

Queensland Urban Utilities

Esk Drinking Water Quality July 2010-June 2011

Aesthetic water quality

Aesthetic test description	No of tests	Units	Minimum	Maximum	Average	Aesthetic guideline	Health limit	Scheme compliant with ADWG 2004
2-methylisoborneol	12	ng/L	<2	3.1	1.3	5		Yes
Aluminium	12	mg/L	0.029	0.11	0.054	0.2		Yes
Ammonia (Total, as N)	12	mg/L	<0.004	0.009	<0.004	0.5		Yes
Chloride	12	mg/L	17	66	46	250		Yes
Colour (True)	12	PCU	<0.5	0.9	0.5	15		Yes
Geosmin	12	ng/L	<2	6.2	3.0	5		Yes
Hardness (Total)	12	mg/L	58	150	109	200		Yes
Iron	12	mg/L	<0.01	0.015	<0.01	0.3		Yes
pH	12	pH unit	7.1	7.5	7.3	8.5		Yes
Sodium	12	mg/L	26	49	33	180		Yes
Sulfate (measured as SO ₄)	12	mg/L	21	88	39	250		Yes
Total Dissolved Salts	12	mg/L	200	310	244	500		Yes
Turbidity	12	NTU	0.10	0.27	0.16	5		Yes
Zinc	12	mg/L	0.002	0.011	0.005	3		Yes

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Health-related water quality

Health related test description	No of tests	Units	Minimum	Maximum	Average	Aesthetic guideline	Health limit	Scheme compliant with ADWG 2004
Barium	12	mg/L	0.019	0.037	0.026		0.7	Yes
Bromodichloromethane	12	µg/L	13	42	28		250	Yes
Bromoform	12	µg/L	<2	4	2		250	Yes
Cadmium	12	mg/L	<0.001	<0.001	<0.001		0.002	Yes
Chlorine (Free)	50	mg/L	<0.10	2.00	0.95		5	Yes
Chlorodibromomethane	12	µg/L	4	32	16		250	Yes
Chloroform	12	µg/L	24	73	40		250	Yes
Chromium	12	mg/L	<0.001	<0.001	<0.001		0.05	Yes
Copper	12	mg/L	0.018	0.077	0.044		2	Yes
<i>E.coli</i>	51	cfu/100 mL	<1	<1	<1		<1	Yes
Dichloroacetic Acid	12	µg/L	15	47	27		100	Yes
Fluoride (as F)	12	mg/L	0.70	0.96	0.85		1.5	Yes
Lead	12	mg/L	<0.001	<0.001	<0.001		0.01	Yes
Manganese (mg/L)	12	mg/L	<0.001	0.002	0.001		0.5	Yes
Nickel	12	mg/L	<0.001	<0.001	<0.001		0.02	Yes
Nitrate (as N)	12	mg/L	0.11	0.20	0.16		50	Yes
Nitrite (as N)	12	mg/L	<0.002	0.003	<0.002		3	Yes
Trichloroacetic Acid	12	µg/L	14	49	25		100	Yes
Trihalomethanes (Total)	12	µg/L	54	120	86		250	Yes

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Other water quality

Test description	No of tests	Units	Minimum	Maximum	Average	Aesthetic guideline	Health limit	Scheme compliant with ADWG 2004
Alkalinity (as CaCO ₃)	12	mg/L	44	90	70			No criterion
Bromide	12	mg/L	<0.01	0.096	0.043			No criterion
Bromochloroacetic Acid	12	µg/L	<10	22	15			No criterion
Calcium	12	mg/L	16	37	27			No criterion
Chlorate	12	mg/L	<0.01	0.13	0.02			No criterion
Chlorine (Combined)	47	mg/L	0.10	1.20	0.34			No criterion
Chlorine (Total)	50	mg/L	0.18	2.40	1.29			No criterion
Conductivity	12	µS/cm	310	490	383			No criterion
Dibromoacetic Acid	12	µg/L	<10	<10	<10			No criterion
Haloacetic Acids (Total)	10	µg/L	<60	110	60			No criterion
Langelier Index	12		-1.40	-0.48	-0.73			No criterion
Magnesium	12	mg/L	4	14	10			No criterion
Monobromoacetic Acid	12	µg/L	<5	<5	<5			No criterion
Monochloroacetic Acid	12	µg/L	<5	<5	<5			No criterion
Nitrite and Nitrate (as N)	12	mg/L	0.110	0.200	0.157			No criterion
Potassium	12	mg/L	2.2	4.2	3.3			No criterion
Silica	12	mg/L	9	17	13			No criterion
Silicon	12	mg/L	4	8	6			No criterion
Total Organic Carbon	12	mg/L	2.3	5.0	3.6			No criterion
Total Sulfur (as S)	12	mg/L	7.0	30.0	13.0			No criterion

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Notes

- The drinking water quality data is representative of drinking water quality for each scheme for July 2010 to June 2011.
- The drinking water quality monitoring program is designed according to the ADWG 2004 and complies with statutory requirements.
- Health-related water quality complies with the ADWG 2004 that the annual 95th percentile value is less than the recommended ADWG 2004 value.
- Aesthetic water quality complies with the ADWG 2004 in that the annual 50th percentile value is less than the recommended ADWG 2004 value.
- E.coli complies with the ADWG 2004 at least 98% of scheduled samples contain no E.coli.

Definitions

ng/L	Nanograms per litre (equivalent to parts per trillion)
mg/L	Mircograms per litre (equivalent to parts per billion)
mg/L	Milligrams per litre (equivalent to parts per million)
cfu	Colony forming units
MPN	Most probable number
mS/cm	Microsiemens per centimetre
PCU	Platinum cobalt colour units
NTU	Nephelometric turbidity units
ADWG 2004	Australian Drinking Water Guidelines 2004 endorsed by the National Health & Medical Research Council