



Abu Dhabi Water Quality Standards & Regulations

Summary

August 2010

Disclaimer: The standards & regulations provided here are attributable to the named source and are assumed to be accurate at the time of posting. This information was assembled by us as a service to our customers, but has not been independently verified or confirmed.

Water Wholesomeness Requirements

The requirements for Water to be **wholesome*** are:

- that the water does not contain any element, organism or substance (other than a Parameter) at a concentration or value which would be detrimental to public health;
- that the water does not contain any element, organism or substance (whether or not a Parameter) at a concentration or value which, in conjunction with any other element, organism or substance it contains (whether or not a Parameter), would be detrimental to public health;
- that the water does not contain concentrations or values that exceed the standard of the Parameters listed below:
 - ❖ [Physical](#)
 - ❖ [Inorganic Chemicals](#)
 - ❖ [Inorganic Chemicals \(mostly trace elements\)](#)
 - ❖ [Miscellaneous Organic Parameters \(mostly pesticides\)](#)
 - ❖ [Organic](#)
 - ❖ [Microbial](#)
 - ❖ [Radioactive](#)
 - ❖ [Disinfection or Disinfection By-products](#)

* *Wholesome water is defined as: All water supplied for the purposes of drinking, washing, cooking or food production*

Physical Parameters

[Go to Menu](#)

Parameter	Units of measurement	Maximum Prescribed Value
Color	mg/ l pt/Co scale	15
Turbidity	NTU (Nephelometric Turbidity Unit)	4
Odor	Dilution Number	Unobjectionable
Taste	Dilution Number	Unobjectionable
Total Dissolved Solids	mg/l	100 minimum – 1000 maximum
Calcium Hardness	mg/l as CaCO ₃	200 at 25 °C
Total Hardness	mg/l as CaCO ₃	300 at 25 °C
Residual Chlorine	mg/l as Cl ₂	0.20 minimum – 0.50 maximum
Conductivity	µmhos/cm	160 minimum – 1600 maximum
Hydrogen Ion	pH value	7.0 minimum – 9.2 maximum

Inorganic Chemical Parameters

[Go to Menu](#)

Parameter	Units of measurement	Maximum Prescribed Value
Suphate	mg/l	250
Magnesium	mg/l	30
Sodium	mg/l	150
Potassium	mg/l	12
Chlorides	mg/l	250
Nitrate	mg/l	50
Nitrite	mg/l	0.1
Ammonium (ions)	mg/l	0.5
Aluminum	mg/l	0.2
Iron	mg/l	0.2
Copper	mg/l	1
Zinc	mg/l	5
Phosphorus	mg/l	2.2

Inorganic Chemical Parameters (mostly trace elements)

[Go to Menu](#)

Parameter	Units of measurement	Maximum Prescribed Value
Arsenic	µg/l	10
Cadmium	µg/l	3
Chromium	µg/l	50
Mercury	µg/l	6
Nickel	µg/l	70
Lead	µg/l	10
Antimony	µg/l	20
Selenium	µg/l	10
Barium	µg/l	700
Boron	µg/l	1000
Manganese	µg/l	400
Fluoride	µg/l	1500

Miscellaneous Organic Parameters (mostly pesticides)

[Go to Menu](#)

Parameter	Units of measurement	Maximum Prescribed Value
Endrine	µg/l	0.6
Lindane	µg/l	2
Methoxychlor	µg/l	20
2,4 dichlorophexy acetic acid	µg/l	30
2,4,5 trichlorophexy propionic acid	µg/l	9
Phenols	µg/l	0.5
Heptachlor	µg/l	0.03
Aldrin	µg/l	0.03
DDT	µg/l	1
Chlordane	µg/l	0.2
Diedrin	µg/l	0.03
Heptachlor epoxide	µg/l	0.03
Cyanide	µg/l	70

Organic Parameters

[Go to Menu](#)

Parameter	Units of measurement	Maximum Prescribed Value
Trichloroethene	µg/l	20
Tetrachloromethane	µg/l	3
Tetrachloroethene	µg/l	40
1,2 Dichloroethane	µg/l	30
Benzene	µg/l	10
Benzo(a)pyrene	µg/l	0.7
Dichloromethane	µg/l	20
Chlorobenzene	µg/l	300
1,2 Dichloroethene	µg/l	50
Toluene	µg/l	700
1,2 Dichlorobenzene	µg/l	1000
1,4 Dichlorobenzene	µg/l	300
Vinyl Chloride	µg/l	0.3

Microbial Parameters

[Go to Menu](#)

Parameter	Units of measurement	Maximum Prescribed Value
Total coliforms	Number/100 ml	0
E.Coli or thermotolerant Faecal coliform Bacteria	Number/100 ml	0
Enterococci	Number/100 ml	0
Total Bacterial Count	Number/100 ml @ 37 °C	10 @ 37 °C

Radioactive Parameters

[Go to Menu](#)

Parameter	Units of measurement	Maximum Prescribed Value
Gross α	Bq/l	≤ 0.5
Gross β	Bq/l	≤ 1

Disinfection and Disinfection By-products Parameters

[Go to Menu](#)

Parameter	Units of measurement	Maximum Prescribed Value
Bromate	mg/l	0.01
Chlorate	mg/l	0.7
Chlorite	mg/l	0.7
Bromoform	mg/l	0.1
Bromodichloromethane	mg/l	0.06
Chloroform	mg/l	0.3
Dibromodichloromethane	mg/l	0.1
Formaldehyde	mg/l	0.9
Trihalomethanes	mg/l	≤ 1



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