

EFFLUENT STANDARDS FOR THE TWO ACTS

	Water Act, (Act 54 of 1956)		Water Act, (Act 11 of 2013)	
	General Standard	Special Standard	General Standard	Special Standard
DETERMINANTS				
Physical Requirements				
Colour mg/ℓ, odor, taste	No substance that will produce colour, odor, taste		< 15, no offensive smell	< 10, no offensive smell
pH	5.5 - 9.5	5.5 – 7.5	6.5 - 9.5	6.5 - 9.5
Temperature °C	≤35	≤25	<10°C higher than recipient water body	
Conductivity mS/m @ 25°C	NS		<75 mS/m above the intake potable water quality	
Turbidity NTU	NS		<12	<5
Total Dissolved Solids (TDS) mg/ℓ	<500 mg/ℓ above the intake potable water quality	≤15% mg/ℓ more than the inlet water	<500 mg/ℓ above the intake potable water quality	
Total Suspended Solids (TSS) mg/ℓ	25	10	<100	<40
Dissolved Oxygen (DO) % saturation	at least 75% saturation		>75% saturation	
Organic Requirements				
Biological Oxygen Demand (BOD) mg/ℓ	NS		<30	<10
Chemical Oxygen Demand (COD) mg/ℓ	75	30	<100	<55
Oxygen Absorbed mg/ℓ	10	5	NS	
Soap, oil or grease mg/ℓ	2.5	Nil	< 3 < 3.0	< 0.2 < 1.0
Fat, oil & grease (FOG) individual mg/ℓ				
Phenolic compounds (as Phenol) mg/ℓ	0.1	0.01	0.1	0.01
Inorganic Macro Determinats				
Ammonia (NH ₄ as N) mg/ℓ	10	0.1	<10	<1
Nitrate (NO ₃ as N) mg/ℓ	NS	1.5	<20	<15
Total Kjeldahl Nitrogen (TKN as N) mg/ℓ	NS		<33	<5.0
Chloride (as Cl) mg/ℓ	NS	<70 mg/ℓ above the intake potable water quality	<70 mg/ℓ above the intake potable water quality	<40 mg/ℓ above the intake potable water quality
Sodium (as Na) mg /ℓ	< 50 mg/ℓ of inlet water		<90 mg/ℓ above the intake potable water quality	<50 mg/ℓ above the intake potable water quality
Sulphate (as SO ₄) mg/ℓ	NS	<10 mg/ℓ above the intake potable water quality	<40 mg/ℓ above the intake potable water quality	<20 mg/ℓ above the intake potable water quality
Ortho-Phosphate (PO ₄ as P) mg/ℓ	NS	1.0	<15	<1.0
Total Phosphates (as P) mg/ℓ	NS	2.0	NS	NS
Fluoride mg/ℓ	1.0	1.0	2.0	1.0
Sulphides (as S)- mg/ℓ	1.0	0.05	< 0.5	< 0.05
Cyanide and related compounds (as CN)- mg/ℓ	0.5	0.5	free < 100 µg/ℓ	free < 30 µg/ℓ
			recoverable < 200 µg/ℓ	recoverable < 70 µg/ℓ
Inorganic Micro Determinats				

Arsenic (as As) mg/ℓ	0.5	0.1	0.15	0.05
Boron (as B) mg/ℓ	1.0	0.5	1.0	0.5
Chromium, hexavalent (as Cr) mg/ℓ	0.05	NS	0.05	0.01
Chromium, Total (as Cr) mg/ℓ	0.5	0.05	1.0	0.05
Copper (as Cu) mg/ℓ	1.0	0.02	2.0	0.5
Lead (as Pb) mg/ℓ	1.0	0.1	0.1	0.01
Zinc mg/ℓ	5.0	0.3	5	1
Iron (as Fe) mg/ℓ	NS	0.3	1	0.2
Manganese (as Mn) mg/ℓ	NS	0.1	0.4	0.1
Microbiological Requirements				
Total coliforms counts/100 ml	0/100	0/100	0/100*	0/100*
E. <i>Coli</i> counts/100 ml	0/100	0/100	0/100*	0/100*

NS = not specified

*** MICROBIOLOGY**

Further treatment of the effluent are dependent on:

1. the water quality of the recipient water body if any
2. the distance from any point of potable water abstraction
3. an acceptable maximum contaminant level downstream of the point of discharge
4. the exposure to human and animal consumption downstream of the point of discharge
5. any water reuse option that may be implemented.