Laboratory	**Konark Research Foundation, Plot No. 338/1, Kachigam, Daman**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
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Validity	**12.01.2018 to 11.01.2020**	**Last Amended on --**	

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.	**Packaged Drinking Water**	E.Coli	IS 15185:2016	Qualitative (Present/Absent) /250ml
		Coliform	IS 15185:2016	Qualitative (Present/Absent) /250ml
		Faecal streptococci	IS 15186:2002 (RA 2009)	Qualitative (Present/Absent) /250ml
		Staphylococcus aureaus	IS 5887 (Part 2) : 1976 (RA 2009)	Qualitative (Present/Absent) /250ml
		Sulphite reducing anaerobes	IS 13428 : 2005 (Annexure C) RA 2014	Qualitative (Present/Absent) /50ml
		Pseudomonas aeruginosa	IS 13428 : 2005 (Annexure D) RA 2014	Qualitative (Present/Absent) /250ml
		Total Aerobic microbial count At 20 – 22°C for 72 hrs.	IS 5402 : 2012	≥ 1 cfu/ml
		Total Aerobic microbial count At 37°C for 24 hrs.	IS 5402 : 2012	≥ 1 cfu/ml
		Yeast and Mould	IS 5403 : 1999 (RA 2009)	Qualitative (Present/Absent) /250ml
		Salmonella	IS 15187:2016	Qualitative (Present/Absent) /250ml
		Shigella	IS- 5887 (Part-7) : 1999 (RA 2009)	Qualitative (Present/Absent) /250ml
		Vibrio Cholerae	IS- 5887 (Part-5) : 1976 (RA 2009)	Qualitative (Present/Absent) /250ml
		Vibrio parahaemolyticus	IS- 5887 (Part-5) : 1976 (RA	Qualitative

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			2009)	(Present/Absent) /250ml
2.	**Packaged Natural Mineral Water**	E.Coli	IS 15185:2016	Qualitative (Present/Absent) /250ml
		Coliform	IS 15185:2016	Qualitative (Present/Absent) /250ml
		Faecal streptococci	IS 15186:2002 (RA 2009	Qualitative (Present/Absent) /250ml
		Staphylococcus aureaus	IS 5887 (Part 2) : 1976 (RA 2009)	Qualitative (Present/Absent) /250ml
		Sulphite reducing anaerobes	IS 13428 : 2005 (Annexure C) RA 2014	Qualitative (Present/Absent) /50ml
		Pseudomonas aeruginosa	IS 13428 : 2005 (Annexure D) RA 2014	Qualitative (Present/Absent) /250ml
		Yeast and Mould	IS 5403 : 1999 (RA 2009)	Qualitative (Present/Absent) /250ml
		Salmonella	IS 15187:2016	Qualitative (Present/Absent) /250ml
		Shigella	IS- 5887 (Part-7) : 1999 (RA 2009)	Qualitative (Present/Absent) /250ml
		Vibrio Cholerae	IS- 5887 (Part-5) : 1976 (RA 2009)	Qualitative (Present/Absent) /250ml
		Vibrio parahaemolyticus	IS- 5887 (Part-5) : 1976 (RA 2009)	Qualitative (Present/Absent) /250ml

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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.	**POLLUTION & ENVIRONMENT**			
1.	**Waste water**	Colour	IS 3025 (Part 4): 1983 (RA 2017) APHA 23rd Edition 2120 D	1 to 500
		pH	IS 3025 (Part 11): 1983 (RA 2017)	3 to 12
		Oil & Grease	IS 3025 (Part 39) : 1991 (RA 2014)	1 mg/L to 2000 mg/L
		Total Suspended Solids	IS 3025 (Part 17) : 1984 (RA 2017)	10 mg/L to 2000 mg/L
		Total Dissolved Solids	IS 3025 (Part 16) : 1984 (RA 2002)	10 mg/L to 2000 mg/L
		COD	APHA(23rd Edition) 5220 B	10 mg/L to 5000 mg/L
		Hexavalent Chromium	APHA (23rd Edition) 3500 Cr B	0.05 mg/L to 10 mg/L
		Total Chromium	IS 13428:1998 Annexure J	0.02 mg/L to 10 mg/L
		Chloride	IS 3025 (Part 32) :1988 (RA 2014)	2 mg/L to 1000 mg/L
		Sulphate	IS 3025 (Part 24) :1986 (RA 2014)	5 mg/L to 400 mg/L
		Phenolic Compounds	IS 3025 (Part 43) :1992 (RA 2014)	0.01 mg/L to 1 mg/L
II.	**WATER**			
1.	**Packaged Drinking Water / Packaged Natural Mineral Water**	Colour	IS 3025 (Part 4) : 1983 (RA 2017)	1 to 500
		Odour	IS 3025 (Part 5) : 1983 (RA 2017)	Qualitative (Agreeable/Disagreeable)

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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
		Taste	IS 3025 (Part 8) : 1984 (RA 2017)	Qualitative (Agreeable/Disagreeable)
		Turbidity	IS 3025 (Part 10) :1984 (RA 2017)	1 NTU to 100 NTU
		Total Dissolved Solids	IS 3025 (Part 16) :1984 (RA 2017)	5 mg/L to 2000 mg/L
		pH	IS 3025 (Part 11) :1983 (RA 2017)	2 to 12
		Nitrite	IS 3025 (Part 34) :1988 (RA 2014)	0.01 mg/L to 5 mg/L
		Nitrate	IS 3025 (Part 34) :1988 (RA 2014)	0.5 mg/L to 10 mg/L
		Fluoride	APHA 23rd Edition 4500-F- C/ IS 3025 (Part 60) :1964 (RA 2013)	0.1 mg/L to 10 mg/L
		Chloride	IS 3025 (Part 32) :1988 (RA 2014)	2.0 mg/L to 2000 mg/L
		Sulphate	IS 3025 (Part 24) :1986 (RA 2014)	5 mg/L to 400 mg/L
		Alkalinity (as $HC0_3$)	IS 3025 (Part 23) :1986 (RA 2014)	5 mg/L to 200 mg/L
		Sodium	IS 3025 (Part 45) :1993 (RA 2014)	0.1 mg/L to 100 mg/L
		Residual Free Chlorine	IS 3025 (Part 26) :1986 (RA 2014)	0.05 mg/L to 10 mg/L
		Phenolic Compounds	IS 3025 (Part 43) :1992 (RA 2014)	0.01 mg/L to 1 mg/L
		Mineral Oil	IS 3025 (Part 39) :1991 (RA 2014)	0.01 mg/L to 10 mg/L
		Anionic Surface Active Agent	APHA 23rd Edition 5540 C/ IS 13428:1998 Annexure K	0.05 mg/L to 0.25 mg/L
		Sulphide (as H_2S)	IS 3025 (Part 29) :1986 (RA 2014)	0.02 mg/L to 1 mg/L

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Convenor

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Program Director

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Borates	APHA 23rd Edition 4500B – B/ IS 13428: 1989 Annexure H	0.5 mg/L to 10 mg/L
		Bromate (as BrO_3)	ISO :15061 : 2001	0.005 mg/L to 0.1 mg/L
III.	**RESIDUE IN WATER**			
1.	**Waste Water**	Copper	IS 3025 (Part 42) :1992 (RA 2014)	0.02 mg/L to 1 mg/L
		Nickel	IS 13428: 1998 Annexure L	0.02 mg/L to 1 mg/L
		Zinc	IS 3025 (Part 49) :1994 (RA 2014)	0.05 mg/L to 10 mg/L
		Lead	IS 3025 (Part 47) :1994 (RA 2014)	0.005 mg/L to 2 mg/L
		Cadmium	IS 3025 (Part 41) :1992 (RA 2014)	0.001 mg/L to 1 mg/L
		Cyanide	APHA 23rd Edition 4500 CN/ IS 3025 (part 27):1986 (RA 2014)	0.01 mg/L to 1 mg/L
		Arsenic	IS 3025 (Part 37) :1988 (RA 2014)	0.02 mg/L to 2 mg/L
		Mercury	IS 3025 (Part 48):1994 (RA 2014)	0.0005 mg/L to 0.5 mg/L
2.	**Packaged Drinking Water / Packaged Natural Mineral Water**	**Trace Metal**		
		Antimony	IS 13428: 1998 Annexure G	0.004 mg/L to 0.1 mg/L
		Mercury	IS 3025 (Part 48):1994 (RA 2014)	0.0005 mg/L to 0.5 mg/L
		Cadmium	IS 3025 (Part 41) :1992 (RA 2014)	0.001 mg/L to 1 mg/L
		Cyanide	APHA 23rd Edition 4500 CN/ IS 3025 (part 27):1986 (RA 2014)	0.01 mg/L to 1 mg/L
		Arsenic	IS 3025 (Part 37) :1988 (RA 2014)	0.02 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
		Lead	IS 3025 (Part 47) :1994 (RA 2014)	0.005 mg/L to 2 mg/L
		Chromium	IS 13428: 1998 Annexure J	0.02 mg/L to 1 mg/L
		Nickel	IS 13428: 1998 Annexure L	0.02 mg/L to 1 mg/L
		Barium	IS 15302: 2003	0.5 mg/L to 8 mg/L
		Copper	IS 3025 (Part 42) :1992 (RA 2014)	0.02 mg/L to 1 mg/L
		Iron	IS 3025 (Part 53) :2003 (RA 2014)	0.05 mg/L to 5 mg/L
		Manganese	IS 3025 (Part 59): 2003 (RA 2017) / APHA 23rd Edition 3111B	0.04 mg/L to 1 mg/L
		Zinc	IS 3025 (Part 49) :1994 (RA 2014)	0.05 mg/L to 10 mg/L
		Silver	IS 13428 : 1998 Annexure J	0.005 mg/L to 1 mg/L
		Aluminium	IS 3025 (Part 55) :2003 (RA 2014)	0.02 mg/L to 0.3 mg/L
		Selenium	IS 3025 (part 56): 2003 (RA 2014)	0.001 mg/L to 0.1 mg/L
		Calcium	IS 3025 (Part 40) :1991 (RA 2014)	1 mg/L to 100 mg/L
		Magnesium	IS 3025 (Part 46) :1994 (RA 2014)	0.1 mg/L to 5 mg/L
		Pesticides Residue		
		op-DDT	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		op-DDE	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		op-DDD	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		pp-DDT	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		pp-DDE	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		pp-DDD	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Lindane	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		α-BHC	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		β-BHC	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		δ-BHC	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		γ-BHC	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Endosulfan-I	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Endosulfan-II	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Endosulfan Sulfate	AOAC–990.06/USEPA 8081A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Monocrotophos	USEPA 8141 B Revision 2 : 2000	0.05 µg/L to 0.5 µg/L
		Ethion	USEPA 8141 A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Chlorpyrifos	USEPA 8141 A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Phorate	USEPA 8141 A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Phorate sulphone	USEPA 8141 A Revision 1 : 1996	0.05 µg/L to 0.5 µg/L
		Phorate Sulphoxide	USEPA 8141 A Revision 1 : 1996	0.05 µg/L to 0.5 µg/L
		2,4-D	USEPA 555 Revision : 1992	0.05 µg/L to 0.5 µg/L
		Butachlor	USEPA 8141 A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Isoproturon	ISO 10695 : 2000 (E)	0.05 µg/L to 0.5 µg/L
		Alachlor	USEPA 8141 B Revision 2 : 2000	0.02 µg/L to 0.1 µg/L
		Atrazine	USEPA 8141 A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Methyl parathion	USEPA 8141 A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Methyl paraoxon	USEPA 8141 A Revision 1 : 1996	0.05 µg/L to 0.5 µg/L
		Malathion	USEPA 8141 A Revision 1 : 1996	0.02 µg/L to 0.1 µg/L
		Malaoxon	USEPA 8141 A Revision 1 : 1996	0.05 µg/L to 0.5 µg/L
		Aldrin	USEPA 8141 B Revision 2 : 2000	0.02 µg/L to 0.1 µg/L
		Dieldrin	USEPA 8141 B Revision 2 : 2000	0.02 µg/L to 0.1 µg/L

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Polychlorinated Biphenyls		
		2,4' - Dichlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,4,4' - trichlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		3,4,4' - trichlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2',3,5'-tetrachlobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2',4,5'-tetrachlobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2',5,5'-tetrachlobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,3,4,4'- tetrachlobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,3'4,4'- tetrachlobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,3',4',5-tetrachlobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,4,4',5- tetrachlobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		3,3',4,4'-tetrachlobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2',3,3',4-pentachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2',3,4,5'-pentachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2',4,4',5-pentachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2',4,5,5'-pentachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,3,3',4,4'-pentachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,3',4,4',5-pentachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,3',4,4',5-pentachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		3,3',4,4',5-	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		pentachlorobiphenyl		
		2,2'3,3'4,4'-Hexachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2'3,4,4',5'-Hexachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2'4,4'5,5'-Hexachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,3,3'4,4'5-Hexachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,3,3'4,4',6 Hexachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,3,4,4',5,6 Hexachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		3,3',4,4',5,5Hexachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2'3,3'4,4'5Heptachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2'3,3'5,6,6'Heptachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2'3,4,4'5,5'Heptachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2'3,4,4'5,6Heptachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,2'3,4',5,5'6Heptachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		2,3,3',4,4',5,5' Heptachlorobiphenyl	USEPA 8082 : 1996	0.1 µg/L to 1 µg/L
		Polynuclear Aromatic Hydrocarbon		
		Naphthalene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Acenaphthylene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L

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		Acenaphthene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Fluorene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Phenanthrene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Anthracene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Fluoranthene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Pyrene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Chrysene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Benzo [a] Anthracene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Benzo [b] Fluoranthene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Benzo [k] Fluoranthene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Benzo [a] Pyrene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Indeno [1,2,3-cd] Pyrene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Dibenzo [a,h] Anthracene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L
		Benzo [g,h] Perylene	APHA 23rd Edition 6440 / USEPA 8100 : 1986	1 µg/L to 10 µg/L