



Sample Points	Sample Point Description	Ammonia	Chloride	Fluoride	M-Alkalinity	Nitrate	Phosphate	Sulphate	Chemical Oxygen Demand	Conductivity	pH	E. coli
<b>Sewage Works Compliance (where applicable) to General Standard (GN 1191 Oct 1999)</b>												
S-BETHAL	Bethal Sewage Works 26°29'8.05"S 29°27'15.88"E	0.30	50	0.27	125	2.17	0.65	55	26	53	7.5	37904
		11.32	42	0.34	200	7.30	0.59	50	41	69	7.6	726
		23.00	75	0.27	230	0.42	2.00	78	45	79	7.5	2,948,100
		2.10	52	0.22	140	5.10	0.63	58	36	61	7.8	1,310
S-ESW	Ermelo Sewage Works 26°30'42.84"S 29°17'30.43"E	33.00	46	0.26	258	1.80	3.13	88	81	88	7.2	1032800
		35.67	48	0.37	255	<0.1	4.47	80	122	85	7.0	1812900
		24.00	65	0.20	225	0.10	1.30	95	175	82	7.1	1,678,830
		25.00	25	0.18	255	0.28	3.40	44	165	79	7.1	1,334,600
S-TUTU	Tutukani Sewage Works 26°47'36.70"S 29°17'30.43"E	<0.2	39	36.00	93	9.05	0.56	71	22	59	7.4	3587
		10.62	56	0.25	74	14.00	1.15	85	28	59	7.3	17
		0.20	73	0.18	81	13.00	0.10	58	22	59	7.5	27,200
		0.12	58	0.20	58	16.00	0.16	64	28	54	7.2	225
S-ND-SOUTH	New Denmark Colliery - South Shaft 26°44'41.51"S 29°18'31.70"E	2.10	52	37.00	120	37.00	1.30	64	51	78	7.3	56285
		2.00	85	0.28	113	10.35	1.30	69	39	76	7.5	549
		0.39	72	0.25	120	4.40	1.60	52	41	71	7.5	7,110
		10.00	70	0.42	150	2.00	2.50	46	39	68	7.4	5,440

**Key**

VE	Vaal River above Standerton	0.12	-	1 July 16 - 30 Sept 16
		0.12	-	1 Oct 16 - 31 Dec 16
		0.12	-	1 Jan 17 - 31 Mar 17
		0.12	-	1 Apr 17 - 30 Jun 17

**Water Quality Guidelines**

	-	Ideal
	-	Acceptable
	-	Tolerable
	-	Unacceptable

Sewage Works Compliance to General Standard (GN 1191 Oct 1999)			
Variables	Measured as	Acceptable Management Target	Unacceptable
<b>Physical</b>			
Conductivity	mS/m	<150	>=150
pH	pH units	5.5 - 9.5	< 5.5; >9.5
<b>Organic</b>			
Chemical Oxygen Demand (COD)**	mg/l	<75	>=75
<b>Macro Elements</b>			
Ammonia (NH <sub>4</sub> )	mg/l	<3	>=3
Fluoride (F)	mg/l	<1	>=1
Nitrate (NO <sub>3</sub> )	mg/l	<15	>=15
Phosphate (PO <sub>4</sub> )	mg/l	<10	>10
<b>Bacteriological</b>			
Faecal coliforms	counts/100ml	<1000	>=1000

\*\* After removal of algae