

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 1 of 32

Validity

27.03.2018 to 26.03.2020

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.	Drinking water, Packaged Drinking water, Surface water, Ground water, Water for food processing industry & Swimming pool water	Total Coliforms	APHA (23 rd Edition) 9221-B : 2017 (Method :- Most Probable Number)	1.8 MPN to 1600 MPN Index/100 ml
		Faecal Coliforms	APHA (23 rd Edition) 9221-E : 2017 (Method :- Most Probable Number)	1.8 MPN to 1600 MPN Index/100 ml
		Total Plate Count	APHA (23 rd Edition) 9215-B : 2017 (Method:- Pour Plate Method)	0 to 10 ⁴ CFU/ml

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory **Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra**

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

Certificate Number **TC-7086**

Page 2 of 32

Validity **27.03.2018 to 26.03.2020**

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
-----	----------------------------	-------------------------	---	--

CHEMICAL TESTING

I.	WATER			
1.	Drinking water, Packaged Drinking water, Surface water, Ground water & Water for food processing industry	Color	APHA 2120 -B 23rd Edition - 2017 IS 3025(Part 4) : 1983 (RA 2012)	1 Color Unit to 70 Color Unit
		Odour	IS 3025(Part 5) : 1983 (RA 2012)	Agreeable / Disagreeable
		pH	APHA 4500 - H+ B 23rd Edition - 2017 IS 3025(Part 11) : 1983 (RA 2012)	2 to 12
		Turbidity	APHA 2130 - B 23rd Edition - 2017 IS 3025(Part 5) : 1983 (RA 2012)	0.1 NTU to 3000 NTU
		Total Dissolved Solids	APHA 2540 - C 23rd Edition - 2017 IS 3025(Part 16) : 1984 (RA 2012)	10 mg/l to 5000 mg/l
		Ammonia (Total as NH ₃ - N)	APHA 4500 NH ₃ - B- C 23rd Edition - 2017 IS 3025(Part 34) : 1988 (RA 2014)	0.1 mg/l to 50 mg/l
		Anionic Detergents (as MBAS)	APHA 5540 C - 23rd Edition - 2017 / Annex K of IS 13428	0.08 mg/l to 50 mg/l
		Chloride (as Cl)	APHA 4500 - Cl ⁻ - B23rd Edition - 2017 IS 3025(Part 32) : 1986 (RA 2014)	1 mg/l to 5000 mg/l

**Ashok Kumar
Convenor**

**N. Venkateswaran
Program Director**

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 3 of 32

Validity

27.03.2018 to 26.03.2020

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
		Fluoride as F	APHA 4500 F ⁻ D 23rd Edition - 2012	0.02 mg/l to 5 mg/l
		Free Residual Chlorine	APHA 4500 - Cl - C 23rd Edition - 2017 IS 3025(Part 26) : 1986 (RA 2014)	0.2 mg/l to 20 mg/l
		Mineral oil	Clause 6 of IS 3025 (Part 39) : 1991 (RA 2003)	0.1 mg/l to 50 mg/l
		Phenolic Compounds as C ₆ H ₅ OH	APHA 5530 B-C 23rd Edition - 2017 IS 3025(Part 43) : 1992 (RA 2014)	0.001 mg/l to 10 mg/l
		Nitrate as NO ₃	APHA 4500 - NO ₃ - B23rd Edition - 2017 IS 3025(Part 34) : 1988 (RA 2014)	1 mg/l to 500 mg/l
		Total Alkalinity as CaCO ₃	APHA 2320 - B 23rd Edition - 2017 IS 3025(Part 23) : 1986 (RA 2014)	1 mg/l to 2000 mg/l
		Total Hardness as CaCO ₃	APHA 2340 - C 23rd Edition - 2017 IS 3025(Part 21) : 2009 (RA 2014)	2 mg/l to 5000 mg/l
		Calcium as Ca	APHA 3500 Ca B 23 rd Edition - 2017	1 mg/l to 5000 mg/l
		Magnesium as Mg	APHA 3500 Mg B- 23rd Edition - 2017- IS 3025(Part 46): 1994- (RA 2014) IS 3025(Part 2):2004- (RA 2014)	5.00 mg/l to 500.00 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 4 of 32

Validity

27.03.2018 to 26.03.2020

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
		Cyanide as CN	APHA 4500-CN - E 23rd Edition - 2017 IS 3025(Part 27): 1986- (RA 2014)	0.02 mg/l to 0.20 mg/l
		Conductivity	APHA 2510 - B 23rd Edition - 2017	0.2 μ S to 200 mS
		Nitrite as NO ₂	APHA 4500 - NO ₂ - B 23rd Edition - 2017	0.1 mg/l to 500 mg/l
		Phosphorus as PO ₄ ²⁻	APHA 4500 - P - C 23rd Edition - 2017 IS 3025(Part 31) : 1988 (RA 2014)	1 mg/l to 1000 mg/l
		Total Suspended Solids	APHA-2540-D 23rd Edition - 2017	1 mg/l to 1000 mg/l
		Sulphate as SO ₄ ²⁻	APHA 4500 - SO ₄ - E 23rd Edition - 2017 IS 3025(Part 24) : 1986 (RA 2014)	1 mg/l to 2000 mg/l
		Sulfide	APHA 4500 - S ₂ - F 23rd Edition - 2017 IS 3025(Part 29) : 1986 (RA 2014)	0.05 mg/l to 100 mg/l
2.	Swimming Pool water	pH	APHA 4500 - H ⁺ B 23rd Edition - 2017 IS 3025(Part 11) : 1983 (RA 2012)	2 to 12
		Color	APHA 2120 -B 23rd Edition - 2017 IS 3025(Part 4) : 1983 (RA 2012)	1 Color Unit to 70 Color Unit
		Turbidity	APHA 2130 - B 23rd Edition - 2017 IS 3025(Part 5) : 1983 (RA 2012)	0.1 NTU to 3000 NTU

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 5 of 32

Validity

27.03.2018 to 26.03.2020

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
		Odour	IS 3025(Part 5) : 1983 (RA 2012)	Agreeable / Disagreeable
		Total alkalinity (as CaCO ₃)	APHA 2320 - B 23rd Edition - 2017 IS 3025(Part 23) : 1986 (RA 2014)	1 mg/l to 2000 mg/l
		Total residual chlorine	APHA 4500 - Cl - C 23rd Edition - 2017 IS 3025(Part 26) : 1986 (RA 2014)	0.2 mg/l to 20 mg/l
		Total Dissolved Solids	APHA 2540 - C 23rd Edition - 2017 IS 3025(Part 16) : 1984 (RA 2012)	10 mg/l to 5000 mg/l
		Chloride (as Cl)	APHA 4500 - Cl - B23rd Edition - 2017 IS 3025(Part 32) : 1986 (RA 2014)	1 mg/l to 2000 mg/l
3.	Industrial Cooling purposes water	pH	APHA 4500 - H ⁺ B 23rd Edition - 2017 IS 3025(Part 11) : 1983 (RA 2012)	2 to 12
		Turbidity	APHA 2130 - B 23rd Edition - 2017 IS 3025(Part 5) : 1983 (RA 2012)	0.1 NTU to 3000 NTU
		Total Hardness as CaCO ₃	APHA 2340 - C 23rd Edition - 2017 IS 3025(Part 21) : 2009 (RA 2014)	2 mg/l to 5000 mg/l
		Calcium as Ca	APHA 3500 Ca B 23rd Edition - 2017- IS 3025(Part 40): 1991- (RA 2009) IS 3025 (Part 2):2004- (RA 2014)	1 mg/l to 500 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 6 of 32

Validity

27.03.2018 to 26.03.2020

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
		Magnesium as Mg	APHA 3500 Mg B- 23rd Edition - 2017- IS 3025(Part 46): 1994- (RA 2014)IS 3025 (Part 2):2004- (RA 2014)	5 mg/l to 500 mg/l
		Sulphate as SO ₄ ²⁻	APHA 4500 - SO ₄ - E 23rd Edition - 2017 IS 3025(Part 24) : 1986 (RA 2014)	1 mg/l to 2000 mg/l
		Total Dissolved Solids	APHA 2540 - C 23rd Edition - 2017 IS 3025(Part 16) : 1984 (RA 2012)	10 mg/l to 5000 mg/l
		Free Residual Chlorine	APHA 4500 - Cl - C 23rd Edition - 2017 IS 3025(Part 26) : 1986 (RA 2014)	0.2 mg/l to 20 mg/l
		Chemical Oxygen Demand	APHA-5220-B 23rd Edition - 2017 IS 3025(Part 58) : 2012	4 mg/l to 25000 mg/l
		Chloride (as Cl)	APHA 4500 - Cl ⁻ - B23rd Edition - 2017 IS 3025(Part 32) : 1986 (RA 2014)	1 mg/l to 2000 mg/l
4.	Construction Water	pH	APHA 4500 - H ⁺ B 23rd Edition - 2017 IS 3025(Part 11) : 1983 (RA 2012)	2 to 12
		Turbidity	APHA 2130 - B 23rdEdition - 2017IS 3025(Part 5) : 1983 (RA 2012)	0.1 NTU to 3000 NTU

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 7 of 32

Validity

27.03.2018 to 26.03.2020

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
		Total Dissolved Solids	APHA 2540 - C 23rd Edition – 2017 IS 3025 (Part 16) : 1984 (RA2012)	10 mg/l to 5000 mg/l
		Chloride as Cl ⁻	APHA 4500 - Cl ⁻ - B23rd Edition - 2017 IS 3025(Part 32) : 1986 (RA 2014)	1 mg/l to 5000 mg/l
		Free Residual Chlorine	APHA 4500 - Cl ⁻ - C 23rd Edition - 2017 IS 3025(Part 26) : 1986 (RA 2014)	0.2 mg/l to 20 mg/l
		Total Alkalinity as CaCO ₃	APHA 2320 - B 23rd Edition - 2017 IS 3025(Part 23) : 1986 (RA 2014)	1 mg/l to 2000 mg/l
		Total Hardness as CaCO ₃	APHA 2340 - C 23rd Edition - 2017 IS 3025(Part 21) : 2009 (RA 2014)	2 mg/l to 5000 mg/l
		Calcium as Ca	APHA 3500 Ca B 23rd Edition - 2017- IS 3025(Part 40): 1991- (RA 2009) IS 3025(Part 2):2004- (RA 2014)	1 mg/l to 500 mg/l
		Magnesium as Mg	APHA 3500 Mg B- 23rd Edition - 2017- IS 3025(Part 46): 1994- (RA 2014) IS 3025(Part 2):2004- (RA 2014)	5.00 mg/l to 500.00 mg/l
		Sulphate as SO ₄ ²⁻	APHA 4500 - SO ₄ - E 23rd Edition - 2017 IS 3025(Part 24) : 1986 (RA 2003)	1 mg/l to 1000 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 8 of 32

Validity

27.03.2018 to 26.03.2020

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
II.	RESIDUES IN WATER			
1.	Drinking water, Packaged Drinking water, Surface water, Ground water & Water for food processing industry	Aluminium	IS 3025(Part 55): 2003 Method B- RA 2014 IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Barium (as Ba)	Annex F of IS 13428 : 2005- RA 2009- IS 3025(Part 2): 2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Boron (as B)	USEPA 1311 / USEPA 6010 B- APHA 3120 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Copper as Cu	IS 3025 (Part 42): 1992- RA 2014 Method B- IS 3025 (Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Iron as Fe	IS 3025 (Part 53): 2014 Method A- (RA 2009)- IS 3025 (Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 9 of 32

Validity

27.03.2018 to 26.03.2020

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
		Manganese as Mn	IS 3025 (Part 2):2004- (RA 2014) IS 3025 (Part 59):2006- (RA 2012) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Selenium as Se	IS 3025(Part 56): 2003- (RA 2014) IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017	0.0025 mg/l to 1.00 mg/l
		Silver as Ag	IS 3025(Part 49): 1994- (RA 2014) Method B- IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Zinc as Zn	IS 3025(Part 49): 1994- (RA 2014) Method B- IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition – 2017, EPA 6020B-2014	0.01 mg/l to 100.00 mg/l
		Cadmium as Cd	APHA 3500 Cd 23rd Edition - 2017- IS 3025 (Part 41):1992- (RA 2014) Method A- IS 3025(Part 2):2004- (RA 2014) based on APHA 3125 B- 23rd Edition – 2017EPA6020B-2014	0.0025 mg/l to 5.00 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 10 of 32

Validity

27.03.2018 to 26.03.2020

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
		Lead as Pb	IS 3025(Part 47): 1994- (RA 2014) IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Mercury as Hg	APHA 3500 Hg 23rd Edition - 2017- IS 3025(Part 48):1994- (RA 2014) Method A- EPA method 200.7 based on APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.001 mg/l to 1.00 mg/l
		Molybdenum as Mo	IS 3025 (Part 2) : 2004 (RA 2014) APHA 3120 B- 23rd Edition - 2017 APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Nickel as Ni	Annex L of IS 13428:2005- (RA 2009) IS 3025(Part 2):2004- (RA 2014) IS 3025(Part 54):2003- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 11 of 32

Validity

27.03.2018 to 26.03.2020

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
		Total Arsenic (as As)	IS 3025(Part 37): 1988- (RA 2014) Method 2- IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Total Chromium (as Cr)	Annex J of IS 13428:2005- RA 2009- IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Antimony (as Sb)	Annex G of IS 13428 :2005- (RA 2009) IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.0025 mg/l to 1.00 mg/l
		Total Chromium (as Cr)	Annex J of IS 13428:2005- RA 2009- IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Pesticides	SEETL/LD/SOP/WA-43 Issue No.01 Dtd.01.04.2017	
		Alachlor	EPA-525.2-1995 - EPA- 508- 1995	0.01 µg/l to 1000 µg/l
		Atrazine	EPA-525.2- 1995 EPA-8141 A-1994	0.01 µg/l to 1000 µg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7086

Page 12 of 32

Validity 27.03.2018 to 26.03.2020

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
		Aldrin/ Dieldrin	EPA-508-1995	0.01 µg/l to 1000 µg/l
		Butachlor	EPA-525.2-1995 EPA- 8141 A- 1994	0.01 µg/l to 1000 µg/l
		Chlorpyrifos	EPA-525.2-1995 EPA- 8141 A- 1994	0.01 µg/l to 1000 µg/l
		Alpha HCH	EPA-508-1995	0.01 µg/l to 1000 µg/l
		Beta HCH	EPA-508-1995	0.01 µg/l to 1000 µg/l
		Delta HCH	EPA-508-1995	0.01 µg/l to 1000 µg/l
		2- 4 -D	EPA 515.1-1981	0.025 µg/l to 1000 µg/l
		DDT/ DDD/ DDE (o,p & p,p Isomers)	EPA-508-1995	0.01 µg/l to 1000 µg/l
		Endosulfan (alpha, beta & Sulphate)	EPA-508-1995	0.01 µg/l to 1000 µg/l
		Ethion	EPA 8141-A-1994	0.01 µg/l to 1000 µg/l
		Gamma HCH	EPA-508- 1995	0.01 µg/l to 1000 µg/l
		Isoproturon	EPA-532-2000	0.025 µg/l to 1000 µg/l
		Malathion	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Methyl Parathion	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Monocrotophos	EPA-8141 A-1994	0.025 µg/l to 2500 µg/l
		Heptachlor (& its eopxide)	EPA-8270 A-1998	0.01 µg/l to 1000 µg/l
		Chlordane	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Methoxychlor	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Phorate(& its Oxygen)	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Polychlorinated biphenyls (PCB)	Annex M of IS 13428- based on EPA 8270 D-1998	0.025 µg/l to 2500 µg/l
		Poly aromatic hydrocarbons (as PAH)	APHA 6440- 23rd Edition-2017	0.025 µg/l to 2500 µg/l
		Trihalomethanes		
		Bromoform	APHA 6232B / EPA 524.2-1995	0.01 mg/l to 1000 mg/l
		Dibromochloromethane	APHA 6232B / EPA 524.2-1995	0.01 mg/l to 1000 mg/l

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 13 of 32

Validity

27.03.2018 to 26.03.2020

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
		Bromodichloromethane	APHA 6232B / EPA 524.2-1995	0.01 mg/l to 1000 mg/l
		Chloroform	APHA 6232B / EPA 524.2-1995	0.01 mg/l to 1000 mg/l
2.	Swimming pool water	Aluminium	IS 3025(Part 55): 2003Method B- (RA 2014) IS 3025(Part 2):2004- (RA 2014)APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Iron as Fe	IS 3025 (Part 53): 2014 Method A- (RA 2009) IS 3025 (Part 2):2004- RA 2014),APHA 3125 B- 23rd Edition – 2017, EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Lead as Pb	IS 3025(Part 47): 1994- (RA 2014) IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
3.	Industrial cooling water	Iron as Fe	IS 3025 (Part 53): 2014 Method A- (RA 2009) IS 3025 (Part 2):2004- (RA 2014),APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Manganese as Mn	IS 3025 (Part 2):2004- (RA2014),IS3025 (Part 59) :2006- (RA 2012), APHA 3125 B- 23rd Edition - 2017EPA 6020 B-2014	0.01 mg/l to 5.00 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 14 of 32

Validity

27.03.2018 to 26.03.2020

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
4.	Construction water	Iron as Fe	IS 3025 (Part 53): 2014 Method A- RA 2009- IS 3025 (Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
		Manganese as Mn	IS 3025 (Part 2):2004- (RA 2014) IS 3025 (Part 59):2006- (RA 2012) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 5.00 mg/l
III.	POLLUTION & ENVIRONMENT			
1.	Waste water (Effluents/Sewage)	pH	APHA 4500 - H+ B 23rd Edition - 2017 IS 3025(Part 11) : 1983 (RA 2012)	2 to 12
		Total Dissolved Solids	APHA 2540 - C 23rd Edition – 2017,IS 3025 (Part 16) :1984 (RA 2012)	10 mg/l to 50000 mg/l
		Color	APHA 2120 -B 23rd Edition – 2017,IS 3025(Part 4) : 1983 (RA 2012)	1 Color Unit to 70 Color Unit
		Turbidity	APHA 2130 - B 23rd Edition - 2017 IS 3025(Part 5) : 1983 (RA 2012)	0.1 NTU to 3000 NTU

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7086

Page 15 of 32

Validity 27.03.2018 to 26.03.2020

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
		Chloride as Cl ⁻	APHA 4500 - Cl ⁻ - B23rd Edition - 2017 IS 3025(Part 32) : 1986 (RA 2014)	1 mg/l to 25000 mg/l
		Total Hardness as CaCO ₃	APHA 2340 - C 23rd Edition - 2017 IS 3025(Part 21) : 2009 (RA 2014)	2 mg/l to 5000 mg/l
		Calcium as Ca	APHA 3500 Ca B 23rd Edition - 2017-	1 mg/l to 5000 mg/l
		Magnesium as Mg	APHA 3500 Mg B- 23rd Edition - 2017- IS 3025(Part 46): 1994- (RA 2014) IS 3025(Part 2):2004- (RA 2009)	5 mg/l to 500 mg/l
		Cyanide as CN	APHA 4500-CN - E 23rd Edition - 2017 IS 3025(Part 27): 1986- (RA 2014)	0.02 mg/l to 0.20 mg/l
		Sulphate as SO ₄ ²⁻	APHA 4500 - SO ₄ - E 23rd Edition - 2017 IS 3025(Part 24) : 1986 (RA 2012)	1 mg/l to 2000 mg/l
		Sulfide	APHA 4500 - S ₂ - F 23rd Edition - 2017 IS 3025(Part 29) : 1986 (RA 2014)	0.05 mg/l to 100 mg/l
		Total Phosphate as PO ₄ ²⁻	APHA 4500 - P - C 23rd Edition - 2017 IS 3025(Part 31) : 1988 (RA 2014)	1 mg/l to 10000 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 16 of 32

Validity

27.03.2018 to 26.03.2020

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
		Chemical Oxygen Demand	APHA-5220-B 23rd Edition - 2017 IS 3025(Part 58) : 2012	4 mg/l to 25000 mg/l
		Biochemical Oxygen Demand (at 27°C for 3 days)	IS 3025(Part 44) : 1993 (RA 2014)	1 mg/l to 5000 mg/l
		Total Suspended Solids	APHA-2540-D 23rd Edition - 2017 IS 3025(Part 15) : 1984 (RA 2009)	1 mg/l to 50000 mg/l
		Oil and Grease	APHA-5520- O & G 23rd Edition - 2017 IS 3025(Part 39) : 1991 (RA 2014)	0.02 mg/l to 10000 mg/l
		Fluoride as F	APHA 4500 F- D 22nd Edition - 2012	0.02 mg/l to 5 mg/l
		Phenolic Compounds as C ₆ H ₅ OH	APHA 5530 B-C 23rd Edition - 2017 IS 3025(Part 43) : 1992 (RA 2014)	0.001 mg/l to 10 mg/l
		Conductivity	APHA 2510 - B 23rd Edition - 2017 IS 3025(Part 14) : 2013	0.02 µS to 200 mS
		Ammonia (Total as NH ₃ - N)	APHA 4500 NH ₃ - B- C 23rd Edition - 2017 IS 3025(Part 34) : 1988 (RA 2014)	0.1 mg/l to 1000 mg/l
		Total Alkalinity as CaCO ₃	APHA 2320 - B 23rd Edition - 2017 IS 3025(Part 23) : 1986 (RA 2014)	1 mg/l to 2000 mg/l
		Acidity	APHA 2310 - B 23rd Edition - 2017 IS 3025(Part 22) : 1986 (RA 2014)	1 mg/l to 5000 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 17 of 32

Validity

27.03.2018 to 26.03.2020

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
		Dissolved oxygen	APHA 4500 - O - C 23rd Edition - 2017 IS 3025(Part 38) : 1989 (RA 2014)	0 to 20 mg/l
		Total Kjeldahl nitrogen (TKN)	APHA 4500 - N - B 23rd Edition - 2017	1 mg/l to 1000 mg/l
		Carbon dioxide	APHA 4500 - CO2 - D 23rd Edition - 2017	0.5 mg/l to 1000 mg/l
		Chromium Hexavalent (Cr+6)	APHA 3500 Cr - B 23rd Edition - 2017	0.05 mg/l to 1000 mg/l
		Nitrate as NO ₃	APHA 4500 - NO3 - B 23rd Edition - 2017 IS 3025(Part 34) : 1988 (RA 2014)	1 mg/l to 1000 mg/l
		Nitrite as NO ₂	APHA 4500 - NO2 - B 23rd Edition - 2017	0.1 mg/l to 1000 mg/l
		Temperature	APHA 2550 B 23rd Edition - 2017 IS 3025(Part 9) : 1984 (RA 2012)	10 ⁰ to 60 ⁰ C
		Anionic Detergents (as MBAS)	APHA 5540 C - 23rd Edition - 2017 / Annex K of IS 13428	0.08 mg/l to 50 mg/l
		Cadmium as Cd	APHA 3500 Cd 23rd Edition - 2017- IS 3025(Part 41):1992- (RA 2014) Method A- IS 3025(Part 2):2004- (RA 2009) based on APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 100.0 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 18 of 32

Validity

27.03.2018 to 26.03.2020

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
		Lead as Pb	IS 3025(Part 47): 1994- . (RA 2014) IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.0 mg/l
		Zinc as Zn	IS 3025(Part 49): 1994- (RA 2014) Method B- IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.0 mg/l
		Total Arsenic (as As)	IS 3025(Part 37): 1988- (RA 2014)Method 2- IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.0 mg/l
		Copper as Cu	IS 3025 (Part 42): 1992- (RA 2014) Method B- IS 3025 (Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA -6020B	0.01 mg/l to 50.0 mg/l
		Total Chromium (as Cr)	Annex J of IS 13428:2005- (RA 2009) IS 3025(Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.0 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7086

Page 19 of 32

Validity 27.03.2018 to 26.03.2020

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
		Iron as Fe	IS 3025 (Part 53): 2003 Method A- (RA 2014) IS 3025 (Part 2):2004- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.0 mg/l
		Nickel as Ni	Annex L of IS 13428:2005- (RA 2009) IS 3025(Part 2):2004- (RA 2013) IS 3025(Part 54):2003- (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.0 mg/l
		Mercury as Hg	APHA 3500 Hg 23rd Edition - 2017- IS 3025(Part 48):1994- (RA 2014) Method A- EPA method 200.7 based on APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.001 mg/l to 1.0 mg/l
		Manganese as Mn	IS 3025 (Part 2):2004- (RA 2014) IS 3025 (Part 59):2006- (RA 2012) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.0 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 20 of 32

Validity

27.03.2018 to 26.03.2020

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
		Selenium as Se	IS 3025(Part 56): 2003-(RA 2014) IS 3025(Part 2):2004-(RA 2014) APHA 3125 B- 23rd Edition - 2017	0.0025 mg/l to 1 mg/l
		Potassium as K	EPA - 3050-1996	0.05 mg/l to 500 mg/l
		Sodium as Na	EPA - 3050 - 1996	0.05 mg/l to 500 mg/l
		Silver as Ag	IS 3025(Part 49): 1994-(RA 2014) Method B- IS 3025(Part 2):2004-(RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.0 mg/l
		Cobalt as Co	USEPA 1311 / USEPA 6010 B- APHA 3120 B- 23rd Edition - 2017	0.05 mg/l to 100.00 mg/l
		Aluminum as Al	IS 3025(Part 55): 2003Method B- (RA 2009) IS 3025(Part 2):2004-(RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.00 mg/l
		Barium as Ba	Annex F of IS 13428 : 2005- (RA 2009) IS 3025(Part 2): 2004-(RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.00 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 21 of 32

Validity

27.03.2018 to 26.03.2020

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
		Lithium as Li	IS 3025 (Part 2) : 2004 (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.00 mg/l
		Molybdenum as Mo	IS 3025 (Part 2) : 2004 (RA 2014) APHA 3120 B- 23rd Edition - 2017 APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.00 mg/l
		Beryllium	IS 3025 (Part 2) : 2004 (RA 2014) APHA 3125 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.00 mg/l
		Boron	USEPA 1311 / USEPA 6010 B- APHA 3120 B- 23rd Edition - 2017 EPA 6020B-2014	0.01 mg/l to 50.00 mg/l
		Tin	USEPA 1311 / USEPA 6010 B- APHA 3120 B- 23rd Edition - 2017 EPA 6020 B	0.01 mg/l to 50.00 mg/l
		Strontium	USEPA 1311 / USEPA 6010 B- APHA 3120 B- 23rd Edition -2017 EPA-6020 B	0.01 mg/l to 50.00 mg/l
		Vanadium	USEPA 1311 / USEPA 6010 B- APHA 3120 B- 23rd Edition -2017, EPA 6020B-2014	0.01 mg/l to 50.00 mg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7086

Page 22 of 32

Validity 27.03.2018 to 26.03.2020

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
		Pesticides	SEETL/LD/SOP/WA-43 Issue, No.01 Dtd.01.04.2017	
		Alachlor	EPA-525.2-1995 - EPA- 508- 1995	0.01 µg/l to 1000 µg/l
		Atrazine	EPA-525.2- 1995 EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Aldrin/ Dieldrin	EPA-508-1995	0.01 µg/l to 1000 µg/l
		Butachlor	EPA-525.2-1995 EPA- 8141 A- 1994	0.01 µg/l to 1000 µg/l
		Chlorpyrifos	EPA-525.2-1995 EPA- 8141 A- 1994	0.01 µg/l to 1000 µg/l
		Alpha HCH	EPA-508-1995	0.01 µg/l to 1000 µg/l
		Beta HCH	EPA-508-1995	0.01 µg/l to 1000 µg/l
		Delta HCH	EPA-508-1995	0.01 µg/l to 1000 µg/l
		2- 4 -D	EPA 515.1-1981	0.025 µg/l to 1000 µg/l
		DDT/ DDD/ DDE (o,p & p,p Isomers)	EPA-508-1995	0.01 µg/l to 1000 µg/l
		Endosulfan (alpha, beta & Sulphate)	EPA-508-1995	0.01 µg/l to 1000 µg/l
		Ethion	EPA 8141-A-1994	0.01 µg/l to 1000 µg/l
		Gamma HCH	EPA-508- 1995	0.01 µg/l to 1000 µg/l
		Isoproturon	EPA-532-2000	0.025 µg/l to 1000 µg/l
		Malathion	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Methyl Parathion	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Monocrotophos	EPA-8141 A-1994	0.025 µg/l to 2500 µg/l
		Heptachlor (& its eopxide)	EPA-8270 A-1998	0.01 µg/l to 1000 µg/l
		Chlordane	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Methoxychlor	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Phorate(& its Oxygen)	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Polychlorinated biphenyls (PCB)	Annex M of IS 13428- based on EPA 8270 D-1998	0.025 µg/l to 2500 µg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7086

Page 23 of 32

Validity 27.03.2018 to 26.03.2020

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
		Poly aromatic hydrocarbons (as PAH)	APHA 6440- 23rd Edition-2017	0.025 µg/l to 2500 µg/l
2.	Soil/Sediments	pH	IS:2720 (Part 26)-1987 (RA 2016)	2 to 12
		Electrical Conductivity	IS :14767 : 2000	0.02 µS/m to 2000 µS/m
		Organic Matter	IS 2720 (Part XXII) :1972 (RA 2015) and SEETL/LD/SOP-SA/O5- Issue Date:01/04/2017. Issue No - 01	0.2 % to 10 %
		Moisture Content	IS 2720 (Part II) :1973 (RA 2015), and SEETL/LD/SOP-SA/13- Issue Date:01/04/2017. Issue No - 01	0.1 % to 50 %
		Total soluble Chloride as Cl	Lab. SOP No: SEETL/LD/SOP-SA/19- Issue Date: 01/04/2017. Issue No - 01	20 mg/kg to 10000 mg/kg
		Total soluble Sulphate as SO ₄	IS 2720 (Part XXVII) :1977 (RA 2015), and Lab. SOP No: SEETL/LD/SOP-SA/28- Issue Date: 01/04/2017.. Issue No - 01	20 mg/kg to 10000 mg/kg
		Available Phosphorus	Lab. SOP No: SEETL/LD/SOP-SA/07- Issue Date: 01/04/2017. Issue No - 01	20 mg/kg to 5000 mg/kg
		Sodium Absorption Ratio (SAR)	Lab. SOP No: SEETL/LD/SOP-SA/11 - Issue Date: 01/04/2017. Issue No – 01	1 mg/kg to 50 mg/kg

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 24 of 32

Validity

27.03.2018 to 26.03.2020

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
		Exchangeable Calcium	Lab. SOP No: SEETL/LD/SOP-SA/18 - Issue Date: 01/04/2017.. Issue No - 01	20 mg/kg to 25000 mg/kg
		Exchangeable Magnesium	Lab. SOP No: SEETL/LD/SOP-SA/23 - Issue Date: 01/04/2017.. Issue No - 01	20 mg/kg to 25000 mg/kg
		Nitrate	Lab. SOP No: SEETL/LD/SOP-SA/24 - Issue Date: 01/04/2017.- Issue No 01.	10 mg/kg to 5000 mg/kg
		Nitrite	Lab. SOP No: SEETL/LD/SOP-SA/25 - Issue Date: 01/04/2017.- Issue No - 01.	10 mg/kg to 5000 mg/kg
		Aluminum as Al	EPA - 3050 - B- 1996 EPA 200.8 Rev.5.7-1994	0.1 mg/kg to 100 mg/kg
		Arsenic as As	EPA - 3050 - B- 1996	0.0001 g/kg to 1 g/kg
		Boron as B	EPA 200.8 Rev.5.7-1994	0.0001 g/kg to 1 g/kg
		Barium as Ba		0.0001 g/kg to 1 g/kg
		Beryllium as Be		0.0001 g/kg to 1 g/kg
		Cadmium as Cd		0.0001 g/kg to 1 g/kg
		Cobalt as Co		0.0001 g/kg to 1 g/kg
		Chromium as Cr		0.0001 g/kg to 1 g/kg
		Copper as Cu		0.0001 g/kg to 1 g/kg
		Iron as Fe		0.0001 g/kg to 1 g/kg
		Potassium as K		0.0001 g/kg to 1 g/kg
		Manganese as Mn		0.0001 g/kg to 1 g/kg
		Sodium as Na		0.0001 g/kg to 1 g/kg
		Nickel as Ni		0.0001 g/kg to 1 g/kg
		Lead as Pb		0.0001 g/kg to 1 g/kg
		Selenium as Se	EPA - 3050 - B- 1996	0.0001 g/kg to 1 g/kg
		Tin as Sn	EPA 200.8 Rev.5.7-1994	0.0001 g/kg to 1 g/kg

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7086

Page 25 of 32

Validity 27.03.2018 to 26.03.2020

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
		Vanadium as V		0.0001 g/kg to 1 g/kg
		Zinc as Zn		0.0001 g/kg to 1 g/kg
		Molybdenum as Mo		0.0001 g/kg to 1 g/kg
		Antimony as Sb		0.0001 g/kg to 1 g/kg
		Lithium as Li		0.0001 g/kg to 1 g/kg
		Mercury as Hg		0.0001 g/kg to 1 g/kg
		Silver as Ag		0.0001 g/kg to 1 g/kg
		Pesticides - SEETL/LD/SOP/SA/27, Issue No.01 Dtd.01.04.2017		
		Alachlor	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Atrazine	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Aldrin/ Dieldrin	EPA 8270-1998	0.01 to 5.00 mg/kg
		Butachlor	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Chlorpyrifos	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Alpha HCH	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Beta HCH	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Delta HCH	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		2- 4 -D	EPA 8270-1998	0.025 mg/kg to 5.00 mg/kg
		DDT/ DDD/ DDE (o,p & p,p Isomers)	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Endosulfan (alpha, beta & Sulphate)	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Ethion	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Gamma HCH	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Isoproturon	EPA 8270-1998	0.025 mg/kg to 5.00 mg/kg
		Malathion	EPA 8270-1998	0.01 mg/kg to 5.00 mg/kg
		Methyl Parathion	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Monocrotophos	EPA-8141 A-1994	0.025 µg/l to 2500 µg/l
		Heptachlor (& its eopxide)	EPA-8270 A-1998	0.01 µg/l to 1000 µg/l
		Chlordane	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l

Laboratory **Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra**

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

Certificate Number **TC-7086**

Page 26 of 32

Validity **27.03.2018 to 26.03.2020**

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
		Methoxychlor	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Phorate(& its Oxygen)	EPA-8141 A-1994	0.01 µg/l to 1000 µg/l
		Polychlorinated biphenyls (PCB)	Annex M of IS 13428-based on EPA 8270 D-1998	0.025 µg/l to 2500 µg/l
		Poly aromatic hydrocarbons (as PAH)	APHA 6440- 23rd Edition-2017	0.025 µg/l to 2500 µg/l
3.	Wastes(Liquid/Slurry/Sludge/Solid/Semi-Solid) Municipal solid wastes	pH	SW 846- EPA 9045D-2004	2 to 12
		Organic Matter	Lab. SOP No: SEETL/LD/SOP-SA/05- Issue Date: 01/04/2017. IssueNo-01	0.2 % to 10 %
		Moisture Content	Lab. SOP No: SEETL/LD/SOP-SA/12- Issue Date: 01/04/2017. Issue-01	0.1 % to 50 %
		Sulphide	SW 846- EPA 9034B-1996	1 mg/kg to 50 mg/kg
		Ammonia	EPA 350.1-1993	1 mg/kg to 100 mg/kg
		Total Kjeldahl Nitrogen	Lab. SOP No: SEETL/LD/SOP-SA/14 - Issue Date: 01/04/2017. Issue-No-01	0.001% to 60%
		Total soluble Chloride as Cl	Lab. SOP No: SEETL/LD/SOP-SA/19- Issue Date: 01/04/2017. Issue-No-01.	20 mg/kg to 10000 mg/kg
		Total soluble Sulphate as SO ₄	Lab. SOP No: SEETL/LD/SOP-SA/28 - Issue Date: 01/04/2017. Issue No-01	20 mg/kg to 10000 mg/kg

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 27 of 32

Validity

27.03.2018 to 26.03.2020

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
		Total Phosphorus as P	Lab. SOP No: SEETL/LD/SOP-SA/08 - Issue Date: 01/04/2017. Issue No-01	20 mg/kg to 5000 mg/kg
		Nitrate	Lab. SOP No: SEETL/LD/SOP-SA/24 - Issue Date: 01/04/2017. IssueNo-01	10 mg/kg to 5000 mg/kg
		Calorific value	IS-1350-1966.	300 cal/g to 15000 cal/g
		Flash Point	IS 1448 (P:21):2012	1°C to 600°C
		Exchangeable Calcium	Lab. SOP No: SEETL/LD/SOP-SA/18- Issue Date: 01/04/2017. IssueNo-01	20 mg/kg to 25000 mg/kg
		Exchangeable Magnesium	Lab. SOP No: SEETL/LD/SOP-SA/23- Issue Date: 01/04/2017. IssueNo-01	20 mg/kg to 25000 mg/kg
		Nitrite	EPA 353.2-1993	10 mg/kg to 5000 mg/kg
		Aluminum as Al	TCLP USEPA 1311-1992	0.05 mg/l to 10000 mg/l
		Arsenic as As	/ USEPA 6010 B-1996	
		Boron as B	APHA 3120 B- 23rd	
		Barium as Ba	Edition - 2017	
		Beryllium as Be		
		Iron as Fe		
		Potassium as K		
		Manganese as Mn		
		Chromium as Cr		
		Copper as Cu		
		Cadmium as Cd	TCLP USEPA 1311-1992	0.05 mg/l to 10000mg/l
		Cobalt as Co	/ USEPA 6010 B-1996	
		Sodium as Na	APHA 3120 B- 23rd	
		Nickel as Ni	Edition - 2017-	

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 28 of 32

Validity

27.03.2018 to 26.03.2020

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
		Lead as Pb	EPA - 3050-1996	
		Selenium as Se		
		Tin as Sn		
		Vanadium as V		
		Zinc as Zn		
		Molybdenum as Mo		
		Antimony as Sb		
		Lithium as Li		
		Thallium		
		Silver as Ag		
		Mercury as Hg		
		VOC	0.0025 mg/l to 10 mg/l	
		1-1- Dichloroethene	EPA-8260B-1996 EPA 524-1995	0.1 mg/l to 400 mg/l
		1-1--dichloroethane		
		chloroform		
		Benzene		
		Trichloroethene		
		Dibromomethane		
		bromodichloromethane		
		Toluene		
		Tetrachloroethene		
		dibromochloromethane		
		chlorobenzene		
		bromoform		
		1-4- Dichlorobenzene		
		Nitrobenzene		
		Hexachlorobutadiene		
		Napthalene		

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 29 of 32

Validity

27.03.2018 to 26.03.2020

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
		Pesticides- SEETL/LD/SOP/SA/27, Issue No.01 Dtd.01.04.2017		
		Alachlor	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Atrazine	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Aldrin/ Dieldrin	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Butachlor	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Chlorpyrifos	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Alpha HCH	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Beta HCH	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Delta HCH	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		2- 4 -D	EPA 8270-1998	0.025 µg/l to 1000 µg/l
		DDT/ DDD/ DDE (o,p & p,p Isomers)	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Endosulfan (alpha, beta & Sulphate)	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Ethion	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Gamma HCH	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Isoproturon	EPA 8270-1998	0.025 µg/l to 1000 µg/l
		Malathion	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Methyl Parathion	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Monocrotophos	EPA 8270-1998	0.025 µg/l to 2500 µg/l
		Heptachlor (& its eopxide)	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Chlordane-	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Methoxychlor	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Phorate (& its Oxygen)	EPA 8270-1998	0.01 µg/l to 1000 µg/l
		Polychlorinated biphenyls (PCB)	EPA 8275 A-1996	0.025 µg/l to 2500 µg/l
		Poly aromatic hydrocarbons (as PAH)	EPA 8275 A-1996	0.025 µg/l to 2500 µg/l

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 30 of 32

Validity

27.03.2018 to 26.03.2020

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
4.	Used /Waste Oil	Moisture Content	APHA-2540 B-23rd Edition - 2017 Based on Procedure for Methods for Soil testing India by Department of Agriculture & cooperation- Ministry of Agriculture- Govt. of India.	0.1 % to 50 %
		Polychlorinated biphenyls	EPA 8082-2007	0.1 mg/kg to 5000 mg/kg
		Poly aromatic hydrocarbons (as PAH)	EPA-8270-1998 EPA 525.2-1995	0.5 % to 50 %
		Calorific value	IS-1350-1966.	300 cal/g to 15000 cal/g
		Flash Point	IS 1448 (P:21):2012	1°C to 600°C
		Cadmium as Cd	USEPA 1311-1992 /	0.05 mg/kg to 10000 mg/kg
		Arsenic as As	USEPA 6010 B-1996	
		Nickel as Ni	APHA 3120 B- 23rd	
Lead as Pb	Edition - 2017			
	Chromium as Cr			
V.	ATMOSPHERIC POLLUTION			
1.	Ambient Air Quality Parameters	PM ₁₀	IS 5182(Part 23): 2006 (RA 2012)	1 µg/m ³ to 1000 µg/m ³
		PM _{2.5}	Lab. SOP No: SEETL/LD/SOP-AA/01- Issue Date: 01/04/2017.. Issue No -01 EPA Quality assurance guidance document 2.12 based on CPCB – 2011	1 µg/m ³ to 1000 µg/m ³

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory

Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7086

Page 31 of 32

Validity

27.03.2018 to 26.03.2020

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
		Sulphur dioxide SO ₂	IS 5182 (Part 2): 2001 (RA 2012)	3 µg/m ³ to 1000 µg/m ³
		Nitrogen dioxide (NO _x)	IS 5182 (Part 6): 2006, (RA 2012)	6 µg/m ³ to 420 µg/m ³
		Ammonia (NH ₃)	Method No.401 Based on Methods of Air Sampling and analysis- 3 rd edition by J P Lodge.	20 µg/m ³ to 700 µg/m ³
		Carbon monoxide CO	NDIR IS 5182 (Part 10) C: 1999 Reaff. 2014	0.045 mg/m ³ to 228 mg/m ³
		Lead as Pb	IS 5182 (Part 22): 2004 (RA 2014) EPA compendium method IO 3.5	0.10 µg/m ³ to 10 µg/m ³
		Benzene (C ₆ H ₆)	IS 5182 (Part 11) :2006 (RA 2012)	1 µg/m ³ to 500 µg/m ³
		Arsenic(As)	EPA compendium method IO 3.5	5 ng/m ³ to 100 ng/m ³
		Nickel(Ni)	EPA compendium method IO 3.5	5 ng/m ³ to 100 ng/m ³
		Ozone (O ₃)	IS 5182 (Part IX) :1974 Method No.417 Based on Methods of Air Sampling and analysis- 3 rd edition by J P Lodge. USEPA Automated Equivalent Method EQOA-0193-091.	1 µg/m ³ to 1000 µg/m ³
		Benzo(α)Pyrene	IS 5182 (Part 12): 2004 (RA 2014)	0.025 ng/m ³ to 500 ng/m ³
		Ambient Noise level	IS:9989 - 1981 (RA 2001)	30 dB to 134 dB

Ashok Kumar
Convenor

N. Venkateswaran
Program Director

Laboratory Sadekar Enviro Engineers Pvt. Ltd., Plot No. A-95, Road No. 16,
Kisan Nagar Road, MIDC, Wagle Industrial Area, Thane, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7086

Page 32 of 32

Validity 27.03.2018 to 26.03.2020

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
2.	Stack emission, Process/Vent emissions	Velocity of flue gas discharge	IS 11255 Part 3-2008 (RA 2013)	1 m/s to 30 m/s
		Particulate matter	IS 11255 Part 1-1985 (RA 2014)	1 mg/Nm ³ to 50 mg/Nm ³
				50 mg/Nm ³ to 100 mg/Nm ³
				100 mg/Nm ³ to 5000 mg/Nm ³
		Ammonia (NH ₃)	IS 11255 Part 6 1999 (RA 2014)	5 mg/Nm ³ to 500 mg/Nm ³
		Oxides of Nitrogen(NO _x)	IS 11255 Part 7 2005 (RA 2012)	2 mg/Nm ³ to 400 mg/Nm ³
		Sulphur Dioxide (SO ₂)	IS 11255 Part 2-1985 (RA 2014)	3 mg/Nm ³ to 500 mg/Nm ³
Carbon monoxide	EPA Method - 10 1996	1 mg/Nm ³ to 11452 mg/m ³		

NOTE: The Laboratory has demonstrated competence for the stated scope for **WATER**. This however **does not fully cover** the specification requirements of **BIS for the Packaged Drinking Water as per IS:14543 and the Packaged Natural Mineral Water IS:13428.**

Ashok Kumar
Convenor

N. Venkateswaran
Program Director