

Schedule

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Certificate No. : LA-2015-0595-F-1
Issue No. : 12
Date : 13 July 2026
Expiry of Certificate : 18 May 2027
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ACCREDITATION STANDARD: ISO/IEC 17025:2017
FIELD OF TESTING : Environmental Testing

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORIES
A. WATER ANALYSIS - Ballast water - Drinking water (Potable) - Non-potable water - Fresh water - Industrial water - Wastewater, Trade effluent - Ground water - RO water - DI water - Swimming pool water - Cooling tower water - Sea water	1. Detergents (MBAS)	<u>APHA Methods are based on 24th Edition: 2023</u> APHA 5540C	WPH, TTP, UFG, LYH, CVK, LJJ, CYC
	2. Fixed Solids (FS)	APHA 2540E	WPH, TTP, UFG, LYH, CVK, LJJ, CYC
	3. Oil & Grease	USEPA 1664 (Feb 2010)	WPH, TTP, UFG, LYH, CVK, LJJ, CYC
	4. Oil & Grease (Hydrocarbon)	APHA 5520F	WPH, TTP, UFG, LYH, CVK, LJJ, CYC
	5. Oil & Grease (Total) by Gravimetric	APHA 5520B	WPH, TTP, UFG, LYH, CVK, LJJ, CYC
	6. Oxidizable Matter	ISO 3696:1987	WPH, TTP, UFG, CVK, LJJ, CYC
	7. Total Dissolved Solids	APHA 2540C	WPH, TTP, UFG, LYH, CVK, LJJ, CYC
	8. Total Solids	APHA 2540B	WPH, TTP, UFG, LYH, CVK, LJJ, CYC
	9. Total Suspended Sediments Concentration (HCTSS)	In-house Method: MLS-SOP-SED-004 Rev 0	WPH, TTP, UFG, LYH
	10. Total Suspended Solids	APHA 2540D	WPH, TTP, UFG, LYH, CVK, LJJ, CYC

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B. ENVIRONMENTAL SAMPLES • Water • Soil • Sediment • Sludge C. FINE AGGREGATE / SOIL / SEDIMENT / SOLID SAMPLES	11. Total Volatile Solids	APHA 2540E	WPH, TTP, UFG, LYH, CVK, LJJ, CYC
	12. Urea in Seawater	In-house Method: MLS-SOP-WQ-041 Rev 0	WPH, TTP, UFG, LYH, CVK, LJJ
	13. Volatile Suspended Solids	APHA 2540E	WPH, TTP, UFG, LYH, CVK, LJJ, CYC
	1. Oil & Grease	USEPA 9071B (1998)	WPH, TTP, UFG, CVK
	2. Oil & Grease for Sludge	APHA 5520E	WPH, TTP, UFG, CVK
	3. Total, Fixed & Volatile Solids in Solid & Semi-solid Samples	APHA 2540G	WPH, TTP, UFG, CVK, LJJ
	1. Acid Solubility	ANSI/AWWA B100-16	WPH, TTP, UFG, CVK, LJJ
	2. Bulk Moisture for Mixed Domestic Waste / Waste Samples	In-house Method: MLS-SOP-SED-023 Rev 0 Section 2	WPH, TTP, UFG, CVK, LJJ
	3. Carbonate	BS 1377-3:2018+A1:2021 Section 8	WPH, TTP, UFG, LJJ
	4. Chloride • Acid-soluble • Water-soluble	BS 1377-3:2018+A1:2021 Section 9	WPH, TTP, UFG, CVK, LJJ
	5. Chromium VI by UV-Vis	USEPA 3060A (Dec 1996) (Digestion) APHA 3500-Cr (B) (Determination)	WPH, TTP, UFG, CVK, LJJ
	6. Conductivity in Soil	Australian Standard (Soil Survey Standard Method: EC-C1-A-3)	WPH, TTP, UFG, CVK, LJJ
	7. Density by Linear Measurement	BS EN ISO 17892-2:2014 Section 5.1	WPH, TTP, UFG, LJJ
	8. Fall Velocity by Owen Tube Method	In-house Method: MLS-SOP-SED-001 Rev 0	WPH, TTP, UFG, CVK

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D. SOIL/SOIL MIX/ COMPOST	9. Material in Soils Finer than 75 µm	ASTM D1140-25	WPH, TTP, UFG, CVK, LJJ
	10. Moisture for Mixed Plastic Waste Samples	In-house Method: MLS-SOP-SED-023 Rev 0 Section 3	WPH, TTP, UFG, CVK, LJJ
	11. Moisture (Water Content)	BS EN ISO 17892-1: 2014+A1:2022	WPH, TTP, UFG, CVK, LJJ
	12. Organic Matter / Mass Loss on Ignition (440°C)	BS 1377-3:2018+A1:2021 Section 6	WPH, TTP, UFG, CVK, LJJ
	13. pH	BS 1377-3:2018+A1:2021 Section 12	WPH, TTP, UFG, CVK, LJJ
	14. Shell / Coral Content	SANS 5840: 2008 Ed 2.2	WPH, TTP, UFG, LJJ
	15. Sulfate • Acid-soluble • Water-soluble	BS 1377-3:2018+A1:2021 Section 7	WPH, TTP, UFG, CVK, LJJ
	1. Conductivity	TMECC 04.10-A, 2015	WPH, TTP, UFG, CVK, LJJ
	2. Foreign Matter or Physical Contaminants	TMECC 02.02-C, 2015	WPH, TTP, UFG, CVK, LJJ
	3. Moisture	TMECC 03.09-A, 2015	WPH, TTP, UFG, CVK, LJJ
	4. Organic Matter	BS 1377-3:2018+A1:2021 Section 4	WPH, TTP, UFG, CVK, LJJ
	5. Organic Matter / Loss on Ignition	TMECC 05.07-A, 2015	WPH, TTP, UFG, CVK, LJJ
	6. Particle Size Distribution	In-house Method: MLS-SOP-SED-015 Rev 0 In-house Method: MLS-SOP-SED-021 Rev 0	WPH, TTP, UFG, CVK, LJJ
	7. pH	TMECC 04.11-A, 2015	WPH, TTP, UFG, CVK, LJJ
	8. Soil Texture	In-house Method: MLS-SOP-SED-016 Rev 0	WPH, TTP, UFG, CVK, LJJ

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E. SOURCE EMISSION	1. Sampling and Velocity Traverse for Stationary Sources	USEPA Method 1 (May 2023)	WPH, TTY, CJQ
	2. Determination of Stack Gas Velocity and Volumetric Flow Rate	USEPA Method 2 (Aug 2017)	WPH, TTY, CJQ
	3. Determination of Oxygen and Carbon Dioxide Concentrations in Emissions From Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 3A (Aug 2017)	WPH, TTY, CJQ
	4. Determination of Moisture Content in Stack Gases	USEPA Method 4 (May 2023)	WPH, TTY, CJQ
	5. Determination of Particulate Matter Emission from Stationary Sources	USEPA Method 5 (Dec 2020)	WPH, TTY, CJQ
	6. Determination of Sulfur Dioxide Emission from Stationary Sources by Gas Analyser	USEPA Method 6C (Aug 2017)	WPH, TTY, CJQ
	7. Determination of Oxides of Nitrogen Emission from Stationary Sources by Gas Analyser	USEPA Method 7E (Oct 2020)	WPH, TTY, CJQ
	8. Determination of Carbon Monoxide Emission from Stationary Sources by Gas Analyser	USEPA Method 10 (Aug 2017)	WPH, TTY, CJQ
	9. Sampling for Determination of Dioxin and Furan from Stationary Sources	USEPA Method 23 (Mar 2023) (Sampling only)	WPH, TTY, CJQ

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	10. Determination of Hydrogen Halide and Halogen Emissions From Stationary Sources Isokinetic Method	USEPA Method 26a (Oct 2020) (Sampling only)	WPH, TTY, CJQ
	11. Determination of Metals Emissions From Stationary Sources	USEPA Method 29 (Aug 2017) (Sampling only)	WPH, TTY, CJQ
	12. Other Test Method 45 Measurement of Selected Per- and Polyfluorinated Alkyl Substances from Stationary Sources	OTM-45 Rev 1 (Sampling only)	WPH, TTY, CJQ
F. WATER SAMPLING • Drinking water (Potable) • Non-potable water • Fresh water • Industrial water • Wastewater, Trade Effluent • Ground water • RO water • DI water • Swimming pool water • Cooling tower water • Sea water	1. In-situ Measurements: • Conductivity • Dissolved Oxygen (DO) • Oxidation Reduction Potential (ORP) • pH • Salinity • Temperature • Turbidity	In-house Method: MLS-SOP-ES-004 Rev 4 (using Multi-parameter Instrument)	WPH, TTY
	2. Sampling of Ground Water Samples	In-house Method: MLS-SOP-ES-023 Rev 2 (adapted from ISO 5667-11)	WPH, TTY
	3. Sampling of Water Samples	In-house Method: MLS-SOP-ES-001 Rev 6	WPH, TTY
	4. Sampling of Water Sample using Remote Autosampler Unit (RAU)	In-house Method: MLS-SOP-ES-001 Rev 6	WPH, TTY
G. WASTEWATER (GREASE TRAP)	1. Assessment and Sampling of Grease Trap	In-house Method: MLS-SOP-ES-013 Rev 1	WPH, TTY
H. AMBIENT AIR QUALITY	1. • Particulate Matter (PM10) • Particulate Matter (PM2.5)	In-house Method: MLS-SOP-ES-022 Rev 2	WPH, TTY

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I. NOISE MEASUREMENT J. LANDFILL GAS / BIOGAS AIR / GAS SAMPLES	2. Total Deposition Rate of Total Solids	AS/NZS 3580.10.1:2016 (R2025) (Sampling only) AS/NZS 3580.10.1:2016 (R2025) (Analysis only)	WPH, TTY WPH, TTP, UFG, CVK, LJJ
	1. Boundary Noise Measurement	In-house Method: MLS-SOP-ES-014 Rev 4	WPH, TTY
	1. Analysis of Landfill Gas/ Biogas Air Sample Methane (CH ₄) Carbon dioxide (CO ₂) Carbon monoxide (CO) Oxygen (O ₂) Hydrogen sulfide (H ₂ S)	In-house Method: MLS-SOP-ES-016 Rev 4	WPH, TTY, CJQ
	2. Analysis of VOC in Gas Samples	In-house Method: MLS-SOP-ES-015 Rev 2	WPH, TTY, CJQ
	3. Analysis of Gas Samples using Gastec Tubes	Gastec Tube Instruction Manual	WPH, TTY, CJQ

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Approved Signatories

S/N	Names	Initials
1.	Mr. Wong Pik Hung	WPH
2.	Mr. Tan Thuan Piang	TTP
3.	Mr. Toh Teck Yeow	TTY
4.	Ms. Umalia Flordelina Gabriel	UFG
5.	Mr. Lim Yeu How	LYH
6.	Mr. Chong Vui Ket, Xavier	CVK
7.	Mr. Lee Yean Jie	LJJ
8.	Mr. Cai Junqin	CJQ
9.	Mr. Lionel Chang Yong Chiang	CYC

Note:

This laboratory is accredited in accordance with the recognised International Standard ISO/IEC 17025. A laboratory's fulfilment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and **management system requirements** that are necessary for it to consistently deliver technically valid test results. The **management system requirements** in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001.