

Laboratory Environmental Chemical Laboratory (E & S Dept.), CSIR-Institute of Minerals & Materials Technology, Bhubaneswar, Odisha

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-8091

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Validity 19.11.2018 to 18.11.2020

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

AT LABORATORY				
I.	WATER			
1.	Drinking Water	pH	IS 3025 (Part 11)	4 to 11.0
		Turbidity	IS 3025 (Part 10)	0.1 NTU to 100 NTU
		Total Dissolved Solids	IS 3025 (Part 16)	1 mg/L to 5000 mg/L
		Calcium (as Ca)	IS 3025 (Part 40)	1 mg/L to 200 mg/L
		Chloride (as Cl)	IS 3025 (Part 32)	1 mg/L to 500 mg/L
		Copper (as Cu)	IS 3025 (Part 42)	0.1 mg/L to 5 mg/L
		Fluoride (as F)	IS 3025 (Part 60)	0.2 mg/L to 10 mg/L
		Iron (as Fe)	IS 3025 (Part 53)	0.1 mg/L to 10 mg/L
		Magnesium (as Mg)	IS 3025 (Part 46)	1 mg/L to 200 mg/L
		Manganese (as Mn)	APHA 3111 B	0.1 mg/L to 20 mg/L
		Sulphate (as SO ₄)	IS 3025 (Part 24)	1 mg/L to 200 mg/L
		Total alkalinity as calcium carbonate	IS 3025 (Part 23)	1 mg/L to 500 mg/L
		Total Hardness (as CaCO ₃)	IS 3025 (Part 21)	1 mg/L to 1000 mg/L
		Zinc (as Zn)	IS 3025 (Part 49)	0.05 mg/L to 10 mg/L
		Cadmium (as Cd)	IS 3025 (Part 41)	0.05 mg/L to 2 mg/L
		Lead (as Pb)	IS 3025 (Part 47)	0.5 mg/L to 10 mg/L
		Nickel (as Ni)	IS 3025 (Part 54)	0.3 mg/L to 10 mg/L
		Total Chromium	IS 3025 (Part 52)	0.5 mg/L to 10 mg/L
II.	ATMOSPHERIC POLLUTION			
1.	Ambient Air	Sulfur dioxide (SO ₂)	IS 5182 (Part 2)	25 µg/m ³ to 1050 µg/m ³
		Oxides of Nitrogen (NO ₂)	IS 5182 (Part 6)	6 µg/m ³ to 750 µg/m ³
		Ammonia (as NH ₃)	SOP-01	1 µg/m ³ to 400 µg/m ³
		PM _{2.5}	SOP-02	10 µg/m ³ to 100 µg/m ³
		PM ₁₀	IS 5182 (Part 23)	1 µg/m ³ to 1000 µg/m ³

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III.	SOIL & ROCK			
1.	Soil	pH	IS 2720 (Part 26)	1 to 13
		Texture % Sand % Clay % Silt	SOP-04	1 % to 100 %
		Water content	IS 2720 (Part 2)	1 % to 50 %
		Organic Matter	IS 2720 (Part 22)	1 % to 30 %

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CHEMICAL TESTING

AT SITE				
I.	ATMOSPHERIC POLLUTION			
1.	Ambient Noise	Equivalent Noise Level (L _{eq})	SOP-03	40 dB(A) to 140 dB(A)