

**Water Treatment Plant Design - Various Water Sources & Its Analysis**

Stream No.		Stream - 1	Stream - 2	Stream - 3	Stream - 4	Stream - 5	Stream - 6
Types of Water Source*							
Flow	KLD						
<b>List of Parameters:</b>	<b>UNIT</b>						
pH							
Temperature (Deg C)	Deg C						
Color	CU						
Oil & Grease	mg/Liter						
Turbidity	NTU						
Bio Chemical Oxygen Demand (BOD)	mg/Liter						
Chemical Oxygen Demand (COD)	mg/Liter						
Total Organic Carbon (TOC)	mg/Liter						
Total Suspended Solids (TSS)	mg/Liter						
Conductivity	milli siemens / cm						
Total Dissolved Solids (TDS)	mg/Liter						
Total Solids (TS)	mg/Liter						
Total Hardness as CaCO <sub>3</sub>	mg/Liter						
Total Alkalinity as CaCO <sub>3</sub> (M-Alkalinity)	mg/Liter						
P-Alkalinity as CaCO <sub>3</sub>	mg/Liter						
Calcium (as Ca)	mg/Liter						
Calcium Hardness as CaCO <sub>3</sub>	mg/Liter						
Magnesium (as Mg)	mg/Liter						
Magnesium Hardness as CaCO <sub>3</sub>	mg/Liter						
Sodium (as Na)	mg/Liter						
Potassium (as K)	mg/Liter						
Chloride (as Cl)	mg/Liter						
Sulphate (as SO <sub>4</sub> )	mg/Liter						
Bicarbonate (as HCO <sub>3</sub> )	mg/Liter						
Carbonate (as CO <sub>3</sub> )	mg/Liter						
Phosphate	mg/Liter						
Nitrate	mg/Liter						
Nitrite	mg/Liter						
Ammonical Nitrogen (as NH <sub>3</sub> -N)	mg/Liter						
Total Kjeldahl Nitrogen (TKN)	mg/Liter						
Colloidal Silica	mg/Liter						
Reactive Silica (as SiO <sub>2</sub> )	mg/Liter						
Residual Chlorine	mg/Liter						
Acidity	%						
Total Fixed Solid (TFS)	mg/Liter						
Total Volatile Solid (TVS)	mg/Liter						
Phenolic Compound	mg/Liter						
PVA	mg/Liter						
Free CO <sub>2</sub>	mg/Liter						
Fluoride (as F)	mg/Liter						
Iron (as Fe)	mg/Liter						
Boron (as Br)	mg/Liter						
Sulfide	mg/Liter						
Aluminium (as Al)	mg/Liter						
Nickel (as Ni)	mg/Liter						
Hexa valent Chromium (as Cr <sup>+6</sup> )	mg/Liter						
Total Chromium	mg/Liter						
Copper (as Cu)	mg/Liter						

Zinc (as Zn)	mg/Liter						
Lead (as Pb)	mg/Liter						
Cadmium (as Cd)	mg/Liter						
Arsenic (as As)	mg/Liter						
Mangeneses (as Mn)	mg/Liter						
<b>Microbial Impurities (Parameters):</b>							
Coliform Bacteria	MPN/100 ml						
Endotoxin	EU/ml						
Escherichia Coli (E.Coli)	CFU/100 ml						
Faecal Streptococci & Staphylococcus	CFU/100 ml						
Pseudomonas - MPN	CFU/100 ml						
Salmonella SPS	CFU/100 ml						
Any other Bacteria (Gram -Ve & Enterobacterial SPS)	MPN/100 ml						

\* Specific Water Source Type - Like Surface Water, River Water, Canal Water, Ground Water, Borewell Water, Muncipal Water, Recycled Water, Sea Water, etc.

**Additional Information:** (any specific/additional information about any parameters):