium chloride DDAC <b>CASRN 7173515</b>	Organic Pesticides	<i>No data</i>	1.5	1999	<i>No data</i>	Insufficient data	1999

Diethylene glycol <b>CASRN 111466</b>	Organic Glycols	<i>No data</i>	Insufficient data	1997	<i>No data</i>	Insufficient data	1997
Diisopropanolamine DIPA <b>CASRN 110974</b>	Organic	<i>No data</i>	1600	2005	<i>No data</i>	Insufficient data	2005
Dimethoate <b>CASRN 60515</b>	Organic Pesticides Organophosphorus compounds	<i>No data</i>	6.2	1993	<i>No data</i>	Insufficient data	1993
Dinoseb <b>CASRN 88857</b>	Organic Pesticides	<i>No data</i>	0.05	1992	<i>No data</i>	<i>No data</i>	<i>No data</i>
Dissolved gas supersaturation <b>CASRN N/A</b>	Physical	<i>No data</i>	Narrative	1999	<i>No data</i>	Narrative	1999
Dissolved oxygen DO <b>CASRN N/A</b>	Inorganic	<i>No data</i>	Variable	1999	<i>No data</i>	>8000 & Narrative	1996
Endosulfan	Organic Pesticides Organochlorine compounds	0.06	0.003	2010	0.09	0.002	2010
Endrin	Organic Pesticides Organochlorine compounds	<i>No data</i>	<del>0.0023</del>	1987	<i>No data</i>	<i>No data</i>	<i>No data</i>
Ethylbenzene <b>CASRN 100414</b>	Organic Monocyclic aromatic compounds	<i>No data</i>	90	1996	<i>No data</i>	25	1996
Ethylene glycol <b>CASRN 107211</b>	Organic Glycols	<i>No data</i>	192 000	1997	<i>No data</i>	Insufficient data	1997
Fluoranthene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	<i>No data</i>	0.04	1999	<i>No data</i>	Insufficient data	1999

Fluorene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	No data	3	1999	No data	Insufficient data	1999
Fluoride	Inorganic	No data	120	2002	No data	NRG	2002
Fluoride <b>CASRN 7782414</b>	Inorganic	No data	120	2002	No data	No data	2002
Glyphosate <b>CASRN 1071836</b>	Organic Pesticides Organophosphorus compounds	27,000	800	2012	NRG	NRG	2012
Heptachlor Heptachlor epoxide	Organic Pesticides Organochlorine compounds	No data	0.04	1987	No data	No data	No data
Hexachlorobenzene	Organic Monocyclic aromatic compounds Chlorinated benzenes	No data	Insufficient data	1997	No data	Insufficient data	1997
Hexachlorobutadiene HCBD <b>CASRN 87683</b>	Organic Halogenated aliphatic compounds	No data	1.3	1999	No data	No data	No data
Hexachlorocyclohexane Lindane	Organic Pesticides Organochlorine compounds	No data	0.01	1987	No data	No data	No data
Imidacloprid <b>CASRN 13826413</b>		No data	0.23	2007	No data	0.65	2007
Iron	Inorganic Metals	No data	300	1987	No data	No data	No data
Lead	Inorganic Metals	No data	Equation	1987	No data	No data	No data
Linuron <b>CASRN 41205214</b>	Organic Pesticides	No data	7	1995	No data	No data	1995



Mercury <b>CASRN 7439976</b>	Inorganic Metals	No data	0.026	2003	No data	0.016	2003
Methoprene <b>CASRN 40596698</b>		No data	0.09 (Target Organism Management value: 0.53)	2007	No data	Insufficient data	2007
Methyl tertiary-butyl ether MTBE <b>CASRN 1634044</b>	Organic Non-halogenated aliphatic compounds Aliphatic ether	No data	10 000	2003	No data	5 000	2003
Methylchlorophenoxyacetic acid (4-Chloro-2-methyl phenoxy acetic acid; 2-Methyl-4-chloro phenoxy acetic acid) MCPA <b>CASRN 94746</b>	Organic Pesticides	No data	2.6	1995	No data	4.2	1995
Methylmercury	Organic	No data	0.004	2003	No data	NRG	2003
Metolachlor <b>CASRN 51218452</b>	Organic Pesticides Organochlorine compounds	No data	7.8	1991	No data	No data	No data
Metribuzin <b>CASRN 21087649</b>	Organic Pesticides Triazine compounds	No data	1	1990	No data	No data	No data
Molybdenum	Inorganic Metals	No data	73	1999	No data	No data	No data
Monobromomethane Methyl bromide	Organic Halogenated aliphatic compounds Halogenated methanes	No data	Insufficient data	1992	No data	Insufficient data	1992
Monochlorobenzene <b>CASRN 108907</b>	Organic Monocyclic aromatic compounds Chlorinated benzenes	No data	1.3	1997	No data	25	1997
Monochloromethane Methyl chloride	Organic Halogenated aliphatic compounds Halogenated methanes	No data	Insufficient data	1992	No data	Insufficient data	1992
	Organic						

Monochlorophenols	Monocyclic aromatic compounds Chlorinated phenols	No data	7	1987	No data	No data	No data
Naphthalene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	No data	1.1	1999	No data	1.4	1999
Nickel	Inorganic Metals	No data	Equation	1987	No data	No data	No data
Nitrate <b>CASRN 14797-55-8</b>	Inorganic Inorganic nitrogen compounds	550,000 µg/L or 550 mg/L	13,000 µg/L or 13 mg/L	2012	1,500,000 µg/L or 1500 mg/L	200,000 µg/L or 200 mg/L	2012
Nitrite	Inorganic Inorganic nitrogen compounds	No data	60 NO <sub>2</sub> -N	1987	No data	No data	No data
Nonylphenol and its ethoxylates <b>CASRN 84852153</b>	Organic Nonylphenol and its ethoxylates	No data	1	2002	No data	0.7	2002
Nutrients		No data	Guidance Framework	2004	No data	Guidance framework	2007
Pentachlorobenzene <b>CASRN 608935</b>	Organic Monocyclic aromatic compounds Chlorinated benzenes	No data	6	1997	No data	Insufficient data	1997
Pentachlorophenol PCP	Organic Monocyclic aromatic compounds Chlorinated phenols	No data	0.5	1987	No data	No data	No data
Permethrin <b>CASRN 52645531</b>	Organic Pesticides Organochlorine compounds	No data	0.004	2006	No data	0.001	2006
Phenanthrene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	No data	0.4	1999	No data	Insufficient data	1999
Phenols (mono- & dihydric) <b>CASRN 108952</b>	Organic Aromatic hydroxy compounds	No data	4	1999	No data	No data	No data
Phenoxy herbicides	Organic						No

2,4 D; 2,4-Dichlorophenoxyacetic acid	Pesticides	No data	4	1987	No data	No data	data
Phosphorus	Inorganic	No data	Guidance Framework	2004	No data	Guidance Framework	2007
Picloram CASRN 1918021	Organic Pesticides	No data	29	1990	No data	No data	No data
Polychlorinated biphenyls PCBs	Organic Polyaromatic compounds Polychlorinated biphenyls	No data	<del>0.001</del>	1987	No data	<del>0.01</del>	1991
Propylene glycol CASRN 57556	Organic Glycols	No data	500 000	1997	No data	Insufficient data	1997
Pyrene PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	No data	0.025	1999	No data	Insufficient data	1999
pH	Inorganic Acidity, alkalinity and pH	No data	6.5 to 9.0	1987	No data	7.0 to 8.7 & Narrative	1996
Quinoline PAHs	Organic Polyaromatic compounds Polycyclic aromatic hydrocarbons	No data	3.4	1999	No data	Insufficient data	1999
Reactive Chlorine Species total residual chlorine, combined residual chlorine, total available chlorine, hypochlorous acid, chloramine, combined available chlorine, free residual chlorine, free available chlorine, chlorine- produced oxidants	Inorganic Reactive chlorine compounds	No data	0.5	1999	No data	0.5	1999
Salinity	Physical	No data	No data	No data	No data	Narrative	1996
Selenium	Inorganic Metals	No data	1	1987	No data	No data	No data
Silver	Inorganic Metals	NRG	0.25	2015	7.5	NRG	2015
Simazine	Organic Pesticides	No data	10	1991	No data	No data	No data

CASRN 122349	Triazine compounds						
Sodium adsorption ratio SAR		No data	No data	No data	No data	No data	No data
		<b>Concentration (µg/L)</b>	<b>Concentration (µg/L)</b>	<b>Date</b>	<b>Concentration (µg/L)</b>	<b>Concentration (µg/L)</b>	<b>Date</b>
<b>Chemical name</b>	<b>Chemical groups</b>	<b>Short Term</b>	<b>Long Term</b>		<b>Short Term</b>	<b>Long Term</b>	
Streambed substrate	Physical Turbidity, clarity and suspended solids Total particulate matter	No data	Narrative	1999	No data	Narrative	1999
Styrene CASRN 100425	Organic Monocyclic aromatic compounds	No data	72	1999	No data	No data	No data
Sulfolane Bondelane CASRN 126330	Organic Organic sulphur compound	No data	50 000	2005	No data	Insufficient data	2005
Suspended sediments TSS	Physical Turbidity, clarity and suspended solids Total particulate matter	No data	Narrative	1999	No data	Narrative	1999
Tebuthiuron CASRN 34014181	Organic Pesticides	No data	1.6	1995	No data	Insufficient data	1995
Temperature	Physical Temperature	No data	Narrative	1987	No data	Narrative	1996
Tetrachloromethane Carbon tetrachloride CASRN 56235	Organic Halogenated aliphatic compounds Halogenated methanes	No data	13.3	1992	No data	Insufficient data	1992
Tetrachlorophenols	Organic Monocyclic aromatic compounds Chlorinated phenols	No data	1	1987	No data	No data	No data
Thallium	Inorganic Metals	No data	0.8	1999	No data	No data	No data
Toluene CASRN 108883	Organic Monocyclic aromatic compounds	No data	2	1996	No data	215	1996

Toxaphene	Organic Pesticides Organochlorine compounds	No data	<del>0.008</del>	1987	No data	No data	No data
Triallate CASRN 2303175	Organic Pesticides Carbamate pesticides	No data	0.24	1992	No data	No data	No data
Tribromomethane Bromoform	Organic Halogenated aliphatic compounds Halogenated methanes	No data	Insufficient data	1992	No data	Insufficient data	1992
Tributyltin	Organic Organotin compounds	No data	0.008	1992	No data	0.001	1992
Trichlorfon CASRN 52-68-6		1.1	0.009	2012	NRG	NRG	2012
Trichloromethane Chloroform CASRN 67663	Organic Halogenated aliphatic compounds Halogenated methanes	No data	1.8	1992	No data	Insufficient data	1992
Trichlorophenols	Organic Monocyclic aromatic compounds Chlorinated phenols	No data	18	1987	No data	No data	No data
Tricyclohexyltin	Organic Organotin compounds	No data	Insufficient data	1992	No data	Insufficient data	1992
Trifluralin CASRN 1582098	Organic Pesticides Dinitroaniline pesticides	No data	0.2	1993	No data	No data	No data
Triphenyltin	Organic Organotin compounds	No data	0.022	1992	No data	No data	1992
Turbidity	Physical Turbidity, clarity and suspended solids Total particulate matter	No data	Narrative	1999	No data	Narrative	1999
Uranium CASRN 7440-61-1	Inorganic Metals	33	15	2011	NRG	NRG	2011

Zinc	Inorganic Metals	No data	30	1987	No data	No data	No data
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Chemical name		Chemical groups
Sodium adsorption ratio SAR		