

BCMOE WATER QUALITY GUIDELINES

Parameter Name	Dissolved or Total	Unit	Aquatic Life 30-day	Aquatic Life Max	Livestock 30-day	Livestock Max	Irrigation 30-day	Irrigation Max	Recreation 30-day	Recreation Max	Wildlife 30-day	Wildlife Max	Drinking 30-day	Drinking Max
PHYSICAL PARAMETERS														
Temperature (T)		°C	Based on fish species	Based on fish species						30				15
Dissolved Oxygen		ug/L	Based on life stage	Based on life stage										
pH		pH		6.5 to 9.0		5.0-9.5		5.0 to 9.0		5 to 9				6.5 to 8.5
Total Suspended Solids (TSS)		ug/L	Based on background conc.	Based on background conc.		Based on background conc.		Based on background conc.				Based on background conc.		
Total Dissolved Solids (TDS)		ug/L				Based on species		Based on crop tolerance						
Turbidity		NTU	Based on background conc.	Based on background conc.		Based on background conc.		Based on background conc.		Based on background conc.		Based on background conc.		Based on background conc.
Colour		Col. Unit							15 mg/L Pt		5mg/L Pt (clearwater) or 20% (coloured)			15mg/L Pt
NUTRIENTS														
Ammonia Total		ug-N/L	Based on pH and T	Based on pH and T										
Nitrate plus Nitrite		ug-N/L				100,000				10,000				10,000
Nitrite		ug-N/L	Based on Cl- conc.	Based on Cl- conc.		10,000				1,000		10,000		1,000
Nitrate		ug-N/L	3,000	32,800		100,000				10,000		100,000		10,000
Phosphorus (P)	Total	ug/L		5 - 15						10				10
Chlorate (ClO3-)		ug/L		30,000		3,000						3,000		Based on weight (min 2400 ug/L)
MISCELLANEOUS														
Mercury (Hg)	Total	ug/L	Based on % Methyl Mercury			3		2		1		Based on % Methyl Mercury		1
MAJOR IONS														
Calcium (Ca)	Diss	ug/L				1,000,000								
Sulphate (SO4)	Diss	ug/L	Based on hardness			1,000,000								500,000
Chloride (Cl-)	Diss	ug/L	150,000	600,000	600,000	600,000		100,000			600,000	600,000	250,000	250,000
MINOR IONS														
Fluoride (F-)		ug/L		Based on hardness	Based on diet	Based on diet	1000	2000			1000	1500	1000	1500

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METALS														
Aluminum (Al)	Diss	ug/L	Based on pH	Based on pH						200				200
Aluminum (Al)	Total	ug/L				5,000		5,000				5,000		
Antimony (Sb)	Total	ug/L	9											
Arsenic (As)	Total	ug/L		5		25		100				25		25
Barium (Ba)	Total	ug/L	1000											
Beryllium (Be)	Total	ug/L	0.13		100	100	100	100						
Boron (B)	Total	ug/L		1,200		5,000		Based on crop				5,000		5,000
Cadmium (Cd)	Diss	ug/L	Based on Hardness	Based on Hardness										
Cadmium (Cd)	Total					80		5.1						
Chlorine (Cl)	Total	ug/L	2	100				1000						
Chromium (Cr)	Total	ug/L	1 Cr(VI); 8.9 Cr(III)		50 Cr(VI); 50 Cr(III)		8 Cr(VI); 4.9 Cr(III)							
Cobalt (Co)	Total	ug/L	4	110										
Copper (Cu)	Total	ug/L	Based on hardness	Based on hardness		300		200		1,000		300		500
Iron (Fe)	Diss	ug/L		350										
Iron (Fe)	Total	ug/L		1,000										
Lead (Pb)	Total	ug/L	Based on hardness	Based on hardness		100		Based on soil type		50		100		50
Lithium (Li)	Total	ug/L						Based on crop						
Manganese (Mn)	Total	ug/L	Based on hardness	Based on hardness										
Molybdenum (Mo)	Total	ug/L	1,000	2,000		50	Based on soil drainage	Based on soil drainage				50		250
Nickel (Ni)	Total	ug/L	Based on hardness		1,000		200							
Selenium (Se)	Total	ug/L	2			30		10				2		10
Silver (Ag)	Total	ug/L	Based on hardness	Based on Hardness										
Thallium (Tl)	Total	ug/L	0.8											
Titanium (Ti)	Total	ug/L												
Uranium (U)	Total	ug/L	8.5		200		10							
Vanadium (V)	Total	ug/L			100		100							
Zinc (Zn)	Total	ug/L	Based on Hardness	Based on Hardness		2,000		Based on soil pH		5,000				5,000

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VOLATILES AND OTHER ORGANICS/COMPOUNDS														
Benzene		ug/L		40										5
benzo[a]pyrene (PAH)		ug/L												0.01
Cyanide (as Free CN)		ug/L	5	10										200
Ethylbenzene		ug/L		200						2.4				2.4
Methyl-tert-butylether (MTBE)		ug/L		3,400		11,000				20				20
Naphthalene		ug/L		1										
Phenol	Total	ug/l		50										
4-hydroxyphenol (hydroquinone, quinol)		ug/L		4.5										
3-hydroxyphenol (resorcinol)				12.5										
Polychlorinated Biphenyls (PCBs)	Total	ug/L		100				0.5						
PCB#105		ug/L		90										
PCB#169		ug/L		60										
PCB#77		ug/L		40										
PCB#126		ug/L		0.25										
Sulfolane		ug/L		50,000		14,000		8,400						
Toluene		ug/L		0.5										
Xylenes	Total	ug/L		30										

Guideline is parameter dependent

Working or interim Guideline