

Gwydir Shire Council

Bingara Sewerage Treatment Plant - EPA License 586 - Yearly Summary

Point 1: Yearly Summary November 2015 to October 2016

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	0	NO DISCHARGE FROM POINT 1						
Total suspended solids (TSS)	mg/L	30	Special Frequency	0							
Oil and Grease	mg/L	10	Special Frequency	0							
pH	pH		Special Frequency	0							
Conductivity	ms/cm		Special Frequency	0							
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	0							
Nitrogen (ammonia)	mg/L		Special Frequency	0							
Phosphorous	mg/L		Special Frequency	0							
Total Kjeldahl Nitrogen	mg/L		Special Frequency	0							
Faecal Coliforms	CFU/100ml		Special Frequency	0							

Point 3: Yearly Summary November 2015 to October 2016

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	12	5	55	22	yes			
Total suspended solids (TSS)	mg/L	30	Special Frequency	12	2	95	36	yes			
Oil and Grease	mg/L	10	Special Frequency	12	<5	<5	<5	no			
pH	pH		Special Frequency	12	7.7	9.4	8.2				
Conductivity	ms/cm		Special Frequency	12	0.51	0.73	0.61				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	12	0.6	12	4.4				
Nitrogen (ammonia)	mg/L		Special Frequency	12	0.1	17.9	4.8				
Phosphorous	mg/L		Special Frequency	12	3.7	7.9	6.1				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	12	3.3	18.4	8.1				
Faecal Coliforms	CFU/100ml		Special Frequency	12	2	280000	30800				

Point 1: Yearly Summary November 2016 to October 2017

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	0	NO DISCHARGE FROM POINT 1						
Total suspended solids (TSS)	mg/L	30	Special Frequency	0							
Oil and Grease	mg/L	10	Special Frequency	0							
pH	pH		Special Frequency	0							
Conductivity	ms/cm		Special Frequency	0							
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	0							
Nitrogen (ammonia)	mg/L		Special Frequency	0							
Phosphorous	mg/L		Special Frequency	0							
Total Kjeldahl Nitrogen	mg/L		Special Frequency	0							
Faecal Coliforms	CFU/100ml		Special Frequency	0							

Point 3: Yearly Summary November 2016 to October 2017

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
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Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	12	6	75	23	yes			
Total suspended solids (TSS)	mg/L	30	Special Frequency	12	6	59	31	yes			
Oil and Grease	mg/L	10	Special Frequency	12	<5	7	<5	no			
pH	pH		Special Frequency	12	7.6	9.4	8.2				
Conductivity	ms/cm		Special Frequency	12	0.54	0.8	0.68				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	12	0.1	1.6	3.2				
Nitrogen (ammonia)	mg/L		Special Frequency	12	0.4	17.2	7.5				
Phosphorous	mg/L		Special Frequency	12	3.06	8.9	6.4				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	12	4.8	18.6	11.2				
Faecal Coliforms	CFU/100ml		Special Frequency	12	0	6000	1723				

Point 1: Yearly Summary November 2017 to October 2018

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	0	NO DISCHARGE FROM POINT 1						
Total suspended solids (TSS)	mg/L	30	Special Frequency	0							
Oil and Grease	mg/L	10	Special Frequency	0							
pH	pH		Special Frequency	0							
Conductivity	ms/cm		Special Frequency	0							
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	0							
Nitrogen (ammonia)	mg/L		Special Frequency	0							
Phosphorous	mg/L		Special Frequency	0							
Total Kjeldahl Nitrogen	mg/L		Special Frequency	0							
Faecal Coliforms	CFU/100ml		Special Frequency	0							

Point 3: Yearly Summary November 2017 to October 2018

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	12	3	50	18	yes			
Total suspended solids (TSS)	mg/L	30	Special Frequency	12	3	38	19	yes			
Oil and Grease	mg/L	10	Special Frequency	12	<5	<5	<5	no			
pH	pH		Special Frequency	12	7.8	9	8				
Conductivity	ms/cm		Special Frequency	12	0.58	0.76	0.65				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	12	0.04	12	2.9				
Nitrogen (ammonia)	mg/L		Special Frequency	12	0.05	23.5	7.2				
Phosphorous	mg/L		Special Frequency	12	2.17	9.8	6.4				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	12	1.7	26	9.9				
Faecal Coliforms	CFU/100ml		Special Frequency	12	0	15000	4019				

Point 1: Yearly Summary November 2018 to October 2019

Note: discharge only occurred during July, August, September and October 2019

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	4	16	28	21	Yes			
Total suspended solids (TSS)	mg/L	30	Special Frequency	4	4	23	14	No			
Oil and Grease	mg/L	10	Special Frequency	4	5	7	5.5	No			
pH	pH		Special Frequency	4	7.8	7.9	7.8				
Conductivity	ms/cm		Special Frequency	4	0.63	0.74	0.69				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	4	2.7	9.6	5.1				

Nitrogen (ammonia)	mg/L		Special Frequency	4	5.9	11.7	8.4				
Phosphorous	mg/L		Special Frequency	4	5.4	7.2	6.2				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	4	7.2	12.7	10.5				
Faecal Coliforms	CFU/100ml		Special Frequency	4	2	980	305				

Point 3: Yearly Summary November 2018 to October 2019

Note: Samples collected at point 3 on the following months - Nov 18, Dec 18, Jan 19, Feb 19, March 19, April 19, May 19 and June 19

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	8	6	85	19	NA - no discharge			
Total suspended solids (TSS)	mg/L	30	Special Frequency	8	5	52	26	NA - no discharge			
Oil and Grease	mg/L	10	Special Frequency	8	5	5	5	NA - no discharge			
pH	pH		Special Frequency	8	7	9.5	8.5				
Conductivity	ms/cm		Special Frequency	8	0.56	0.87	0.63				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	8	0.7	6.2	2.1				
Nitrogen (ammonia)	mg/L		Special Frequency	8	0.1	11.3	4.4				
Phosphorous	mg/L		Special Frequency	8	1.8	6.1	4.1				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	8	2.5	15.1	7.1				
Faecal Coliforms	CFU/100ml		Special Frequency	8	2	64000	10543				

Point 1: Yearly Summary November 2019 to October 2020

Note:

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	12	6	51	23	Yes	5	1	Tertiary ponds impacted by algae bloom
Total suspended solids (TSS)	mg/L	30	Special Frequency	12	16	66	38	Yes	5	1	Tertiary ponds impacted by algae bloom
Oil and Grease	mg/L	10	Special Frequency	12	<5	<5	<5	No	0	1	
pH	pH		Special Frequency	12	7.9	10.1	8.9				
Conductivity	ms/cm		Special Frequency	12	0.57	0.76	0.63				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	12	0.2	4.2	1.6				
Nitrogen (ammonia)	mg/L		Special Frequency	12	0.1	15.1	3.2				
Phosphorous	mg/L		Special Frequency	12	1.17	9.6	4.6				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	12	2.6	20.9	8.8				
Faecal Coliforms	CFU/100ml		Special Frequency	12	2	3400	466				

Point 3: Yearly Summary November 2019 to October 2020

Note: all samples from point 1

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	0							
Total suspended solids (TSS)	mg/L	30	Special Frequency	0							
Oil and Grease	mg/L	10	Special Frequency	0							
pH	pH		Special Frequency	0							
Conductivity	ms/cm		Special Frequency	0							
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	0							
Nitrogen (ammonia)	mg/L		Special Frequency	0							
Phosphorous	mg/L		Special Frequency	0							
Total Kjeldahl Nitrogen	mg/L		Special Frequency	0							
Faecal Coliforms	CFU/100ml		Special Frequency	0							

Point 1: Yearly Summary November 2020 to October 2021

Note:

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	8	3	23	13.5	4			
Total suspended solids (TSS)	mg/L	30	Special Frequency	8	3	24	22	2			
Oil and Grease	mg/L	10	Special Frequency	8	<5	<5	<5	0			
pH	pH		Special Frequency	8	7.4	10	8.6				
Conductivity	ms/cm		Special Frequency	8	0.47	0.67	0.57				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	8							
Nitrogen (ammonia)	mg/L		Special Frequency	8	0.04	8.67	3.15				
Phosphorous	mg/L		Special Frequency	8	1.09	6.34	3.8				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	8	2	14.9	6.2				
Faecal Coliforms	CFU/100ml		Special Frequency	8	4	65000	6349				

Point 3: Yearly Summary November 2020 to October 2021

Note:

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	4	10	64	28	0			no discharge
Total suspended solids (TSS)	mg/L	30	Special Frequency	4	30	59	39.5	0			no discharge
Oil and Grease	mg/L	10	Special Frequency	4	<5	<5	<5	0			
pH	pH		Special Frequency	4	8.3	9.6	8.6				
Conductivity	ms/cm		Special Frequency	4	0.48	0.57	0.53				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	4							
Nitrogen (ammonia)	mg/L		Special Frequency	4	0.13	8.67	3.17				
Phosphorous	mg/L		Special Frequency	4	1.74	4.94	3.3				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	4	4.5	10.4	7.3				
Faecal Coliforms	CFU/100ml		Special Frequency	4	4	65000	16400				

Point 1: Yearly Summary November 2021 to October 2022

Note:

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	2	2	24	13	1	0		
Total suspended solids (TSS)	mg/L	30	Special Frequency	2	34	34	34	2	1		
Oil and Grease	mg/L	10	Special Frequency	2	<5	<5	<5				
pH	pH		Special Frequency	2	7.8	8.6	8.2				
Conductivity	ms/cm		Special Frequency	2	0.54	0.54	0.54				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	2							
Nitrogen (ammonia)	mg/L		Special Frequency	2	0.8	1.5	1.15				
Phosphorous	mg/L		Special Frequency	2	3.75	5.96	4.8				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	2	6.3	13.1	9.7				
Faecal Coliforms	CFU/100ml		Special Frequency	2	600	1100	850				

Point 3: Yearly Summary November 2021 to October 2022

Note:

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Excedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	10	2	45	24				No discharge to river
Total suspended solids (TSS)	mg/L	30	Special Frequency	10	29	110	48				
Oil and Grease	mg/L	10	Special Frequency	10	<5	<5	<5				
pH	pH		Special Frequency	10	7.6	10.2	8.6				
Conductivity	ms/cm		Special Frequency	10	0.44	0.61	0.53				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	10							
Nitrogen (ammonia)	mg/L		Special Frequency	10	0.02	12.6	3.5				
Phosphorous	mg/L		Special Frequency	10	1.26	6.41	4.74				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	10	2.8	19.8	9.36				
Faecal Coliforms	CFU/100ml		Special Frequency	10	2	84000	14754				

Point 1: Yearly Summary November 2022 to October 2023

Note:

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Excedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	0							NO discharge to the river
Total suspended solids (TSS)	mg/L	30	Special Frequency	0							
Oil and Grease	mg/L	10	Special Frequency	0							
pH	pH		Special Frequency	0							
Conductivity	ms/cm		Special Frequency	0							
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	0							
Nitrogen (ammonia)	mg/L		Special Frequency	0							
Phosphorous	mg/L		Special Frequency	0							
Total Kjeldahl Nitrogen	mg/L		Special Frequency	0							
Faecal Coliforms	CFU/100ml		Special Frequency	0							

Point 3: Yearly Summary November 2022 to October 2023

Note: all samples from point 1

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Excedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	12	4	71	26				
Total suspended solids (TSS)	mg/L	30	Special Frequency	12	15	99	42.5				
Oil and Grease	mg/L	10	Special Frequency	12	<5	<5	<5				
pH	pH		Special Frequency	12	7.7	9.1	8.2				
Conductivity	ms/cm		Special Frequency	12	0.46	0.9	0.68				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	12							
Nitrogen (ammonia)	mg/L		Special Frequency	12	0.2	23.54	7.68				
Phosphorous	mg/L		Special Frequency	12	2.65	16.78	7.19				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	12	4.1	33.6	14.6				
Faecal Coliforms	CFU/100ml		Special Frequency	12	46	29000	6430				

Point 1: Yearly Summary November 2023 to October 2024

Note:

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Excedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	3	7	13	10.6				

Total suspended solids (TSS)	mg/L	30	Special Frequency	3	4	18	13				
Oil and Grease	mg/L	10	Special Frequency	3	<5	<5	<5				
pH	pH		Special Frequency	3	8.1	8.2	8.1				
Conductivity	ms/cm		Special Frequency	3	0.6	0.63	0.62				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	3							
Nitrogen (ammonia)	mg/L		Special Frequency	3	1	10	6				
Phosphorous	mg/L		Special Frequency	3	3.05	36.31	14.6				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	3	2.2	39.7	17.9				
Faecal Coliforms	CFU/100ml		Special Frequency	3	10	100	40				

Point 3: Yearly Summary November 2023 to October 2024

Note: all samples from point 1

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	9	8	56	25.5				
Total suspended solids (TSS)	mg/L	30	Special Frequency	9	16	244	62				
Oil and Grease	mg/L	10	Special Frequency	9	<5	<5	<5				
pH	pH		Special Frequency	9	7.7	8.6	8.2				
Conductivity	ms/cm		Special Frequency	9	6.57	0.78	0.66				
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	9							
Nitrogen (ammonia)	mg/L		Special Frequency	9	1.77	17.39	8.7				
Phosphorous	mg/L		Special Frequency	9	3.35	16.78	7.93				
Total Kjeldahl Nitrogen	mg/L		Special Frequency	9	2.1	51	17.06				
Faecal Coliforms	CFU/100ml		Special Frequency	9	100	27500	5080				

Point 1: Yearly Summary November 2024 to October 2025

Note:

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	0							
Total suspended solids (TSS)	mg/L	30	Special Frequency	0							
Oil and Grease	mg/L	10	Special Frequency	0							
pH	pH		Special Frequency	0							
Conductivity	ms/cm		Special Frequency	0							
Nitrate+nitrite (oxidised nitrogen)	mg/L		Special Frequency	0							
Nitrogen (ammonia)	mg/L		Special Frequency	0							
Phosphorous	mg/L		Special Frequency	0							
Total Kjeldahl Nitrogen	mg/L		Special Frequency	0							
Faecal Coliforms	CFU/100ml		Special Frequency	0							

Point 3: Yearly Summary November 2024 to October 2025

Note: all samples from point 1

Pollutant	Units	90 percentile concentration limit	Monitoring Frequency required by the License	Number of data points for the year	Minimum value	Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Exceedence acceptable limit	Comments
Biochemical oxygen demand (BOD)	mg/L	20	Special Frequency	12	5	44	20.6				
Total suspended solids (TSS)	mg/L	30	Special Frequency	12	11	156	54.7				
Oil and Grease	mg/L	10	Special Frequency	12	<5	<5	<5				
pH	pH		Special Frequency	12	7.5	8.6	8				
Conductivity	ms/cm		Special Frequency	12	0.54	0.87	0.68				

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