

Waikato District Council Wastewater Treatment Monitoring Results
 Site Raglan
 Consent number 971390
 Report date July 2011- June 2012

Discharge Transgression or Limit Exceeded	
suspect data or no data recorded	
Value actually < number shown i.e <2 MPN/100mL	

1 Discharge Limits - Monthly Tests from Outlet Post UV

Parameter	Unit	Consent value		Median	10 Percentile	90 Percentile	Average	Maximum	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	15-Dec-11	22-Dec-11	28-Dec-11	10-Jan-12	19-Jan-12	24-Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
		Median	Maximum																					
SS (median from 12)	g/cum	20	30	38	9	123	52	124	31	41	11	9	8	123					100	77	38	124	12	9
cBOD5 (median from 12)	g/cum	10	20	8	3	19	21.26	159	8.2	8	2.7	3	3	13					19	10	5	159	3	2
FC (median from 12)	MPN/100ml	14	43	2	2	10	5	10	2	1	2	2	2	10	10	10	2	10	10	2	4	2	2	2
Enterococci (15 Dec - 30 Jan)	MPN/100ml	5 of 6 samples	35	10	5.2	10	8.4	10						10	10	10	2	10	10					

* The result is <10 but the < sign makes my percentages out of kilter

2 Characterisation Values - Quarterly Tests from Outlet Post UV

Parameter	Units	Median	10 Percentile	90 Percentile	Average	Maximum	Aug-11	Nov-11	Feb-12	May-12
Total Ammoniacal Nitrogen	g/cum	4.4	2.24	9.92	5.8	11.3	1.7	4.4		11.3
TKN	g/cum	6	5.2	11.04	7.77	12.3	5	6		12.3
Nitrate NO3-N	g/cum	4.1	3.7	7.62	5.4	8.5	8.5	4.1		3.6
Nitrite NO2-N	g/cum	0.24	0.1496	0.344	0.25	0.37	0.24	0.37		0.127
Total Nitrogen	g/cum	13.74	11.124	15.5696	13.41	16.027	13.74	10.47		16.03
DRP	g/cum	3.4	2.68	4.2	3.43	4.4	2.5	3.4		4.4
TP	g/cum	3.7	3.22	4.42	3.8	4.6	3.1	3.7		4.6
Temp	*C	14.1	13.3	19.14	15.87	20.4	13.1	20.4		14.1
Dissolved Oxygen		7.69	6.034	7.698	7.00	7.7	7.69	5.62		7.7
Alkalinity	g/cum	110	82.8	158	118.67	170	76	110		170
pH		7.88	7.616	8.272	7.93	8.37	8.37	7.88		7.55
Conductivity	uS	500	404.8	720.8	552.33	776	381	500		776
UV Transmittance (monthly)	%T, 1 cm cell	34.5	19.6	44.5	32.75	46	41	16	28	46
UV Absorbance (monthly)	AU, 1 cm cell	0.359	0.25	0.5044	0.37	0.556	0.384	0.214	0.556	0.334

** Pumps not working no data received

3 Characterisation Values - Daily Total In Flows (From Marine Parade Pump Station)

Date	Flow cum/day	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 In Flow	cum/day	790	763	895	806	905	904	735	761	811	782	780	818	776	790	790	814	905
Average Daily In Flow	cum/day	989	911	1295	1079	1392	1296	794	949	1392	957	1148	1280	907	972	972	1006	1269
Maximum Daily In Flow	cum/day	1792	1341	3340	2059	3772	2530	1047	1544	3772	1331	3430	2508	1433	1792	1792	1564	1969
Total Monthly In Flow	cum/day	30175	25706	40134	32768	43164	40183	24618	28484	43164	28707	34443	39691	25397	30125	30125	30224	38055

4 Characterisation Values - Daily Total Out Flows

Consent limit cum/day	2600																							
Date	Flow cum/day	Max 20 days/yr	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 Out Flow	cum/day		2	1	52	21	162	162	12	1	56	1	11	1	2	1	1	4	2					
Average Daily Out Flow	cum/day		961	729	1293	1005	1405	1300	823	892	1405	870	1013	718	949	719	973	1166						
Maximum Daily Out Flow	cum/day		1953	1775	2457	2046	2538	2538	1548	1773	2240	1883	2479	1941	1789	2254	1928	2215	1965					
Total Monthly Out Flow	cum/day		28922	21616	40082	29837	43561	40299	22140	25882	43561	24348	30380	38131	20090	29415	21558	28429	33809					
Number of Days Discharged Outside Tides (maximum 20)													2											

11 hrs

5 Characterisation Values - UV Discharge Outlet Comparison 2008-09 to 2009-2010 to 2010-11 Results

Parameter	Unit	Consent value	Median 2008-09	Median 2009-10	Median 2010-11	Median 2011-12
SS	g/cum	20	59	74	23	38
cBOD5	g/cum	10	11	12	6	8
FC	MPN/100ml	14	2	2	2	2
Enterococci (17 Dec - 30 Jan)	MPN/100ml	35	20	6	2	10

** For additional characterisation data refer DATA table