Lucknow, Uttar Pradesh

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-8241 Page 1 of 5

Validity 01.01.2019 to 31.12.2020 Last Amended on --

"In view of the transition for ISO/IEC 17025:2017, the validity of this accreditation certificate will cease on 30.11.2020"

	·		·		-
SI.	Product / Material	Specific Test Performed	Test Method Specification	Range of Testing /	l
1	of Test		against which tests are	Limits of Detection	İ
j	į	į	performed		į

CHEMICAL TESTING

Ī.	ATMOSPHERIC PO	LLUTION	r	†
1.	Ambient Air	Particulate Matter (PM ₁₀)	IS 5182 (Part 23)	5 μg/m³ to 1000 μg/m³
		Sulphur Dioxide (SO ₂)	IS 5182 (Part 2)	4 μg/m³ to 1050 μg/m³
		Oxides of Nitrogen(NO _x)	IS 5182 (Part 6)	6 μg/m³ to 750 μg/m³
2.	Stack Emission	Particulate Matter (PM)	IS 11255 (Part 1)	10.0 mg/Nm³ to 1000.0 mg/Nm³
 		Sulphur Dioxide (SO ₂)	IS 11255 (Part 2)	3.0 mg/Nm³ to 1000.0 mg/Nm³
		Carbon Mono Oxide (CO)	PCS-SOP-FGA-01 01/01/2018	1.14 mg/Nm³ to 4560 mg/Nm³
		Oxygen (O ₂)		0.1 % to 25 %
		Carbon Dioxide (CO ₂)	 	0.1 % to 99.9 %
[Temperature	IS 11255 (Part 3)	0 °C to 600 °C
3.	Ambient Noise	Noise Level	IS 9989	30 dB(A) to 130 dB(A)
II.	POLLUTION & ENV	VIRONMENT	i ! !	
1.	Waste Water / Effluent Water	pH	APHA 4500-H ⁺ -B 23 rd Edition	2 to10
		Total Solids	APHA 2540-B, 23 rd Edition	10 mg/L to 20000 mg/L
[Total dissolved Solids	APHA 2540-C, 23 rd Edition	10 mg/L to 15000 mg/L
		Total Suspended Solids	APHA 2540-D, 23 rd Edition	10 mg/L to 5000 mg/L
		Dissolved Oxygen	APHA 4500-O-C, 23 rd Edition	1 mg/L to 12 mg/L
		Biochemical Oxygen Demand (BOD)	APHA 5210-B, 23 rd Edition	5 mg/L to 60000 mg/L
		Chemical Oxygen Demand (COD)	APHA 5220-C, 23 rd Edition	10 mg/L to 10000 mg/L
		Oil & Grease	APHA 5520-B, 23 rd Edition	2 mg/L to 100 mg/L
[Residual Chlorine	APHA 4500-CI-B	0.1 mg/L to 5 mg/L

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
 !	i !	[23 rd Edition	
! !	} [Temperature	APHA 2550 B, 23 rd Edition	1.0 °C to 100.0 °C
		Ammonical Nitrogen	APHA 4500-NH3-C 23 rd Edition	1 mg/L to 100 mg/L
		Total Kjeldahl Nitrogen	APHA 4500-Norg-B 23 rd Edition	1 mg/L to100 mg/L
		Fluoride	APHA 4500-F-D 23 rd Edition	0.1 mg/L to 100 mg/L
[[Hexavalent Chromium	APHA 3111-B, 23 rd Edition	0.1 mg/L to 10 mg/L
[[Iron (Fe)	APHA 3111-B, 23rd Edition	0.3 mg/L to 10.0 mg/L
		Lead (Pb)	APHA 3111-B, 23 rd Edition	0.01 mg/L to 5.0 mg/L
		Nickel (Ni)	APHA 3111-B, 23 rd Edition	0.02 mg/L to 5.0 mg/L
[[Copper (Cu)	APHA 3111-B, 23rd Edition	0.05 mg/L to 5.0 mg/L
		Cadmium (Cd)	APHA 3111-B, 23 rd Edition	0.05 mg/L to 1.0 mg/L
		Total Chromium (Cr)	APHA 3111-B, 23 rd Edition	0.05 mg/L to 1.0 mg/L
		Zinc (Zn)	APHA 3111-B, 23rd Edition	0.01 mg/L to 5.0 mg/L
		Arsenic (As)	APHA 3111-B, 23 rd Edition	0.01 mg/L to 1.0 mg/L
2.	Soil / Sediments	рН	IS 2720 (Part 26)	2 to 10
		Electrical Conductivity / Specific Conductance	IS 14767	200 µmho/cm to 1000 mmho/cm
		Texture	PCS/SOP/Soil/03 Dated 01–01–2018	Qualitative
	Í !	Available Nitrogen	IS 14684	0 to 25 mg/kg
[[Available Phosphorous	ISO 11263	10 mg/kg to 30 mg/kg
	[Potassium	IS 9497	10 mg/kg to 1000 mg/kg
i i ! !	i !	Sodium	IS 9497	10 mg/kg to 1000 mg/kg
i ! ! !		Organic Carbon	IS 2720 (Part 22)	0.5 % to 0.75 %
III.	WATER			
1.	Surface Water	рН	APHA 4500-H ⁺ -B 23 rd Edition	2 to 10

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
[,	Total Dissolved Solids	APHA 2540 C, 23 rd Edition	10 mg/L to 15000 mg/L
[}	Total Hardness	APHA 2340 C, 23 rd Edition	2 mg/L to 900 mg/L
 		Electrical Conductivity / Specific Conductance	APHA 2510 B, 23 rd Edition	200 µmho/cm to 1000 mmho/cm
[Calcium	APHA 3500 Ca-B 23 rd Edition	2 mg/L to 200 mg/L
[Total Alkalinity	APHA 2320 B, 23rd Edition	2 mg/L to 1000 mg/L
[[[Chloride	APHA 4500-CI- B 23 rd Edition	5 mg/L to 1000 mg/L
[Sulphate	APHA 4500-SO42- E 23 rd Edition	10 mg/L to 600 mg/L
 		Sodium	APHA 3500-Na-B 23 rd Edition	10 mg/L to 200 mg/L
 		Potassium	APHA 3500-K-B 23 rd Edition	10 mg/L to 200 mg/L
[}	Boron	APHA 4500-B, 23 rd Edition	0.1 mg/L to 10 mg/L
 		Residual Chlorine	APHA 4500-CI-B 23 rd Edition	0.1 mg/L to 5 mg/L
[]		Fluoride	APHA 4500-F-D 23 rd Edition	0.1 mg/L to 100 mg/L
; ! ! ! !		Nitrate	APHA 4500-NO3-B 23 rd Edition	0.1 mg/L to 100 mg/L
; ! ! ! !		Magnesium	APHA 3500-Mg-B 23 rd Edition	2 mg/L to 200 mg/L
		Iron (Fe)	APHA 3111-B, 23 rd Edition	0.3 mg/L to 10.0 mg/L
i i		Lead (Pb)	APHA 3111-B, 23 rd Edition	0.01 mg/L to 5.0 mg/L
i 		Nickel (Ni)	APHA 3111-B, 23rd Edition	0.02 mg/L to 5.0 mg/L
ļ		Copper (Cu)	APHA 3111-B, 23 rd Edition	0.05 mg/L to 5.0 mg/L
i 	i 	Cadmium (Cd)	APHA 3111-B, 23 rd Edition	0.05 mg/L to 1.0 mg/L
 	 	Total Chromium (Cr)	APHA 3111-B, 23 rd Edition	0.05 mg/L to 1.0 mg/L
ļ 	 	Zinc (Zn)	APHA 3111-B, 23 rd Edition	0.01 mg/L to 5.0 mg/L
<u> </u>	 	Arsenic (As)	APHA 3111-B, 23 rd Edition	0.01 mg/L to 1.0 mg/L

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
2.	Drinking Water	рН	APHA 4500-H ⁺ -B 23 rd Edition	2 to 10
	[Total Dissolved Solids	APHA 2540 C, 23rd Edition	10 mg/L to 15000 mg/L
		Total Hardness	APHA 2340 C, 23 rd Edition	2 to 900 mg/L
		Electrical Conductivity/ Specific Conductance	APHA 2510 B, 23 rd Edition	200 µmho/cm to 1000 mmho/cm
		Calcium	APHA 3500 Ca-B, 23 rd Edition	2 mg/L to 200 mg/L
[Total Alkalinity	APHA 2320 B, 23rd Edition	2 mg/L to 1000 mg/L
		Chloride	APHA 4500-CI-B 23 rd Edition	5 mg/L to 1000 mg/L
[[[Sulphate	APHA 4500-SO42-E 23 rd Edition	10 mg/L to 600 mg/L
[]		Sodium	APHA 3500-Na-B 23 rd Edition	10 mg/L to 200 mg/L
 ! ! ! !		Potassium	APHA 3500-K-B 23 rd Edition	10 mg/L to 200 mg/L
 	}	Boron	APHA 4500-B, 23 rd Edition	0.1 mg/L to 10 mg/L
[Residual Chlorine	APHA 4500-CI-B 23 rd Edition	0.1 mg/L to 5 mg/L
 ! ! !		Fluoride	APHA 4500-F-D 23 rd Edition	0.1 mg/L to 100 mg/L
[Nitrate	APHA 4500-NO3-B 23 rd Edition	0.1 mg/L to 100 mg/L
 ! ! !		Magnesium	APHA 3500-Mg-B 23 rd Edition	2 mg/L to 200 mg/L
[Iron (Fe)	APHA 3111-B, 23 rd Edition	0.3 mg/L to 10.0 mg/L
į 	; ; ; }	Lead (Pb)	APHA 3111-B, 23 rd Edition	0.01 mg/L to 5.0 mg/L
 	 	Nickel (Ni)	APHA 3111-B, 23 rd Edition	0.02 mg/L to 5.0 mg/L
ļ 	 	Copper (Cu)	APHA 3111-B, 23 rd Edition	0.05 mg/L to 5.0 mg/L
ļ	! ! }	Cadmium (Cd)	APHA 3111-B, 23 rd Edition	0.008 mg/L to 1.0 mg/L
<u> </u>	! 	Total Chromium (Cr)	APHA 3111-B, 23 rd Edition	0.05 mg/L to 1.0 mg/L

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
[[Zinc (Zn)	APHA 3111-B, 23 rd Edition	0.01 mg/L to 5.0 mg/L
!		Arsenic (As)	APHA 3111-B, 23 rd Edition	0.01 mg/L to 1.0 mg/L