2nd Main, Judges Bungalow Road, Narayanpur, Dharwad, Karnataka

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	SI.	Product / Material of Test	•	Test Method Specification against which tests are	Range of Testing / Limits of Detection
L			 	performed	

BIOLOGICAL TESTING

I.	WATER		T	
1.	Water	Total Coliforms	IS : 1622	Presence/Absence per 100 mL sample
	 	Escherichia coli	IS : 1622	Presence/Absence per 100mL sample
		Aerobic microbial counts	IS : 1622	≥1 CFU/mL
		Yeast and molds	IS : 5403	≥1CFU/mL
 	 	Pseudomonas aureginosa	IS:13428 (Annexure-D)	Presence/Absence per 100mL sample
 	 	Staphylococcus aureus	IS:5887 (Part-8)	Presence/Absence per 100mL sample
II.	FOOD AND AGRICU	JLTURAL PRODUCTS		
1.	Other Specified	Coliforms	FDA/BAM chapter 4	Presence/Absence per 1g
	food items: Ready	Escherichia coli	FDA/BAM chapter 9	Presence/Absence per 1g
	to eat Foods,	Aerobic microbial counts	FDA/BAM chapter 3	≥1 0CFU/g
 	Herbs, Spices & condiments	Yeast and molds	FDA/BAM chapter18	≥10 CFU/g
 		Staphylococcus aureus	Food and Drug Administration/BAM Chapter 6	Presence/Absence per 1g
III.	ENVIRONMENTAL	AND POLLUTION	 	
1.	Air monitoring of indoor air by plate	Total plate count	NTLR/SOP/650, Issue 1.0, Dated 07/08/2017	≥1 CFU per plate per time of exposure
 	exposure method (Classified & Non classified areas)	Yeast and Mold count	NTLR/SOP/650, Issue 1.0, Dated 07/08/2017	≥1 CFU per plate per time of exposure

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ification Range of Testing / ts are Limits of Detection		Specific Test Performed	Product / Material of Test	SI.
ter 3	ounts l	Aerobic microbial counts	Surface monitoring	2.
ter18 ≥10 CFU/swab/cm²/mL of rinse		Yeast and molds	(Estimation of Bioburden of	[
ter 4 Absent /swab/cm²/mL of rinse		Escherichia coli	surfaces and equipment by	
ter 4 Presence/Absence/swab /cm²/mL of rinse		Coliforms	swabs) 	
Absent /swab/cm²/mL of rinse	<u> </u>	Enterobacteriaceae		
12 Absent /swab/cm²/mL of rinse	reus F	Staphylococcus aureus	 	
1 to 1600 MPN/100mL	<u> </u>	Total Coliforms	Waste Water /	3.
	 1	Total Coliforms Escherichia coli	Waste Water / Sewage	3.

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are	Range of Testing / Limits of Detection
<u> </u>	 	 	performed	

CHEMICAL TESTING

[I.	WATER		T	
1.	Potable, Industrial/	Colour	APHA 22 nd Edition 2120 B	1 to 100 Hazen Units
	Coolant water Bore Water	pH@ 25°C	APHA 22 nd Edition 4500 H ⁺ ,B	3 to 12
	Surface water, Ground water,	Electrical conductivity @ 25°C	APHA 22 nd Edition 2510 B	5 μS/cm to 10,000 μS/cm
 	RO water	Turbidity	APHA 22 nd Edition 2130 B	0.1 NTU to 100 NTU
	 	Chloride as Cl	APHA 22 nd Edition 4500-Cl ⁻ ,B	10 mg/L to 2000 mg/L
 	 	Total Alkalinity as CaCO₃	APHA 22 nd Edition 2320 B	1 mg/L to 1000 mg/L
	 	Residual Free Chlorine	IS 3025 (Part 26)	0.2 mg/L to 2 mg/L
 	 	Total Hardness as CaCO₃	APHA 22 nd Edition 2340 C	2 mg/L to 2500 mg/L
 		Calcium as Ca	APHA 22 nd Edition 3500 Ca ,B	1 mg/L to 1000 mg/L
 		Magnesium as Mg	APHA 22 nd Edition 3500-Mg,B	1 mg/L to 1000 mg/L
	 	Dissolved Oxygen	IS 3025 (Part 38)	0.1 mg/L to 8 mg/L
		Acidity as CaCO ₃	IS 3025 (Part 22)	1 mg/L to 500 mg/L
 	 	Boron as B	APHA 22 nd Edition 4500-B, B	0.2 mg/L to 5 mg/L
 	 	Iron as Fe	APHA 22 nd Edition 3500-Fe, B	0.05 mg/L to 2 mg/L
 	 	Chromium Hexavalent	APHA 22 nd Edition 3500-Cr,B	0.05 mg/L to 1 mg/L
	 	Sulphate as SO4	IS 3025,Part-24	1 mg/L to 1000 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
		Dissolved Phosphorous as P	APHA 22 nd Edition 4500-P, D	0.1 mg/L to 50 mg/L
 		Fluoride as F	APHA 22 nd Edition 4500-F,D	0.1 mg/L to 5 mg/L
 		Nitrate Nitrogen as NO ₃ -N	IS : 3025 (Part-34) (Chromotropic Acid Method)	0.5 mg/L to 50 mg/L
 		Total Dissolved Solids	APHA 22 nd Edition 2540 C	10 mg/L to 7000 mg/L
	 	Potassium	APHA 22 nd Edition 3500-K ,B	1 mg/L to 1000 mg/L
		Sodium	APHA 22 nd Edition 3500-Na, B	1 mg/L to 1000 mg/L
		CO ₂	APHA 22 nd Edition 4500-C	0.5 mg/L to 50mg/L
		Free CO ₂	APHA 22 nd Edition 4500-D	0.5 mg/L to 3mg/L
		NO ₂	IS:3025(part 34) Spectrophotometer method	0.1 mg/L to 10.00 mg/L
 	 	NO ₂ -N	IS:3025(part 34)-1992 Spectrophotometer method	0.1 mg/L to 10.00 mg/L
 		Chemical Oxygen Demand	IS :3025 (Part-58)	4 mg/L to 100.00 mg/L
		Biological Oxygen Demand (BOD) 3 days, 27° C	IS : 3025 (Part-44)	2 mg/L to 50.00 mg/L
 		Ortho-phosphate	APHA 22 nd Edition, 4500-P-D	0.01 mg/L to 6.0 mg/L
		Dissolved Phosphate	APHA 22 nd Edition, 4500-P, D	0.1 mg/L to 10 mg/L
		Free-Ammonia as NH₃	IS-2488 (PART IV)	0.01 mg/L to 10mg/L
		Odour	IS-3025(PART 5)	Qualitative
	 	Total Silica	APHA 22 nd Edition 3111D	2 mg/L to 100mg/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
F	T		IS 3025(Part 35)	0.02 mg/L to 100mg/L
	 	Colloidal Silica	APHA 22 nd Edition	2 mg/L to 100mg/L
F	 	T	IS 3025(Part 35)	0.02 mg/L to 100mg/L
	 	Reactive Silica	APHA 22 nd Edition	2 mg/L to 100mg/L
į		į.	4500 SiO2-C-D	
			IS 3025(Part 35)	0.02 mg/L to 100mg/L
		Copper	IS 3025(Part 42),	0.01 mg/L to 20.00 mg/L
į		į	APHA 22 nd Edition	
L	<u> </u>	<u> </u>	3111B	
1		Cadmium	IS 3025 (Part 41),	0.002 mg/L to 20.00
į		ļ	APHA 22 nd Edition	mg/L
L	<u> </u>	 	3111B	
1		Chromium	IS 3025(Part 52),	0.03 mg/L to 20.00 mg/L
1			APHA 22 nd Edition	
<u> </u>	 	_	3111B	<u> </u>
İ		Lead	IS 3025(Part 47),	0.01 mg/L to 20.00 mg/L
		}	APHA 22 nd Edition	
<u> </u>	 	Nickel	3111B	0.01
į		INICKEI	IS 3025(Part 54), APHA 22 nd Edition	0.01 mg/L to 20.00 mg/L
ł		}	3111B	
<u> </u>	 	Zinc	IS 3025(Part 49),	0.005 mg/L to 20.00
į		ZIIIC	APHA 22 nd Edition	0.005 Hig/L to 20.00 mg/L
		İ	3111B	111g/L
<u> </u>	 	Iron	IS 3025(Part 53),	0.05 mg/L to 20.00 mg/L
1		11011	APHA 22 nd Edition	0.00 mg/L to 20.00 mg/L
į		İ	3111B	
<u> </u>	 	Manganese	IS 3025(Part 59)	0.01 mg/L to 20.00 mg/L
		9	APHA 22 nd Edition	
į		ļ	3111B	į
2.	Distilled	pH@ 25°C	APHA 22 nd Edition	3 to 12
	Demineralized		4500 H+, B	
ļ	water	Electrical conductivity @	APHA 22 nd Edition	5 μS/cm to 10,000
		25°C	2510 B	μŚ/cm
L			 	

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Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
 	Total Hardness as	APHA 22 nd Edition 2340 C	2 mg/L to 2500 mg/L
 	Calcium as Ca	APHA 22 nd Edition 3500 Ca ,B	1 mg/L to 1000 mg/L
 	Magnesium as Mg	APHA 22 nd Edition 3500-Mg,B	1 mg/L to 1000 mg/L
Construction purpose water	pH@ 25°C	APHA 22 nd Edition 4500 H+, B	3 to 12
 	Organic Solids	APHA 22 nd Edition 2540 E	10 mg/L to 10000 mg/L
†	Inorganic Solids	APHA 22 nd Edition 2540 E	10 mg/L to 10000 mg/L
 	Sulphates (SO ₄₎	IS 3025,Part-24	4 mg/L to 1000 mg/L
 	Chlorides(CI)	APHA 22 nd Edition 4500-Cl ⁻ ,B	10 mg/L to 2000 mg/L
 	Total Suspended Solids	APHA 22 nd Edition 2540 D	10 mg/L to 20000 mg/L
Irrigation water	pH@ 25°C	APHA 22 nd Edition 4500 H+, B	3 to 12
 	Electrical conductivity @ 25°C	APHA 22nd Edition 2510 B	5 μS/cm to 10,000 μS/cm
POLLUTION & ENV	IRONMENT	 	
Raw,Treated Effluent or	pH@ 25°C	APHA 22 nd Edition 4500 H+, B	3 to 12
Sewage Water liquid	Electrical conductivity @ 25°C	APHA 22 nd Edition 2510 B	5 μS/cm to 40000 μS/cm
Effluent/Spent wash/ Effluent	Chloride as Cl	*APHA 22nd Edition 4500-Cl ⁻ ,B	2 mg/L to 2000 mg/L
Toxicity	Alkalinity as CaCO ₃	APHA 22nd Edition 2320 B	1 mg/L to 1000 mg/L
	Construction purpose water Irrigation water POLLUTION & ENV Raw,Treated Effluent or Sewage Water liquid Effluent/Spent wash/ Effluent	Total Hardness as CaCO3 Calcium as Ca Magnesium as Mg Construction pH@ 25°C purpose water Organic Solids Inorganic Solids Inorganic Solids Sulphates (SO4) Chlorides(CI) Total Suspended Solids Irrigation water PH@ 25°C POLLUTION & ENVIRONMENT Raw,Treated Effluent or Sewage Water liquid Effluent/Spent wash/ Effluent Chloride as CI Electrical conductivity @ 25°C Chloride as CI	of Test Performed against which tests are performed Total Hardness as CaCO ₃ APHA 22nd Edition Calcium as Ca APHA 22nd Edition APHA 22nd Edition 3500 Ca_B Magnesium as Mg APHA 22nd Edition 3500 Mg,B APHA 22nd Edition 3500 Mg,B APHA 22nd Edition 4500 H+, B APHA 22nd Edition Construction purpose water APHA 22nd Edition Inorganic Solids APHA 22nd Edition 4500 H+, B APHA 22nd Edition Sulphates (SO4) IS 3025,Part-24 Chlorides(Cl) APHA 22nd Edition 4500-Cl ,B APHA 22nd Edition 4500 D APHA 22nd Edition 4500 D APHA 22nd Edition 4500 H+, B APHA 22nd Edition Electrical conductivity @ 25°C APHA 22nd Edition APHA 22nd Edition APHA 22nd Edition 4500 H+, B APHA 22nd Edition APHA 22nd Edition APHA 22nd Edition 4500-Cl ,B APHA 22nd Edition 4500-Cl ,B APHA 22nd Edition 4500-Cl ,B

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 	 	Total Hardness asCaCO ₃	APHA 22 nd Edition 2340 C	2 mg/L to 2500mg/L
		Calcium as CaCO ₃	APHA 22 nd Edition 3500 Ca ,B	1 mg/L to 1000 mg/L
	 	Magnesium as CaCO ₃	APHA 22 nd Edition 3500-Mg B	1 mg/L to 1000 mg/L
 		Chemical oxygen Demand	IS : 3025 (Part-58)	4 mg/L to 50000 mg/L
	 	Biological Oxygen Demand (BOD), 3 days, 27° C	IS : 3025 (Part-44)	2 mg/L to 15000 mg/L
 	 	Total Kjeldahl Nitrogen	APHA 22 nd Edition 4500-N org, B	1 mg/L to 2000 mg/L
	†	Boron	APHA 22 nd Edition 4500-B, B	0.2 mg/L to 5 mg/L
	 	Iron	APHA 22 nd Edition 3500-Fe,B	0.05 mg/L to 2 mg/L
ļ	 	Sulphate	IS 3025,Part-24,	1 mg/L to 1000 mg/L
	 	Total Dissolved Solids	APHA 22 nd Edition 2540 C	10 mg/L to 40000 mg/L
	 	Dissolved Phosphorus as	APHA 22 nd Edition 4500-P, D	0.1 mg/L to 50 mg/L
	 	Total Suspended Solids	APHA 22 nd Edition 2540 D	10 mg/L to 20000 mg/L
	 	Total Solids	APHA 22 nd Edition 2540 B	10 mg/L to 150000 mg/L
		Total Settleable Solids	APHA 22 nd Edition 2540 F	10– 15000 mg/L
 	 	Fixed Solids	APHA 22 nd Edition 2540 E	10 mg/L to 10000 mg/L
 	 	Volatile Solids	APHA 22 nd Edition 2540 E	10 mg/L to 10000 mg/L
		Oil & Grease	IS : 3025 (Part-39)	10 mg/L to 1000 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
		Residual Sodium Carbonate (RSC)	NTLR/SOP/36, Issue No:01, Issue Date:30/09/2017	-10 to +5
 	 	Sodium absorption Ratio (SAR)	NTLR/SOP/38, Issue No:01, Issue Date:30/09/2017	2 to 40
	 	% Sodium	NTLR/SOP/35, Issue No:01, Issue Date:30/09/2017	20 to 100
	 	Chromium Hexavalent	APHA 22 nd Edition 3500-Cr, B	0.05 mg/L to 1 mg/L
	 	Potassium	APHA 22 nd Edition 3500-K ,B	1 mg/L to 1000 mg/L
	 	Sodium	APHA 22 nd Edition 3500-Na, B	1 mg/L to 1000 mg/L
		Ammonical Nitrogen	APHA 22 nd Edition 4500-NH ₃ , B, C	1 mg/L to 1500 mg/L
 	 	Organic Nitrogen	APHA 22 nd Edition 4500-NH ₃ , B, C	1 mg/L to 1500 mg/L
 	 	Odour	IS 3025 (Part 5)	Objectionable/ Unobjectionable
	†	Total silica	APHA 22 nd Edition 3111D Page. No. 3-23-24	2 mg/L to 100mg/L
 	 	Colloidal Silica	APHA 22 nd Edition 4500 SiO ₂ -C-D	2 mg/L to 100mg/L
			IS 3025 (Part 35)	0.02 mg/L to 2 mg/L
		Reactive silica	APHA 22 nd Edition 4500 SiO ₂ -C-D	2 mg/L to 100mg/L
			IS 3025 (Part 35)	0.02 mg/L to 2 mg/L
 		NO ₂	IS:3025 (Part 34) Spectrophotometer method	0.1 mg/L to 10.00 mg/L
		Free-Ammonia as NH ₃	IS-3025 (Part 34)	0.01 mg/L to 20 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
 		Bioassay only qualitative- 90% survival of fish after 96 hours in 100 percent effluent)	IS 6582 (Part 1)	90% survival of fish after 96 hours in 100% effluent
		Copper	IS 3025 (Part-42) APHA 22 nd Edition 3111B	0.01 mg/L to 8.00 mg/L
 		Cadmium	IS 3025 (Part-41) APHA 22 nd Edition 3111B	0.002 mg/L to 5.00 mg/L
		Chromium	IS 3025 (Part-52) APHA 22 nd Edition 3111B	0.03 mg/L to 10.00 mg/L
		Lead	IS 3025 (Part-47) APHA 22 nd Edition 3111B	0.01 mg/L to 10.00 mg/L
		Nickel	IS 3025 (Part-54) APHA 22 nd Edition 3111B	0.01 mg/L to 8.00 mg/L
 		Zinc	IS 3025 (Part-49) APHA 22 nd Edition 3111B	0.005 mg/L to 4.00 mg/L
		Iron	IS 3025 (Part-53) APHA 22 nd Edition 3111B	0.05 mg/L to 8.00 mg/L
		Manganese	IS 3025 (Part-59) APHA 22 nd Edition 3111B	0.01 mg/L to 10.00 mg/L
2.	Sludge/Solid waste/Hazardous waste/Toxic	pH at 25 °c	NTLR/SOP/46 Issue No 1.0 dated 01.10.2012	4.6 to 8.5
	waste/ Contaminated soil	Electrical Conductivity	NTLR/SOP/47 Issue No1.0 dated 01.10.2012	0.1 mS/cm to 1 mS/cm
L		Moisture	IS 9235	0.1% 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
F	7			10% to 90%
F	<u> </u>	Copper as Cu	EPA 3050B	0.1 mg/kg to 50 mg/kg
	ļ		EPA 7210	51 mg/kg to 500mg/kg
F	T	Iron as Fe	EPA 3050B	0.1 mg/kg to 500 mg/kg
	<u> </u>	<u>i</u>	EPA 7380	0.05% to 5%
 	T	Zinc as Zn	EPA 3050B	0.1 mg/kg to 50 mg/kg
			EPA 7950	50 mg/kg to 500 mg/kg
	†	Lead as Pb	EPA 3050B	0.1 mg/kg to 50 mg/kg
	İ		EPA 7420	50 mg/kg to 500 mg/kg
 		Cadmium as Cd	EPA 3050B EPA 7130	0.1 mg/kg to 50 mg/kg
	 	Nickel as Ni	EPA 3050B	0.1 mg/kg to 50 mg/kg
i			EPA 7520	50 mg/kg to 500 mg/kg
	†	Mercury as Hg	EPA 7471B	0.1 mg/kg to 50 mg/kg
	Ì			50 mg/kg to 500 mg/kg
	T	Chromium	NTLR/SOP/105	0.03 mg/L to 10.00 mg/L
į	ļ		Issue 1.0	į į
 	 	<u> </u>	dated 01.10.2017	
III.	SOIL AND ROCK	 		
1.	Agricultural Soil	pH at 25 °c	NTLR/SOP/46	4.6 to 8.5
	İ		lssue 1.0	;
] 		dated 01.10.2012	
		Electrical Conductivity	NTLR/SOP/47	0.1 mS/cm to 1 mS/cm
į	ļ		Issue 1.0	į į
 	<u> </u>	<u> </u>	dated 01.10.2012	L
l I	 	Organic carbon	NTLR/SOP/48	0.10% to 10 %
į	į		Issue 1.0	į
! └──-	ı L	<u> </u>	dated 01.10.2012	
	[Moisture Content	NTLR/SOP/49	0.5% to 18 %
į	ļ		Issue 1.0	į
 	 	<u> </u>	dated 01.10.2012	<u> </u>
! 	[Mineralizable Nitrogen	NTLR/SOP/50	14 Kg/ha to 1500 Kg/ha
	İ	I	i Issue 1.0	I i

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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
	Ţ	Ţ	dated 01.10.2012	
 		Available Phosphorus	NTLR/SOP/51 Issue 1.0	0.6 Kg/ha to 500 Kg/ha
 			dated 01.10.2012	
 	† 	Available Potassium	NTLR/SOP/52 Issue 1.0	2 Kg/ha to 1500 Kg/ha
 	 	<u> </u>	dated 01.10.2012	
 		Exchangeable Calcium	NTLR/SOP/53 Issue 1.0 dated 01.10.2012	1 to 2000 meq/100 g Soil
 	 	Exchangeable Magnesium	NTLR/SOP/54 Issue 1.0 dated 01.10.2012	1 to 1000 meq/100 g Soil
 	 	Available Sulphur	NTLR/SOP/55 Issue 1.0 dated 01.10.2012	0.1 to 1000 mg/kg
 !		Available Zinc	NTLR/SOP/66 Issue 1.0 dated 01.10.2016	0.06 mg/L to 100 mg/L
 	+	Available Manganese	NTLR/SOP/66 Issue 1.0 dated 01.10.2012	0.1mg/L to 100 mg/L
 	 	Available Copper	NTLR/SOP/66 Issue 1.0 dated 01.10.2012	0.1mg/L to 100 mg/L
 	+	Available Iron	NTLR/SOP/66 Issue 1.0 dated 01.10.2012	0.2mg/L to 100 mg/L
IV.	FERTILISER	†	- 	
1.	Compost	pH at 25 °c	NTLR/SOP/46 Issue 1.0 dated 01.10.2012	4.6 to 8.5
		Electrical Conductivity	NTLR/SOP/47	0.1 mS/cm to 1 mS/cm

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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
	T		Issue 1.0	
į			dated 01.10.2012	
		Organic Carbon	NTLR/SOP/48	0.10% to 10 %
į			Issue 1.0	į
L	<u> </u>	L	dated 01.10.2012	L
		Moisture Content	NTLR/SOP/49	0.5% to 18 %
į			Issue 1.0	į
 	 	 	dated 01.10.2012	
		Mineralizable Nitrogen	NTLR/SOP/50	14 kg/ha to 1500 kg/ha
į			Issue 1.0	i
L	<u> </u>	L	dated 01.10.2012	L
		Available Phosphorus	NTLR/SOP/51	0.6 kg/ha to 500 kg/ha
į			Issue 1.0	İ
<u> </u>	<u> </u>		dated 01.10.2012	
 		Available Potassium	NTLR/SOP/52	2 kg/ha to 1500 kg/ha
į			Issue 1.0	i
L	<u> </u>	.L	dated 01.10.2012	
1		Exchangeable Calcium	NTLR/SOP/53	1 to 2000 meq/100 g
į			Issue 1.0	į į
L	<u> </u>	· <u>L</u>	dated 01.10.2012	
		Exchangeable	NTLR/SOP/54	1 to 1000 meq/100 g
į		Magnesium	Issue 1.0	į į
L	<u> </u>		dated 01.10.2012	<u> </u>
1		Available Sulphur	NTLR/SOP/55	0.1 mg/kg to1000 mg/kg
į			Issue 1.0	
L	<u> </u>	L	dated 01.10.2012	L
1		Available Zinc	NTLR/SOP/66	0.06 mg/L to 100 mg/L
į			Issue 1.0	į į
 	<u> </u>	· L	dated 01.10.2016	L
		Available Manganese	NTLR/SOP/66	0.1 mg/L to 100 mg/L
į			Issue 1.0	
<u> </u>	<u> </u>	<u> </u>	dated 01.10.2016	<u> </u>
 		Available Copper	NTLR/SOP/66	0.1 mg/L to 100 mg/L
į			Issue 1.0	į
L	L	L	dated 01.10.2016	L

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Validity 24.02.2018 to 23.02.2020 Last Amended on --

SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
 	T	Available Iron	NTLR/SOP/66 Issue 1.0 dated 01.10.2016	0.2 mg/L to 100 mg/L
V.	ATMOSPHERIC PO	DLLUTION		
1.	Ambient Air	Oxides of Nitrogen	IS 5182 (Part 6)	6 μg/m³ to 100 μg/m³
 	Monitoring	Respirable Suspended Particulate Matter (PM10), Cyclonic Flow Technique	IS 5182 (Part 23)	4 μg/m³ to 700 μg/m³
 	† 	Particulate matter (PM2.5)	NTLR/SOP/37, Issue 1.0 dated 01.10.2012	5 μg/m³ to 100 μg/m³
		Sulphur Dioxide	IS 5182 (Part 2)	2 μg/m³ to 100 μg/m³
 		Ozone	Methods of air sampling and analysis 3 rd Edition Part – 2 (411)	10 μg/m³ to 1000 μg/m³
· 		Ammonia (Indophenol method)	Methods of air sampling and analysis 3 rd Edition Part – 2 (401)	20 µg/m³ to 700 µg/m³
 	† 	Carbon Monoxide	NTLR/SOP/101 Issue 1.0 dated 10.07.2017	2 mg/m³ to 200 mg/m³
		Hydrogen sulphide	IS 5182 (Part 7)	3 μg/m³ to 200 μg/m³
 		Temperature	NTLR/SOP/102 Issue 1.0 dated 10.07.2017	10 °C to 60 °C
	 	Relative Humidity	NTLR/SOP/103 Issue 1.0 dated 10.07.2017	40% to 85%
		Benzene	IS 5182 (Part 11)	5 μg/m³ to 100 μg/m³
 		Toluene	IS 5182 (Part 11)	5 μg/m³ to 100 μg/m³
! ├	 -	Xylene	IS 5182 (Part 11)	5 μg/m³ to 100 μg/m³
2.	Stack Emission	Flow Rate	IS 11255 (Part 3)	100 m ³ /h to 2800 m ³ /h

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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
===	Monitoring	 	- +	
	 	Particulate matter/Dust Particulate Emissions	IS 11255 (Part 1)	5 mg/Nm³ to 1000 mg/Nm³
	 	Oxides of Nitrogen Sulphur Dioxide	IS 11255 (Part 7) IS 11255 (Part 2)	2 mg/Nm³ to 400 mg/Nm³ 3 mg/Nm³ to 200 mg/Nm³
	<u> </u>	Hydrogen Sulphide	IS 11255 (Part 4)	5 mg/Nm³ to 15 mg/Nm³
3.	Noise Level monitoring at Ambient Air	Noise	IS 9989	35 dB to 130 dB
4.	Noise Level monitoring at work zone	Noise	IS 9989	35 dB to 130 dB
5.	Light intensity level in Indoor/work zone	Illumination	IS 3646 (Part1)	1 Lux to 20000 Lux
6.	Work environment and Indoor Air quality	Suspended particulate Matter (SPM)	NTLR/SOP/104 Issue 1.0 dated 10.07.2017	1 μg/m³ to 1000 μg/m³
		Oxides of Nitrogen	IS 5182 (Part 6)	6 μg/m³ to 100 μg/m³
	 	Sulphur Dioxide Temperature	IS 5182 (Part 2) NTLR/SOP/102 Issue 1.0 dated 10.07.2017	2 μg/m³ to 100 μg/m³ 10 °C to 60 °C
		Relative Humidity	NTLR/SOP/103 Issue 1.0 dated 10.07.2017	40% to 85%
		Benzene	IS 5182 (Part 11)	5 μg/m³ to100 μg/m³
	 	Toluene	IS 5182 (Part 11)	5 μg/m³ to100 μg/m³
VI.	SOLID FUELS	Xylene	IS 5182 (Part 11)	5 μg/m³ to100 μg/m³
1.	Coal / Briquettes /	Moisture	IS 1350 (Part-1)	1% to 20%

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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
	Wood / Baggass	Inherent Moisture	IS 1350 (Part-1)	1% to 20%
	and others	Gross calorific value	IS 1350 (Part-2)	500 to 4500 cal /gram
	 	Ash	IS 1350 (Part-1)	5% to 70%
	 	Fixed carbon	IS 1350 (Part-1)	1% to 10%
	 	Volatile Matter	IS 1350 (Part-1)	5% to 60%
VII.	PESTICIDE RESIDU	JE	_ _	
1.	Water	2,4 DDT	APHA 22 nd Edition 6630-B	25.00 μg/L to 1000.00 μg/L
	 	4,4 DDT	APHA 22 nd Edition 6630-B	25.00 µg/L to 1000.00 µg/L
	 	Alpha HCH	APHA 22 nd Edition 6630-B	25.00 μg/L to 1000.00 μg/L
		Beta HCH	APHA 22 nd Edition 6630-B	25.00 μg/L to 1000.00 μg/L
	 	Gamma HCH	APHA 22 nd Edition 6630-B	25.00 μg/L to 1000.00 μg/L
		Alpha Endosulfan	APHA 22 nd Edition 6630-B	25.00 μg/L to 1000.00 μg/L
		Beta Endosulfan	APHA 22 nd Edition 6630-B	25.00 μg/L to 1000.00 μg/L
		Chlorpyrifos	APHA 22 nd Edition 6630-B	50.00 μg/L to 1000.00 μg/L
		Alachlor	APHA 22 nd Edition 6630-B	50.00 μg/L to 1000.00 μg/L
	 	Atrazine	APHA 22 nd Edition 6630-B	200.00 µg/L to 1000.00 µg/L
	† 	Methyl Parathion	APHA 22 nd Edition 6630-B	5.00 µg/L to 1000.00 µg/L
	 	Aldrin	APHA 22 nd Edition 6630-B	25.00 μg/L to 1000.00 μg/L
	 	Dieldrin	APHA 22 nd Edition 6630-B	25.00 μg/L to 1000.00 μg/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
		T		
2.	Waste Water	2,4 DDT	APHA 22 nd Edition 6630-B Page. No. 6-121-127	25.00 μg/L to 1000.00 μg/L
	 	4,4 DDT	APHA 22 nd Edition 6630-B	25.00 μg/L to 1000.00 μg/L
 	 	Alpha HCH	APHA 22 nd Edition 6630-B	25.00 µg/L to 1000.00 µg/L
 	 	Beta HCH	APHA 22 nd Edition 6630-B	25.00 µg/L to 1000.00 µg/L
 	 	Gamma HCH	APHA 22 nd Edition 6630-B	25.00 µg/L to 1000.00 µg/L
 		Alpha Endosulfan	APHA 22 nd Edition 6630-B	25.00 µg/L to 1000.00 µg/L
		Beta Endosulfan	APHA 22 nd Edition 6630-B	25.00 µg/L to 1000.00 µg/L
		Chlorpyrifos	APHA 22 nd Edition 6630-B	50.00 µg/L to 1000.00 µg/L
		Alachlor	APHA 22 nd Edition 6630-B	50.00 μg/L to 1000.00 μg/L
		Atrazine	APHA 22 nd Edition 6630-B	200.00 μg/L to 1000.00 μg/L
		Methyl Parathion	APHA 22 nd Edition 6630-B	5.00 μg/L to 1000.00 μg/L
	 	Aldrin	APHA 22 nd Edition 6630-B	25.00 µg/L to 1000.00 µg/L
 	 	Dieldrin	APHA 22 nd Edition 6630-B	25.00 µg/L to 1000.00 µg/L