

Waikato District Council Wastewater Treatment Monitoring Results
 Site **Maramarua**
 Consent number **101961**
 Report Period July 2008 to June 2009

Discharge Transgression	
Discharge Limit Exceeded	
nr = no recorded data	
suspect/interpolated data	

1 Characterisation Values - Monthly Tests from Treated Waste Discharge Tank

Parameter	Units	Median	10 Percentile	90 Percentile	Average	Maximum	08-Jul-08	07-Aug-08	11-Sep-08	14-Oct-08	11-Nov-08	10-Dec-08	13-Jan-09	12-Feb-09	06-Mar-09	09-Apr-09	05-May-09	03-Jun-09
Suspended Solids	g/m3	7.4	3.7	10.8	7.6	16.0	3.5	7.5	5.6	5.6	8.2	11	7.3	8.3	16	9.3	6	3.3
BOD	g/m3	2.4	1.8	5.4	2.9	7.6	1.1	2.4	2.3	2.3	5.6	3.1	2.4	2.6	7.6	1.8	1.9	1.9
Ammoniacal-N	g/m3	3.3	1.4	7.1	3.8	7.7	1	4.5	2.1	2.1	3	3.5	7.7	5.1	2.7	4.9	7.3	1.3
Total Kjeldahl Nitrogen	g/m3	5.9	3.2	6.9	5.6	8.3	2.9	6.2	4.2	4.2	5.5	5.3	8.3	5.9	6.1	6.7	6.9	3.2
Nitrate	g/m3	33.5	24.0	48.0	34.8	51.0	27	13	24	24	32	35	48	48	32	47	51	36
Nitrite	g/m3	0.110	0.110	0.110	0.110	0.110	0.027	0.18	.22	0.11	0.17	0.13	0.34	0.18	0.28	0.020	0.043	0.082
Total nitrogen	g/m3	38.7	24.5	56.1	39.9	57.9	29.9	19.2	28.2	24.11	37.5	40.3	56.3	53.9	38.1	53.7	57.9	39.2
DRP	g/m3	6.0	3.6	7.7	5.8	8.4	3.5	2.9	6	6	7.2	7.8	8.4	5.8	4.4	6.7	6.2	5
Total Phosphorus	g/m3	6.6	3.8	7.8	6.0	8.2	3.7	3	6.7	6.7	7.2	7.9	8.2	5.6	4.9	6.5	6.7	5.1
Faecal coliforms	MPN/100ml	615	230	11700	4993	29000	440	600	180	5500	9000	230	630	230	29000	1600	500	12000
E coli	MPN/100ml	600	180	12000	4096	20000		600	180	1900	9000	80	230	190	20000	700	180	12000
pH (field)	units	5.6	4.7	6.0	5.5	6.2	5.1	6.17	6.04	5.9	5.91	5.3	5.44	5.47	4.68	4.23	5.63	5.87
alkalinity	g/m3	6.4	1.4	32.0	14.4	40.0	3.9	32	28	28	40	4.4	7.7	6.4	1.4	1	5.9	
Conductivity(field)	uS/cm	581.5	381.5	774.6	560.8	810.0	467	375	5.47	440	669	560	810	771	597	775	694	566
Temperature	*C	17.6	12.4	22.4	17.7	24.5	11.4	13.4	15.6	16.5	18.1	20.6	22.5	24.5	21.6	18.2	17.1	12.3
Dissolved Oxygen		5.7	4.2	6.8	5.6	8.0	7.96	6.08	6	6.79	4.1	5.42	4.73	4.16	4.6	4.67	6.01	6.8

2 Daily Discharge Volume

Parameter	2008-09	Limit	Median	10 Percentile	90 Percentile	Average	Maximum	04-Jul-08	11-Jul-08	18-Jul-08	25-Jul-08	01-Aug-08	08-Aug-08	18-Aug-08	25-Aug-08	01-Sep-08	11-Sep-08	15-Sep-08	23-Sep-08
Avg Daily Flow	m3/day	6.0	3.1	2.1	8.5	4.4	15.9	7.0	5.1	3.7	8.3	15.9	8.6	11.4	12.1	6.4	3.3	3.8	3.5
								29-Sep-08	06-Oct-08	14-Oct-08	21-Oct-08	11-Nov-08	17-Nov-08	01-Dec-08	10-Dec-08	15-Dec-08	13-Jan-09	28-Jan-09	18-Feb-09
								1.8	3.1	5.6	3.1	2.7	2.5	2.2	2.7	2.2	2.2	2.5	2.1
								06-Mar-09	25-Mar-09	09-Apr-09	21-Apr-09	05-May-09	15-May-09	09-Jun-09	24-Jun-09				
								2.9	2.0	2.1	2.5	2.5	1.4	3.2	3.3				

3 Comparison of Winter Discharge Volumes

Parameter	2007-08	Limit	Median	10 Percentile	90 Percentile	Average	Maximum	29-Jun-07	05-Jul-07	11-Jul-07	11-Jul-07	16-Jul-07	17-Jul-07	24-Jul-07	30-Jul-07	06-Aug-07	10-Aug-07	17-Aug-07	24-Aug-07	31-Aug-07	07-Sep-07	11-Sep-07	14-Sep-07	21-Sep-07
Avg Daily Flow	m3/day	6.0	5.4	2.9	8.1	5.4	11.0	4.9	6.8	11.0	0.0	3.0	9.0	5.4	6.5	7.6	6.3	5.7	6.7	4.0	4.3	4.2	2.8	3.0
Parameter	2008-09	Limit	Median	10 Percentile	90 Percentile	Average	Maximum	04-Jul-08	11-Jul-08	18-Jul-08	25-Jul-08	01-Aug-08	08-Aug-08	18-Aug-08	25-Aug-08	01-Sep-08	11-Sep-08	15-Sep-08	23-Sep-08					
Avg Daily Flow	m3/day	6.0	6.7	3.5	12.1	7.4	15.9	7.0	5.1	3.7	8.3	15.9	8.6	11.4	12.1	6.4	3.3	3.8	3.5					
Parameter	2009-10	Limit	Median	10 Percentile	90 Percentile	Average	Maximum	8/07/2009	14-Jul-09	22-Jul-09	03-Aug-09	12-Aug-09	17-Aug-09	11-Sep-09	15-Sep-09	24-Sep-09								
Avg Daily Flow	m3/day	6.0	3.4	2.9	7.4	4.7	7.4	5.1	6.7	7.4	3.3	3.2	7.4	3.4	3.0	2.4								

4 Characterisation Values - Monthly Tests from Treated Waste Discharge Tank

Parameter	Units	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
		Median	Median	90 Percentile	90 Percentile	Average	Average
Suspended Solids	g/m3	13.5	7.4	47.1	10.8	28.2	7.6
BOD	g/m3	9.5	2.4	38.9	5.4	16.5	2.9
Ammoniacal-N	g/m3	14.0	3.3	31.2	7.1	17.4	3.8
Total Kjeldahl Nitrogen	g/m3	15.5	5.9	32.6	6.9	19.9	5.6
Nitrate	g/m3	51.0	33.5	67.8	48.0	44.4	34.8
Nitrite	g/m3	4.500	0.110	4.500	0.110	4.500	0.110
Total nitrogen	g/m3	53.5	38.7	90.3	56.1	61.3	39.9
DRP	g/m3	7.9	6.0	10.0	7.7	7.6	5.8
Total Phosphorus	g/m3	7.5	6.6	10.9	7.8	8.0	6.0
Faecal coliforms	MPN/100ml	9950	615	393000	11700	275751	4993
E coli	MPN/100ml	370	600	73200	12000	26699	4096
pH (field)	units	6.5	5.6	7.0	6.0	6.5	5.5
alkalinity	g/m3	81	6	233	32	112	14
Conductivity(field)	uS/cm	811	582	1190	775	893	561
Temperature	*C	18.5	17.6	21.0	22.4	18.0	17.7
Dissolved Oxygen		4.1	5.7	6.8	6.8	4.7	5.6