Gwydir Shire Council

Bingara Sewerage Treatment Plant - EPA License 586 - Yearly Summary

Point 1: Yearly Summary November 2015 to October 2016

			Monitoring Frequency						Count of 90	Excedence	
		90 percentile	required by the	Number of data points					percentile	acceptable	
Pollutant	Units	concentration limit	License	for the year	Minimum value	Maximum value	Mean	Exceedences	exceedences	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	pН		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							
Phosporous	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

			Monitoring Frequency						Count of 90	Excedence	
		90 percentile	required by the	Number of data points					percentile	acceptable	
Pollutant	Units	concentration limit	License	for the year	Minimum value	Maximum value	Mean	Exceedences	exceedences	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	pН		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				
Phosporous	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

			Monitoring Frequency						Count of 90	Excedence	
		90 percentile	required by the	Number of data points					percentile	acceptable	
Pollutant	Units	concentration limit	License	for the year	Minimum value	Maximum value	Mean	Exceedences	exceedences	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	pН		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							
Phosporous	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

			Monitoring Frequency						Count of 90	Excedence	
		90 percentile	required by the	Number of data points					percentile	acceptable	
Pollutant	Units	concentration limit	License	for the year	Minimum value	Maximum value	Mean	Exceedences	exceedences	limit	Comments
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	pН		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				
Phosporous	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

		90 percentile	Monitoring Frequency required by the	Number of data points					Count of 90 percentile	Excedence acceptable	
Pollutant	Units	concentration limit	License			Maximum value	Mean	Exceedences	exceedences	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	pН		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							
Phosporous	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		Maximum value	Mean	Exceedences	Count of 90 percentile exceedences	Excedence 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	pН		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			
Phosporous	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

Note: discharge only oct	curred during July, Au	gust, September and Oct							04 6 00	F	
			Monitoring Frequency						Count of 90	Excedence	
		90 percentile		Number of data points					percentile	acceptable	
Pollutant	Units	concentration limit	License	for the year	Minimum value	Maximum value	Mean	Exceedences	exceedences	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	pН		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				
Phosporous	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				
aecal Coliforms	CFU/100ml		Special Frequency	4	2	980	305				

Point 3: Yearly Summary November 2018 to October 2019

		90 percentile	Monitoring Frequency required by the	Number of data points					Count of 90 percentile	Excedence acceptable	
Pollutant	Units	concentration limit	License	•		Maximum value	Mean	Exceedences	exceedences	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			
Н	pН		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				
Phosporous	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:

			Monitoring Frequency						Count of 90	Excedence	
		90 percentile	•	Number of data points					percentile	acceptable	
Pollutant	Units	concentration limit	License	for the year	Minimum value	Maximum value	Mean	Exceedences	exceedences	limit	Comments
Biochemical oxygen											Tertiary ponds impacted by algae
demand (BOD)	mg/L	20	Special Frequency	12	6	51	23	Yes	5	1	bloom
Total suspended solids											Tertiary ponds impacted by algae
(TSS)	mg/L	30	Special Frequency	12	16	66	38	Yes	5	1	bloom
Oil and Grease	mg/L	10	Special Frequency	12	<5	<5	<5	No	0	1	
pH	pН		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				
Phosporous	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

Troto: all samples hell per			Monitoring Frequency						Count of 90	Excedence	
		90 percentile	required by the	Number of data points					percentile	acceptable	
Pollutant	Units	concentration limit	License	for the year	Minimum value	Maximum value	Mean	Exceedences	exceedences	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	pН		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							
Phosporous	mg/L		Special Frequency	0							
Total Kjeldahl Nitrogen	mg/L		Special Frequency	0							
Faecal Coliforms	CFU/100ml		Special Frequency	0							