**Table 5 - Nova Scotia Tier II Pathway-Specific Standards (PSS) for Surface Water and Groundwater Discharging to Surface Water (µg/L)**

| Media | | Surface Water (Including Groundwater < 10m from Surface Water Body) | | | | | | Groundwater (> 10 metres from Surface Water Body) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pathway | | Fresh Water | | | Marine Water | | | Fresh Water | | Marine Water | |
| Parameter | Units | Value | Comments | Reference | Value | Comments | Reference | Value | Comments | Value | Comments |
| ***Inorganic Parameters*** | | | | | | | | | | | |
| Aluminum | µg/L | 5 | 5 ug/L at pH<6.5; 100 ug/L at pH ≥ 6.5 | CCME; at pH <6.5 | - | | | 50 | | - | |
| Antimony | µg/L | 9 | | BC CSR Schedule 3.2 | 250 | | BC CSR Schedule 3.2 | 90 | | 2500 | |
| Arsenic | µg/L | 5.0 | | CCME | 12.5 | | CCME | 50 | | 125 | |
| Barium | µg/L | 1000 | this is a 30 day avg; BC also has 5000 ug/L as a max acceptable value | BC CSR Schedule 3.2 | 500 | this is min risk level; BC also has 1000 ug/L as hazardous concentration | BC CSR Schedule 3.2 | 10,000 | | 5000 | |
| Beryllium | µg/L | 0.15 | | BC CSR Schedule 3.2 | 100 | this is min risk level; BC also has 1500 ug/L as hazardous concentration | BC CSR Schedule 3.2 | 1.5 | | 1000 | |
| Boron | µg/L | 1500 | | CCME | 1200 | | BCMOECCS, 2019 - Approved | 15,000 | | 12,000 | |
| Cadmium | µg/L | 0.09 | 10{0.86[log(hardness)]-3.2} ;Cadmium guideline value ranges from 0.01 ug/L at hardness of 25 mg/L CaCO3 to 0.055 ug/L at hardness of 180 mg/L CaCO3 | CCME | 0.12 | | CCME | 0.9 | | 1.2 | |
| Chromium (hexavalent) | µg/L | 1.0 | | CCME | 1.5 | | CCME | 10 | | 15 | |
| Chromium (total) | µg/L | 8.9 | | CCME | 56 | | CCME | 89 | | 560 | |
| Cobalt | µg/L | 1 | The freshwater guideline assumes a hardness of 100 mg/L. There is an equation: FWQG = exp{(0.414[ln(hardness)] – 1.887}, for other hardness values between 52-396 mg/L. | FEQG | 4 | 30-d average; max value of 110 ug/L. | BCMOECCS, 2019 - Approved | 10 | | 40 | |
| Copper | µg/L | 2.0 | The CWQG for copper is related to water hardness (as CaCO3): When the water hardness is 0 to < 82 mg/L, the CWQG is 2 µg/L. At hardness ≥82 to ≤180 mg/L the CWQG is calculated using this equation (see calculator below) CWQG (µg/L) = 0.2 * e{0.8545[ln(hardness)]-1.465} At hardness >180 mg/L, the CWQG is 4 µg/L If the hardness is unknown, the CWQG is 2 µg/L | CCME | 2 | this is a 30 d avg; BC also has a max acceptable value of 3 ug/L | BCMOECCS, 2019 - Approved | 20 | | 20 | |
| Cyanide | µg/L | 5 | | CCME | 1 | max; weak-acid dissociable CN | BCMOECCS, 2019 - Approved | 50 | | 10 | |
| Iron | µg/L | 300 | | CCME | - | | | 3000 | | - | |
| Lead | µg/L | 1 | Lead guideline: 1 ug/L at a water hardness of 0-60 mg/L (soft) as CaCO3; 2 ug/L at a water hardness of 60-120 mg/L (medium) as CaCO3; 4 ug/L at a water hardness of 120-180 mg/L (hard) as CaCO3; 7 ug/L at a water hardness of >180 mg/L (very hard) as CaCO3 | CCME | 2 | this is a 30 day avg; BC also has a max value of 140 ug/L | BCMOECCS, 2019 - Approved | 10 | 10 X Surface Fresh Water value | 20 | 10 X Surface Marine Water value |
| Manganese | µg/L | 430 | Guideline value is based on hardness of 50 mg/L and pH of 7.5. Guideline values that correspond to other hardness and pH values are in Table 5 of the CCME Factsheet. The tabulated guideline values are valid between a hardness range of 25 to 670 mg/L and a pH range of 5.8 to 8.4. | CCME | - | | | 4300 | | - | |
| Mercury (total) | µg/L | 0.026 | | CCME | 0.016 | | CCME | 0.26 | | 0.16 | |
| Methylmercury | µg/L | 0.004 | | CCME | 0.004 | adopted the FW WQG as a marine WQG in the absence of a marine WQG | CCME | 0.04 | | 0.04 | |
| Molybdenum | µg/L | 73 | | CCME | 1000 | | BC CSR Schedule 3.2 | 730 | | 10,000 | |
| Nickel | µg/L | 25 | Nickel guideline: 25 ug/L at a water hardness of 0-60 mg/L (soft) as CaCO3; 65 ug/L at a water hardness of 60-120 mg/L (medium) as CaCO3; 110 ug/L at a water hardness of 120-180 mg/L (hard) as CaCO3; 150 ug/L at a water hardness of >180 mg/L (very hard) as CaCO3 | CCME | 8.3 | this is a 4 day avg; BC also has a 1 hour avg of 75 ug/L | BC CSR Schedule 3.2 | 250 | | 83 | |
| Selenium | µg/L | 1.0 | | CCME | 2 | | BCMOECCS, 2019 - Approved | 10 | | 20 | |
| Silver | µg/L | 0.25 | | CCME | 1.5 | this is a 30 day avg; BC also has max acceptable value of 3 ug/L | BCMOECCS, 2019 - Approved | 2.5 | | 15 | |
| Strontium | µg/L | 21,000 | final chronic value | MDEQ, 2008 | - | | | 210,000 | | - | |
| Thallium | µg/L | 0.8 | | CCME | 0.3 | | BC CSR Schedule 3.2 | 8 | | 3 | |
| Tin | µg/L | - | | | - | | | - | | - | |
| Uranium | µg/L | 15 | | CCME | 8.5 | this is a min risk level; BC also has 500 ug/L as the hazardous concentration | BC CSR Schedule 3.2 | 150 | | 85 | |
| Vanadium | µg/L | 120 | | FEQG | 5 | trigger value for 99% level of protection | FEQG | 1200 | | 50 | |
| Zinc | µg/L | 7 | | CCME | 10 | | BCMOECCS, 2019 - Approved | 70 | | 100 | |
| ***General Chemistry Parameters*** | | | | | | | | | | | |
| Ammonia | µg/L | pH and temperature dependent; consult CCME fact sheet. | unionized Ammonia guideline (fresh water): See CCME (2000) for guideline values as a function of pH and temperature. | CCME | pH, salinity and temperature dependent; consult BCMOE schedule. | this is a 5-30 day avg; BC also has a max value of 14,000 ug/L; Ammonia guideline (sea water): Both maximum and 5-30 d average guidelines are expessed as total ammonia N, assuming salinity of 30 g/kg, temperature of 5 degrees C, and pH of 8.2 ; (all of which are typical sea water values); see BCMOE, 2001 for tables for total ammonia-N as a function of salinity, temperature and pH. To convert from unionized ammonia to ammonia-N, multiply by 0.8 (CCME, 2000). | BC CSR Schedule 3.2 | pH and temperature dependent; consult CCME fact sheet. | 10 X Surface Fresh Water value | pH, salinity and temperature dependent; consult BCMOE schedule. | 10 X Surface Marine Water value |
| Chloride | µg/L | 120,000 | based on salinity as NaCl | CCME | No more than a 10% change in ambient sea water salinity (as NaCl). | | BCMOECCS, 2019 - Approved | 1,200,000 | 10 X Surface Fresh Water value | No more than a 10% change in ambient sea water salinity (as NaCl). | |
| Colour | TCU | **True Colour:** Mean absorbance of filtered samples at 456 nm shall not be significantly higher than seasonally adjusted expected value for system under consideration. **Apparent Colour:** Mean percent transmission of white light per metre shall not be significantly less than seasonally adjusted value for system under consideration (CCME, 2001). | | | | | | **True Colour:** Mean absorbance of filtered samples at 456 nm shall not be significantly higher than seasonally adjusted expected value for system under consideration. **Apparent Colour:** Mean percent transmission of white light per metre shall not be significantly less than seasonally adjusted value for system under consideration (CCME, 2001). | | | |

**Table 5 - Nova Scotia Tier II Pathway-Specific Standards (PSS) for Surface Water and Groundwater Discharging to Surface Water (µg/L)**

| Media | | Surface Water (Including Groundwater < 10m from Surface Water Body) | | | | | | Groundwater (> 10 metres from Surface Water Body) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pathway | | Fresh Water | | | Marine Water | | | Fresh Water | | Marine Water | |
| Parameter | Units | Value | Comments | Reference | Value | Comments | Reference | Value | Comments | Value | Comments |
| Fluoride | µg/L | 120 | | CCME | 1500 | max value | BCMOECCS, 2019 - Approved | 1200 | 10 X Surface Fresh Water value | 15,000 | 10 X Surface Marine Water value |
| Hydrogen Sulphide | µg/L | 2 | | OMOE, 1999 | - | | | 20 | | - | |
| Nitrate (as N) | µg/L | 13,000 | this benchmark does not protect against potential eutrophication; equivalent to 2900 ug nitrate-N/L | CCME | 200,000 | this benchmark does not protect against potential eutrophication; equivalent to 3600 ug nitrate-N/L | CCME | 130,000 | | 2,000,000 | |
| Nitrate + Nitrite (as N) | µg/L | - | | | - | | | - | | - | |
| Nitrite (as N) | µg/L | 60 | | CCME | - | | | 600 | | - | |
| pH | Units | 6.5 to 9 | | CCME | 7.0 to 8.7 | | CCME | #VALUE! | | - | |
| Sodium | µg/L | - | | | - | | | - | | - | |
| Sulphate | µg/L | 128,000 | max acceptable value | BCMOECCS, 2019 - Approved | - | | | 1,280,000 | | - | |
| Total Dissolved Solids (TDS) | µg/L | - | | | - | | | - | | - | |
| ***Petroleum Hydrocarbons (PHC) Parameters*** | | | | | | | | | | | |
| Benzene | µg/L | 2100 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 2100 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 4600 | Eco-screening Protocol, ARBCA | 4600 | Eco-screening Protocol, ARBCA |
| Toluene | µg/L | 770 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 770 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 4200 | Eco-screening Protocol, ARBCA | 4200 | Eco-screening Protocol, ARBCA |
| Ethylbenzene | µg/L | 320 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 320 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 3200 | Eco-screening Protocol, ARBCA | 3200 | Eco-screening Protocol, ARBCA |
| Xylene | µg/L | 330 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 330 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 2800 | Eco-screening Protocol, ARBCA | 2800 | Eco-screening Protocol, ARBCA |
| Modified TPH (Gas) | µg/L | 1500 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 1500 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 13,000 | Eco-screening Protocol, ARBCA | 13,000 | Eco-screening Protocol, ARBCA |
| Modified TPH (Fuel) | µg/L | 100 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 100 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 840 | Eco-screening Protocol, ARBCA | 840 | Eco-screening Protocol, ARBCA |
| Modified TPH (Lube) | µg/L | 100 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 100 | Eco-screening Protocol, ARBCA | ARBCA, 2021 | 480 | Eco-screening Protocol, ARBCA | 480 | Eco-screening Protocol, ARBCA |
| MTBE | µg/L | 10,000 | | CCME | 5000 | | CCME | 100,000 | 10 X Surface Fresh Water value | 50,000 | 10 X Surface Marine Water value |
| ***Polycyclic Aromatic Hydrocarbons (PAH) Parameters*** | | | | | | | | | | | |
| ***Non-Carcinogenic PAH Compounds*** | | | | | | | | | | | |
| Naphthalene | µg/L | 1.1 | | CCME | 1.4 | | CCME | 11 | 10 X Surface Fresh Water value | 14 | 10 X Surface Marine Water value |
| 1 - Methylnaphthalene | µg/L | 2 | Interim PWQO | OMOE, 1999 | 1 | | BCMOECCS, 2019 - Approved | 20 | | 10 | |
| 2 - Methylnaphthalene | µg/L | 2 | Interim PWQO | OMOE, 1999 | 1 | | BCMOECCS, 2019 - Approved | 20 | | 10 | |
| Acenaphthene | µg/L | 5.8 | | CCME | 6 | | BCMOECCS, 2019 - Approved | 58 | | 60 | |
| Acenaphthylene | µg/L | - | | | - | | | - | | - | |
| Anthracene | µg/L | 0.012 | | CCME | 0.1 | | BC CSR Schedule 3.2 | 0.12 | | 1 | |
| Fluoranthene | µg/L | 0.04 | | CCME | 0.2 | | BC CSR Schedule 3.2 | 0.4 | | 2 | |
| Fluorene | µg/L | 3 | | CCME | 12 | | BCMOECCS, 2019 - Approved | 30 | | 120 | |
| Phenanthrene | µg/L | 0.4 | | CCME | 0.3 | | BC CSR Schedule 3.2 | 4 | | 3 | |
| Pyrene | µg/L | 0.025 | | CCME | 0.02 | | BC CSR Schedule 3.2 | 0.25 | | 0.2 | |
| ***Carcinogenic PAH Compounds*** | | | | | | | | | | | |
| BaP Total Potency Equivalents | µg/L | - | | | - | | | - | 10 X Surface Fresh Water value | - | 10 X Surface Marine Water value |
| Benz[a]anthracene | µg/L | 0.018 | | CCME | - | | | 0.18 | | - | |
| Benzo[a]pyrene | µg/L | 0.015 | | CCME | 0.01 | | BCMOECCS, 2019 - Approved | 0.15 | | 0.1 | |
| Benzo[b,j,k]fluoranthene isomers | µg/L | - | | | - | | | - | | - | |
| Benzo[g,h,i]perylene | µg/L | - | | | - | | | - | | - | |
| Chrysene | µg/L | 0.1 | | BC CSR Schedule 3.2 | 0.1 | | BCMOECCS, 2019 - Approved | 1 | | 1 | |
| Dibenz[a,h]anthracene | µg/L | - | | | - | | | - | | - | |
| Indeno[1,2,3-c,d]pyrene | µg/L | - | | | - | | | - | | - | |
| ***Volatile Organic Compound (VOC) Parameters*** | | | | | | | | | | | |
| Bromodichloromethane | µg/L | 200 | Interim PWQO | OMOE, 1999 | 6400 | marine chronic criteria; applies to sum of all halomethanes | New Hampshire DES, 2016 | 2000 | 10 X Surface Fresh Water value | 64,000 | 10 X Surface Marine Water value |
| Bromoform | µg/L | 60 | Interim PWQO | OMOE, 1999 | 6400 | marine chronic criteria; applies to sum of all halomethanes | New Hampshire DES, 2016 | 600 | | 64,000 | |
| Bromomethane | µg/L | 0.9 | Interim PWQO | OMOE, 1999 | 6400 | marine chronic criteria; applies to sum of all halomethanes | New Hampshire DES, 2016 | 9 | | 64,000 | |
| Carbon Tetrachloride (Tetrachloromethane) | µg/L | 13.3 | | CCME | 13 | | BC CSR Schedule 3.2 | 133 | | 130 | |
| Chlorobenzene | µg/L | 1.3 | | CCME | 25 | | CCME | 13 | | 250 | |
| Chloroethane | µg/L | 1100 | | MDEQ, 2008 | - | | | 11,000 | | - | |
| Chloroform | µg/L | 1.8 | | CCME | 2 | | BC CSR Schedule 3.2 | 18 | | 20 | |
| Chloromethane | µg/L | 700 | | OMOE, 1999 | 6400 | marine chronic criteria; applies to sum of all halomethanes | New Hampshire DES, 2016 | 7000 | | 64,000 | |
| Dibromochloromethane | µg/L | 40 | Interim PWQO | OMOE, 1999 | 6400 | marine chronic criteria; applies to sum of all halomethanes | New Hampshire DES, 2016 | 400 | | 64,000 | |
| 1,2-Dichlorobenzene | µg/L | 0.7 | | CCME | 42 | | CCME | 7 | | 420 | |
| 1,3-Dichlorobenzene | µg/L | 150 | | CCME | 150 | | BC CSR Schedule 3.2 | 1500 | | 1500 | |
| 1,4-Dichlorobenzene | µg/L | 26 | | CCME | 26 | | BC CSR Schedule 3.2 | 260 | | 260 | |
| 1,1-Dichloroethane | µg/L | 200 | Interim PWQO | OMOE, 1999 | - | | | 2000 | | - | |
| 1,2-Dichloroethane | µg/L | 100 | | CCME | 100 | | BC CSR Schedule 3.2 | 1000 | | 1000 | |
| 1,1-Dichloroethylene | µg/L | 40 | Interim PWQO | OMOE, 1999 | - | | | 400 | | - | |
| cis-1,2-Dichloroethylene | µg/L | 200 | Interim PWQO | OMOE, 1999 | - | | | 2000 | | - | |
| trans-1,2-Dichloroethylene | µg/L | 200 | Interim PWQO | OMOE, 1999 | - | | | 2000 | | - | |
| 1,2-Dichloropropane | µg/L | 0.7 | Interim PWQO | OMOE, 1999 | 3040 | marine chronic criteria | New Hampshire DES, 2016 | 7 | | 30,400 | |
| 1,3-Dichloropropene | µg/L | 7 | assumed same toxicity as the trans isomer | OMOE, 1999 | - | | | 70 | | - | |
| Ethylene Dibromide | µg/L | 5 | Interim PWQO | OMOE, 1999 | - | | | 50 | | - | |
| Methylene Chloride (Dichloromethane) | µg/L | 98.1 | | CCME | 98 | | BC CSR Schedule 3.2 | 981 | | 980 | |
| Styrene | µg/L | 72 | | CCME | - | | | 720 | | - | |
| 1,1,1,2-Tetrachloroethane | µg/L | 20 | Interim PWQO | OMOE, 1999 | - | | | 200 | | - | |
| 1,1,2,2-Tetrachloroethane | µg/L | 70 | Interim PWQO | OMOE, 1999 | - | | | 700 | | - | |
| Tetrachloroethylene | µg/L | 110 | | CCME | 110 | marine chronic criteria | BC CSR Schedule 3.2 | 1100 | | 1100 | |
| 1,1,1-Trichloroethane | µg/L | 10 | Interim PWQO | OMOE, 1999 | - | | | 100 | | - | |
| 1,1,2-Trichloroethane | µg/L | 800 | Interim PWQO | OMOE, 1999 | - | | | 8000 | | - | |
| Trichloroethylene | µg/L | 21 | | CCME | 20 | | BC CSR Schedule 3.2 | 210 | | 200 | |
| Vinyl Chloride | µg/L | 600 | Interim PWQO | OMOE, 1999 | - | | | 6000 | | - | |

**Table 5 - Nova Scotia Tier II Pathway-Specific Standards (PSS) for Surface Water and Groundwater Discharging to Surface Water (µg/L)**

| Media | | Surface Water (Including Groundwater < 10m from Surface Water Body) | | | | | | Groundwater (> 10 metres from Surface Water Body) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pathway | | Fresh Water | | | Marine Water | | | Fresh Water | | Marine Water | |
| Parameter | Units | Value | Comments | Reference | Value | Comments | Reference | Value | Comments | Value | Comments |
| ***Pesticides*** | | | | | | | | | | | |
| Aldicarb | µg/L | 1 | | CCME | 0.15 | | CCME | 10 | | 1.5 | |
| Aldrin | µg/L | See Dieldrin, PWQO is for sum of aldrin + dieldrin | applies to sum of concentrations of aldrin+dieldrin isomers in water | OMOE, 1999 | - | | | See Dieldrin, PWQO is for sum of aldrin + dieldrin | | - | |
| Atrazine | µg/L | 1.8 | | CCME | - | | CCME | 18 | | - | |
| Azinphos-methyl | µg/L | 0.01 | | AEP, 2018 | 0.01 | | Quebec MDEQ | 0.1 | | 0.1 | |
| Bendiocarb | µg/L | - | | | - | | | - | | - | |
| Bromoxynil | µg/L | 5 | | CCME | - | | | 50 | | - | |
| Carbaryl | µg/L | 0.2 | | CCME | 0.29 | | CCME | 2 | | 2.9 | |
| Carbofuran | µg/L | 1.8 | | CCME | - | | | 18 | | - | |
| Chlorothalonil | µg/L | 0.18 | | CCME | 0.36 | | CCME | 1.8 | | 3.6 | |
| Chlorpyrifos | µg/L | 0.002 | | CCME | 0.002 | | CCME | 0.02 | | 0.02 | |
| Cyanazine | µg/L | 2 | | CCME | - | | | 20 | | - | |
| 2,4-D | µg/L | 4 | max ester formulation | BC CSR Schedule 3.2 | 4 | | BC CSR Schedule 3.2 | 40 | | 40 | |
| **DDT*** | µg/L | 0.001 | applies to sum of DDT, DDD and DDE concentrations in water | BC CSR Schedule 3.2 | 0.001 | applies to sum of DDT, DDD and DDE concentrations in water | BC CSR Schedule 3.2 | 0.01 | | 0.01 | |
| Diazinon | µg/L | 0.003 | | BC CSR Schedule 3.2 | 0.82 | | New Hampshire DES, 2016 | 0.03 | | 8.2 | |
| Dicamba | µg/L | 10 | | CCME | - | | | 100 | | - | |
| Dichlorfop-methyl | µg/L | 6.1 | | CCME | - | | | 61 | | - | |
| **Dieldrin*** | µg/L | 0.001 | applies to sum of concentrations of aldrin+dieldrin isomers in water | OMOE, 1999 | 0.0019 | this is a chronic criterion; the acute criterion is 0.71 ug/L | New Hampshire DES, 2016 | 0.01 | | 0.019 | |
| Dimethoate | µg/L | 6.2 | | CCME | - | | | 62 | | - | |
| Dinoseb | µg/L | 0.05 | | CCME | - | | | 0.5 | | - | |
| Diquat | µg/L | 0.5 | | OMOE, 1999 | - | | | 5 | 10 X Surface Fresh Water value | - | 10 X Surface Marine Water value |
| Diuron | µg/L | 1.6 | | OMOE, 1999 | - | | | 16 | | - | |
| Endosulfan | µg/L | 0.003 | | CCME | 0.002 | | CCME | 0.03 | | 0.02 | |
| **Endrin*** | µg/L | 0.002 | | MOE, 1999 | 0.0023 | this is a chronic criterion; the acute criterion is 0.037 ug/L | New Hampshire DES, 2016 | 0.02 | | 0.023 | |
| Glyphosate | µg/L | 800 | | CCME | - | | | 8000 | | - | |
| **Heptachlor*** | µg/L | 0.001 | | OMOE, 1999 | 0.0036 | this is a chronic criterion; the acute criterion is 0.053 ug/L | New Hampshire DES, 2016 | 0.01 | | 0.036 | |
| Lindane | µg/L | 0.01 | | CCME | - | | | 0.1 | | - | |
| Linuron | µg/L | 7 | | CCME | - | | | 70 | | - | |
| Malathion | µg/L | 0.1 | | BC CSR Schedule 3.2 | 0.1 | | BC CSR Schedule 3.2 | 1 | | 1 | |
| MCPA | µg/L | 2.6 | | CCME | 4.2 | | CCME | 26 | | 42 | |
| Methoxychlor | µg/L | 0.03 | | AEP, 2018 | - | | | 0.3 | | - | |
| Metolachlor | µg/L | 7.8 | | CCME | - | | | 78 | | - | |
| Metribuzin | µg/L | 1 | | CCME | - | | | 10 | | - | |
| Paraquat | µg/L | 16 | Chronic Criterion | MDEQ, 1996 | - | | | 160 | | - | |
| Parathion | µg/L | 0.008 | | OMOE, 1999 | - | | | 0.08 | | - | |
| Phorate | µg/L | - | | | - | | | - | | - | |
| Picloram | µg/L | 29 | | CCME | - | | | 290 | | - | |
| Simazine | µg/L | 10 | | CCME | - | | | 100 | | - | |
| Tebuthiuron | µg/L | 1.6 | | CCME | - | | | 16 | | - | |
| Terbufos | µg/L | - | | | - | | | - | | - | |
| **Toxaphene*** | µg/L | 0.008 | | OMOE, 1999 | 0.0002 | this is a chronic criterion; the acute criterion is 0.21 ug/L | New Hampshire DES, 2016 | 0.08 | | 0.002 | |
| Triallate | µg/L | 0.24 | | CCME | - | | | 2.4 | | - | |
| Trifluralin | µg/L | 0.2 | | CCME | - | | | 2 | | - | |
| **PFAS Substances** | | | | | | | | | | | |
| Perfluorooctane sulfonate (PFOS) | µg/L | 6.8 | | FEQG | - | | | 68 | | - | |
| Perfluorooctanoic acid (PFOA) | µg/L | - | | | - | | | - | | - | |
| Perfluorobutanoate (PFBA) | µg/L | - | | | - | | | - | | - | |
| Perfluorobutanesulfonate (PFBS) | µg/L | - | | | - | | | - | | - | |
| Perfluorohexanesulfonate (PFHxS) | µg/L | - | | | - | | | - | 10 X Surface Fresh Water value | - | 10 X Surface Marine Water value |
| Perfluoropentanoate (PFPeA) | µg/L | - | | | - | | | - | | - | |
| Perfluorohexanoate (PFHxA) | µg/L | - | | | - | | | - | | - | |
| Perfluoroheptanoate (PFHpA) | µg/L | - | | | - | | | - | | - | |
| Perfluorononanoate (PFNA) | µg/L | - | | | - | | | - | | - | |
| ***Other Parameters*** | | | | | | | | | | | |
| Polychlorinated Biphenyls (Total PCB) | µg/L | 0.001 | PCBs do not partition to water to any signifcant extent | OMOE, 1999 | - | PCBs do not partition to water to any signifcant extent | | 0.01 | PCBs do not partition to water to any signifcant extent | - | PCBs do not partition to water to any signifcant extent |
| Dioxins and Furans (TEQ) | µg/L | - | Dioxins/furans do not partition to water to any significant extent | | - | Dioxins/furans do not partition to water to any significant extent | | - | Dioxins/furans do not partition to water to any significant extent | - | Dioxins/furans do not partition to water to any significant extent |
| Pentachlorophenol (PCP) | µg/L | 0.5 | | CCME | 7.9 | chronic criterion | U.S. EPA, 2017 | 5 | | 79 | |
| Organotins - Tributyltin | µg/L | 0.008 | | CCME | 0.001 | | CCME | 0.08 | | 0.01 | |
| Ethylene Glycol | µg/L | 192,000 | | CCME | 192,000 | | BC CSR Schedule 3.2 | 1,920,000 | 10 X Surface Fresh Water value | 1,920,000 | 10 X Surface Marine Water value |
| Propylene Glycol | µg/L | 500,000 | | CCME | 500,000 | | BC CSR Schedule 3.2 | 5,000,000 | | 5,000,000 | |
| Phenol | µg/L | 4 | | CCME | 200 | | BC CSR Schedule 3.2 | 40 | | 2000 | |

Notes:
All values in µg/L unless otherwise noted.
"-" indicates no guideline available.
Tier 2 PSS Value may be modified according to corresponding comment and reference within this table when supported by applicable field data.

The Atlantic PIRI benchmarks for BTEX and TPH (gasoline, diesel, #6 oil) are based on the Target Lipid Narcosis Model (TLNM), as these substances have a general narcotic mode of action. Because of this, it can be assumed that benchmarks for freshwater organisms are protective of marine organisms. This assumption is based on the similar sensitivity of freshwater and marine organisms to narcotic chemicals. Thus, most benchmarks derived on the basis of the TLNM are protective of both freshwater and marine organisms. For chemicals with more specific modes of action, freshwater and marine organisms can not be assumed to be similar in sensitivity, and separate freshwater and marine benchmarks should be applied or derived (if sufficient data exists).

* Indicates the benchmark value is below currently achievable analytical RDLs. For sites with potential surface water or groundwater contamination in relation to this substance, additional aquatic assessment and/or consultation with provincial regulators should occur to confirm this substance is not likely to be present at levels that could adversely affect aquatic biota.