

Laboratory National River Water Quality Laboratory, Central Water Commission,
Ministry of Water Resources, River Development and Ganga
Rejuvenation, B-5 Kalindi Bhawan, Tara Crescent Road, Qutub
Institutional Area, New Delhi

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5578

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Validity 12.04.2018 to 11.04.2020

Last Amended on 26.04.2018

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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BIOLOGICAL TESTING

I.	WATER			
1	River Water	Thermotolerant (Fecal) Coliform	APHA23 rd Edn.2017, 9211 E	< 1.8 to > 1600 MPN/100ml
		Standard Total Coliform (MPN)	APHA23 rd Edn.2017, 9211 A&B	< 1.8 to > 1600 MPN/100ml

Ajay Kumar Sharma
Convenor

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Program Director

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CHEMICAL TESTING

I.	WATER			
	River Water	Turbidity	APHA23 rd Edn.2017-2130 B (Nephelometric)	0.1 to 1000NTU
		pH	APHA23 rd Edn.2017-4500H ⁺ B (Electrometric)	2 to 12
		Conductivity	APHA23 rd Edn.2017-2510 B (Laboratory Method)	0.1µS/cm to 25000 µS / cm
		Total Dissolved solids	APHA23 rd Edn.2017-2540 C (Dried at 180°C)	0.1 mg/L to 15000 mg/L
		Total Hardness as CaCO ₃	APHA23 rd Edn.2017-2340 C (EDTA Titrimetric)	1 mg/L to 3000 mg/L
		Calcium as Ca	APHA23 rd Edn.2017-3500Ca - B (EDTA Titrimetric)	1 mg/L to 1500 mg/L
		Magnesium as Mg	APHA23 rd Edn.2017-3500 Mg – B (By Calculation)	1 to 1000 mg/L
		Total alkalinity as CaCO ₃	APHA23 rd Edn.2017-2320 B (Titrimetric)	1 mg/L to 5000 mg/L
		Chloride as Cl ⁻	APHA23 rd Edn.2017-4500Cl ⁻ B (Argentometric)	1 mg/L to 2000 mg/L
		Chemical Oxygen Demand (COD)	APHA23 rd Edn.2017-5220 D (Closed Reflux Colorimetric)	1 mg/L to 1000 mg/L
		Biological Oxygen Demand (BOD) @5 Days	APHA23 rd Edn.2017-5210 B	1.0 mg/L to 500 mg/L
		Dissolved Oxygen(mg/L)	APHA23 rd Edn.2017-4500, O-C (Azide Modification)	0.1 mg/L to 20mg/L

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		Nitrate as NO ₃ ⁻	APHA23 rd Edn.2017 – 4500 NO ₃ ⁻ D (Nitrate Electrode)	0.20 mg/L to 500 mg/L
		Nitrite as NO ₂	APHA23 rd Edn.2017 – 4500 NO ₂ ⁻ B (Colorimetric)	0.01 mg/L to 10 mg/L
		Ammonical Nitrogen as NH ₃	APHA23 rd Edn.2017 – 4500 NH ₃ -D (Ammonia Selective Electrode)	0.3 mg/L to 100 mg/L
		Fluoride as F	APHA23 rd Edn.2017-4500 F-C (Ion Selective Electrode)	0.1 mg/L to 25 mg/L
		Boron as B	APHA23 rd Edn.2017-4500B/B (Curcumin)	0.1 mg/L to 10 mg/L
		Total Phosphate as P	APHA23 rd Edn.2017-4500 P-E (Ascorbic Acid)	0.01 mg/L to 50 mg/L
		Sulphate as SO ₄ ²⁻	APHA23 rd Edn.2017-4500 SO ₄ ²⁻ E (Turbidimetric)	1 mg/L to 1000 mg/L
		Sodium as Na	APHA23 rd Edn.2017–3500 Na-B (Flame Emission Photometric)	1 mg/L to 1000 mg/L
		Potassium as K	APHA23 rd Edn.2017–3500 K-D (Flame Emission Photometric)	1 mg/L to 100 mg/L
		Cadmium as Cd	APHA23 rd Edn.2017–3111B & 3113B (Atomic Absorption Spectrometric)	0.0001 mg/L to 20 mg/L

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		Copper as Cu	APHA23 rd Edn.2017– 3111B & 3113B (Atomic Absorption Spectrometric)	0.005 mg/L to 50 mg/L
		Total chromium as Cr	APHA23 rd Edn.2017 – 3111B (Atomic Absorption Spectrometric)	0.0001 mg/L to 25 mg/L
		Lead as Pb	APHA23 rd Edn.2017– 3111B & 3113B (Atomic Absorption Spectrometric)	0.0001 mg/L to 20 mg/L
		Nickel as Ni	APHA23 rd Edn.2017 – 3111B & 3113B (Atomic Absorption Spectrometric)	0.0001 mg/L to 20 mg/L
		Zinc as Zn	APHA23 rd Edn.2017 – 3111B (Atomic Absorption Spectrometric)	0.0001 mg/L to 50 mg/L
		Arsenic as As	APHA23 rd Edn.2017 – 3113B (Atomic Absorption Spectrometric)	0.0001 mg/L to 20 mg/L
		Mercury as Hg	APHA23 rd Edn.2017-- 3112B (Atomic Absorption Spectrometric)	0.0001 mg/L to 10 mg/L
		Iron as Fe	APHA23 rd Edn.2017-- 3111B (Atomic Absorption Spectrometric)	0.0001 mg/L to 50 mg/L