

## FORBES SEWAGE TREATMENT WORKS - EPA LICENCE TESTING RESULTS

Licensee: Forbes Shire Council

Licence 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

DP752962

Date Sampled	Effective Month	11/Oct/21 Oct/21	8/Nov/21 Nov/21	6/Dec/21 Dec/21	17/Jan/22 Jan/22	14/Feb/22 Feb/22	14/Mar/22 Mar/22	9/Apr/22 Apr/22	9/May/22 May/22	6/Jun/22 Jun/22	12/Jul/22 Jul/22	10/Aug/22 Aug/22	6/Sep/22 Sep/22							
		<b>Required Monitoring Frequency - Monthly</b>																		
<b>Parameter</b>	<b>Licence L</b>	<b>PQL</b>	<b>limits</b>	<b>90 percentile limit</b>												<b>Measured Values</b>	<b>Min</b>	<b>Average</b>	<b>Max</b>	
pH	6.8 - 8.5	6.8 - 8.5			7.40	7.30	7.40	7.57	7.30	8.00	7.90	7.90	7.80	8.00	7.70	7.90	12	7.30	7.68	8.00
Total Nitro	15	10			4.00	3.30	4.50	5.00	5.70	4.00	3.70	4.00	3.90	4.60	3.40	0.34	12	0.34	3.87	5.70
Total Phos	0.5				0.12	0.20	0.13	0.05	0.05	0.03	0.81	0.29	0.33	0.67	0.36	0.03	12	0.03	0.26	0.81
Faecal Col	600	200				1.00	1.00	1.00	108.00	19.00	1.00	17.00	91.00	1.00	520.00	150.00	11	1.00	82.73	520.00
BOD5	15	10			4.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	3.00	3.00	2.00	12	2.00	2.42	4.00
Non Filtera	20	15			11.00	16.00	6.00	4.00	4.00	4.00	5.70	2.70	3.00	2.50	10.00	1.50	12	1.50	5.87	16.00
Ammonia-	5	2			0.39	0.64	1.30	1.90	1.80	2.00	0.83	0.97	0.98	0.37	0.45	0.41	12	0.37	1.00	2.00
Oil and Gr	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					2.00	2.00	2.00	2.00	2.00	2.00			3.00	4.00		2.00	9	2.00	2.33	4.00

  Indicates result was < the number given

### Monitoring Point 7 - Gum Swamp Water Quality near Birdhide

Pollutant concentrations of water in Gum Swamp

Date Sampled	Effective Month	11/Oct/21 Oct/21	8/Nov/21 Nov/21	6/Dec/21 Dec/21	17/Jan/22 Jan/22	14/Feb/22 Feb/22	14/Mar/22 Mar/22	9/Apr/22 Apr/22	9/May/22 May/22	6/Jun/22 Jun/22	12/Jul/22 Jul/22	10/Aug/22 Aug/22	6/Sep/22 Sep/22							
														<b>Parameters Monitored</b>	<b>Min</b>	<b>Average</b>	<b>Max</b>			
pH					7.70	8.50	7.90	8.21	7.81	8.00	8.10	8.40	8.60	7.80	7.70	7.90	12	7.70	8.05	8.60
Total Nitrogen mg/l					6.00	3.10	3.90	2.30	3.80	2.00	3.70	3.80	1.90	3.20	3.40	6.90	12	1.90	3.67	6.90
Total P mg/l					0.39	0.43	0.38	0.24	0.07	0.03	2.10	0.39	0.19	0.24	0.29	0.90	12	0.03	0.47	2.10
Faecal Coliforms CFU/100mL						12,997.00	187	548.00	225.00	365.00	1,700.00	980.00	34.00	2.00	1.00	6.00	11	1.00	1549.55	12997.00
BOD5					4.00	10.00	13.00	6.00	8.00	16.00	8.00	7.00	6.00	7.00	3.00	3.00	12	3.00	7.58	16.00
Non Filterable Residue mg/l					14.00	58.00	42.00	28.00	57.00	170.00	56.00	81.00	30.00	26.00	6.00	20.00	12	6.00	49.00	170.00
Ammonia mg/l					3.90	0.01	0.56	0.01	0.61	1.00	0.42	0.44	0.07	1.10	0.20	4.00	12	0.01	1.03	4.00
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	2.00	2.00

  Indicates result was < the number given       Indicates result was > the number given

### Monitoring Point 9 - Lachlan River Downstream of sewer outfall location

Pollutant contrations of Lachlan River Water Downstream of Sewer Outfall

Date Sampled	11/Oct/21	8/Nov/21	6/Dec/21	17/Jan/22	14/Feb/22	14/Mar/22	9/Apr/22	9/May/22	6/Jun/22	12/Jul/22	10/Aug/22	6/Sep/22				
Effective Month	Oct/21	Nov/21	Dec/21	Jan/22	Feb/22	Mar/22	Apr/22	May/22	Jun/22	Jul/22	Aug/22	Sep/22				
Discharge during month y/n														Min	Average	Max
Parameters Monitored																
pH	7.60	7.80	7.40	7.47	7.53	8.00	7.40	7.80	7.80	7.70	7.40	7.80	12	7.40	7.64	8.00
Total Nitrogen mg/L	1.10	1.00	1.30	1.10	0.96	1.00	0.94	1.10	1.40	1.00	1.60	1.20	12	0.94	1.14	1.60
Total Phosphorus mg/L	0.06	0.09	0.14	0.09	0.07	0.03	0.68	0.06	0.16	0.07	0.15	0.07	12	0.03	0.14	0.68
Facael Coliforms CFU/100mL		770.00	26.00	115.00	50.00	41.00	490.00	91.00	140.00	31.00	32.00	86.00	11	26.00	170.18	770.00
BOD5	2.00	2.00	3.00	2.00	2.00	2.00	2.00	7.00	25.00	3.00	3.00	2.00	12	2.00	4.58	25.00
Suspended Solids mg/L	52.00	39.00	50.00	50.00	39.00	89.00	60.00	32.00	98.00	59.00	110.00	53.00	12	32.00	60.92	110.00
Ammonia mg/l	0.01	0.02	0.04	0.04	0.02	0.03	0.04	0.02	0.02	0.02	0.03	0.03	12	0.01	0.03	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	2.00	2.00

Indicates result was < the number given

### Monitoring Point 10 - Lachlan River Upstream of sewer outfall location

Pollutant contrations of Lachlan River Water Upstream of Sewer Outfall

Date Sampled	11/Oct/21	8/22/21	6/Dec/21	17/Jan/22	14/Feb/22	14/Mar/22	9/Apr/22	9/May/22	6/Jun/22	12/Jul/22	10/Aug/22	6/Sep/22				
Effective Month	Oct/21	Nov/21	Dec/21	Jan/22	Feb/22	Mar/22	Apr/22	May/22	Jun/22	Jul/22	Aug/22	Sep/22				
Discharge during month y/n														Min	Average	Max
Parameters Monitored																
pH	7.60	7.70	7.5	7.24	7.55	8.00	7.30	7.70	0.70	7.70	7.40	7.90	12	0.70	7.02	8.00
Total Nitrogen mg/L	1.20	1.00	1.40	1.20	1.10	1.00	1.10	1.10	1.40	1.10	1.60	1.20	12	1.00	1.20	1.60
Total Phosphorus mg/L	0.07	0.08	0.13	0.09	0.09	0.09	0.42	0.08	0.14	0.08	0.18	0.08	12	0.07	0.13	0.42
Facael Coliforms CFU/100mL		488.00	15	83.00	206.00	110.00	410.00	110.00	110.00	11.00	75.00	110.00	11	11.00	157.09	488.00
BOD5	2.00	2.00	3.00	3.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	12	2.00	2.25	3.00
Suspended Solids mg/L	62.00	25.00	61	50.00	31.00	140.00	68.00	35.00	90.00	58.00	120.00	54.00	12	25.00	66.17	140.00
Ammonia mg/l	0.02	0.01	0.03	0.01	0.02	0.00	0.04	0.03	0.03	0.02	0.03	0.02	12	0.00	0.02	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	2.00	2.00

Indicates result was < the number given