

FORBES SEWAGE TREATMENT WORKS - EPA LICENCE TESTING RESULTS

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Licensee: Forbes Shire Council

License No. 4809

Address: 2 Court Street Forbes NSW 2871

Monitoring Point 5 - Discharge from Sewer Plant

Site Address: Forbes STP Newell Hwy Forbes NSW 2871 Pollutant concentrations of water being discharged from Sewer Treatment Plant

Lot 226 DP752962

Date Sampled	Effective Month			6/Oct/15	11/Nov/15	13/Dec/15	12/Jan/16	9/Feb/16	15/Mar/16	5/Apr/16	3/May/16	7/Jun/16	5/Jul/16	Aug/16	Sep/16	of tests			
				Oct/15	Nov/15	Dec/15	Jan/16	Feb/16	Mar/16	Apr/16	May/16	Jun/16	Jul/16						
Parameters Monitored	Units	100 percentile limits	90 percentile limit	Required Monitoring Frequency - Monthly													Min	Avg	Max
		License Limits	PQL limit	Measured Values															
pH		6.8 - 8.5	6.8 - 8.5	7.00	7.00	7.50	7.20	7.10	7.80	7.00	7.00	7.40	7.30	7.20	7.50	12	7	7.25	7.8
Total Nitrogen	mg/l	15	10	3.50	3.50	3.60	3.90	4.20	4.80	3.90	4.80	4.30	5.60	4.70	10.00	12	3.5	4.73	10
Total Phosphorus	mg/l	0.5	0.3	0.06	0.07	0.08	0.05	0.06	1.09	0.05	0.05	0.09	0.17	0.21	0.46	12	0.05	0.20	1.09
Faecal Coliforms	CFU/100ml	600	200	1.00	1.00	1.00	11.00	1.00	4.00	1.00	1.00	1.00	2.00	1.00	2600.00	12	1	218.75	2600
BOD5	mg/l	15	10	3.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00	12	2	2.17	3
Non Filterable Residue	mg/l	20	15	7.00	12.00	2.00	1.00	6.00	9.00	4.00	5.00	7.00	5.00	8.00	7.00	12	1	6.08	12
Ammonia	mg/l	5	2	0.37	0.17	0.02	0.19	0.35	1.33	0.23	0.23	0.18	0.38	0.55	0.59	12	0.02	0.38	1.33
Oil and Grease	mg/l	15	10	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00	12	2.00	2.08	3.00
Chlorophyll-a	ug/L			6.00	2.00	2.00	4.00	3.00	3.00	N/A	10.00	3.00	2.00	8.00	2.00	12	2.00	3.75	10.00

Indicates result was below the limit of measure of the test
 Indicates results exceed the licence limits

Monthly Discharge Volume	Megalitres	52.375	51.755	58.763	58.709	49.789	52.001	53.001
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Monitoring Point 7 - Gum Swamp Water Quality near Birdhide

Pollutant concentrations of water in Gum Swamp

Date Sampled	Effective Month			6/Oct/15	11/Nov/15	13/Dec/15	12/Jan/16	9/Feb/16	15/Mar/16	5/Apr/16	3/May/16	7/Jun/16	5/Jul/16	Aug/16	Sep/16	No of tests			
				Oct/15	Nov/15	Dec/15	Jan/16	Feb/16	Mar/16	Apr/16	May/16	Jun/16	Jul/16						
Parameters Monitored	Units	Required Monitoring Frequency - Monthly													Min	Avg	Max		
		Measured Values																	
pH				7.50	7.60	8.00	7.60	8.80	8.60	7.70	7.80	8.00	7.50	7.40	7.70	12	7.4	7.9	8.8
Total Nitrogen	mg/l			6.60	4.80	5.30	4.70	6.80	5.90	5.20	4.40	3.40	2.60	6.40	7.30	12	2.6	5.3	7.3
Total Phosphorus	mg/l			0.50	0.47	1.10	0.87	0.89	1.64	0.87	0.80	0.35	0.23	0.33	0.31	12	0.23	0.7	1.64
Faecal Coliforms	CFU/100mL			1660.00	1780.00	1040.00	2940.00	170.00	3601.00	4.80	6.30	1.05	100.00	70.00	2650.00	12	1.05	1168.6	3601
BOD5	mg/l			7.00	4.00	14.00	13.00	28.00	22.00	2.00	14.00	8.00	2.00	2.00	2.00	12	2	9.8	28
Non Filterable Residue	mg/l			34.00	31.00	186.00	61.00	115.00	88.00	78.00	93.00	34.00	9.00	18.00	20.00	12	9	63.9	186
Ammonia	mg/l			4.00	2.40	0.01	0.17	0.01	1.01	0.01	0.55	0.79	1.20	4.80	5.00	12	0.01	1.7	5
Oil and Grease	mg/l			2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00	12	2	2.1	3

Indicates result was below the limit of measure of the test

Monitoring Point 9 - Lachlan River Downstream of sewer outfall location

Pollutant contractions of Lachlan River Water Downstream of Sewer Outfall

Date Sampled				6/Oct/15	11/Nov/15	13/Dec/15	12/Jan/16	9/Feb/16	15/Mar/16	5/Apr/16	3/May/16	7/Jun/16	5/Jul/16			No of tests			
Effective Month				Oct/15	Nov/15	Dec/15	Jan/16	Feb/16	Mar/160	Apr/16	May/16	Jun/16	Jul/16	Aug/16	Sep/16				
Parameters Monitored	Units	Required Monitoring Frequency - Monthly														Min	Averag	Max	
		Measured Values																	
pH				7.70	7.80	8.00	7.80	7.80	8.70	7.90	7.80	7.80	7.60	7.70	7.20	12	7.2	7.8	8.7
Total Nitrogen	mg/l			0.74	0.70	0.68	0.69	0.71	1.63	0.52	1.30	0.54	3.00	1.60	1.90	12	0.5	1.2	3
Total Phosphorus	mg/l			0.05	0.05	0.05	0.05	0.05	1.05	0.05	0.05	0.05	0.11	0.05	0.30	12	0.1	0.07	1.05
Facael Coliforms	CFU/100mL			370.00	160.00	108.00	48.00	130.00	211.00	74.00	140.00	210.00	180.00	190.00	1740.00	12	48	296.8	1740
BOD5	mg/l			2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	8.00	12	2	2.6	8
Non Filterable Residue	mg/l			36.00	25.00	20.00	26.00	35.00	33.00	18.00	19.00	21.00	111.00	93.00	292.00	12	18	60.8	292
Ammonia	mg/l			0.02	0.02	0.01	0.02	0.01	1.01	0.01	0.01	0.01	0.03	0.01	0.13	12	0	0.1	1.01
Oil and Grease	mg/l			2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00	12	2	2.1	3

Indicates result was below the limit of measure of the test

Monitoring Point 10 - Lachlan River Upstream of sewer outfall location

Pollutant contractions of Lachlan River Water Upstream of Sewer Outfall

Date Sampled				6/Oct/15	11/Nov/15	13/Dec/15	12/Jan/16	9/Feb/16	15/Mar/16	5/Apr/16	3/May/16	7/Jun/16	5/Jul/16			No of tests			
Effective Month				Oct/15	Nov/15	Dec/15	Jan/16	Feb/16	Mar/16	Apr/16	May/16	Jun/16	Jul/16	Aug/16	Sep/16				
Parameters Monitored	Units	Required Monitoring Frequency - Monthly														Min	Averag	Max	
		Measured Values																	
pH				7.70	7.70	7.80	7.70	7.90	8.60	7.90	7.70	7.80	7.60	7.60	7.20	12	7.2	7.8	8.6
Total Nitrogen	mg/l			2.70	0.73	0.74	0.64	0.70	1.66	0.51	0.52	0.60	2.80	1.50	2.00	12	0.5	1.3	2.8
Total Phosphorus	mg/l			0.05	0.05	0.05	0.05	0.06	1.05	0.05	0.05	0.05	0.08	0.05	0.27	12	0.1	0.2	1.05
Facael Coliforms	CFU/100mL			520.00	280.00	220.00	280.00	70.00	151.00	200.00	350.00	104.00	240.00	150.00	1880.00	12	70	370.4	1880
BOD5	mg/l			2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	5.00	12	2	2.3	5
Non Filterable Residue	mg/l			37.00	25.00	25.00	27.00	35.00	32.00	22.00	19.00	27.00	57.00	84.00	260.00	12	19	54.2	260
Ammonia	mg/l			0.01	0.02	0.01	0.01	0.01	1.01	0.01	0.01	0.01	0.01	0.01	0.12	12	0	0.1	1.01
Oil and Grease	mg/l			2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00	12	2.00	2.1	3.00

Indicates result was below the limit of measure of the test