

Recommended Raw Water Quality Criteria

Parameters	Unit	Acceptable value	Frequency to be monitored			Ref.
			Surface	Ground	Direct Impounding	
Total Coliform	cfu/100 ml	5000.0	W	M	M	WHO1
Turbidity	NTU	1000.0	W	M	M	WHO2
Colour	TCU	300.0	W	M	M	WHO1
pH	-	5.5-9.0	W	M	M	MAL
Total Dissolved Solids (TDS)	mg/l	1500.0	M	Y/4	Y/4	WHO1
Biochemical Oxygen Demand (BOD)	mg/l	6.0	M	Y/4	Y/4	WHO1
Chemical Oxygen Demand (COD)	mg/l	10.0	M	Y/4	Y/4	WHO1
Chloride (Cl)	mg/l	250.0	M	Y/4	Y/4	MAL
Anionic Detergent, MBAS	mg/l	1.0	M	Y/4	Y/4	WHO1
Ammonia (as N)	mg/l	1.5	M	Y/4	Y/4	WHO1
Nitrate (as N)	mg/l	10.0	M	Y/4	Y/4	MAL
Total Nitrogen (as N)	mg/l	1.0	M	Y/4	Y/4	WHO1
Iron (Fe)	mg/l	1.0	M	Y/4	Y/4	WHO1
Fluoride (Fl)	mg/l	1.5	M	Y/4	Y/4	WHO1
Hardness	mg/l	500.0	M	Y/4	Y/4	MAL
Mercury (Hg)	mg/l	0.001	Y/4	Y/4	Y/4	MAL
Cadmium (Cd)	mg/l	0.003	Y/4	Y/4	Y/4	MAL
Selenium (Se)	mg/l	0.01	Y/4	Y/4	Y/4	WHO1
Arsenic (As)	mg/l	0.01	Y/4	Y/4	Y/4	WHO1
Cyanide (CN)	mg/l	0.07	Y/4	Y/4	Y/4	MAL
Lead (Pb)	mg/l	0.05	Y/4	Y/4	Y/4	MAL
Chromium (Cr)	mg/l	0.05	Y/4	Y/4	Y/4	WHO1
Silver (Ag)	mg/l	0.05	Y/4	Y/4	Y/4	MAL
Copper (Cu)	mg/l	1.0	Y/4	Y/4	Y/4	MAL
Manganese (Mn)	mg/l	0.2	Y/4	Y/4	Y/4	MAL
Magnesium (Mg)	mg/l	150.0	Y/4	Y/4	Y/4	MAL
Sodium (Na)	mg/l	200.0	Y/4	Y/4	Y/4	MAL
Zinc (Zn)	mg/l	3.0	Y/4	Y/4	Y/4	WHO1
Sulphate (SO ₄)	mg/l	250.0	Y/4	Y/4	Y/4	WHO1
Mineral Oil	mg/l	0.3	Y/4	Y/4	Y/4	MAL
Phenol	mg/l	0.002	Y/4	Y/4	Y/4	WHO1

Recommended Raw Water Quality Criteria (Cont.)

Parameters	Unit	Acceptable value	Frequency to be monitored			Ref.
			Surface	Ground	Direct Impounding	
Organochlorine Pesticides:						
Aldrin/Dieldrin	mg/l	0.00003	Y/4	Y/4	Y/4	MAL
Chlordane	mg/l	0.0002	Y/4	Y/4	Y/4	MAL
DDT	mg/l	0.002	Y/4	Y/4	Y/4	MAL
Heptachlor & Heptachlor Epoxide	mg/l	0.0003	Y/4	Y/4	Y/4	MAL
Hexachlorobenzene	mg/l	0.001	Y/4	Y/4	Y/4	MAL
Lindane	mg/l	0.002	Y/4	Y/4	Y/4	MAL
Methoxychlor	mg/l	0.02	Y/4	Y/4	Y/4	MAL
Herbicides:						
2,4-D (Dichlorophenoxyacetic Acid)	mg/l	0.03	Y/4	Y/4	Y/4	MAL
Radioactivity:						
Gross α	Bq/l	0.1	Y	Y	Y	MAL
Gross β	Bq/l	1.0	Y	Y	Y	MAL

- Note:
- WHO1 : International Standards For Drinking Water 1963.
 - WHO2 : Guidelines For Drinking Water Volume 1 & 2 1984.
 - MAL : Values adopted For Malaysian Conditions.
 - W : Indicates parameters to be monitored at least once a week.
 - M : Indicates parameters to be monitored at least once a month.
 - Y/4 : Indicates parameters to be monitored at least once in 3 months.
 - Y : Indicates parameters to be monitored at least once a year.