

## MANILLA WASTEWATER TREATMENT PLANT - YEARLY SUMMARY FOR 2016/17

LICENCE PERIOD: 1st Feb 2016 - 31st Jan 2017

POINT 1 NOTE: Monitoring Frequency - Quarterly

Pollutant	Units	90th Percentile Concentration Limit	Monitoring Frequency	Number of Samples	Minimum Value	Maximum Value	Mean	Median	Exceedances (Yes / No)
TSS	mg/L	30	Quarterly	4	3	24	14.0	-	No
BOD	mg/L	20	Quarterly	4	3	11	7.0	-	No
Calcium	mg/L	-	Quarterly	4	13	30	21	-	-
Conductivity	uS/cm	-	Quarterly	4	670	710	694	-	-
Faecal Coliforms	CFU/100mL	-	Quarterly	4	<1	280	132	-	-
Magnesium	mg/L	-	Quarterly	4	8	24	15.3	-	-
Nitrite	mg/L	-	Quarterly	4	<0.1	0.5	0.35	-	-
Nitrate	mg/L	-	Quarterly	4	<0.1	1.5	0.7	-	-
Ammonia	mg/L	-	Quarterly	4	0.4	0.7	0.53	-	-
Oil and Grease	mg/L	-	6 Monthly	4	<5	<5	<5	-	-
OC/OP	ug/L	-	Yearly	1	<PQL	<PQL	<PQL	-	-
pH	pH Units	-	Quarterly	4	8.4	9.1	8.8	-	-
Total Phosphorus	mg/L	-	Quarterly	4	1.65	2.61	1.85	-	-
Potassium	mg/L	-	Quarterly	4	19	21	20.3	-	-
Sodium	mg/L	-	Quarterly	4	87	13	99	-	-
SAR		-	Quarterly	4	3.0	5.7	4.28	-	-
TKN	mg/L	-	Quarterly	4	2.3	2.7	2.5	-	-

POINT 2 NOTE: Monitoring Frequency - Yearly

Pollutant	Units	90th Percentile Concentration Limit	Monitoring Frequency	Number of Samples	Minimum Value	Maximum Value	Mean	Median	Exceedances (Yes / No)
CEC	cm/kg	-	Yearly	1	12.5	12.5	12.5	12.5	-
Chloride	mg/kg	-	Yearly	1	40	40	40	40	-
Conductivity	uS/cm	-	Yearly	1	64	64	64	64	-
Ex. Calcium	mg/kg	-	Yearly	1	6.9	6.9	6.9	6.9	-
Ex. Magnesium	mg/kg	-	Yearly	1	3.6	3.6	3.6	3.6	-
Ex. Potassium	mg/kg	-	Yearly	1	1.0	1.0	1.0	1.0	-

Ex. Sodium	mg/kg	-	Yearly	1	1.0	1.0	1.0	1.0	-
Extractable Phos.	mg/kg	-	Yearly	1	30	30	30	30	-
Moisture Content	%	-	3 Yearly	1	10.3	10.3	10.3	10.3	-
Nitrate	mg/kg	-	Yearly	1	2.2	2.2	2.2	2.2	-
Ammonia	mg/kg	-	Yearly	1	<50	<50	<50	<50	-
Total Nitrogen	mg/kg	-	3 Yearly	-	-	-	-	-	-
pH	pH Units	-	Yearly	1	7.2	7.2	7.2	7.2	-
Total Phosphorus	mg/kg	-	3 Yearly	-	-	-	-	-	-
PSC	mg/kg	-	3 Yearly	-	-	-	-	-	-
SHC	mm/week	-	3 Yearly	-	-	-	-	-	-
SAR		-	Yearly	1	5.31	5.31	5.31	5.31	-

**POINT 3,4,5,6** NOTE: Monitoring Frequency - Quarterly

Pollutant	Units	90th Percentile Concentration Limit	Monitoring Frequency	Number of Samples	Minimum Value	Maximum Value	Mean	Median	Exceedances (Yes / No)
Conductivity	uS/cm	-	Quarterly	0	DRY	DRY	DRY	DRY	-
Nitrate	mg/L	-	Yearly	0	DRY	DRY	DRY	DRY	-
Ammonia	mg/L	-	Yearly	0	DRY	DRY	DRY	DRY	-
Total Nitrogen	mg/L	-	Yearly	0	DRY	DRY	DRY	DRY	-
Orthophosphate	mg/L	-	Yearly	0	DRY	DRY	DRY	DRY	-
pH	pH Units	-	Quarterly	0	DRY	DRY	DRY	DRY	-
Total Phosphorus	mg/L	-	Yearly	0	DRY	DRY	DRY	DRY	-
Standing Water Level	m	-	Quarterly	0	DRY	DRY	DRY	DRY	-

**POINT 7** NOTE: Monitoring Frequency - Each Overflow Event

Pollutant	Units	90th Percentile Concentration Limit	Monitoring Frequency	Number of Samples	Minimum Value	Maximum Value	Mean	Median	Exceedances (Yes / No)
BOD	mg/L	-	As above	2	4	16	10.0	10.0	-
Total Nitrogen	mg/L	-	As above	2	2.3	6.4	4.4	4.4	-
Oil and Grease	mg/L	-	As above	2	<5	6	<5	<5	-
Total Phosphorus	mg/L	-	As above	2	1.62	1.65	1.63	1.63	-
TSS	mg/L	-	As above	2	6	47	26.5	26.5	-