

Laboratory Environmental Research And Services (India) Pvt. Ltd., Plot No: B-22,
Sector-B, Chandaka Industrial Estate, Infocity Road, Bhubaneswar,
District: Khurda, Odisha

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7440

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Validity 22.06.2018 to 21.06.2020

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. ATMOSPHERIC POLLUTION				
1.	Ambient Air Quality	Suspended Particulate Matter	IS: 5182 (Part 4), Gravimetric Method	10µg/m ³ to 5000µg/m ³
		Respirable Suspended Particulate Matter (PM ₁₀)	IS 5182 (Part 23) Gravimetric Method	10µg/m ³ to 500µg/m ³
		Particulate Matter (PM _{2.5})	ERSIPL/SOP/01 Issue No:02, Revision Date: 19.02.2018	10µg/m ³ to 150 µg/m ³
		Sulphur Dioxide	IS 5182 (Part 2) Improved West & Gaeke Method	6µg/m ³ to 1050µg/m ³
		Oxides of Nitrogen	IS 5182 (Part 6)	9µg/m ³ to 750µg/m ³
2.	Stack Emission	Particulate Matter (PM)	IS 11255 (Part 1)	10mg /Nm ³ to 5000mg /Nm ³
		Sulphur Dioxide	IS 11255 (Part 2) Barium Perchlorate Method	5mg/Nm ³ to 1000mg/Nm ³
3.	Fugitive Emission	Suspended Particulate Matter	IS 5182 (Part 4) Gravimetric Method	10µg/m ³ to 5000µg /m ³
II. POLLUTION & ENVIRONMENT				
1.	Waste Water (Effluent)	Acidity as CaCO ₃	IS 3025 (Part 22)	1mg/L to 500mg/L
		Alkalinity as CaCO ₃	IS 3025(Part 23)	5mg/L to 500mg/L
		Bio Chemical Oxygen Demand (BOD) 3days @ 27°C	IS 3025(Part 44)	2mg/L to 500mg/L
		Calcium as Ca	IS 3025 (Part 40)	2mg/L to 1000mg/L
		Chemical Oxygen Demand (COD)	IS 3025 (Part 58)	4mg/L to 3000mg/L

Vinay Kumar Tyagi
Convenor

N. Venkateswaran
Program Director

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		Chloride as Cl	IS 3025 (Part 32)	1mg/L to 500mg/L
		Conductivity	IS 3025 (Part 14)	1µS/cm to 200mS/cm
		Dissolved Oxygen	IS 3025 (Part 38)	1mg/L to 20mg/L
		Fluoride as F	IS 3025 (Part 60)	0.1mg/L to 1mg/L
		Total Hardness as CaCO ₃	IS 3025 (Part 21)	2mg/L to 2000mg/L
		Hexavalent Chromium as Cr ⁶⁺	IS 3025 (Part 52)	0.1mg/L to 20mg/L
		Iron (Total) as Fe	IS 3025 (Part 53)	0.07mg/L to 0.5mg/L
		Magnesium as Mg	IS 3025 (Part 46)	0.5mg/L to 250mg/L
		Oil & Grease	IS 3025 (Part 39)	10mg/L to 500mg/L
		pH	IS 3025 (Part 11)	1 to 14
		Phosphate as PO ₄	IS 3025 (Part 31)	0.1mg/L to 20mg/L
		Silica as SiO ₂	IS 3025 (Part 35)	0.1mg/L to 25mg/L
		Sulphates as SO ₄	IS 3025 (Part 24)	1mg/L to 40mg/L
		Total Dissolved Solid	IS 3025 (Part 15)	10mg/L to 4000mg/L
		Total Suspended Solids	IS 3025 (Part 17)	10mg/L to 1000mg/L
		Turbidity	IS 3025 (Part 10)	0.1NTU to 1000NTU
III.	WATER			
1.	Surface Water/ Ground Water	Bio Chemical Oxygen Demand (BOD) 3days @ 27°C	IS 3025 (Part 44)	2mg/L to 500mg/L
		Chemical Oxygen Demand (COD)	IS 3025 (Part 58)	4mg/L to 3000mg/L
		Oil & Grease	IS 3025 (Part 39)	10mg/L to 500mg/L
2.	Surface Water/ Ground Water/ Drinking Water	Alkalinity as CaCO ₃	IS 3025 (Part 23)	5mg/L to 500mg/L
		Calcium as Ca	IS 3025 (Part 40)	2mg/L to 1000mg/L
		Chloride as Cl	IS 3025 (Part 32)	2mg/L to 500mg/L
		Conductivity	IS 3025 (Part 14)	1µS/cm to 200mS/cm
		Fluoride as F	IS 3025 (Part 60)	0.1mg/L to 1mg/L

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		Total Hardness as CaCO ₃	IS 3025 (Part 21)	2mg/L to 2000mg/L
		Hexavalent Chromium as Cr ⁶⁺	IS 3025 (Part 52)	0.1mg/L to 20mg/L
		Iron (Total) as Fe	IS 3025 (Part 53)	0.07mg/L to 0.5mg/L
		Magnesium as Mg	IS 3025 (Part 46)	1mg/L to 250mg/L
		pH	IS 3025 (Part 11)	3 to 12
		Phosphate as PO ₄	IS 3025 (Part 31)	0.01mg/L to 20mg/L
		Sulphates as SO ₄	IS 3025 (Part 24)	1mg/L to 40mg/L
		Total Suspended Solids	IS 3025 (Part 17)	10mg/L to 1000mg/L
		Total Dissolved Solid	IS 3025 (Part 15)	10mg/L to 4000mg/L
		Turbidity	IS 3025 (Part 10)	0.1NTU to 1000NTU