

FORBES SEWAGE TREATMENT WORKS - EPA LICENCE TESTING RESULTS

Published 13/9/17

Licensee: Forbes Shire Council

License No. 4809

Monitoring Point 5 - Discharge from Sewer Plant

Address: 2 Court Street Forbes NSW 2871

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			18/Oct/16 Oct/16	15/Nov/16 Nov/16	6/Dec/16 Dec/16	10/Jan/17 Jan/17	7/Feb/17 Feb/17	7/Mar/17 Mar/17	4/Apr/17 Apr/17	2/May/17 May/17	6/Jun/17 Jun/17	4/Jul/17 Jul/17	9/Aug/17 Aug/17	5/Sep/17 Sep/17	of tests			
Parameters Monitored	Units	100 percentile limits License Limits	90 percentile limit PQL limit	Required Monitoring Frequency - Monthly												Min	Avg	Max	
				Measured Values															
pH		6.8 - 8.5	6.8 - 8.5	7.40	7.40	7.30	7.30	7.00	7.00	7.30	7.40	7.10	7.20	7.20	7.10	12	7	7.23	7.4
Total Nitrogen	mg/l	15	10	3.80	4.10	2.50	3.00	4.60	4.00	5.00	3.60	3.50	5.00	4.30	4.30	12	2.5	3.98	5
Total Phosphorus	mg/l	0.5	0.3	0.22	0.14	0.16	0.07	0.11	0.07	0.18	0.06	0.10	0.06	0.06	0.07	12	0.06	0.11	0.22
Faecal Coliforms	CFU/100ml	600	200	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12	1	1.00	1
BOD5	mg/l	15	10	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	12	2	2.08	3
Non Filterable Residue	mg/l	20	15	6.00	8.00	8.00	8.00	8.00	5.00	9.00	5.00	6.00	5.00	6.00	9.00	12	5	6.92	9
Ammonia	mg/l	5	2	0.29	0.26	0.11	0.49	0.98	0.33	0.29	0.30	0.05	0.14	0.32	0.24	12	0.05	0.32	0.98
Oil and Grease	mg/l	15	10	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	12	2.00	2.00	2.00
Chlorophyll-a	ug/L			3.00	2.00	5.00	9.00	17.00	3.00	10.0	7.00	2.00	2.00	2.00	2.00	12	2.00	5.33	17.00

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

Monitoring Point 7 - Gum Swamp Water Quality near Birdhide

Pollutant concentrations of water in Gum Swamp

Date Sampled	Effective Month			18/Oct/16 Oct/16	15/Nov/16 Nov/16	6/Dec/16 Dec/16	10/Jan/17 Jan/17	7/Feb/17 Feb/17	7/Mar/17 Mar/17	4/Apr/17 Apr/17	2/May/17 May/17	6/Jun/17 Jun/17	4/Jul/17 Jul/17	9/Aug/17 Aug/17	5/Sep/17 Sep/17	No of tests			
Parameters Monitored	Units	Required Monitoring Frequency - Monthly														Min	Avg	Max	
		Measured Values																	
pH				7.60	8.00	8.10	8.40	8.10	7.70	8.40	8.40	9.00	8.80	8.70	7.60	12	7.6	8.2	9
Total Nitrogen	mg/l			3.00	2.10	1.90	5.50	5.10	7.30	3.20	3.90	2.90	3.20	2.40	7.00	12	1.9	4.0	7.3
Total Phosphorus	mg/l			0.71	0.50	0.25	0.55	0.61	0.86	0.42	0.46	0.33	0.46	0.58	0.47	12	0.25	0.5	0.86
Faecal Coliforms	CFU/100mL			116.00	1850.00	420.00	214.00	488.00	3654.00	785.00	921.00	262.00	187.00	455.00	8.00	12	8	780.0	3654
BOD5	mg/l			3.00	6.00	6.00	17.00	23.00	18.00	8.00	11.00	12.00	14.00	18.00	10.00	12	3	12.2	23
Non Filterable Residue	mg/l			14.00	45.00	36.00	64.00	99.00	145.00	71.00	117.00	63.00	97.00	105.00	88.00	12	14	78.7	145
Ammonia	mg/l			1.60	0.17	0.13	0.98	0.03	1.20	0.10	0.48	0.02	0.01	0.01	4.40	12	0.01	0.8	4.4
Oil and Grease	mg/l			2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	12	2	2.0	2

Indicates result was below the limit of measure of the test

Monitoring Point 9 - Lachlan River Downstream of sewer outfall location

Pollutant contrations of Lachlan River Water Downstream of Sewer Outfall

Date Sampled Effective Month				18/Oct/16 Oct/16	15/Nov/16 Nov/16	6/Dec/16 Dec/16	10/Jan/17 Jan/17	7/Feb/17 Feb/17	7/Mar/17 Mar/17	4/Apr/17 Apr/17	2/May/17 May/17	6/Jun/17 Jun/17	4/Jul/17 Jul/17	9/Aug/17 Aug/17	5/Sep/17 Sep/17	No of tests			
Parameters Monitored	Units	Required Monitoring Frequency - Monthly														Min	Averag	Max	
		Measured Values																	
pH				7.60	7.70	7.70	7.70	7.60	7.60	7.70	7.90	7.70	7.80	7.90	7.80	12	7.6	7.7	7.9
Total Nitrogen	mg/l			0.10	1.20	0.81	0.74	0.99	1.00	1.50	0.72	0.70	0.84	0.97	0.81	12	0.1	0.9	1.5
Total Phosphorus	mg/l			0.10	0.09	0.05	0.07	0.09	0.08	0.08	0.05	0.05	0.05	0.09	0.05	12	0.1	0.07	0.1
Facael Coliforms	CFU/100mL			120.00	230.00	30.00	124.00	44.00	47.00	62.00	96.00	105.00	37.00	93.00	27.00	12	27	84.6	230
BOD5	mg/l			3.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	12	2	2.2	3
Non Filterable Residue	mg/l			62.00	49.00	25.00	31.00	43.00	36.00	43.00	26.00	10.00	39.00	66.00	35.00	12	10	38.8	66
Ammonia	mg/l			0.04	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.02	12	0	0.0	0.04
Oil and Grease	mg/l			2.00	2.00			2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	11	2	1.8	2

Indicates result was below the limit of measure of the test

Monitoring Point 10 - Lachlan River Upstream of sewer outfall location

Pollutant contrations of Lachlan River Water Upstream of Sewer Outfall

Date Sampled Effective Month				18/Oct/16 Oct/16	15/Nov/16 Nov/16	6/Dec/16 Dec/16	10/Jan/17 Jan/17	7/Feb/17 Feb/17	7/Mar/17 Mar/17	4/Apr/17 Apr/17	2/May/17 May/17	6/Jun/17 Jun/17	4/Jul/17 Jul/17	9/Aug/17 Aug/17	5/Sep/17 Sep/17	No of tests			
Parameters Monitored	Units	Required Monitoring Frequency - Monthly														Min	Averag	Max	
		Measured Values																	
pH				7.60	7.70	7.60	7.70	7.60	7.60	7.70	8.00	7.90	7.90	7.90	7.80	12	7.6	7.8	8
Total Nitrogen	mg/l			1.30	1.30	1.40	0.74	1.10	1.00	1.70	0.77	0.89	0.68	0.94	0.88	12	0.7	1.1	1.7
Total Phosphorus	mg/l			0.11	0.08	0.06	0.08	0.09	0.07	0.08	0.05	0.05	0.05	0.08	0.05	12	0.1	0.1	0.11
Facael Coliforms	CFU/100mL			118.00	120.00	60.00	22.00	88.00	236.00	142.00	118.00	77.00	91.00	96.00	78.00	12	22	103.8	236
BOD5	mg/l			3.00	2.00	7.00	2.00	2.00	2.00	3.00	2.00	3.00	2.00	2.00	2.00	12	2	2.7	7
Non Filterable Residue	mg/l			53.00	54.00	39.00	31.00	45.00	32.00	34.00	19.00	15.00	15.00	42.00	39.00	12	15	34.8	54
Ammonia	mg/l			0.02	0.01	0.02	0.01	0.01	0.01	0.04	0.01	0.02	0.01	0.03	0.01	12	0	0.0	0.04
Oil and Grease	mg/l			2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	12	2.00	2.0	2.00

Indicates result was below the limit of measure of the test