

SWARTLAND MUNICIPALITY: COMPLIANCE SAMPLE RESULTS OF FINAL EFFLUENT

pH	WWTW	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	No of Sam	No of Sam	% Compli	Requirement
	Malmesbury	7.30	6.60	7.09	7.05	6.87	7.04	7.16	7.22	7.32		6.50	6.30	11	11	100.0%	5.5 - 9.5 General Limit
Darling	7.30	7.10	7.20	7.30	7.37	7.79	7.19	6.90	7.40	7.49	6.95	7.20	12	12	100.0%	5.5 - 9.5 General Limit	
Moorreesburg	6.90	8.80	8.70	8.00	8.05	6.85	8.36	8.27	7.57	7.20	7.60	6.90	12	12	100.0%	5.5 - 9.5 General Limit	
PPC	5.53	4.24	6.80	6.32	7.24	7.12	7.02	6.76	6.89	4.69	6.15	7.43	12	10	83.3%	5.5 - 9.5 General Limit	
Chatsworth	6.49	7.40	7.30	7.53	7.19	7.31	7.77	7.11	7.73	7.52	7.47	7.85	12	12	100.0%	6 - 9 for irrigation up to 0.5 MI/d	
Kalbaskraal	7.35	6.33	7.06	7.23	7.42	7.22	7.40	7.14	7.34	7.13	7.50	7.38	12	12	100.0%	6 - 9 for irrigation up to 0.5 MI/d	
Koringberg	7.57	7.17	7.22	7.86	7.47	7.69	7.46	7.74	7.30	7.04	7.53	7.57	12	12	100.0%	6 - 9 for irrigation up to 0.5 MI/d	
Riebeek Kasteel	6.86	7.54	7.19	7.60	7.39	7.94	7.52	7.46	7.21	7.43	7.34	7.59	12	12	100.0%	6 - 9 for irrigation up to 0.5 MI/d	
Riebeek Wes	7.25	7.53	7.24	7.35	7.58	7.45	7.70	7.51	6.79	7.18	7.20	7.39	12	12	100.0%	6 - 9 for irrigation up to 0.5 MI/d	

COD (mg/l)	WWTW	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	No of Sam	No of Sam	% Compli	Requirement
	Malmesbury	46.1	18.4	56.9	38.7	122	77.3	44.4	41.8	34.4	28.5	34.2	28.1	12	10	83.3%	75 General Limit
Darling	41.6	30.8	42.9	31.7	42.3	27.2	39.2	25.3	24.8	15.7	25.2	39.3	12	12	100.0%	75 General Limit	
Moorreesburg	44.9	30.4	56.6	50.8	62	70.9	86.4	42.2	46.6	32.2	46.5	36.1	12	11	91.7%	75 General Limit	
PPC	209	24.4	23.3	40.6	14	70.5	20	27.7	21.9	45.6	38.9	36.9	12	11	91.7%	75 General Limit	
Chatsworth	386	269	326	212	395	292	226	218	335	204	245	224	12	12	100.0%	400 for irrigation up to 0.5 MI/d	
Kalbaskraal	112	494	323	339	337	344	503	736	690	627	426	256	12	6	50.0%	400 for irrigation up to 0.5 MI/d	
Koringberg	493	433	694	801	1011	1029	975	702	791	784	750	510	12	0	0.0%	400 for irrigation up to 0.5 MI/d	
Riebeek Kasteel	176	116	108	126	127	181	202	227	229	136	231	157	12	12	100.0%	400 for irrigation up to 0.5 MI/d	
Riebeek Wes	198	63.6	106	126	123	139	144	174	305	170	218	39.3	12	12	100.0%	400 for irrigation up to 0.5 MI/d	

TSS (mg/l)	WWTW	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	No of Sam	No of Sam	% Compli	Requirement
	Malmesbury	10	25	95	333	18	16	5	8	4	4	4	4	12	10	83.3%	25 General Limit
Darling	4	4	4	5	15	9	8	4	7	4	5	4	12	12	100.0%	25 General Limit	
Moorreesburg	11	56	5	4	4	6	17	10	5	7	5	5	12	11	91.7%	25 General Limit	
PPC	14	8	4	20	4	28	5	8	15	15	5	10	12	11	91.7%	25 General Limit	
Chatsworth	63	56	48	55	31	13	11	42	52	16	46	33	12	3	25.0%	N/A for irrigation up to 0.5 MI/d	
Kalbaskraal	33	24	320	77	115	32	47	85	50	180	21	23	12	3	25.0%	N/A for irrigation up to 0.5 MI/d	
Koringberg	157	51	81	46	424	157	49	63	119	322	78	45	12	0	0.0%	N/A for irrigation up to 0.5 MI/d	
Riebeek Kasteel	36	18	8	32	72	32	48	34	62	24	52	20	12	4	33.3%	N/A for irrigation up to 0.5 MI/d	
Riebeek Wes	43	6	11	29	72	10	23	18	60	13	30	34	12	6	50.0%	N/A for irrigation up to 0.5 MI/d	

Ammonia (mg/l)	WWTW	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	No of Sam	No of Sam	% Compli	Requirement
	Malmesbury	4.2	5.3	7.1	4.8	34.3	22.1	8	17.7	0.15	0.88	1.9	0.15	12	7	58.3%	6 General Limit
Darling	0.32	2.1	11.9	1.1	2.6	3	1.4	0.84	0.16	0.15	0.15	0.15	12	11	91.7%	6 General Limit	
Moorreesburg	7.8	2.2	2.1	12.6	16.6	16.7	19.6	13.1	13.4	12.1	18.6	6	12	3	25.0%	6 General Limit	
PPC	3.4	1.5	0.32	0.42	1.2	15.7	0.15	0.44	1.5	0.15	0.2	0.15	12	11	91.7%	6 General Limit	
Chatsworth	52.0	65.2	24.5	33.5	21.8	28.1	19.1	9.7	36.5	52.9	23.0	60.5	12	0	0.0%	N/A for irrigation up to 0.5 MI/d	
Kalbaskraal	54.3	52.8	23.5	32.6	20.1	57.5	47	36.3	48	44.7	56.2	78.9	12	0	0.0%	N/A for irrigation up to 0.5 MI/d	
Koringberg	41	119	31.7	105	117	117	108	86.2	89.7	134	110	152	12	0	0.0%	N/A for irrigation up to 0.5 MI/d	
Riebeek Kasteel	36.3	41.8	20.4	23	21.7	84.3	24.3	76.5	72.9	96.6	66.8	82.8	12	0	0.0%	N/A for irrigation up to 0.5 MI/d	
Riebeek Wes	49.7	44.4	21	20.8	24	29.6	21.5	44.7	39.3	94	56.4	91.1	12	0	0.0%	N/A for irrigation up to 0.5 MI/d	

Faecal Coliforms (org/100ml)	WWTW	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	No of Sam	No of Sam	% Compli	Requirement
	Malmesbury	411	436	154	2419	1001	1001	16	1001	1001	165	24	722	12	7	58.3%	1 000 General Limit
Darling	11	15	0	0	34	1001	50	1	124	78	173	148	12	11	91.7%	1 000 General Limit	
Moorreesburg	24	0	288	36	0	3	1001	613	109	172	1	205	12	11	91.7%	1 000 General Limit	
PPC	1001	0	0	0	74	17	1	1001	2	0	0	276	12	10	83.3%	1 000 General Limit	
Chatsworth	1001	1001	1001	2419	1001	1001	1	345	326	291	343	2420	12	12	100.0%	< 100 000 for irrigation up to 0.5 MI/d	
Kalbaskraal	1001	1001	1001	2419	1001	1001	1001	1001	1120	2419	691	2419	12	12	100.0%	< 100 000 for irrigation up to 0.5 MI/d	
Koringberg	1001	1001	1001	2419	0	1001	1001	1001	1732	2419	2419	2419	12	12	100.0%	< 100 000 for irrigation up to 0.5 MI/d	
Riebeek Kasteel	1001	1001	1001	2419	2	1001	1001	1001	1001	2419	78	517	12	12	100.0%	< 100 000 for irrigation up to 0.5 MI/d	
Riebeek Wes	1001	1001	190	2419	5	46	770	1001	1733	2419	0	921	12	12	100.0%	< 100 000 for irrigation up to 0.5 MI/d	

Conductivity	WWTW	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	No of Sam	No of Sam	% Compli	Requirement
	Malmesbury	125	111	121	111	145	165	137	129	106			113	127	11	10	90.9%
Darling	74.9	74.2	87.5	68.6	75.6	85.9	104	79.5	78.5	77.6	88.4	83.5	12	12	100.0%	Max 150 General Limit	
Moorreesburg	128	296	180	111	172	181	196	135	130	121	128	115	12	7	58.3%	Max 150 General Limit	
PPC	33.5	37.8	57.1	63.5	54.7	80.6	53.5	43.2	61.5	64.1	63.1	86.2	12	12	100.0%	Max 150 General Limit	
Chatsworth	120	125	132	133	149	156	189	185	157	167	158	133	12	12	100.0%	200 for irrigation up to 0.5 MI/d	
Kalbaskraal	113	112	104	109	127	141	224	162	183	166	141	129	12	11	91.7%	200 for irrigation up to 0.5 MI/d	
Koringberg	245	243	242	268	251	240	206	188	185	188	177	206	12	4	33.3%	200 for irrigation up to 0.5 MI/d	
Riebeek Kasteel	105	133	125	143	150	144	151	134	142	136	136	132	12	12	100.0%	200 for irrigation up to 0.5 MI/d	
Riebeek Wes	116	108	105	114	118	140	151	151	143	154	140	126	12	12	100.0%	200 for irrigation up to 0.5 MI/d	

Nitrate Nitrogen	WWTW	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	No of Sam	No of Sam	% Compli	Requirement
	Malmesbury	6.4	2.7	23.5	8.1	3.3	2.4	3.3	2	0.2	6.8	14	8.9	12	11	91.7%	15 General Limit
Darling	3.7	1.2	0.7	4.6	3	3.2	0.6	4.4	2.5	4.1	14	1.3	12	12	100.0%	15 General Limit	
Moorreesburg	16.4	23.9	13.5	8.4	1.2	2.3	3.3	0.2	0.2	9.3	0.8	16.5	12	9	75.0%	15 General Limit	
PPC	22.3	8.2	8.8	14.7	12.1	16.4	7	10.8	7.9	21.6	10	18.1	12	8	66.7%	15 General Limit	
Chatsworth	3.2	5.2	2.5	7	6	4.2	6	12.7	1.8	11.3	0.2	0.2	12	12	100.0%	N/A for irrigation up to 0.5 MI/d	
Kalbaskraal	17.8	11.3	0.2	14.8	3.4	3.5	4.4	1.2	0.2	11.7	0.2	0.2	12	11	91.7%	N/A for irrigation up to 0.5 MI/d	
Koringberg	7	2.6	0.6	0.2	4.3	14.8	10.8	12.1	0.2	6.5	0.2	0.43	12	11	91.7%	N/A for irrigation up to 0.5 MI/d	
Riebeek Kasteel	3	4.2	8.4	16	2.3	26.5	4.2	1.2	0.2	12.6	0.2	0.2	12	10	83.3%	N/A for irrigation up to 0.5 MI/d	
Riebeek Wes	4.1	2.9	6.8	23	0.68	4.7	17	1.5	2.1	20.9	0.2	0.2	12	9	75.0%	N/A for irrigation up to 0.5 MI/d	

Nitrite Nitrogen	WWTW	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec
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