Laboratory	**Apex Enviro Laboratory, 3, Dhebar Colony, Pratap Nagar, Udaipur, Rajasthan**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
Certificate Number	**TC-7531**	**Page 1 of 18**	
Validity	**04.07.2018 to 03.07.2020**	**Last Amended on 21.05.2019**	

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		BIOLOGICAL TESTING		
I.	**WATER**			
1.	**Drinking Water, Potable Waters, Tap, Ground & Surgace Water, Bore Well Water, RO Water**	Total Plate count	IS 1622-1981 (RA 2009)	>1CFU/ml
		Total Coliform	IS 1622-1981 (RA 2009)	2 to 1600 MPN/100ml or Membrane filter method
		Faecal Coliform	IS 1622-1981 (RA 2009)	2 to 1600 MPN/100ml or membrane filter method
		Faecal Streptococci	IS 1622-1981 (RA 2009)	2 to 1600 MPN/100ml or membrane filter method
		E. Coli	IS 1622-1981 (RA 2009)	Present/Absent/ 100ml
		Total Plate Count	IS 1622-1981 (RA 2009)	>1 CFU/ml

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.	**ATMOSPHERIC POLLUTION**			
1.	**Ambient Air**	Nitrogen Dioxide (as NO_2)	IS 5182 (Part 6)-2006 (RA 2012)	6.0 µg/m^3 to 740.0 µg/m^3
		Sulphur dioxide (as SO_2)	IS 5182 (Part 2)-2001 (RA 2012)	5.0 µ g/m^3 to 1050 µg/m^3
		Respirable Suspended Particulate Matter (PM_{10}), Cyclone Flow Technique	IS 5182 (Part 23)-2001 (RA 2006)	10.0 µg/m^3 to 1000.0 µg/m^3
		Fine Particulate Matter (as $PM_{2.5}$)	AEL/SOP/A-04, Dated 15/02/2013 (based on CPCB's guideline 2012-13, Vol-I), US EPA method for PM2.5, 40 CFR Candidate Part 50, Appendix L	10.0 µg/m^3 to 500.0 µg/m^3
		Suspended Particulate Matter	IS 5182 (Part 4)-1999 (RA 2005)	100.0 µg/m^3 to 2000.0 µg/m^3
		Carbon Monoxide	IS 13270-1992:RA 2003 Orsat Method, Lab Procedure No. AEL/WI/A-06	1.5 mg/m^3 to 40 mg/m^3
		Ammonia	CPCB Guideline 2012-13, Vol-I for sampling and analysis protocol for ammonia in ambient air, pp35-39	8 µg /m^3 to 100 µg /m^3
		Chlorine	IS 5182 (Part 19)-1982 (RA 2009) Methyl Orange Method	0.5 µg /m^3 to 100 µg /m^3
		Fluoride	IS 5182 (Part 13)-1991 (RA 2003), Zirconium Spands Method	10 µg /m^3 to 1000 µg/ m^3

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		Lead	IS 5182 (Part 22) 2004 (RA 2009) AAS method after sampling on EPM or Filter paper	0.1 µg /m^3 to 20 µg /m^3
		Noise level Ambient	IS 9989-1981, (RA 2001)	30 dB to 130 dB
		Source specific noise	IS 9989-1981, (RA 2001)	30 dB to 130 dB
2.	**Stack Monitoring**	Particulate matter	IS 11255 (Part 1) 1985 (RA 2009) Gravimetric Method	5 mg/m^3 to 400 mg/m^3
		Sulphur Dioxide	IS 11255 (Part 2) 1985 Barium Percolate, Thorin Indicator Method	4 mg/m^3 to 400 mg/m^3
		Oxides of Nitrogen (as NO_2)	IS 11255 (Part 7) 2005 PDS Method	4 mg/m^3 to 200 mg/m^3
		Carbon Dioxide	IS 13270:1992 (RA 2009) Orsat Analysis	1 % to 20 %
		Velocity & flow	IS 11255 (Part 3)-2008 Standard Pitot tube method	Upto 30m/s
		Carbon Monoxide	IS 13270:1992:(RA 2009) Orsat analysis Electochemial Method	0.2 % to 2 % 0.2 mg/m^3 to 200mg/m^3
		Temperature	IS 11255 (Part 3)-2008 Use of Stack Probe	10°C to 600°C
		Oxygen	IS 13270-1992 (RA 2003) Orsat Apparatus	Upto 20 %
		Ammonia	IS 11255 (Part 6)-1999 (RA 2009) Method A Titration Method B Nessler reagent/ Spectrophotometric method	8 mg/m^3 to 100 mg/m^3
		Fluoride (Gaseous)	IS 11255 (Part 5)1990 (RA 2003) Zirconium Spands Method	0.5mg/m^3 to 5 mg/m^3

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		Hydrogen sulphide	IS 11255 (Part 4):1985 Iodometric Method	0.5mg/m^3 to 5 mg/m^3
3.	**Meteorological Monitoring**	Ambient Temperature	(i) US-EPA Meteorological Monitoring Guideline for regulatory Modeling Applications EPA-454/R-99-005 (ii) Modeling as Fugitive Dust Model (FDM)	(-) 40°C to (+) 65°C
		Wind direction		1° to 360°
		Wind speed		5 kPH to 200kPH
		Relative Humidity		1 % to 100 %
		Rain fall		100 mm/Hg
II.	**POLLUTION & ENVIRONMENT**			
1.	**Waste water**	Total Solids	IS 3025 (Part 15):1984 Gravimetric method APHA-22nd Ed 2012-2540B Dried at 103-105ºC (PP 2-64)	5 mg/l to 10000 mg/l
		Total Dissolved Solids	IS 3025 (Part 15):1984 Gravimetric method APHA-22nd Ed 2012-2540C Dried at 180ºC (PP 2-65)	5 mg/l to 10000 mg/l
		Total Suspended Solids	IS 3025 (Part 15):1984 Gravimetric method APHA-22nd Ed 2012-2540 D Dried at 103-105ºC (PP 2-44 to PP 2-47)	5 mg/l to 10000 mg/l
		Chloride as Cl	IS 3025 (Part 32):1988 (RA 2003) Clause 2 Argentometric method APHA-22nd Ed 2012-4500 B Argentometric Method (PP 4-72 to PP 4-73)	2 mg/l to 10000 mg/l
		Sulphate (SO_4)	IS 3025 (Part 24):1986	10 mg/l to 1000 mg/l

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			(RA 2003) Gravimetric method APHA-22nd Ed 2012-4500C Gravimetric Method (PP 4-189 to PP 4-190)	
		Biochemical Oxygen Demand (BOD)	IS 3025 (Part 44)-1993 (RA 2009) Ad.1 BOD 3-days at 27 ºC	3 mg/l to 100000 mg/l
		Chemical Oxygen Demand (COD)	IS 3025 (Part 58):2006 1st Revision APHA-22nd Ed 2012-5220B Open Reflux Method (PP 5-17 to PP 5-18)	5 mg/l to 100000 mg/l
		Oil & Grease	IS 3025 (Part 39):1991 (RA 2003) Clause 5 Partition gravimetric method APHA-22nd Ed 2012-5520D Soxhlet Extraction (PP 5-42 to PP 5-43)	1 mg/l to 100 mg/l
		pH	IS 3025 (Part 11)-1983 (RA 2002)/ APHA-22nd Ed 2012-4500B (PP 4-92 to PP 4-95)	1 to 12
		Volatile and fixed residue	IS 3025 (Part 18)-1984, (RA 2002) Gravimetric Method	10 mg/lit to 10000 mg/lit
		Turbidity	IS 3025 (Part 10)-1984 (RA 2002)/ APHA-22nd Ed 2012-2130B Nephelometric Method (PP 2-13 to PP 2-15)	0.1 NTU to 400 NTU

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Odour	IS 3025 (Part 5)1983 (RA 2006) APHA 22nd Ed. 2150B	Qualitative
		Settleable solids	IS 3025 (Part 19), 1984 (RA 2002) Volumetric using Imhoff concentration 2540F APHA 22nd edition, Gravimetric 2540F APHA 22nd edition	1 mg/l to 100 ml/l
		Sludge volume index (SVI)	APHA 2710D Sludge volume index	50 mg/l to 200 mg/l
		Ammonical Nitrogen	IS 3025 (Part 34):1988 (RA 2003) Distillation followed by colorimetric method (Nesselerization), Distillation followed by titrimetric method 4500 NH3 C APHA 21st edition	0.1 mg/l to 200 mg/l 0.5 mg/l to 100 mg/l
		Total Kjehldal nitrogen (TKN)	IS 3025 (Part 34) (RA 2009) Macro-Nitrogen Method 4500-Norg B APHA 22st edition (PP 4-132 to PP 4-133)	2 mg/l to 100 mg/l
		Phosphate	IS 3025 (Part 31):1988 (RA 2003) Colormetric method 4500-P D APHA 22nd edition (PP 4-154 to 4-155)	0.1 mg/l to 20 mg/l
		Total and free Carbon dioxide	IS 3025 (Part 61) 2008, Titrimetric method	1 % to 20 %
		Chlorine demand	IS 3025 (Part 25)-1986-(RA 2003)	0.5 mg/l to 10 mg/l
		Silica	IS 3025 (Part 35):	0.003 mg/l to 2 mg/l

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(RA 2009) Molybdosilicate method 4500-SiO2 C APHA 22nd edition (PP 4-167 to PP 4-169)	
		Sulphide	IS 3025 (Part 29) 1986, (RA 2003) Iodometric method	1 mg/l to 50 mg/l
		Boron	IS 3025 (Part 57):2005 (RA 2009) B Curcumine method 3500B APHA-22nd Ed 2012	Upto 1.0 mg/l
		Nickel	IS 3025 (Part 54):2003 Direct Air-Acetylene Flame method 3111 B APHA 22nd edition (PP 3-18 to 3-20)	0.01 to 5 mg/l
		Cadmium	IS 3025 (Part 41):1992 (RA 2003) APHA-22nd Ed 2012-3111B (pg. 3-18) and instruction manual for AAS	0.02 mg/l to 10 mg/l
		Calcium	IS 3025 (Part 40):1991 (RA 2003) EDTA Titrimetric Method 3500-Ca B., APHA 22nd edition (PP 3-67 PP to 3-68)	1 mg/l to 2000 mg/l
		Chromium (Cr) total	IS 3025(Part 52):2003 Colorimetric Method	0.05 mg/l to 5 mg/l
		Chromium (Cr) hexavalent	IS 3025(Part 52):2003 Colorimetric Method	0.01 mg/l to 1mg/l
		Copper	IS 3025 (Part 42):1992	0.05 mg/l to 10 mg/l

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(RA 2009) APHA-22nd Ed 2012-3111B, AAs Method	
		Iron	IS 3025(Part 53):2003 AAS Method	0.1 mg/l to 10 mg/l
		Lead	IS 3025(Part 47):1994 (RA 2009) APHA-22nd Ed 2012-3111B, AAs Method	0.05 mg/l to 10 mg/l
		Magnesium	IS 3025(Part 46):1994 (RA 2003) Calculation Method 3500-Mg B APHA 22nd edition (PP 3-84)	1 mg/l to 120 mg/l
		Potassium	IS 3025(Part 45):1993 (RA 2003) Flame photometric method 3500-K B APHA 22nd edition (PP 3-87 to 3-88)	1 mg/l to 100 mg/l
		Sodium	IS 3025(Part 45):1993 (RA 2003) Flame photometric method 3500-Na B APHA 22nd edition (PP 3-97 to 3-98)	1 mg/l to 100 mg/l
		Sodium absorption ratio (SAR)	Calculation Method As per USDA Hand Book 60, P-72	3 to 30
		Zinc	IS 3025(Part 49):1994 (RA 2003) Direct Air-Acetylene Flame method 3111 B APHA 22nd edition (PP 3-18 to 3-20)	0.01 mg/l to 5 mg/l
		Aluminum	IS 3025(Part 55):2003	5 mg/l to 100 mg/l

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			(RA 20099) AAs Method	
		Manganese	IS 3025(Part 59):2006 (RA 2009) Direct Air-Acetylene Flame method 3111 BAPHA 22st edition (PP 3-18 to 3-20)	0.01 mg/l to 5 mg/l
		Silver	Direct Air-Acetylene Flame method 3111 B APHA 22nd edition (PP 3-18 to 3-20) and instruction manual for AAS	0.01 mg/l to 5 mg/l
		Phenol	IS 3025(Part 43):1992 (RA 2003) 4, amino Antipyrine Method	0.01 mg/l to 0.1 mg/l
		Pesticides		
		Organo-chlorine BHC DDT Aldrin Endosulphan	Organo-chlorine 6630B,C APHA 22nd edition	 0.001 mg/l to 0.1 mg/l 0.001 mg/l to 0.1 mg/l 0.001 mg/l to 0.1 mg/l 0.001 mg/l to 0.1 mg/l
2.	**Soil/Sediments**	pH	Cl-2, IS 2720 (Part 26) 1987 (RA 2011)	1 to 13
		Conductivity	IS 14767:2000 (RA 2010)	0.1 ms/m to 199.9 ms/m
		Total Soluble Sulphate	IS 2720 (Part 27)-1977 (RA 2010)	0.002 % to 1.0 %
		Organic Matter/ Organic Carbon	Sec-1, IS 2720 (Part XXII) 1972 (RA 2010)	0.1 % to 10 %
		Calcium Carbonate	IS 2720 (Part 23)-1976 (RA 2006)	0.5 % to 10 %
		Available Nitrogen	Method Manual Soil	0.00028 % to 1.0 %

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			Testing in India (Govt. of India)2011	
		Available Phosphorous	Method Manual Soil Testing in India (Govt. of India)2011	0.0002 % to 1.0 %
		Available Potassium	Method Manual Soil Testing in India (Govt. of India)2011	0.001 % to 1.0 %
		Moisture Content	Sec-1, IS 2720 (Part II) 1973 (RA 2002)	0.5 % to 50 %
		Nitrates	Method Manual Soil Testing in India (Govt. of India)2011	0.0002 % to 1.0 %
		Water Retention Capacity	Laboratory Testing Procedure for Soil & water sample analysis DIRD-Pune2009	10 % to 50 %
		Texture	Cl 2,4, IS 2720 (Part 4) 1985 (RA 2006)	Qualitative
		Bulk Density	IS 2720 (Part III):1980 (RA 2002)	1 gm/cc to 4 gm/cc
		Phosphate (ortho)	Colormetric method 4500-P D APHA 22nd edition (PP 4-154 to PP-155)	0.1 mg/l to 2 mg/l
		Phosphate (total)	Colormetric method 4500-P D APHA 22nd edition (PP 4-154 to PP 4-155)	0.3 mg/l to 6 mg/l
		Calcium	Soil Testing Method, Ministry of Agricultural of India Jan-2011 Method Manual	1 mg/kg to 200 mg/kg
		Chloride	Soil Testing Method,	1 mg/kg to 200mg/kg

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			Ministry of Agricultural of India Jan-2011 Method Manual	
		Micronutrients Cu Fe Mn Zn	Soil Testing Method, Ministry of Agricultural of India Jan-2011 Method Manual	 0.05 to 10mg/kg 0.1 to 10mg/kg 0.01 to 5mg/kg 0.01 to 5mg/kg
		Exchangeable sodium percentage	Laboratory Testing Procedure for Soil & water sample analysis DIRD-Pune2009	3 % to 25 %
III.	**WATER**			
1.	**Domestic Water, Potable Water, Surface Water, Ground Water**	Color	IS 3025 Part 4 (RA 2006) APHA-22nd Ed 2012-2120 B Visual Comparison (Pt Cobalt) Method (PP 2-6 to PP 2-7)	5 HU to100 HU
		Odour	IS 3025 (Part 5)1983 (RA 1996)	Qualitative
		Taste	IS 3025 (Part 7/8)1984 (RA 1996)	Qualitative
		Temperature	IS 3025 (Part 9) 1984: (RA 1996) by mercury filled thermometer APHA-22nd Ed 2012-2550 B (PP 2-69 to PP 2-70)	1°C to 100°C
		Total Solids	IS 3025(Part 15):1984 (RA 2009) APHA-22nd Ed 2012-2540B Dried at 103-105ºC (PP 2-64)	5 mg/l to 10,000 mg/l
		Chlorine	IS 3025(Part 26):1986	0.1 mg/l to 10 mg/l

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		(Free Residual)	(RA 2003) APHA-22nd Ed 2012-4500G DPD Colorimetric Method (PP 4-69 to PP 4-70)	
		Iron as Fe	IS 3025(Part 53):2003 (RA 2009) APHA-22nd Ed 2012-3111B (PP 3-18 to PP 3-20) APHA-22nd Ed 2012-3500Fe-B Phenanthroline Method (PP 3-77 to PP 3-80)	0.1 mg/l to 10 mg/l
		Copper as Cu	IS 3025(Part 42):1992 (RA 2009) APHA-22nd Ed 2012-3111B A-Ac Flame AAS Method IS 3025(Part 42)	0.04 mg/l to 10 mg/l
		Cadmium	IS 3025(Part 41):1992 (RA 2003) APHA-22nd Ed 2012-3111B A-Ac Flame AAS Method (PP 3-18 to PP 3-20)	0.01 mg/l to 5 mg/l
		Chromium as Cr	IS 3025(Part 52):2003 APHA-22nd Ed 2012-3111B A-Ac Flame AAS Method (PP 3-18 to PP 3-20) IS 13428-2005 Annexure	0.1 mg/l to 10 mg/l
		Lead as Pb	IS 3025(Part 47):1994	0.1 mg/l to 10 mg/l

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(RA 2009) APHA-22nd Ed 2012-3111B A-Ac Flame AAS Method (PP 3-18 to PP 3-20)	
		pH	IS 3025 (Part 11)-1983 (RA 2002)/ APHA-22nd Ed 2012-4500B (PP 4-92 to PP 4-95)	1 to 12
		Turbidity	IS 3025 (Part 10)-1984 (RA 2002)/ APHA-22nd Ed 2012-2130B Nephelometric Method (PP 2-13 to PP 2-15)	0.1 NTU to 400 NTU
		Conductivity	IS 3025 part 14-1984 (RA 2006)/ APHA-22nd Ed 2012-2510B (PP 2-54 to PP 2-55)	1 µmohs/cm to 20,000 µmohs/cm
		Total Dissolved Solids	IS 3025 (Part 16)-1984 (RA 2006)/ APHA-22nd Ed 2012-2540C Dried at 180ºC (PP 2-65)	5 mg/l to 5000 mg/l
		Total Alkalinity as $CaCO_3$	IS 3025 (Part 23)-1986 (RA 2003)/ APHA-22nd Ed 2012-.2320 B Titration Method (PP 2-34 to PP 2-36)	1 mg/l to 5000 mg/l
		Calcium as Ca^{++}	IS 3025(Part 40):1991 (RA 2003) Clause 5 Cl 5 IS 3025 part 40-1991:(RA 2003)/ APHA-22nd Ed 2012-3500B-EDTA Method (PP 3-67 to PP 3-68)	1 mg/l to 1000 mg/l
		Magnesium as Mg^{++}	IS 3025(Part 46):1994	1 mg/l to 1000 mg/l

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			(RA 2003) Clause 6 Cl 6 IS 3025 part 46-1994: (RA 2003)/ APHA-22nd Ed 2012-3500-Mg B Calculation Method PP3-84	
		Total Hardness as $CaCO_3$	IS 3025 (Part 21)-1983: (RA 2009)/ APHA-22nd Ed 2012-2340C EDTA Method (PP 2-44 to PP 2-47)	1 mg/l to 5000 mg/l
		Chlorides as Cl^-	IS 3025 (Part 32)-1988:(RA 2003)/ APHA-22nd Ed 2012-4500 B Argentometric Method (PP 4-72 to PP 4-73)	1 mg/l to 5000 mg/l
		Nitrate as NO_3^-	IS 3025 (Part 34)-1988:(RA 2003)/ Cl 3.3, IS 3025 (Part 34) 1988 (RA1999) Chromotropic Acid Method	0.5 mg/l to 200 mg/l
		Sulphate as SO_4^-	IS 3025 (Part 24)-1986:(RA 2003)/ APHA-22nd Ed 2012-4500E Turbidity Method (PP 4-190 to PP 4-191)	1 mg/l to 1000 mg/l
		Fluoride as F^-	IS 3025 (Part 60)-2008/ APHA-22nd Ed 2012-4500 D SPANDS Method (PP 4-87 to PP 4-88)	0.1 mg/l to 10 mg/l
		Sodium as Na^+	IS 3025 (Part 45)-1993: (RA 2003)/ APHA-22nd Ed 2012-3500K-B Flame Photometric Method	1 mg/l to 1000 mg/l

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			(PP 3-87 to PP 3-88)	
		Potassium as K^+	IS 3025 (Part 45)-1993: (RA 2003)/ APHA-22nd Ed 2012-3500K-B Flame Photometric Method (PP 3-87 to PP 3-88)	1 mg/l to 1000 mg/l
		Fixed olids volatile solids	IS 3025 (Part 18) 1984 (RA 2002) APHA-22nd Ed 2012-2540E (PP 2-67)	5 mg/l to 10,000 mg/l 2 mg/l to 20,000 mg/l
		Velocity & discharge measurement of industrial effluent stream	IS 14573 (1998) (RA 2004) Velocity area Method	0.01m^3 to 100 m^3
		Settleable solids	IS 3025 (Part 19)1984 (RA 2002) Volumetric using Imhoff concentration 2540F APHA 22nd edition, Gravimetric 2540F APHA 22nd edition	1 ml/l to 100ml/l
		Sludge volume index (SVI)	Standard Method for Examination of water & waste water 22nd edition, APHA, 2710D, Sludge Volume Index	50 mg/l to 200 mg/l
		Ammonical Nitrogen	IS 3025 (Part 34) (RA 2009) Distillation followed by colorimetric method (Nesselerization), Distillation followed by titrimetric method 4500 NH3 C APHA 22nd edition	0.1 mg/l to 20 mg/l 0.5 mg/l to 100 mg/l
		Total Kjehldal nitrogen	IS 3025 (Part 34)	2 mg/l to 100 mg/l

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		(TKN)	(RA 2009) Macro-Nitrogen Method 4500-Norg BAPHA 22nd edition (PP 4-132 to PP 4-133)	
		Nitrite nitrogen	IS 3025(Part 34) 1988 (RA 2003) colorimetric method	0.01 mg/l to 1 mg/l
		Phosphate	Colormetric method 4500-P D APHA 22nd edition (PP 4-154 to 4-155)	0.1 mg/l to 2 mg/l
		Carbon dioxide	IS 3025 (Part 61)-1992 (RA 2008) Titrimatric method	1 % to 20 %
		Chlorine demand	IS 3025 (Part 25)1986 (RA 2003) Titrimetric method	0.5 mg/l to 10 mg/l
		Silica	Molybdosilicate method 4500-SiO2 C APHA 22nd edition (PP 4-167 to PP 4-169)	0.003 mg/l to 2 mg/l
		Sulphide	IS 3025(Part 29) 1986 (RA 2003) Indomertic method Methylene blue method	1 mg/lt to 50 mg/lt
		Boron	IS 3025(Part 57):2005 (RA 2009)/ B Curcumine method 3500B APHA-22nd Ed 2012	Upto 1.0 mg/l
		Nickel	IS 3025(Part 54):2003/ Direct Air-Acetylene Flame method3111 B APHA 22nd edition (PP 3-18 to 3-20)	0.01 mg/l to 5 mg/l
		Sodium absorption ratio	Calculation Method	3 to 30

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		(SAR)	As per USDA Hand Book 60, Page 72	
		Manganese	IS 3025(Part 59):2006 (RA 2009)/ Direct Air-Acetylene Flame method3111 B APHA 22st edition (PP 3-18 to 3-20)	0.01 mg/l to 5 mg/l
		Silver	Direct Air-Acetylene Flame method 3111 B APHA 22nd edition (PP 3-18 to 3-20) and instruction manual for AAS	0.01 mg/l to 5 mg/l
		Zinc	IS 3025(Part 49):1994 (RA 2009)/ Direct Air-Acetylene Flame method3111 B APHA 22nd edition (PP 3-18 to 3-20)	0.01 mg/l to 5 mg/l
2.	**Construction water**	Organic Solids	IS 3025 (Part 18):1984 (RA 2012)	1 mg/l to 10000 mg/l
		Inorganic Solids	IS 3025 (Part 18):1984 (RA 2012)	1 mg/l to 10000 mg/l
		Sulphate as SO_3	I S3025 (Part 24):1986 (RA 2014) Gravimetric method	1 mg/l to 5000 mg/l
		Chloride as Cl	IS3025(Part 32):1988 (RA 2014) (Argentometric method) and APHA-22nd Ed 2012-4500-Cl-B	1 mg/l to 10000 mg/l
		Suspended Matter	IS3025(Part 17):1984 (RA 2014) and APHA-22nd Ed 2012-2540-D	1 mg/l to 10000 mg/l
		pH @ 25°C	IS 3025(Part 11):1983	1 to 14

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(RA 2012) (electrometric method) APHA-22nd Ed 2012-4500H^+-B	
		Water Neutralization To neutralize 100ml sample of water, using phenolphthalcin as an indicator, using 0.02N NaOH To neutralize 100ml sample of water, using mixed indicator using 0.02N H_2SO_4	 IS3025(Part 22):1986 (RA 2014) IS3025(Part 23):1986 (RA 2014)	 0.1 ml to 50ml 0.1 ml to 50 ml
IV.	**RESIDUE IN WATER**			
1.	**Pesticides**	Organo-chlorine BHC DDT Aldrin Endosulphan	Organo-chlorine 6630B,C APHA 22nd edition	 0.001 mg/l to 0.1 mg/l 0.001 mg/l to 0.1 mg/l 0.001 mg/l to 0.1 mg/l 0.001 mg/l to 0.1 mg/l
		Phenol	IS3025(Part 43):1992 (RA 2003) 5530 C&D APHA 22nd edition	0.01 mg/l to 0.1 mg/l
		Tannin and Lignin	5550 APHA 22nd edition Colorimetric method	0.01 mg/l to 0.1 mg/l
		Organic Carbon (in solid)	IS3025(Part 18):1984 (RA 2012)	0.1 mg/l to 10,000 mg/l