

# GUIDELINES for BOREWATER used for HUMAN CONSUMPTION (private use only)

Information extracted from the "Australian Drinking Water Guidelines", 1996.

Characteristic	Guideline Values		Issues	Comments
	Health	Aesthetic		
<b>Chemistry:</b>				
Oxidised Nitrogen (includes nitrate & nitrite)	50 mg/L		Health	Occurs naturally. Increasing in some waters from intensive farming & sewage effluent. Guideline value will protect bottle-fed infants under 3 months. Adults and children over 3 months can safely drink water with up to 100mg/L nitrate.
Alkalinity/Bicarbonate	Not health or aesthetic issue		Corrosion	Alkalinity is related to the amount of bicarbonate ions present. Waters that have a low alkalinity can become very acidic when chlorine is added for disinfection.
Total dissolved solids (salinity)		500 mg/L	Corrosion Taste	<500 mg/L is regarded as good quality drinking water based on taste. 500-1000 mg/L is acceptable based on taste. >1000 mg/L may be associated with excessive scaling, corrosion, and unsatisfactory taste.
Langelier index	Not health or aesthetic issue		Corrosion	Provides a reasonable indication of whether a particular water is corrosive or not.
Hardness*		100mg/L	Corrosion Taste	Hardness increases soap usage and prevents formation of a good lather, it scales water heater appliances and blocks pipes. Hardness minerals have no detrimental effect on human health although very hard water has an unpleasant metallic taste.
Fluoride	1.5 mg/L			Occurs naturally in some waters from fluoride containing rocks. Often added to water at level of 1mg/L to protect against dental caries. Greater than 1.5mg/L can cause dental fluorosis and greater than 4mg/L can cause skeletal fluorosis.
Arsenic	0.007 mg/L			From natural sources & mining/industrial/agricultural wastes
<b>Microbiological:</b>				
<i>E.coli</i>	0/100ml		Health	No sample should contain any <i>E.coli</i> organisms.

\* Not guideline value but value recommended by AWQC

**Please note these tests are for private use bores only.** If you have a bore that is used for commercial or public purposes the testing requirements will be different. Please contact the South Australian Department of Human Services (DHS) on 8226 7100 to obtain further information.