

Waikato District Council Wastewater Treatment Monitoring Results

Site
Consent number
Report Period

Huntly
119647
July 2011 - June 2012

Discharge Limit Exceeded	
nr = no recorded data	
Values < number shown	

1 Discharge Limits - Monthly Tests from Oxidation Pond 2

Parameter	Unit	Consent value	Consent value	Median	10 Percentile	90 Percentile	Average	Maximum	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
		Median	90 Percentile																	
pH between 6 - 9				8.21	7.54	9.14	8.39	10.40	7.63	7.8	7.53	8.65	8.36	9.14	9.1	9.1	10.4	8.05	7.6	7.34
Ammoniacal Nitrogen (med from 10)	g/cum	18	30	0.03	0.01	3.85	1.89	16.50	0.031	0.023	4.1	16.5	1.6	0.23	0.026	0.093	0.02	0.01	0.011	0.025
Total Nitrogen	g/cum	40		11.95	4.04	16.09	10.28	16.55	4.04	2.773	4.671	16.55	4.07	8.9	11.3	14.2	16.2	15.1	12.6	13
Total Phosphorous	g/cum	8		3.94	2.48	4.50	3.72	4.50	2.4	2.2	3.3	4.5	3.8	4.2	3.2	3.6	4.08	4.5	4.5	4.3
cBOD5 (median from 10)	g/cum	30	90	24	19.0	27.9	23.2	30	19	19	30	17	23	26	28	20	26	24	19	27
Suspended Solids (median from 10)	g/cum	90	150	81	37	121	81	174	43	36	19	50	66	83	96	122	174	114	88	79
E.coli	MPN/100ml	3500		2900	1000	16000	6882	27000	2000	1000		400	2800	6000	27000	16000	2000	2900	11000	4600

*From 1 Dec 2012 limits change

** Ecoli sampled weekly from November. Highest result entered on this page. See Individual monthly pages for all results.

2 Characterisation Values - Monthly Tests from Oxidation Pond 2

Parameter	Units	Median	10 Percentile	90 Percentile	Average	Maximum	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Conductivity	g/cum	413	318	727	502	1323	315	289	753	488	395	462	349	379	1323	413	441	412
Temp	*C	19	13	23	18	23	11.8	13.2	13.6	20	19.8	23.1	22.9	22.9	18.6	19.8	13.4	14.4
Colour							green	green/grey	light brown	green	green	green	green	green	green	green	green	green
Odour							slight	slight	none	slight	slight	slight	slight	slight	slight	some	slight	slight

3 Characterisation Values - monthly grab sample from Oxidation Pond 2

Parameter	Units	6/07/2011 @ 1pm	3/08/2011 @ 2pm	13/9/11 @ 10.10am	5/10/11 @ 1.25pm	16/11/11 @ 11.20am	8/12/11 @ 10.50am	16/1/12 @ 1.40pm	1/2/12 @ 12.20pm	1/3/12 @ 1pm	3/4/12 @ 12.20pm	3/5/12 @ 10.30am	6/6/12 @ 12.20pm
DO	grab sample	11.1	10.57	5.94	19.18	9.41	14.29	13.4	10.4	13.45	10.98	8.9	6.47

4 Characterisation Values - Daily Total In Flows

	Median	10 Percentile	90 Percentile	Average	Maximum	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Minimum Daily Flow	1821	1649	2028	1836	2556	2556	1895	1892	1822	1780	1641	2043	1819	1217	1719	1762	1884
Average Daily Flow	2267	1947	3259	2505	4500	4500	2252	2220	2358	1955	2809	3309	1946	2042	1904	2283	2485
Maximum Daily Flow	3454	2393	9925	4823	10000	10000	3024	2873	4335	2343	10000	9247	2235	3193	2841	4073	3715
Monthly Total	69159	57265	98060	76002	139511	139511	67553	66613	73098	58647	87084	99279	54494	63316	57111	70765	74553

5 Characterisation Values - Daily Total Out Flows

Consent limit cum/day	11500	Median	10 Percentile	90 Percentile	Average	Maximum	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Minimum Daily Flow		1279	255	1995	1185	2479	2479	219	843	1386	1195	574	1711	130	1362	1431	866	2027
Average Daily Flow		2324	1574	3035	2372	4061	4061	2810	2078	2254	1564	2418	3060	1561	1986	1663	2393	2611
Maximum Daily Flow		3672	2223	5917	3752	6164	6164	4132	2644	3634	2189	6086	4395	2527	3349	2182	4017	3709
Monthly Total		72038	47228	94073	72600	125881	125881	87101	62351	69877	46933	74972	94848	45272	61565	49879	74198	78317

6 Characterisation Values - Nutrient Loading Discharged to Waikato River

	Median	10 Percentile	90 Percentile	Average	Maximum	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Total Nitrogen	23.64	9.75	34.51	23.29	37.30	16.41	10.11	9.71	37.30	6.37	21.52	34.57	22.17	32.17	25.11	30.16	33.9
Total Phosphorous	8.92	5.97	10.71	8.50	11.23	9.75	6.18	6.86	10.14	5.94	10.16	9.79	5.62	8.10	7.48	10.77	11

7 Median Summer Total Nitrogen/Phosphorus

Consent value	Actual Value	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11
Median	Median						
20	28	21.52	34.57	22.17	32.17	25.11	30.16
8	9	10.16	9.79	5.62	8.10	7.48	10.77

8 Combined Summer Mass Load - Huntly + Ngaruawahia

Consent value	Actual Value	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11
Median	Median						
		21.52	34.57	22.17	32.17	25.11	30.16
		17.34	35.70	23.80	31.6	22.2	21.5
57	49	38.86	70.28	45.97	63.77	47.32	51.62
		10.16	9.79	5.62	8.10	7.48	10.77
		6.76	6.18	4.65	6.3	3.7	5.8
17.3	15	16.92	15.97	10.27	14.42	11.18	16.56

Huntly Total Nitrogen	kg/day
Ngaruawahia Total Nitrogen	kg/day
Combined Total Nitrogen	kg/day
Huntly Total Phosphorus	kg/day
Ngaruawahia Total Phosphorus	kg/day
Combined Total Phosphorus	kg/day

9 Characterisation Values - Oxidation Ponds Outlet Comparison 2008-12 Results

Parameter	Units	2008-09	2009-10	2010-11	2011-12
Median	Median				
21	18	17.5	23.5		
89	86	75	81.0		
5.9	6.5	4.3	3.9		
0.045	0.260	0.090	0.029		

cBOD5	g/m3
SS	g/m3
TP	g/m3
Ammoniacal Nitrogen	g/m3