

**METSI-a-LEKOA
WATER SECTION
DRINKING WATER QUALITY MONITORING FOR EMFULENI LOCAL MUNICIPALITY**

All Municipalities are required to have a suitable drinking water quality monitoring programme in accordance with the requirements of the latest version of SANS 241 for Drinking Water. The results from the monitoring programme must be submitted to the Department of Water Affairs and Forestry on a monthly basis and published in a suitable media accessible to the relevant stakeholders.

The results of the drinking water quality monitoring programme for Emfuleni Local Municipality for the period June 2008 to June 2009 is as follows:

Percentage compliance versus SANS 241

Parameters:	Unit Of Measure	Number of Samples	SANS 241			
			SANS: Microbiological Safety: Column 3	SANS: Microbiological Safety: Column 4	SANS: Operational Limits: Acceptable Level	SANS: Microbiological Safety: Column 5
Microbiological						
Total Coliforms (operational)	count per 100 mL	35	-	-	100.0	-
Faecal Coliforms (health)	count per 100 mL	14	100.0	100.0	-	100.0
E.coli (health)	count per 100 mL	36	10.0	100.0	-	100.0

Parameters:	Unit Of Measure	Number of Samples	SANS 241	
			SANS: Physical, Organoleptic, Chemical: Class I	SANS: Physical, Organoleptic, Chemical: Class II
Physical				
Colour (aesthetic)	mg/L Pt	14	100.0	100.0
Electrical Conductivity (aesthetic)	mS/m	14	100.0	100.0
Odour (aesthetic)	TON	0	-	-
pH (aesthetic/operational)	pH units	13	100.0	100.0
Taste (aesthetic)	FTN	0	-	-
Total Dissolved Solids (aesthetic)	mg/L	0	-	-

Parameters:	Unit Of Measure	Number of Samples	SANS 241	
			SANS: Physical, Organoleptic, Chemical: Class I	SANS: Physical, Organoleptic, Chemical: Class II
Physical				
Turbidity (aesthetic/operational/indirect health)	NTU	13	92.3	100.0

Parameters:	Unit Of Measure	Number of Samples	SANS 241	
			SANS: Physical, Organoleptic, Chemical: Class I	SANS: Physical, Organoleptic, Chemical: Class II
Chemical				
Aluminium (health)	mg/L as Al	14	100.0	100.0
Ammonia (operational)	mg/L as N	0	-	-
Antimony (health)	ug/L as Sb	0	-	-
Arsenic (health)	mg/L as As	0	-	-
Cadmium (health)	mg/L as Cd	12	100.0	100.0
Calcium (aesthetic/operational)	mg/L as Ca	14	100.0	100.0
Chloride (aesthetic)	mg/L as Cl-	0	-	-
Chromium (health)	mg/L as Cr	0	-	-
Cobalt (health)	ug/L as Co	0	-	-
Copper (health)	mg/L as Cu	14	100.0	100.0
Cyanide (recoverable) (health)	ug/L as CN-	0	-	-
Dissolved Organic Carbon (aesthetic/health)	mg/L as C	0	-	-
Fluoride (health)	mg/L as F-	14	100.0	100.0
Iron (aesthetic/operational)	mg/L as Fe	14	100.0	100.0
Lead (health)	mg/L as Pb	14	100.0	100.0
Magnesium (aesthetic/health)	mg/L as Mg	14	100.0	100.0
Manganese (aesthetic)	mg/L as Mn	14	100.0	100.0
Mercury (health)	mg/L as Hg	0	-	-
Nickel (health)	ug/L as Ni	0	-	-
Nitrate (health)	mg/L as N	14	100.0	100.0
Nitrates and Nitrites (health)	mg/L as N	0	-	-
Phenols (aesthetic/health)	ug/L	0	-	-
Potassium (operational/health)	mg/L as K	0	-	-
Selenium (health)	mg/L as Se	0	-	-
Sodium (aesthetic/health)	mg/L as Na	0	-	-
Sulphate (health)	mg/L as SO4=	14	100.0	100.0
Total Trihalomethanes (health)	ug/L	0	-	-
Vanadium (health)	ug/L as V	0	-	-
Zinc (aesthetic/health)	mg/L as Zn	14	100.0	100.0

Quality of Water System	Microbiological requirement	Chemical requirement	
	Column 5 of Table 1	Class I	Class II
Excellent>	>= 99%%	>= 95%%	>= 97%%
Good	>= 98%%	>= 90%%	>= 95%%
Fair	>= 97%%	>= 85%%	>= 90%%
Poor	<97%%	<85%%	<90%%