

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.

Polychlorinated biphenyls

Synonyms and/or acronyms: PCBs

Parameter 1: ORGANIC

Parameter 2: Polyaromatic compounds

Parameter 3: Polychlorinated biphenyls

Water Quality for the Protection of Aquatic Life

Freshwater

Concentration ($\mu\text{g/L}$)

0.004

No fact sheet created. For more information on this guideline, please refer to Canadian Water Quality Guidelines (CCREM 1987).

This guideline (originally published in Canadian Water Quality Guidelines [CCREM 1987 + Appendixes] in 1987 or 1991 [PCBs in marine waters]) is no longer recommended and the value is withdrawn. A water quality guideline is not recommended. Environmental exposure is predominantly via sediment, soil, and/or tissue, therefore, the reader is referred to the respective guidelines for these media.

This substance meets the criteria for track 1 substances under the national CCME Policy for the Management of Toxic Substances (PMTS) (i.e., persistent, bioaccumulative, primarily the result of human activity, and CEPA-toxic or equivalent), and should be subject to virtual elimination strategies. Guidelines can serve as action levels or interim management objectives towards virtual elimination.

Date

1987

Marine

Concentration ($\mu\text{g/L}$)

0.04

No fact sheet created. For more information on this guideline, please refer to Canadian Water Quality Guidelines (CCREM 1987).

This guideline (originally published in Canadian Water Quality Guidelines [CCREM 1987 + Appendixes] in 1987 or 1991 [PCBs in marine waters]) is no longer recommended and the value is withdrawn. A water quality guideline is not recommended. Environmental exposure is predominantly via sediment, soil, and/or tissue, therefore, the reader is referred to the respective guidelines for these media.

This substance meets the criteria for track 1 substances under the national CCME Policy for the Management of Toxic Substances (PMTS) (i.e., persistent, bioaccumulative, primarily the result of human activity, and CEPA-toxic or equivalent), and should be subject to virtual elimination strategies. Guidelines can serve as action levels or interim management objectives towards virtual elimination.

Date 1991

Water Quality for the Protection of Agriculture

Irrigation

Concentration (µg/L) No data

Date No data

Livestock

Concentration (µg/L) No data

Date No data

Sediment Quality for the Protection of Aquatic Life

Further documentation on these guidelines can be found in the Canadian Environment Quality Guidelines.

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Freshwater

Concentration (µg/kg dry weight) - ISQG 34.1

Guideline	% ≤ ISQG	ISQG < % < PEL	ISQG % ≥ PEL
Total PCBs	4	40	50

Concentration (µg/kg dry weight) - PEL 277

Guideline	% ≤ ISQG	ISQG < % < PEL	ISQG % ≥ PEL
Total PCBs	4	40	50

Date 2001

Marine

Concentration (µg/kg dry weight) - ISQG 21.5

Guideline	% ≤ ISQG	ISQG < % < PEL	ISQG % ≥ PEL
Aroclor 1254	1	24	76
Total PCBs	16	37	55

Concentration (µg/kg dry weight) - PEL 189

Guideline	% ≤ ISQG	ISQG < % < PEL	ISQG % ≥ PEL
Aroclor 1254	1	24	76
Total PCBs	16	37	55

Date 2001

Soil Quality for the Protection of Environmental and Human Health

Further documentation on these guidelines can be found in the Canadian Environment Quality Guidelines.

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Concentration (mg/kg dry weight) - Agricultural 0.5

Data are sufficient and adequate to calculate only a Soil Quality Guideline for Environmental Health (SQG_E), which is less than the existing interim soil quality criterion (CCME 1001) for this

health (SQG_E), which is less than the existing interim soil quality criterion (CCME, 1991) for this land use. Therefore the SQG_E becomes the soil quality guideline, which supersedes the interim soil quality criterion for this land use.

For guidelines derived prior to 2004, differentiation between soil texture (coarse/fine) is not applicable.

Concentration (mg/kg dry weight) - Residential / parkland 1.3

Data are sufficient and adequate to calculate only a Soil Quality Guideline for Environmental Health (SQG_E), which is less than the existing interim soil quality criterion (CCME, 1991) for this land use. Therefore the SQG_E becomes the soil quality guideline, which supersedes the interim soil quality criterion for this land use.

For guidelines derived prior to 2004, differentiation between soil texture (coarse/fine) is not applicable.

Concentration (mg/kg dry weight) - Commercial 33

Data are sufficient and adequate to calculate only a Soil Quality Guideline for Environmental Health (SQG_E), which is less than the existing interim soil quality criterion (CCME, 1991) for this land use. Therefore the SQG_E becomes the soil quality guideline, which supersedes the interim soil quality criterion for this land use.

In site-specific situations where the size and/or location of commercial and industrial land uses may impact primary, secondary or tertiary consumers, the soil and food ingestion guideline is recommended as the Soil Quality Guideline for Environmental health (SQG_E)

For guidelines derived prior to 2004, differentiation between soil texture (coarse/fine) is not applicable.

Concentration (mg/kg dry weight) - Industrial 33

Data are sufficient and adequate to calculate only a Soil Quality Guideline for Environmental Health (SQG_E), which is less than the existing interim soil quality criterion (CCME, 1991) for this land use. Therefore the SQG_E becomes the soil quality guideline, which supersedes the interim soil quality criterion for this land use.

In site-specific situations where the size and/or location of commercial and industrial land uses may impact primary, secondary or tertiary consumers, the soil and food ingestion guideline is recommended as the Soil Quality Guideline for Environmental health (SQG_E)

For guidelines derived prior to 2004, differentiation between soil texture (coarse/fine) is not applicable.

Date 1999

Tissue Residue Quality for the Protection of Wildlife Consumer of Aquatic Biota

Further documentation on these guidelines can be found in the Canadian Environment Quality Guidelines

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Concentration ($\mu\text{g}/\text{kg}$ diet wet weight)

Variable

Mammalian: 0.79 ng TEQ/kg diet wet weight

Note: TEQ refers to dioxin toxic equivalents using toxic equivalency factors (TEFs) for PCBs for mammals developed by the World Health Organization in 1998. See fact sheet for supporting document for more details

Avian: 2.4 ng TEQ/kg diet wet weight

Note: TEQ refers to dioxin toxic equivalents using toxic equivalency factors (TEFs) for PCBs for birds developed by the World Health Organization in 1998. See fact sheet for supporting document for more details

Date

1998