

**ENVIRONMENTAL CHEMISTRY:**

S. No.	Type of Test	Material / Product	Test Description	Test Method
01	Chemical	Water / Waste Water (17025 Accredited)	pH	APHA 4500 H <sup>+</sup> B 22 <sup>nd</sup> Edition
02			Total Suspended Solids	APHA 2540 D 22 <sup>nd</sup> Edition
03			Total Dissolved Solids	APHA 2540 C 22 <sup>nd</sup> Edition
04			Biochemical Oxygen Demand	APHA 5210 B 22 <sup>nd</sup> Edition
05			Chemical Oxygen Demand	APHA 5220 B 22 <sup>nd</sup> Edition
06			Oil and Grease	APHA 5520 B 22 <sup>nd</sup> Edition
07			Copper Cu), Lead (Pb), Cadmium (Cd), Zinc (Zn), Nickel (Ni), Chromium (Cr), Iron (Fe), Manganese (Mn), Cobalt (Co)	APHA 3120 B 22 <sup>nd</sup> Edition
08		Alkalinity	APHA 2320 B 22 <sup>nd</sup> Edition	
09		Hardness	APHA 2340 C 22 <sup>nd</sup> Edition	
10		Chlorides (Cl)	APHA 4500 Cl B 22 <sup>nd</sup> Edition	
11		Sulphates (SO <sub>4</sub> )	APHA 4500 SO <sub>4</sub> 2-C 22 <sup>nd</sup> Edition	
12		Calcium (Ca)	APHA 3120 B 22 <sup>nd</sup> Edition	
13		Magnesium (Mg)		
14		Sodium (Na)		
15		Potassium (K)		

### OTHER CHEMICAL TESTING DETAILS

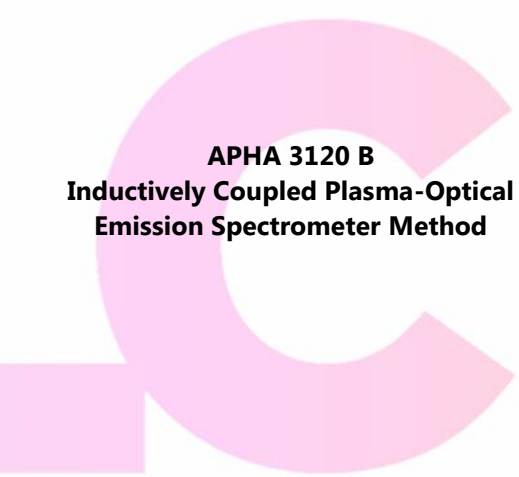
(Water/ Waste Water/ Treated Water/Ground Water/ Sea Water as per APHA Standards)

S. No.	Test Description	Test Method
Chemical Analysis of: Water/ Waste Water/ Treated Water/Ground Water/ Sea Water		
01	pH	APHA 4500 H <sup>+</sup> B
02	Electrical Conductivity	APHA 2510 B
03	Total Dissolved Solids	APHA 2540 C
03	Total Suspended Solids	APHA 2540 D
04	Chemical Oxygen Demand (COD)	APHA 5220 B
05	Biochemical Oxygen Demand (BOD) 5days incubation @ 20 ° C	APHA 5210 B
06	Oil & Grease	APHA 5520 B
07	Chloride as Cl <sup>-</sup>	APHA 4500 Cl <sup>-</sup> B
07	Sulphate as SO <sub>4</sub> <sup>2-</sup>	APHA 4500 SO <sub>4</sub> <sup>2-</sup> C
08	Total Hardness	APHA 2340 C
09	Carbonate, Bicarbonate, Total Alkalinity	APHA 2320 B

### **COLORIMETRIC ANALYSIS:**

S. No.	Test Description	Test Method
01	Free Chlorine (Cl <sub>2</sub> )	DPD Method
02	Total Chlorine (Cl <sub>2</sub> )	DPD Method
03	Fluoride (F)	SPADNS Method
04	Nitrate Species (NO <sub>3</sub> <sup>-</sup> , NO <sub>3</sub> -N)	Cadmium reduction method
05	Nitrite Species (NO <sub>2</sub> <sup>-</sup> , NO <sub>2</sub> -N, NaNO <sub>2</sub> )	Ferrous Sulphate Method
06	Ammonia Species (NH <sub>3</sub> , NH <sub>4</sub> <sup>+</sup> , NH <sub>3</sub> -N)	Salicylate Method
07	Sulfide (S <sup>2-</sup> )	Methylene Blue method
08	Sulfate (SO <sub>4</sub> <sup>2-</sup> )	Turbidity Method

**METALS ANALYSIS:**

S. No.	Test Description	Test Method
01	Aluminium (Al)	 <p><b>APHA 3120 B Inductively Coupled Plasma-Optical Emission Spectrometer Method</b></p>
02	Arsenic (As)	
03	Boron (B)	
04	Barium (Ba)	
05	Beryllium (Be)	
06	Bismuth (Bi)	
07	Calcium (Ca)	
08	Cadmium (Cd)	
09	Cobalt (Co)	
10	Chromium (Cr)	
11	Copper (Cu)	
12	Iron (Fe)	
13	Potassium (K)	
14	Magnesium (Mg)	
15	Manganese (Mn)	
16	Sodium (Na)	
17	Nickel (Ni)	
18	Lead (Pb)	
19	Selenium (Se)	
20	Strontium (Sr)	
21	Silver (Ag)	
22	Thallium (Tl)	
23	Zinc (Zn)	

**WATER FOR CONCRETE USE:**

S. No.	Test Description	Test Method
01	Total Dissolved Solids	BS 1377 Part 3 : 1990 Cls. 8
02	pH & Electrical Conductivity	ASTM D 1293 – 99 (2005)
03	Chloride	ASTM D 512 - 04
04	Sulphate	ASTM D 516 - 07
05	Total Alkalinity, Carbonate, Bicarbonate	ASTM D 513 - 06

**GROUND WATER:**

S. No.	Test Description	Test Method
01	Chloride Content of Ground Water	BS 1377 Part 3 : 1990 Cls. 7.3 AMD 9028 : 1996
02	Sulphate Content of Ground Water	BS 1377 Part 3 : 1990 Cls. 5.4/5.5 AMD 9028 : 1996
03	pH of Ground Water	BS 1377 Part 3 : 1990 Cls. 9 AMD 9028 : 1996

## ENVIRONMENTAL MICROBIOLOGY

### **1. SWIMMING POOL WATER:**

S. No.	Test Description	Test Method
01	HPC	APHA 9215 B
02	Total Coliforms by Membrane Filtration	APHA 9222 B
03	Fecal Coliforms by Membrane	APHA 9222 B & G
04	Fecal Streptococci or Enterococci	APHA 9230 C
05	Pseudomonas aeruginosa	ISO 16266

### **2. RAW WATER OR NON POTABLE WATER OR SURFACE WATER (INDUSTRIAL WASTE WATER):**

S. No.	Test Description	Test Method
01	Fecal Coliforms by MPN	APHA 9221 E
02	Nematological Examination	APHA 10750 B

### **3. RAW WATER OR NON POTABLE WATER OR SURFACE WATER (IRRIGATION WATER):**

S. No.	Test Description	Test Method
01	Fecal Coliforms by MPN	APHA 9221 E

### **4. RAW WATER OR NON POTABLE WATER OR SURFACE WATER (GROUND WATER):**

S. No.	Test Description	Test Method
01	Fecal Coliforms by MPN	APHA 9221 E

### **5. RAW WATER OR NON POTABLE WATER OR SURFACE WATER (MARINE WATER):**

S. No.	Test Description	Test Method
01	E.coli by MPN	APHA 9221 F

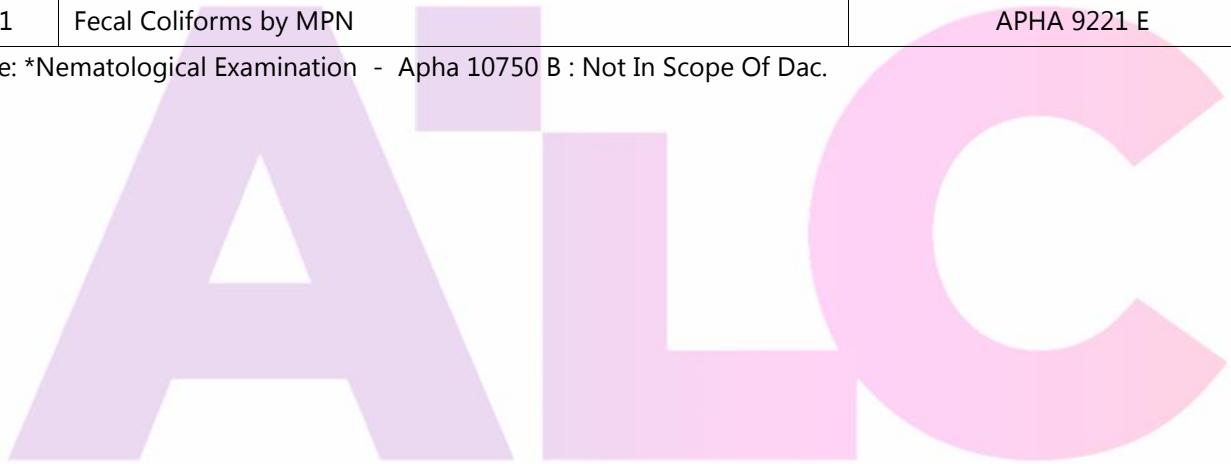
**6. RAW WATER OR NON POTABLE WATER OR SURFACE WATER (WASTEWATER DISPOSAL TO MARINE WATER):**

S. No.	Test Description	Test Method
01	Coliforms by MPN	APHA 9221 B
02	Fecal Coliforms by MPN	APHA 9221 E
03	Egg & Worm Parasites (I.E,*Nematological Examination)	APHA 10750 B

**7. RAW WATER OR NON POTABLE WATER OR SURFACE WATER (WASTEWATER DISPOSAL TO SEA WATER):**

S. No.	Test Description	Test Method
01	Fecal Coliforms by MPN	APHA 9221 E

Note: \*Nematological Examination - Apha 10750 B : Not In Scope Of Dac.



**COSMETICS SAMPLE ANALYSIS DETAILS:**

**1. COSMETICS (CREAM/LOTION/SUSPENSION/SOLUTION/OINTMENT/POWDER/GEL/STICK):**

S. No.	Test Description	Test Method
01	Enumeration and detection of Aerobic Mesophilic Bacteria	ISO 21149
02	Detection of Staphylococcus aureus	ISO 22718
03	Detection of Pseudomonas aeruginosa	ISO 22717
04	Detection of E.coli	ISO 21150
05	Enumeration of Yeast & Mould	ISO 16212

**AIR SAMPLE ANALYSIS DETAILS:**

**1. AIR (ROOM):**

S. No.	Test Description	Test Method
01	Total Bacterial Count	NMAM 800
02	Fungal Count	