

NATIONAL EFFLUENT STANDARDS

DETERMINANTS	GENERAL*	SPECIAL*
Physical Requirements		
Colour, odor, taste	No substance that will produce colour, odor, taste	
pH	5.5 - 9.5	5.5 – 7.5
Temperature- °C	≤35	≤25
Conductivity-mS/m @ 25°C	NS	
Turbidity-NTU	NS	
Total Dissolved Solids (TDS)-mg/ℓ	<500 mg/ℓ above the intake potable water quality	≤15% mg/ℓ more than the inlet water
Total Suspended Solids (TSS)-mg/ℓ	25	10
Dissolved Oxygen (DO)-% saturation	at least 75% saturation	
Organic Requirements		
Biological Oxygen Demand (BOD)-mg/ℓ	NS	NS
Chemical Oxygen Demand (COD)-mg/ℓ	75	30
Oxygen Absorbed-mg/ℓ	10	5
Soap, oil or grease-mg/ℓ	2.5	Nil
Phenolic compounds (Phenol)-mg/ℓ	0.1	0.01
Inorganic Macro Determinats		
Ammonia free & saline (NH ₄ as N)-mg/ℓ	10	0.1
Nitrate (NO ₃ as N) mg/ℓ	NS	1.5
Total Kjeldahl Nitrogen (TKN as N)-mg/ℓ	NS	NS
Chloride (as Cl)-mg/ℓ	NS	NS
Sodium (as Na)-mg /ℓ	< 50 mg/ℓ above the intake potable water quality	
Sulphate (as SO ₄)-mg/ℓ	NS	NS
Ortho-Phosphate (PO ₄ as P)-mg/ℓ	NS	NS
Total Phosphates (as P)-mg/ℓ	NS	2.0
Fluoride (as F)-mg/ℓ	1.0	1.0
Sulphides (as S)- mg/ℓ	1.0	0.05
Cyanide and related compunds (as Cn)-mg/ℓ	0.5	0.5
Inorganic Micro Determinats		
Arsenic (as As)-mg/ℓ	0.5	0.1
Boron (as B)-mg/ℓ	1.0	0.5
Chromium, hexavalent (as Cr)- mg/ℓ	0.05	NS
Chromium, Total (as Cr)-mg/ℓ	0.5	0.05
Copper (as Cu)-mg/ℓ	1.0	0.02
Lead (as Pb)-mg/ℓ	1.0	0.1
Zinc (as Zn)-mg/ℓ	5.0	0.3
Iron (as Fe)-mg/ℓ	NS	0.3
Manganese (as Mn)-mg/ℓ	NS	0.1
Biological Requirements		
Total coliforms-counts/100 mℓ	0/100mℓ	0/100mℓ
E. Coli-counts/100 mℓ	0/100mℓ	0/100mℓ
Disinfection		
Residual Chlorine- mg/ℓ	0.1	Nil
* as per Regional Effluent Standard: R553 of 15 April 1962 and amendments (Water Act, Act 54 of 1956)		
NS = not specified		