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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		CHEMICAL TESTING		
I.	**WATER**			
1.	**Ground Water, Surface Water & Saline Water**	Color	APHA 2120 C (23rd edition) Spectrometric Single wavelength method	2 to 99 Pt-Co units
		Temperature	APHA 2550, 2550-B (23rd edition) IS 3025 (Part 9)	2 °C to 99 °C
		pH Value	IS 3025 (Part 11) (Electrometric Method) APHA 4500- B (23rd edition)	1 to 14
		Conductivity	APHA 2510 B (23rd edition)	1.0 µS/cm to 10000 µS/cm
		Total Solids	APHA 2540 B (23rd edition)	10 mg/l to 10000 mg/l
		Total Suspended Solids	APHA 2540 D (23rd edition)	2 mg/l to 1000mg/l
		Total Dissolved Solids	APHA 2540 C (23rd edition)	10 mg/l to 1000 mg/l
		Volatile and Fixed Residue	APHA 2540 E (23rd edition)	2 mg/l to 110 mg/l
		Total Hardness	APHA 2340 C (23rd edition) EDTA Titrimetric Method	5 mg/l to 1000 mg/l
		Residual Chlorine	APHA 4500 Cl B & C (23rd edition)	0.1 mg/l to 5 mg/l
		Chloride	APHA 4500 Cl^- B (23rd edition) Argentometric method	5 to 200 mg/l
		Dissolved Oxygen	APHA 4500 O C (23rd edition)	0.1 mg/l to 10 mg/l

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Calcium	APHA 3500 Ca B (23rd edition)	5 mg/l to 1000 mg/l
		Magnesium	APHA 3500 Mg B (23rd edition)	5 mg/l to 1000 mg/l
		Biological Oxygen Demand (3 days at 27^0C)	IS 3025 (Part 44)	10 mg/l to 500 mg/l
		Chemical Oxygen Demand	APHA 5220 B (23rd edition)	1 mg/l to 1000 mg/l
		Hexavalent Chromium	APHA 3500 Cr B (23rd edition)	0.05 mg/l to 25 mg/l
		Sulphate	APHA 4500 SO_4 E (23rd Edition)	1 mg/l to 70.0 mg/l
		Sodium	APHA 3500 Na B (23rd edition)	0.1 mg/l to 100 mg/l
		Potassium	APHA 3500 K B(23rd edition)	0.1 mg/l to 100 mg/l
		Total Acidity as $CaCO_3$	APHA 2310 B (23rd edition)	1 mg/l to 100 mg/l
		Total Alkalinity as $CaCO_3$	APHA 2320 B (23rd edition)	1 mg/l to 100 mg/l
		Phosphate	APHA 4500 P D & E (23rd edition)	0.1 mg/l to 50 mg/l
		Ammonia Nitrogen	APHA 4500 NH_3 B & C (23rd edition)	0.5 mg/l to 200 mg/l
		Nitrate Nitrogen	APHA 4500 NO_3 E (23rd edition)	0.1 mg/l to 10 mg/l
		Nitrite Nitrogen	APHA 4500 NO_2 B (23rd edition)	1.0 mg/l to 10 mg/l
		Fluoride	APHA 4500 F D (23rd edition)	1.0 mg/l to 10 mg/l
		Copper as Cu	APHA 3111 B (23rd edition)	0.04 mg/l to 10 mg/l
		Chromium as Cr	APHA 3111 B (23rd edition)	0.1 mg/l to 10 mg/l

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Program Manager

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Chromium as Cr	APHA 3111 B (23rd edition)	0.04 mg/l to 2 mg/l
		Iron as Fe	APHA 3111 B (23rd edition)	0.1 mg/l to 10 mg/l
		Lead as Pb	APHA 3111 B (23rd edition)	0.1 mg/l to 10 mg/l
		Lead as Pb	APHA 3111 B (23rd edition)	0.009 mg/l to 2 mg/l
		Mercury as Hg	APHA 3111 2B (23rd edition)	0.0009 mg/l to 2 mg/l
		Nickel as Ni	APHA 3111 B (23rd edition)	0.019 mg/l to 2 mg/l
		Zinc as Zn	APHA 3111 B (23rd edition)	0.5 mg/l to 40 mg/l
II.	**POLLUTION AND ENVIRONMENT**			
1.	**Waste Water Effluent & Leachate Water**	Color	APHA 2120 B (23rd edition)	2 to 99 Pt- Co units
		Temperature	IS 3025 (Part 9): 1984 (RA 2017)	2 °C to 99 °C
		pH Value	IS 3025 (Part 11): 1983 (Electrometric Method) (Reaffirmed 2017) APHA 4500- B (23rd edition)	1 to 14
		Conductivity	APHA 2510 B (23rd edition)	1.0 µS/cm to 20000 µS/cm
		Total Solids	APHA 2540 B (23rd edition)	10 mg/l to 10000 mg/l
		Total Suspended Solids	APHA 2540 D (23rd edition)	2 mg/l to 10000 mg/l
		Total Dissolved Solids	APHA 2540 C (23rd edition)	10 mg/l to 1000 mg/l

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Volatile and Fixed Residue	APHA 2540 E (23rd edition)	2 mg/l to 500 mg/l
		Total Hardness	APHA 2340 C (23rd edition)	5 mg/l to 1000 mg/l
		Residual Chlorine	APHA 4500 B & C (23rd edition)	0.1 mg/l to 50 mg/l
		Chloride	APHA 4500 Cl B (23rd edition)	5 mg/l to 1000 mg/l
		Dissolved Oxygen	APHA 4500 O C (23rd Edition)	0.1 mg/l to 10 mg/l
		Calcium	APHA 3500 Ca B (23rd edition)	5 mg/l to 1000 mg/l
		Magnesium	APHA 3500 Mg B (23rd edition)	5 mg/l to 1000 mg/l
		Biological Oxygen Demand (3 days at 27 °C)	IS 3025 (Part 44): 1993 (RA 2014)	10 mg/l to 5000 mg/l
		Oil & Grease	APHA 5520 B (23rd edition)	0.2 mg/l to 100 mg/l
		Phenolic Compound	APHA 5530 D (23rd edition)	0.1 mg/l to 20 mg/l
		Sulphide	APHA 4500 S2 D (23rd edition)	1 mg/l to 5.0 mg/l
		Chemical Oxygen Demand	APHA 5220 B (23rd edition)	10 mg/l to 5000 mg/l
		Hexavalent Chromium	APHA 3500 Cr B (23rd edition)	1.0 mg/l to 100 mg/l
		Sulphate	APHA 4500 SO_4 E (23rd edition)	2 mg/l to 70 mg/l
		Ammonical Nitrogen	APHA 4500 NH_3 B & C (23rd edition)	0.5 mg/l to 200 mg/l
		Sodium	APHA 3500 Na B (23rd edition)	1.0 mg/l to 500 mg/l
		Potassium	APHA 3500 K B (23rd edition)	1.0 mg/l to 500 mg/l

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		Total Acidity as $CaCO_3$	APHA 2310 B (23^{rd} edition)	1 mg/l to 400 mg/l
		Total Alkalinity as $CaCO_3$	APHA 2320 B (23^{rd} edition)	1 mg/l to 400 mg/l
		Phosphate	APHA 4500 P D (23^{rd} edition)	2.0 mg/l to 25 mg/l
		Fluoride	APHA 4500 F D (23^{rd} edition)	0.1 mg/l to 15 mg/l
		Cyanide	APHA 4500 CN C & D (23^{rd} edition)	0.1 mg/l to 10 mg/l
		Nitrate Nitrogen	APHA 4500 NO_3 E (23^{rd} edition)	0.1 mg/l to 10 mg/l
		Nitrite Nitrogen	APHA 4500 NO_2 B (23^{rd} edition)	1.0 mg/l to 10 mg/l
		Copper as Cu	APHA 3111 B (23^{rd} edition)	0.04 mg/l to10 mg/l
		Chromium as Cr	APHA 3111 B (23^{rd} edition)	0.1 mg/l to10 mg/l
		Chromium as Cr	APHA 3111 B (23^{rd} edition)	0.04 mg/l to 2 mg/l
		Iron as Fe	APHA 3111 B (23^{rd} edition)	0.1 mg/l to 10 mg/l
		Lead as Pb	APHA 3111 B (23^{rd} edition)	0.1 mg/l to 10 mg/l
		Lead as Pb	APHA 3111 B (23^{rd} edition)	0.009 mg/l to 2 mg/l
		Mercury as Hg	APHA 3111 2B (23^{rd} edition)	0.0009 mg/l to 2 mg/l
		Nickel as Ni	APHA 3111 B (23^{rd} edition)	0.019 mg/l to 2 mg/l
		Zinc as Zn	APHA 3111 B (23^{rd} edition)	0.5 mg/l to 40 mg/l

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III.	**ATMOSPHERIC POLLUTION**			
1.	**Ambient Air**	PM 2.5	EEL-DDU/AA/SOP-01 Issue no. 01 Issue date: 01.04.18	15 200 µg/m^3 to 200 µg/m^3
		RSPM (PM10)	IS 5182 (Part 23)	20 µg/m^3 to 500 µg/m^3
		Sulfur Di Oxide	IS 5182 (Part 2)	5 µg/m^3 to 600 µg/m^3
		Oxides of Nitrogen	IS 5182 (Part 6)	5 µg/m^3 to 500 µg/m^3
		Chlorine	IS 5182 (Part 29)	5 µg/m^3 to 2000 µg/m^3
		Hydrogen Sulphide	IS 5182 (Part 7)	6 µg/m^3 to 100 µg/m^3
		Ammonia	EEL-DDU/AA/SOP-04 Issue no. 02 Issue date: 01.04.18	9 µg/m^3 to 700 µg/m^3
2.	**Stack Emission**	PM	IS 11255 (Part 1)	10 mg/Nm^3 to 1500 mg/Nm^3
		CO	IS 13270 (Part 26)	1.2 µg/$m^3$to 200 µg/m^3
		Nitrogen Oxide	IS11255 (Part 7)	5 mg/Nm^3 to 1000 mg/Nm^3
		Sulfur Di Oxide	IS 11255 (Part 2)	5 mg/Nm^3 to 1500 mg/Nm^3
		Ammonia (as NH_3)	IS 11255 (Part 6)	5 µg/m^3 to 500 µg/m^3
		Hydrogen Sulphide (as H_2S)	IS 11255 (Part 4)	5µg/m^3 to 50 µg/m^3

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