

Laboratory **Advanced Environmental Laboratory, Tamil Nadu Pollution Control Board, No.5, Ramasamy Street, Koundampalayam, Coimbatore, Tamil Nadu**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7025**

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Validity **12.03.2018 to 11.03.2020**

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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CHEMICAL TESTING

I. POLLUTION & ENVIRONMENT				
1.	Waste Water (Effluents/ Sewage)	pH Value @ 25°C	APHA 23rd Edn. - 4500 H ⁺	2 to 12
		Conductivity @ 25°C	APHA 23rd Edn.- 2510 B	1 μS/cm to 100000μS/cm
		Total Solids	APHA 23rd Edn.- 2540B	4 mg/L to 100000 mg/L
		Total Suspended Solids @ 105°C	APHA 23rd Edn.- 2540 D	4 mg/L to 5000 mg/L
		Total Dissolved solids @180°C	APHA 23rd Edn.- 2540 C	8 mg/L to 60000 mg/L
		Chloride as Cl	APHA 23rd Edn.- 4500 - Cl ⁻ B	2 mg/L to 50000 mg/L
		Sulphate as SO ₄	APHA 23rd Edn.- 4500- SO ₄ ²⁻ E	5 mg/L to 5000 mg/L
		Oil & grease	APHA 23rd Edn.-5520 B	4 mg/L to 100 mg/L
		Bio chemical oxygen demand (3 days @ 27°C)	IS 3025 (Part 44) - 1993 (RA : 2009)	2 mg/L to 10000 mg/L
		Chemical Oxygen Demand	IS 3025 (Part 58) - 2006	8 mg/L to 40000 mg/L
		Ammonical nitrogen as NH ₃ -N	APHA 23rd Edn.- 4500-NH ₃	2 mg/L to 100 mg/L
		Free Ammonia as NH ₃	APHA 23rd Edn.- 4500-NH ₃	2 mg/L.5 to 5 mg/L
		Total Kjeldhal Nitrogen	APHA 23rd Edn.- 4500-N-B	5 mg/L to 500 mg/L
Nitrite Nitrogen	APHA 23rd Edn.- 4500 NO ₂ -B	0.05 mg/L to 10 mg/L		

Iti Saxena
Convenor

Alok Jain
Program Director

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		Nitrate nitrogen as NO ₃ -N	APHA 23rd Edn.- NO ₃ -B	1.0 mg/L to 400 mg/L
		Phosphate as PO ₄	APHA 23rd Edn. -4500 P-E	0.1 mg/L to 50 mg/L
		Phenolic compounds as C ₆ H ₅ OH	APHA 23rd Edn.- 5530 C	0.001 mg/L to 5mg/L
		Fluoride	APHA 23 rd Edn.-4500-F-B,D	0.2 mg/L to 50 mg/L
		Alkalinity as CaCO ₃	APHA 23 rd Edn.- 2320 - B	4 mg/L to 500 mg/L
		Acidity as CaCO ₃	APHA 23rd Edn.- 2310 - B	1 mg/L to 50 mg/L
		Total Hardness as CaCO ₃	APHA 23rd Edn.- '2340 C	10 mg/L to 2000 mg/L
		Calcium hardness as CaCO ₃	APHA 23 rd Edn.- 3500Ca	4 mg/L to 1000 mg/L
		Magnesium hardness as CaCO ₃	APHA 23 rd Edn.-3500Mg -B	5 mg/L to 1000 mg/L
		Calcium as Ca	APHA 23rd Edn.3500Ca	4 mg/L to 500 mg/L
		Magnesium as Mg	APHA 23rd Edn.3500Mg	5 mg/L to 500 mg/L
		Sodium as Na	APHA 23rd Edn.3500Na - B	5 mg/L to 20000 mg/L
		Potassium as K	APHA 23rd Edn.3500K - B	5 mg/L to 1,000 mg/L
		% Sodium	TNPCB/AEL-CBE/SOP/18 Issue No.01/ Date.20.08.14	1 mg/L to 95 %
		Hexavalent Chromium as Cr6+	APHA 23rd Edn.3500 Cr- B	0.01 mg/L to 5 mg/L
		Total Chromium as Cr	APHA 23 rd Edn.-3500 Cr-B	0.01 mg/L to 50 mg/L
		Total Iron as Fe	APHA 23rd Edn.-3500 Fe B	0.05 mg/L to 10 mg/L

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		Sodium Absorption Ratio	TNPCB/AEL-CBE/SOP/21 Issue No.01, Date 20/08/14	1 to 500
		Sulphide	APHA 23 rd Edn. 4500 –S ²⁻ F	1 mg/L to 50 mg/L
		Total Residual Chlorine	APHA 23 rd Edn.4500 – Cl B	1 mg/L to 150 mg/L
		Dissolved Oxygen	APHA 23 rd Edn.4500 C	1 to 8
II.	WATER			
1.	Water (Ground water, lake water, river water, Drinking water-IS 10500-2012)	pH Value @25°C	APHA 23rd Edn.– 4500 H ⁺	6 to 9
		Conductivity @25°C	APHA 23rd Edn.– 2510 B	1 µS/cm to 5000 µS/cm
		Total Solids	APHA 23rd Edn. 2540B	4 mg/L to 25000 mg/L
		Total Suspended Solids	APHA 23rd Edn.2540 D	4 mg/L to 1000 mg/L
		Total Dissolved solids @180°C	APHA 23rd Edn. 2540 C	4 mg/L to 5000 mg/L
		Chloride as Cl	APHA 23rd Edn.–4500 Cl B	2 mg/L to 2000 mg/L
		Sulphate as SO ₄	APHA 23rd Edn.– 4500-SO ₄ ²⁻ E	5 mg/L to 1000 mg/L
		Phosphate as PO ₄	APHA 23rd Edn. 4500 P-E	0.1 mg/L to 50 mg/L
		Oil & grease	APHA 23rd Edn. 5520 B	2 mg/L to 50 mg/L
		Bio chemical oxygen demand (3 days @ 27°C)	IS 3025 (Part 44)	2 mg/L to 50 mg/L
		Chemical Oxygen Demand	IS 3025 (Part 58)	8 mg/L to 1000 mg/L
		Ammonical nitrogen as NH ₃ -N	APHA 23rd Edn.- 4500-NH ₃	2 mg/L to 50 mg/L
		Free Ammonia as NH ₃	APHA 23rd Edn.4500-NH ₃	2.5 mg/L to 5 mg/L
		Total Kjeldhal Nitrogen	APHA 23rd Edn 4500-N-B	2 mg/L to 100 mg/L

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		Nitrite Nitrogen	APHA 23rd Edn.- 4500 NO ₂ -B	0.05 mg/L to 10 mg/L
		Nitrate nitrogen as NO ₃ -N	APHA 23rd Edn.- NO ₃ -B	0.1 mg/L to 50 mg/L
		Fluoride	APHA 23 rd Edn. -4500-F B,D	0.2 mg/L to 3 mg/L
		Alkalinity as CaCO ₃	APHA 23rd Edn.2320 - B	4 mg/L to 500 mg/L
		Acidity as CaCO ₃	APHA 23rd Edn.2310 - B	1 mg/L to 50 mg/L
		Total Hardness as CaCO ₃	APHA 23rd Edn.2340 C	10 mg/L to 2000 mg/L
		Calcium hardness as CaCO ₃	APHA 23rd Edn. 3500 Ca	4 mg/L to 1000 mg/L
		Magnesium hardness as CaCO ₃	APHA 23 rd Edn. 3500 Mg B	5 mg/L to 1000 mg/L
		Calcium as Ca	APHA 23rd Edn.- 3500 Ca	4 mg/L to 500 mg/L
		Magnesium as Mg	APHA 23rd Edn.3500 Mg	5 mg/L to 500 mg/L
		Sodium as Na	APHA 23rd Edn.3500 Na B	5 mg/L to 1000 mg/L
		Potassium as K	APHA 23rd Edn.3500 K B	5 mg/L to 200 mg/L
		Hexavalent chromium as Cr ⁶⁺	APHA 23rd Edn.3500 Cr B	0.05 mg/L to 5 mg/L
		Total chromium as Cr	APHA 23rd Edn.3500 Cr B	0.05 mg/L to 10 mg/L
		Dissolved Oxygen	APHA 23 rd Edn. 4500 C	1 mg/L to 8 mg/L
		Phosphate as PO ₄	APHA 23rd Edn.4500 P E	0.5 mg/L to 20 mg/L
		Total Iron as Fe	APHA 23rd Edn. 3500 Fe B	0.05 mg/L to 10 mg/L
		Phenolic compounds as C ₆ H ₅ OH	APHA 23rd Edn. 5530 C	0.001 mg/L to 2 mg/L
III.	ATMOSPHERIC POLLUTION			

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1.	Ambient Air	Respirable Suspended Particulate Matter (PM ₁₀)	IS 5182: (Part 23)	5 µg/m ³ to 1000 µg/m ³
		Sulphur Dioxide (as SO ₂)	IS 5182: (Part 2)	4 µg/m ³ to 50 µg/m ³
		Oxides of Nitrogen (as NO _x)	IS 5182: (Part 6)	9 µg/m ³ to 100 µg/m ³
2.	Stack Gases/ Source Emission	Particulate Matter	IS 11255 (Part 1)	10 mg/Nm ³ to 4000 mg/Nm ³
3.	Sound Level (Industrial Ambient Noise)	Sound level	IS : 9989	30 Leq dB(A) to 110 Leq dB(A)

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