

EXTRACT FROM AUST. DRINKING WATER GUIDELINES

NTEL CODE	PARAMETER	HEALTH GUIDELINE	AESTHETIC* GUIDELINE
pH	pH	C	6.5-8.5
Turb1	Turbidity		5 NTU
True Colour	True Colour		15 PCU
TDS	Total Dissolved Solids		600mg/L
NO2	Nitrite	3mg/L	
NO3	Nitrate	50mg/L	
Cl	Chloride		250mg/L
NH3_N	Ammonia		0.5mg/L
F	Fluoride	1.5mg/L	
Hardness	Total Hardness [as CaCO3]		200mg/L
Na_F	Sodium		180mg/L
SiO2	Silica		80mg/L
SO4_F	Sulfate	C	250mg/L
Ag_T	Silver	100µg/L	
Al_T	Aluminium		200µg/L
As_T	Arsenic	10µg/L	
B_T	Boron	4000µg/L	
Ba_T	Barium	2000µg/L	
Be_T	Beryllium	60µg/L	
Cd_T	Cadmium	2µg/L	
Cr_T	Chromium	50µg/l as CrVI	
Cu_T	Copper	2000µg/L	1000µg/L
Fe_T	Iron	C	300µg/L
Hg_T	Mercury	1µg/L	
Mn_T	Manganese	500µg/L	100µg/L
Mo_T	Molybdenum	50µg/L	
Ni_T	Nickel	20µg/L	
Pb_T	Lead	10µg/L	
Sb_T	Antimony	3µg/L	
Se_T	Selenium	10µg/L	
U_T	Uranium	17µg/L	
Zn_T	Zinc	C	3000µg/L

NOTES:

- Results below guideline values are generally considered to be suitable for human consumption. Aesthetic* Guidelines are not health based but relate to issues such as taste, odour or the visual appearance of the water.
- Other tests such as radiological or pesticide residues may be required to clear the supply for human consumption.
- Should the water, as analysed, not meet guidelines, Intertek NTEL recommends that the recipient of the analysis contact their local water provider or a water treatment professional. Staff may assist in the interpretation of the data but cannot provide advice on water treatment options or issues outside of their Scope of NATA accreditation.
- NTU = Nephelometric Turbidity Units
- C = Insufficient data to set a guideline value based on health considerations.
- PCU = Platinum Cobalt Unit
- 1mg/L = 1000µg/L
- MPN = Most Probable Number of organisms detected [Micro* - Test not covered by our NATA Scope of Accreditation]
- _T element concentrations in the sample as received. Alternate preservation or preparation techniques may be suggested if results are required for regulatory compliance.

MICROBIOLOGICAL GUIDELINES FOR POTABLE WATER

PASS NO microbiological organisms were detected where a guideline value exists

FAIL some contaminant organism (E Coli or Enterococci) has been detected.

STOP DRINKING THIS WATER. TREATMENT IS REQUIRED.

Escherichia coli (*E.Coli*)

Escherichia coli should not be detected in any 100 mL sample of drinking water. If detected in drinking water, immediate action should be taken including investigation of potential sources of faecal contamination. Possible causes include inadequate treatment or ingress of contamination. Investigation will generally require further testing.

Total coliforms (T Coli)

No guideline value has been set for total coliforms in drinking water. If used as an indicator, numbers should be established on a system-specific basis. Increased concentrations should be investigated.

Coliforms can be used in operational monitoring to indicate inadequate treatment, breakdowns in system integrity, or the presence of biofilms.

Heterotrophic Plate Count (HPC)

No guideline value has been set for heterotrophic plate counts in drinking water. Immediately after disinfection, numbers would be expected to be low. If used as an indicator of distribution system cleanliness, numbers should be established on a system-specific basis.

The use of HPC as an indicator of safety declined with the adoption of testing for faecal indicators such as *E. coli*. HPC can be used for monitoring of disinfection processes with the objective to keep HPC numbers as low as possible. They can also be used to monitor the integrity, cleanliness and maintenance of distribution systems and the presence of biofilms. Absolute numbers are less important than changes in numbers and the objective is to keep HPC numbers within defined limits. Marked orders of magnitude increases, provide evidence of deteriorating conditions that should be investigated. The causes could include inadequate treatment, loss of disinfection residual, and stagnant water.

Intestinal enterococci (Entero)

Intestinal enterococci should not be present in drinking water. If used as an indicator and detected in drinking water, immediate action should be taken, including investigation of potential sources of faecal contamination.

Intestinal enterococci are not effective indicators for the presence of enteric protozoa or viruses. The detection of intestinal enterococci in drinking water should always lead to investigation of the cause, which could include inadequate treatment or ingress of contamination.

Pseudomonas aeruginosa (Pseud)

No guideline value has been established for Pseudomonas aeruginosa in drinking water.

Pseudomonas aeruginosa is commonly found in faeces, soil, water and sewage. Though *P. aeruginosa* occurs in Australian drinking water supplies, it has only been associated with cases of folliculitis (inflammation of the hair follicles) in health-spa whirlpools. Free available chlorine residuals of 0.2–0.5 mg/L are generally sufficient to control *P. aeruginosa* in water

Direct extracts from fact sheets published in NHMRC *Australian Drinking Water Guidelines 6: 2011*

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