

**Laboratory** SV Enviro Labs & Consultants (Laboratory Services Division), Enviro House, B-1, Block-B, IDA, Autonagar, Visakhapatnam, Andhra Pradesh

**Accreditation Standard** ISO/IEC 17025: 2005

**Certificate Number** TC-5582

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**Validity** 08.05.2017 to 07.05.2019

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.	Ground Water, Surface Water, Drinking Water, Domestic Water, Potable Water & Industrial Water	Escherichia coli	IS 15185:2016	Qualitative (Present/Absent/ 250 ml)
		Coliform	IS 15185:2016	Qualitative (Present/Absent/ 250 ml)
		Faecal streptococci	IS 15186:2002 R 2014	Qualitative (Present/Absent/ 250 ml)
		Staphylococcus aureus	IS 5887 Part 2:1976 (Reaff 2013)	Qualitative (Present/Absent/ 250 ml)
		Sulphite reducing anaerobes	IS 13428 Annex C:2005 R 2009	Qualitative (Present/Absent/ 50ml)
		Pseudomonas aeruginosa	IS 13428 Annex D:2005 R 2009	Qualitative (Present/Absent/ 250 ml)
		Aerobic Microbial count at 22 °C and 37 °C	IS 5402:2012	1 cfu/ml & above
		Yeast & Mould count	IS 5403:1999 (RA 2013)	Qualitative (Present/Absent/ml)
		Salmonella	IS 15187:2016	Qualitative (Present/Absent/ 250 ml)
		Shigella	IS 5887 (Part 7): 1999 (RA 2013)	Qualitative (Present/Absent/ 250 ml)
		Vibrio cholera	IS 5887 (Part 5): 1976 (RA 2013)	Qualitative (Present/Absent/ 250 ml)
		V. parahaemolyticus	IS 5887 (Part 5): 1976 (RA 2013)	Qualitative (Present/Absent/ 250 ml)

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**CHEMICAL TESTING**

I.	WATER			
1.	<b>Ground Water, Surface Water, Drinking Water, Domestic Water, Potable Water &amp; Industrial Water</b>	Colour	APHA, 2120-C, 23 <sup>rd</sup> Edition	1.0 Hazen to 50 Hazen
		Odour	APHA, 2150, 23 <sup>rd</sup> Edition	Qualitative (Agreeable/Disagreeable)
		Taste	APHA, 2160 B, 23 <sup>rd</sup> Edition	Qualitative (Agreeable/Disagreeable)
		Turbidity	APHA, 2130-B, 23 <sup>rd</sup> Edition	0.1 NTU to 1000 NTU
		pH	APHA, 4500-H+B, 23 <sup>rd</sup> Edition	1 to 14
		Conductivity	APHA, 2510-B, 23 <sup>rd</sup> Edition	1 µmhos/cm to 20000 µmhos/cm
		Total Solids	APHA, 2540-B, 23 <sup>rd</sup> Edition	5.0 mg/l to 100 mg/l 100.0 mg/l to 5000 mg/l
		Total Dissolved Solids (TDS)	APHA, 2540-C, 23 <sup>rd</sup> Edition	50.0 mg/l to 20000 mg/l
		Total Suspended Solids (TSS)	APHA, 2540-D, 23 <sup>rd</sup> Edition	5.0 mg/l to 1000 mg/l
		Dissolved Oxygen (DO)	APHA, 4500-DC, 23 <sup>rd</sup> Edition	0.2 mg/l to 8 mg/l
		Anionic Surface Active Agents (as MBAS)	IS 13428:2005Annex-K&L (RA 2009)	0.1 mg/l to 5 mg/l
		Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	APHA, 5530-C, 23 <sup>rd</sup> Edition	0.005 mg/l to 10 mg/l
		Residual Free Chlorine	IS 3025 P:26:1986 (RA:2003)	0.1 mg/l to 10 mg/l
	Acidity (as CaCO <sub>3</sub> )	APHA, 2310-B, 23 <sup>rd</sup> Edition	2.0 mg/l to 500 mg/l	

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		Total Alkalinity (as CaCO <sub>3</sub> )	APHA, 2320-B, 23 <sup>rd</sup> Edition	2.0 mg/l to 500 mg/l
		Total Hardness (as CaCO <sub>3</sub> )	APHA, 2340-C, 23 <sup>rd</sup> Edition	2.0 mg/l to 1500 mg/l
		Chlorides (as Cl)	APHA, 4500-Cl B, 23 <sup>rd</sup> Edition	5.0 mg/l to 10000 mg/l
		Sulfates (as SO <sub>4</sub> )	APHA, 4500-SO <sub>4</sub> <sup>2-</sup> E, 23 <sup>rd</sup> Edition	2.0 mg/l to 200 mg/l
		Sulphide (as S)	APHA, 4500S <sup>2</sup> D, 23 <sup>rd</sup> Edition	2.0 mg/l to 30 mg/l
		Cyanides (as CN)	APHA, 4500-CN E, 23 <sup>rd</sup> Edition	0.05 mg/l to 15 mg/l
		Fluoride (as F)	APHA, 4500-FD, 23 <sup>rd</sup> Edition	0.1 mg/l to 5 mg/l
		Nitrate Nitrogen (as NO <sub>3</sub> )	APHA, 4500 NO <sub>3</sub> <sup>-</sup> B & C, 23 <sup>rd</sup> Edition	1.0 mg/l to 40 mg/l
		Nitrite (as NO <sub>2</sub> )	APHA, 4500-NO <sub>2</sub> <sup>-</sup> B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
		Calcium (as Ca)	APHA, 3500-Ca B, 23 <sup>rd</sup> Edition	5.0 mg/l to 1500 mg/l
		Magnesium (as Mg)	APHA, 3500-Mg B, 23 <sup>rd</sup> Edition	5.0 mg/l to 1500 mg/l
		Sodium (as Na)	APHA, 3500-Na B, 23 <sup>rd</sup> Edition	1.0 mg/l to 1000 mg/l
		Potassium (as K)	APHA, 3500-KB, 23 <sup>rd</sup> Edition	1.0 mg/l to 300 mg/l
		Borate (as B)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.1 mg/l to 10 mg/l
		Aluminium (as Al)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
		Antimony (as Sb)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 2 mg/l

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		Arsenic (as As)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 2 mg/l
		Barium (as Ba)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.1 mg/l to 10 mg/l
		Cadmium (as Cd)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
		Chromium (as Cr)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
		Copper (as Cu)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
		Iron (as Fe)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
		Lead (as Pb)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
		Manganese (as Mn)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
		Mercury (as Hg)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 2.0 mg/l
		Nickel (as Ni)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
		Selenium (as Se)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 2 mg/l
		Silver (as Ag)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
		Zinc (as Zn)	APHA, 3120-B, 23 <sup>rd</sup> Edition	0.01 mg/l to 10 mg/l
<b>II.</b>	<b>RESIDUES IN WATER</b>			
<b>1.</b>	<b>Pesticides</b>	Alpha-HCH	SVELC/LAB/WAT/034 GC-ECD/Issue No. 1 Issue Dated 01.02.2017	0.02 µg/l to 1 µg/l
		Beta-HCH	SVELC/LAB/WAT/034 GC-ECD/Issue No. 1 Issue Dated 01.02.2017	0.02 µg/l to 1 µg/l

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		Gama-HCH	SVELC/LAB/WAT/034 GC-ECD/Issue No. 1 Issue Dated 01.02.2017	0.02 µg/l to 1 µg/l
		Delta-HCH	SVELC/LAB/WAT/034 GC-ECD/Issue No. 1 Issue Dated 01.02.2017	0.02 µg/l to 1 µg/l
		<i>p,p'</i> -DDT	SVELC/LAB/WAT/034 GC-ECD/Issue No. 1 Issue Dated 01.02.2017	0.02 µg/l to 1 µg/l
		Endosulpan	SVELC/LAB/WAT/034 GC-ECD/Issue No. 1 Issue Dated 01.02.2017	0.02 µg/l to 1 µg/l
		Aldrin	SVELC/LAB/WAT/034 GC-ECD/Issue No. 1 Issue Dated 01.02.2017	0.02 µg/l to 1 µg/l
		Dieldrin	SVELC/LAB/WAT/034 GC-ECD/Issue No. 1 Issue Dated 01.02.2017	0.02 µg/l to 1 µg/l
		Isoproturon	SVELC/LAB/WAT/034 HPLC-UV/Issue No. 1 Issue Dated 01.02.2017	0.02 µg/l to 1 µg/l
<b>III.</b>	<b>POLLUTION &amp; ENVIRONMENT</b>			
<b>1.</b>	<b>Waste Water (Effluents/ Sewage)</b>	pH	APHA, 4500-H <sub>+</sub> B, 23 <sup>rd</sup> Edition	1 to 14
		Total Solids	APHA, 2540-B, 23 <sup>rd</sup> Edition	5.0 mg/l to 20000 mg/l
		Total Dissolved Solids (TDS)	APHA, 2540-C, 23 <sup>rd</sup> Edition	5.0 mg/l to 20000 mg/l
		Total Suspended Solids (TSS)	APHA, 2540-D, 23 <sup>rd</sup> Edition	5.0 mg/l to 1000 mg/l

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		Oil & Grease	APHA, 5520-D, 5-38, 23 <sup>rd</sup> Edition	5.0 mg/l to 200 mg/l
<b>IV. ATMOSPHERIC POLLUTION</b>				
<b>1.</b>	<b>Ambient Air</b>	Respirable Suspended Particulate Matter (PM10)	IS 5182 (Part 23): 2006	5.0 µg/m <sup>3</sup> to 1000 µg/m <sup>3</sup>
		Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 2): 2001 (RA 2006)	4.0 µg/m <sup>3</sup> to 1050 µg/m <sup>3</sup>
		Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 6): 2006	5.0 µg/m <sup>3</sup> to 1000 µg/m <sup>3</sup>
<b>2.</b>	<b>Stack Emission</b>	Particulate Matter (PM)	IS 11255 (Part 1): 1985	5.0 mg/Nm <sup>3</sup> to 5000 mg/Nm <sup>3</sup>
		Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part 2): 2009	5.0 mg/Nm <sup>3</sup> to 1000 mg/Nm <sup>3</sup>
		Oxides of Nitrogen (NO <sub>x</sub> )	IS 11255 (Part 7): 1985	5.0 mg/Nm <sup>3</sup> to 1000 mg/nm <sup>3</sup>