

Fact sheet

Class A+ recycled water quality annual summary 2010-2011

Recycled Water Class A+ July 2010 - June 2011

Component	Units	Number of tests	Pimpama Treatment Plant Median Result
Alkalinity	mg CaCO ₃ /L	51	150
Chlorine Free	mg/L	51	3.8
Chlorine Total	mg/L	51	4.5
Conductivity	mS/cm	51	0.885
E. coli	CFU/100mL	51	< 1
C. perfringens	CFU/100mL	51	< 1
F-RNA bacteriophages	PFU/100mL	49	< 1
Somatic coliphages	PFU/100mL	50	< 1
Elements ^a			
Total			
Aluminium	mg/L	2	0.11
Arsenic	mg/L	2	0.001
Beryllium	mg/L	2	< 0.01
Boron	mg/L	2	0.15
Cadmium	mg/L	2	< 0.001
Calcium	mg/L	2	46.5
Chromium	mg/L	2	< 0.001
Cobalt	mg/L	2	< 0.001
Copper	mg/L	2	< 0.005
Fluoride	mg/L	2	0.35
Iron	mg/L	2	0.05
Lead	mg/L	2	< 0.005
Lithium	mg/L	2	< 0.04
Magnesium	mg/L	2	5.6
Manganese	mg/L	2	0.003
Mercury	mg/L	2	< 0.0003
Molybdenum	mg/L	2	< 0.05
Nickel	mg/L	2	< 0.005
Potassium	mg/L	2	14.5
Selenium	mg/L	2	< 0.001
Silica	mg/L	2	11.5
Silver	mg/L	2	< 0.005
Sodium	mg/L	2	115
Vanadium	mg/L	2	< 0.005
Zinc	mg/L	2	0.02

Component	Units	Number of tests	Pimpama Treatment Plant
			Median Result
Nitrogen, Ammonia	mg/L	51	0.01
Nitrogen, Oxidised	mg/L	51	0.28
Nitrogen, Total	mg/L	51	0.75
Oxygen, Biochemical Demand	mg/L	50	< 3
Oxygen, Chemical Demand	mg/L	51	20
Oxygen, Dissolved	mg/L	51	7.8
pH		51	7.7
Phosphorus, Orthophosphate	mg/L	51	0.02
Phosphorus, Total	mg/L	51	0.05
Sodium Adsorption Ratio		2	4.3
Sulfate	mg/L	2	83
Suspended Solids	mg/L	51	<2
Temperature	°C	52	24.8
Turbidity	NTU	51	0.27

Comments

mg/L = Milligrams per Litre (or Parts per Million)

NT = Not tested °C = Degrees Celsius

CFU = Colony Forming Unit

Median = the number in the middle of a set of numbers; that is half the numbers have a value greater than or equal to the median, and half have a value less than or equal to the median.

mS/cm = Millisiemens per Centimetre

NTU = Nephelometric Turbidity Units

mg CaCO₃/L = mg/L of Calcium Carbonate

All results except temperature, free and total chlorine, dissolved oxygen, E.coli and elements, are medians of 24hr composite samples collected weekly between 01/07/10 - 30/06/11. All microbiological results are quoted from final lagoon effluent.

^a Mean metal results determined from samples collected on 09/11/2010 and 10/05/2011 for Coombabah, Elanora, Merrimac and Beenleigh.