



DUNOGG WASTEWATER TREATMENT WORKS - SEPTEMBER MONTHLY POLLUTION MONITORING SUMMARY

Environment Protection Licence No. 4197
 Date Obtained: 3 October 2017
 Date Published: 19 October 2017

Licensee Hunter Water Corporation
 36 Honeysuckle Drive
 NEWCASTLE WEST NSW 2302

QUALITY MONITORING

Site Description - Effluent Storage Pond												
Site Code 5DU0001												
Pollutant	Unit of Measurement	Sampling Frequency *	No. of times measured during the month for licence reporting	Monthly Summary 1 September 2017 to 30 September 2017								
				Minimum	Mean Value	Median Value	Maximum	3DGM Limit	3DGM Actual	100%ile Limit	100%ile Actual	Within Limits
Biochemical Oxygen Demand	milligrams per litre	Weekly	4	4	7	6	11	N/A	N/A	N/A	N/A	N/A
Chlorophyll a	micrograms per litre	Weekly	4	<1.0	3.6	3.0	7.3	N/A	N/A	N/A	N/A	N/A
Faecal Coliforms	colony forming units per 100 mL	Weekly	4	360	1320	1410	2100	N/A	N/A	N/A	N/A	N/A
Nitrogen (Total)	milligrams per litre	Weekly	4	19.0	20.3	19.9	22.4	N/A	N/A	N/A	N/A	N/A
Oil and Grease	milligrams per litre	Weekly	4	<2	<2	<2	<2	N/A	N/A	N/A	N/A	N/A
pH	pH	Weekly	4	7.71	7.87	7.89	7.98	N/A	N/A	N/A	N/A	N/A
Total Phosphorus-unfiltered sample	milligrams per litre	Weekly	4	3.4	3.5	3.5	3.6	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	milligrams per litre	Weekly	4	1	12	16	17	N/A	N/A	N/A	N/A	N/A

Monitoring data for all samples collected from the Effluent Storage Pond during the month. Relevant samples from the complete data set have been attributed to discharge through each monitoring point and are presented below in separate tables.
 * As per the note under the licence condition M2.3, it is acceptable for the licensee to take a single sample of Storage Pond water (5DU0001) monthly to meet the monitoring requirements for Points 3, 4 and 5, provided that sample is representative of waters discharged via Points 3, 4 and 5.

Site Description - Discharge to Utilisation Area												
EPA Id. No. 3 Site Code 5DU0001												
Pollutant	Unit of Measurement	Sampling Frequency *	No. of times measured during the month for licence reporting	Monthly Summary 1 September 2017 to 30 September 2017								
				Minimum	Mean Value	Median Value	Maximum	3DGM Limit	3DGM Actual	100%ile Limit	100%ile Actual	Within Limits
Biochemical Oxygen Demand	milligrams per litre	Weekly	4	4	7	6	11	N/A	N/A	N/A	N/A	N/A
Chlorophyll a	micrograms per litre	Weekly	4	<1.0	3.6	3.0	7.3	N/A	N/A	N/A	N/A	N/A
Faecal Coliforms	colony forming units per 100 mL	Weekly	4	360	1320	1410	2100	N/A	N/A	N/A	N/A	N/A
Nitrogen (Total)	milligrams per litre	Weekly	4	19.0	20.3	19.9	22.4	N/A	N/A	N/A	N/A	N/A
Oil and Grease	milligrams per litre	Weekly	4	<2	<2	<2	<2	N/A	N/A	N/A	N/A	N/A
pH	pH	Weekly	4	7.71	7.87	7.89	7.98	N/A	N/A	N/A	N/A	N/A
Total Phosphorus-unfiltered sample	milligrams per litre	Weekly	4	3.4	3.5	3.5	3.6	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	milligrams per litre	Weekly	4	1	12	16	17	N/A	N/A	N/A	N/A	N/A

Monitoring data taken from Effluent Storage Pond for each week that discharge occurred during via Point 3. This data is from the same data set that comprises Table 1.
 * As per the note under the licence condition M2.3, it is acceptable for the licensee to take a single sample of Storage Pond water monthly to meet the monitoring requirements for Points 3, 4 and 5, provided that sample is representative of waters discharged via Points 3, 4 and 5.

Site Description - Discharge to Waters - Pump												
EPA Id. No. 4 Site Code 5DU0001												
Pollutant	Unit of Measurement	Sampling Frequency *	No. of times measured during the month for licence reporting #	Monthly Summary 1 September 2017 to 30 September 2017								
				Minimum	Mean Value	Median Value	Maximum	3DGM Limit	3DGM Actual	100%ile Limit	100%ile Actual	Within Limits
Biochemical Oxygen Demand	milligrams per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Chlorophyll a	micrograms per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Faecal Coliforms	colony forming units per 100 mL	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Nitrogen (Total)	milligrams per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Oil and Grease	milligrams per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
pH	pH	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Total Phosphorus-unfiltered sample	milligrams per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	milligrams per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A

No discharge occurred from Point 4 during the month.
 Monitoring data taken from Effluent Storage Pond for each week that discharge occurred during via Point 4. This data is from the same data set that comprises Table 1.
 * As per the note under the licence condition M2.3, it is acceptable for the licensee to take a single sample of Storage Pond water monthly to meet the monitoring requirements for Points 3, 4 and 5, provided that sample is representative of waters discharged via Points 3, 4 and 5.

Site Description - Discharge to Waters - Overflow from Wet Weather Storage Dam												
EPA Id. No. 5 Site Code 5DU0016												
Pollutant	Unit of Measurement	Sampling Frequency *	No. of times measured during the month for licence reporting #	Monthly Summary 1 September 2017 to 30 September 2017								
				Minimum	Mean Value	Median Value	Maximum	3DGM Limit	3DGM Actual	100%ile Limit	100%ile Actual	Within Limits
Biochemical Oxygen Demand	milligrams per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Chlorophyll a	micrograms per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Faecal Coliforms	colony forming units per 100 mL	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Nitrogen (Total)	milligrams per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Oil and Grease	milligrams per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
pH	pH	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Total Phosphorus-unfiltered sample	milligrams per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	milligrams per litre	Weekly	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A

No discharge occurred from Point 5 during the month.
 Monitoring data taken from Effluent Storage Pond for each week that discharge occurred during via Point 4. This data is from the same data set that comprises Table 1.
 * As per the note under the licence condition M2.3, it is acceptable for the licensee to take a single sample of Storage Pond water monthly to meet the monitoring requirements for Points 3, 4 and 5, provided that sample is representative of waters discharged via Points 3, 4 and 5.

Site Description - Humus Clarifier Effluent												
EPA Id. No. 8 Site Code 5DU0002												
Pollutant	Unit of Measurement	Sampling Frequency	No. of times measured during the month for licence reporting	Monthly Summary 1 September 2017 to 30 September 2017								
				Minimum	Mean Value	Median Value	Maximum	3DGM Limit	3DGM Actual	100%ile Limit	100%ile Actual	Within Limits
Biochemical Oxygen Demand	milligrams per litre	Weekly	4	40	66	68	90	N/A	N/A	N/A	N/A	N/A
Chlorophyll a	micrograms per litre	Weekly	4	1.8	4.3	3.9	7.7	N/A	N/A	N/A	N/A	N/A
Faecal Coliforms	colony forming units per 100 mL	Weekly	4	960000	1515000	1100000	2900000	N/A	N/A	N/A	N/A	N/A
Nitrogen (Total)	milligrams per litre	Weekly	4	27.2	29.5	28.5	33.8	N/A	N/A	N/A	N/A	N/A
Oil and Grease	milligrams per litre	Weekly	4	<2	3	<2	6	N/A	N/A	N/A	N/A	N/A
pH	pH	Weekly	4	7.26	7.29	7.30	7.30	N/A	N/A	N/A	N/A	N/A
Total Phosphorus-unfiltered sample	milligrams per litre	Weekly	4	5.9	6.5	6.6	6.9	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	milligrams per litre	Weekly	4	29	62	47	124	N/A	N/A	N/A	N/A	N/A