

Laboratory	Envirocheck, 189 & 190, Rastraguru Avenue, Kolkata, West Bengal		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	03.02.2015
Certificate Number	T-1751	Valid Until	02.02.2017
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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I. AIR, GASES & ATMOSPHERE				
1.	Ambient Air	Suspended Particulate Matter	IS 5182 (Part 4): 1999 (RA 2005) ASTM D 4096: 91 RA 2009 : Sec XI Vol 11.07: 2011	10 µg/m ³ to 1000 µg/m ³
		Carbon monoxide	IS 5182 (Part 10): 1999 (RA 2003) ASTM D 3162: 94 (RA 2005): Sec XI Vol 11.07: 2011	0.1 mg/m ³ to 100 mg/m ³
		Sulphur dioxide	IS 5182 (Part 2): 2001 (RA 2007) ASTM D 2914: 01: Sec XI Vol. 11.07 : 2011	4.0 µg/m ³ to 350 µg/m ³
		Nitrogen oxide	IS 5182 (Part 6): 2006 (RA 2005) ASTM D 1607: 91: Sec 11 Vol. 11.07: 2011	6.5 µg/m ³ to 1000 µg/m ³
		Respirable Suspended Particulate Matter or (PM 10)	IS 5182 (Part 23): 2006	10 µg/m ³ to 1000 µg/m ³
		Respirable Particulate Matter or (PM 2.5)	Lab SOP No 01 (Based on CPCB Guidelines and USEPA 1997a, 40 CFR Part 50, Appendix L)	10 µg/m ³ to 1000 µg/m ³
		Ozone	IS 5182 (Part 9): 1974	10 µg/m ³ to 1960 µg/m ³
		Benzene	IS 5182 (Part 11): 2006 (RA 2007) ASTM D 5466: 01: Sec XI Vol. 11.07: 2011	0.74 µg/m ³ to 7.4 µg/m ³
		Benzo(a)Pyrene	IS 5182 (Part 12): 2004 (RA 2004) ASTM D 6209: 98: Sec XI	0.36 ng/m ³ to 3.6 ng/m ³

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	Ambient Air	Nickel	Vol. 11.07: 2011 IS 5182 (Part 22): 2004 ASTM D 4185: 06: Sec XI Vol. 11.07: 2011	0.02 ng/m ³ to 10 ng/m ³
		Arsenic	IS 5182 (Part 22): 2004 ASTM D 4185: 06: Sec XI Vol. 11.07: 2011	0.01 ng/m ³ to 10 ng/m ³
		Lead	IS 5182 (Part 22): 2004 ASTM D 4185: 06: Sec XI Vol. 11.07: 2011	0.01 µg/m ³ to 10 µg/m ³
		Ammonia	NIOSH Manual of Analytical Method, (4 th Edition): 1994, Method 6015 Issue 2	0.15 mg/m ³ to 320 mg/m ³
2.	Micro Meteorological	Wind Speed	ASTM D 5096: 02 (RA 2007): Sec XI Vol. 11.07: 2011	0.5 Kmph to 180 Kmph
		Wind Direction	ASTM D 5096: 02 (RA 2007): Sec XI Vol. 11.07: 2011	Upto 360 °C
		Temperature	ASTM E 337: 02 (RA 2007): Sec XI Vol. 11.07: 2011	3 °C to 50 °C
		Humidity	ASTM E 337: 02 (RA 2007): Sec XI Vol. 11.07: 2011	10 % to 100 %
		Rainfall	IS: 5235 & Specification of Surface Meteorological	Qualitative

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			Instrument, IMD, Govt. of India.	
3.	Stack Emission Monitoring	Particulate Matter	IS 11255 (Part 1): 1985 (RA 2003) ASTM D 3685/ D3685M: 98 (RA 2005): Sec XI Vol.11.07: 2011	5 mg/m ³ to 1000 mg/m ³
		Carbon dioxide (by ORSAT App.)	IS 13270: 1992 (RA 2003)	0.2 % to 25 %
		Nitrogen oxide	IS 11255 (Part 7): 2005 (RA 2009) ASTM D 1608: 98: Sec 11 Vol. 11.07: 2011	2 mg/m ³ to 800 mg/m ³
		Sulfur di oxide	IS 11255 (Part 2): 1985 (RA 2003)	0.1 mg/m ³ to 80000 mg/m ³
		Carbon monoxide (by ORSAT App.)	IS 13270 1992: (RA 2003)	1.0 % to 5 %
		Fluoride	IS 11255 (Part 5): 1990	0.02 mg/m ³ to 5.0 mg/m ³
4.	Fugitive Emission	Suspended Particulate Matter	IS 5182 (Part 4): 1999 (RA 2005) ASTM D 4096: 91 (RA 2009): Sec XI (Vol11.07): 2011	10 µg/m ³ to 1000 µg/m ³
II. WATER				
1.	Drinking Water	Colour	APHA (22 nd Edition) 2120-B: 2012	1 Hazen to 500 Hazen Units
		Turbidity	APHA (22 nd Edition) 2130-B: 2012	1 NTU to 1000 NTU
		pH	APHA (22 nd Edition) 4500-H ⁺ B: 2012	1 to 13.6

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	Drinking Water	Total Hardness	APHA (22 nd Edition) 2340-C: 2012	2 mg/l to 1000 mg/l
		Sulfate	APHA (22 nd Edition) 4500-SO ₄ ²⁻ E: 2012	1 mg/l to 400 mg/l
		Chloride	APHA (22 nd Edition) 4500-Cl ⁻ B/D: 2012	0.15 mg/l to 1000 mg/l
		Fluoride	APHA (22 nd Edition) 4500-F ⁻ D: 2012	0.1 mg/l to 10 mg/l
		Nitrate	APHA (22 nd Edition) 4500-NO ₃ ⁻ E: 2012	0.01 mg/l to 1 mg/l
		Dissolved Solid	APHA (22 nd Edition) 2540-C: 2012	1 mg/l to 4000 mg/l
		Residual Chlorine	APHA (22 nd Edition) 4500-Cl ⁻ B: 2012	1 mg/l to 10 mg/l
		Phosphate	APHA (22 nd Edition) 4500-PE/D: 2012	0.01 mg/l to 6 mg/l
		Alkalinity	APHA (22 nd Edition) 2320-B: 2012	2 mg/l to 1000 mg/l
		Copper	APHA (22 nd Edition) 3111-B: 2012	0.04 mg/l to 5 mg/l
		Manganese	APHA (22 nd Edition) 3111-B: 2012	0.1 mg/l to 5 mg/l
		Arsenic	APHA (22 nd Edition) 3114-B: 2012	0.01 mg/l to 5 mg/l
		Zinc	APHA (22 nd Edition) 3111-B: 2012	0.01 mg/l to 5 mg/l
	Hexavalent Chromium	APHA (22 nd Edition) 3500-CrB: 2012	0.1 mg/l to 5 mg/l	

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	Drinking Water	Total Chromium	APHA (22 nd Edition) 3111-Cr ⁺ B: 2012	0.06 mg/l to 5 mg/l
		Boron	APHA (22 nd Edition) 4500-B ⁻ C: 2012	0.1 mg/l to 5 mg/l
		Lead	APHA (22 nd Edition) 3111-B: 2012	0.2 mg/l to 5 mg/l
		Cadmium	APHA (22 nd Edition) 3111-B: 2012	0.01 mg/l to 5 mg/l
		Iron	APHA (22 nd Edition) 3111-B: 2012	0.05 mg/l to 20 mg/l
		Mercury	APHA (22 nd Edition) 3112-B: 2012	0.001 mg/l to 1 mg/l
		Phenols	APHA (22 nd Edition) 5530-Phenols D: 2012	0.1 mg/l to 5 mg/l
		Calcium	APHA (22 nd Edition) 3500-Ca ⁻ B: 2012	5 mg/l to 2000 mg/l
		Magnesium	APHA (22 nd Edition) 3500-Mg B: 2012	1 mg/l to 2000 mg/l
		Sodium	APHA (22 nd Edition) 3500-Na: 2012	1 mg/l to 10 mg/l
		Potassium	APHA (22 nd Edition) 3500-K: 2012	1 mg/l to 10 mg/l
		Conductivity	APHA (22 nd Edition) 2510-B: 2012	1 µs/cm to 20000 µs/cm
		Aluminium	APHA (22 nd Edition) 3500-Al B: 2012	0.02 mg/l to 0.3 mg/l
		Cyanide	APHA (22 nd Edition) D/E/F: 2012	0.05 mg/l to 2 mg/l

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		Selenium	APHA (22 nd Edition) 3111-D: 2012	0.1 mg/l to 5 mg/l
2.	Waste Water	Temp.	APHA (22 nd Edition) 2550-B: 2012	Ambient to 60 °C
		pH	APHA (22 nd Edition) 4500-H ⁺ B: 2012	1 to 13.3
		TSS	APHA (22 nd Edition) 2540-D: 2012	10 mg/l to 1000 mg/l
		Dissolved Oxygen	APHA (22 nd Edition) 4500-O C: 2012	1 mg/l to 12 mg/l
		Oil & Grease	APHA (22 nd Edition) 5520-B/D: 2012	1 mg/l to 1000 mg/l
		Bio Chemical Oxygen Demand (BOD)	APHA (22 nd Edition) 5210-B: 2012	2 mg/l to 200 mg/l
		Chemical Oxygen Demand (COD)	APHA (22 nd Edition) 5220-B/C/D: 2012	5 mg/l to 1000 mg/l
		Lead	APHA (22 nd Edition) 3111-B: 2012	0.2 mg/l to 30 mg/l
		Hexavalent Chromium	APHA (22 nd Edition) 3500- Cr ⁶⁺ B: 2012	0.1 mg/l to 10 mg/l
		Total Chromium	APHA (22 nd Edition) 3111-Cr ⁶⁺ B: 2012	0.06 mg/l to 20 mg/l
		Copper	APHA (22 nd Edition) 3111-B: 2012	0.04 mg/l to 10 mg/l
		Manganese	APHA (22 nd Edition) 3111-B: 2012	0.1 mg/l to 10 mg/l
		Arsenic	APHA (22 nd Edition) 3114-B: 2012	0.01 mg/l to 5 mg/l

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		Zinc	APHA (22 nd Edition) 3111-B: 2012	0.01 mg/l to 2 mg/l
		Mercury	APHA (22 nd Edition) 3112-B: 2012	0.001 mg/ml to 1 mg/ml
	Waste Water	Phenols	APHA (22 nd Edition) 5530-Phenols D: 2012	0.1 mg/ml to 5 mg/l
		Nickel	APHA (22 nd Edition) 3111-B: 2012	0.2 mg/l to 20 mg/l
		Ammonia	APHA (22 nd Edition) 4500-NH ₃ : 2012	0.1 mg/l to 50 mg/l
		Silica	APHA (22 nd Edition) 4500-SiO ₂ ⁻ C/F: 2012	0.4 mg/l to 50 mg/l
		Sulfate	APHA (22 nd Edition) 4500-SO ₄ ²⁻ E: 2012	1 mg/l to 400 mg/l
		Chloride	APHA (22 nd Edition) 4500-Cl ⁻ B/D: 2012	0.15 mg/l to 1000 mg/l
		Fluoride	APHA (22 nd Edition) 4500-F ⁻ C/D: 2012	0.1 mg/l to 10 mg/l
		Nitrate	APHA (22 nd Edition) 4500-NO ₃ ⁻ E: 2012	0.01 mg/l to 100 mg/l
		Residual Chlorine	APHA (22 nd Edition) 4500-Cl ⁻ B: 2012	0.04 mg/l to 20 mg/l
		Phosphate	APHA (22 nd Edition) 4500-E/D: 2012	0.01 mg/l to 6 mg/l

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		Kjeldahl Nitrogen	APHA (22 nd Edition) 4500-N _{org} B/C: 2012, 4500-NH ₃ C/F: 2012	0.2 mg/l to 200 mg/l
		Cyanide	APHA (22 nd Edition) 4500-CN C: 2012	0.05 mg/l to 10 mg/l
	Waste Water	Cadmium	APHA (22 nd Edition) 3111-B: 2005	0.05 mg/l to 2.0 mg/l
		Iron	APHA (22 nd Edition) 3111-B: 2012	0.3 mg/l to 10 mg/l
		Selenium	APHA (22 nd Edition) 3111-D: 2012	0.1 mg/l to 5.0 mg/l
		Sulfide	APHA (22 nd Edition) 4500-S ²⁻ D/F: 2012	1 mg/l to 20 mg/l

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