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LABORATORY LOCATION/ CENTRAL OFFICE:	Environmental & Technology Research Centre (ETRC), SIRIM Berhad Building 15, SIRIM Berhad No.1, Persiaran Dato Menteri P.O. Box 7035 , 40911 Shah Alam, Selangor , 40911, SELANGOR MALAYSIA
	
ACCREDITED SINCE :	26 MARCH 2025
FIELD(S) OF TESTING:	BIOLOGICAL (BIODEGRADATION) BIOLOGICAL (IN-VITRO CHROMOSOME ABERRATION TEST) BIOLOGICAL (TOXICITY) CHEMICAL

This laboratory has demonstrated its technical competence to operate in accordance with MS ISO/IEC 17025:2017 (ISO/IEC 17025:2017).

This laboratory's fulfillment 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 and calibrations. 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 (see Joint ISO-ILAC-IAF Communiqué dated April 2017).

CENTRAL LOCATION:	Environmental & Technology Research Centre (ETRC), SIRIM Berhad Building 15, SIRIM Berhad No.1, Persiaran Dato Menteri P.O. Box 7035 , 40911 Shah Alam, Selangor , 40911, Selangor
FIELD(S) OF TESTING :	BIOLOGICAL, BIOLOGICAL, BIOLOGICAL, CHEMICAL

SCOPE OF TESTING : BIOLOGICAL (BIODEGRADATION)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
And Hazards	Moisture	BS:EN 12880:2000
Chemical Substances, Cosmetics And Skin Care	Daphnia sp.: Acute	OECD Guideline for Testing of
Compounds	Oil and Grease	APHA 5520 E (2005)
	Anions (chloride, sulphate,	K 0504, JKM K 0505
Environmental Monitoring Soil	Hexavalent Chromium	APHA 3500 Cr-B (2005) Colorimetric Method
	Hexane Extractable Material	USEPA 9071B, April 1998
Environmental Samples	Algae : Growth Inhibition Test	OECD Guideline for Testing of

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Detection and enumeration of	ISO 21528-1: 2017
	None	69
	None	Vaccines for Terrestrial Animal (Ver.
	Salmonella spp.	AOAC OMA 2016.01 (3M-,¢ Molecular
	None	None
Ground Water Processed Water	Arsenic	None
Leachate Aqueous Extract Industrial Effluent	Sulphate, Phosphate	None
	Biological Oxygen Demand	APHA 5210 B (2005)
	Sulphide	APHA 4500 S* Methylene Blue Method
	Total Suspended Solids	APHA 2540 D (2005)
Liquid Sample Solvent Liquid Product	Determination of boiling point Range: 0°C -" 280°C	QW-257-PS-50 In house Method Based on OECD 103 Guideline for Testing Chemicals (1995) and European Pharmacopoeia 5.0
Metal And Metal E	None	Determination of Dry Residue and Water Content
Petroleum-based Liquid	None	Chromium
Processed Water Recycled Water Wastewater	Phenol	APHA 5530 D (2005) Direct Photometric Method
Product	None	QW-257-PS-43
	None	None
	None	None
	None	2015 Appendix XVI B
	None	In-house method based on AOCS Te
	None	None
	None	None
	None	None
	None	Traceable to:
	None	Food Microwave Digestion
	Furaltadone (AM0Z)	None
	None	None
	Boron	None
	Nitrite	based on AOAC 973.31, 17" Edition
	None	None
	Detection	Method
	Fatigue Test	MS 146:2014 Clause 7.3.4
	c) X, Y, Z Direction	None
Products, Waste And	Immobilisation Test	Chemicals Method No. 202:2004

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Recycled Water Wastewater Leachate Aqueous Extract Industrial Effluent Workplace Environment And Hazards Metal And Metal E Compounds	Aluminium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Barium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Boron	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Cadmium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Calcium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Chromium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Cobalt	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Copper	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Iron	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Lead	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Magnesium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Manganese	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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	Molybdenum	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Nickel	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Potassium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Selenium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Silicon	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Silver	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Sodium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Tin	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Vanadium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Zinc	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Bismuth	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Beryllium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Antimony	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Titanium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Thalium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Mercury	EPA SW 846 7473 using NIC
Sediment Solid Wastes	Hexavalent Chromium	EPA SW-846 Method 3060A (1996) Alkaline Digestion for Hexavalent
Sludge Sediment Solid Wastes	Aluminium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Arsenic	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Barium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Boron	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Cadmium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Calcium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Chromium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Cobalt	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Copper	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Iron	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Lead	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Magnesium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Manganese	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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	Molybdenum	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Nickel	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Potassium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Selenium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Silicon	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Silver	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Sodium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Tin	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Vanadium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Zinc	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Bismuth	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Beryllium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Antimony	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Titanium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Thalium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Mercury	EPA SW 846 7473 (2007) using NIC Mercury Analyzer
Soil Sludge	None	Determination of the Loss of Ignition of Dry Mass
	None	Trap GC-MS)
	Volatile Organic Compounds (Refer to Appendix 1 for the list of	In-house method SGS-TM-ENVI-S- 001 (Solvent Extraction / Purge-and-
Toxicity Testing For:	Fish: Acute Toxicity Test	OECD Guideline for Testing of
Wastewater	None	None
	None	None
	Biochemical Oxygen Demand	APHA 5210 B
	Chemical Oxygen Demand	APHA 5220 C
	Ammoniacal Nitrogen	APHA 4500-NH3N (B&F)
	Temperature	APHA 2550 B
	Turbidity	APHA 2130 B
	Dissolved Oxygen	APHA 4500 O-G
	Temperature	APHA 2550B-2017 / Liquid in Glass Thermometer
	pH	APHA 4500H+B-2017 / pH Meter
	Conductivity	APHA 2510B-2017 / Conductivity Meter
	Iron, Fe	None
	None	None
	None	house test method MKA TM04 by Ion
	None	Chromatography

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Total Phosphorus	HACH Method 8190, 10" Edition, 2017
	pH	APHA 4500 H*B
	BODs	APHA 5210 B
	pH	APHA 4500 H*B Electrometric
	(Continued)	None
	Cadmium (Cd)	None
	Aluminium (Al)	APHA 3111 D. Direct Nitrous-Oxide
	Temperature (On Site)	APHA 2550 B
	None	based on APHA 2510 B, Edition
	Boron	APHA 3125 B, 21st Edition 2005
	pH	None
	Hexavalent Chromium	APHA 3500-Cr B
	Fixed and Volatile Solids	APHA 2540 G
	Digestion	None
	- on Metals	APHA 3030 E
	- on Metals	APHA 3030 F
	Metals Determination by Cold	None
	Vapour	None
	- Mercury	APHA 3112 B
	Cyanide	APHA 4500 CN- C & D
	Cyanide	APHA 4500 CN- C & E
Workplace Environment	None	None

SCOPE OF TESTING : BIOLOGICAL (IN-VITRO CHROMOSOME ABERRATION TEST)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
And Hazards	Moisture	BS:EN 12880:2000
Chemical Substances, Cosmetics And Skin Care	Daphnia sp.: Acute	OECD Guideline for Testing of
Compounds	Oil and Grease	APHA 5520 E (2005)
	Anions (chloride, sulphate,	K 0504, JKM K 0505
Environmental Monitoring Soil	Hexavalent Chromium	APHA 3500 Cr-B (2005) Colorimetric Method
	Hexane Extractable Material	USEPA 9071B, April 1998
Environmental Samples	Algae : Growth Inhibition Test	OECD Guideline for Testing of
	Detection and enumeration of	ISO 21528-1: 2017
	None	69
	None	Vaccines for Terrestrial Animal (Ver.
	Salmonella spp.	AOAC OMA 2016.01 (3M-,¢ Molecular

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	None
Ground Water Processed Water	Arsenic	None
Leachate Aqueous Extract	Sulphate, Phosphate	None
Industrial Effluent	Biological Oxygen Demand	APHA 5210 B (2005)
	Sulphide	APHA 4500 S* Methylene Blue Method
	Total Suspended Solids	APHA 2540 D (2005)
Liquid Sample Solvent Liquid Product	Determination of boiling point Range: 0°C -" 280°C	QW-257-PS-50 In house Method Based on OECD 103 Guideline for Testing Chemicals (1995) and European Pharmacopoeia 5.0
Metal And Metal E	None	Determination of Dry Residue and Water Content
Petroleum-based Liquid	None	Chromium
Processed Water Recycled Water Wastewater	Phenol	APHA 5530 D (2005) Direct Photometric Method
Product	None	QW-257-PS-43
	None	None
	None	None
	None	2015 Appendix XVI B
	None	In-house method based on AOCS Te
	None	None
	None	None
	None	None
	None	Traceable to:
	None	Food Microwave Digestion
	Furaltadone (AMTZ)	None
	None	None
	Boron	None
	Nitrite	based on AOAC 973.31, 17" Edition
	None	None
	Detection	Method
	Fatigue Test	MS 146:2014 Clause 7.3.4
	c) X, Y, Z Direction	None
Products, Waste And	Immobilisation Test	Chemicals Method No. 202:2004
Recycled Water Wastewater Leachate Aqueous Extract Industrial Effluent Workplace Environment And Hazards Metal And Metal E Compounds	Aluminium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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	Barium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Boron	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Cadmium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Calcium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Chromium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Cobalt	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Copper	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Iron	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Lead	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Magnesium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Manganese	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Molybdenum	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Nickel	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Potassium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Selenium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Silicon	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Silver	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Sodium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Tin	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Vanadium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Zinc	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Bismuth	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Beryllium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Antimony	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Titanium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Thalium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Mercury	EPA SW 846 7473 using NIC
Sediment Solid Wastes	Hexavalent Chromium	EPA SW-846 Method 3060A (1996) Alkaline Digestion for Hexavalent
Sludge Sediment Solid Wastes	Aluminium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Arsenic	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Barium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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	Boron	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Cadmium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Calcium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Chromium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Cobalt	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Copper	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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	Iron	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Lead	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Magnesium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Manganese	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Molybdenum	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Nickel	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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	Potassium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Selenium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Silicon	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Silver	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Sodium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Tin	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Vanadium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Zinc	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Bismuth	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Beryllium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Antimony	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Titanium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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	Thalium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Mercury	EPA SW 846 7473 (2007) using NIC Mercury Analyzer
Soil Sludge	None	Determination of the Loss of Ignition of Dry Mass
	None	Trap GC-MS)
	Volatile Organic Compounds (Refer to Appendix 1 for the list of	In-house method SGS-TM-ENVI-S- 001 (Solvent Extraction / Purge-and-
Toxicity Testing For:	Fish: Acute Toxicity Test	OECD Guideline for Testing of
Wastewater	None	None
	None	None
	Biochemical Oxygen Demand	APHA 5210 B
	Chemical Oxygen Demand	APHA 5220 C
	Ammoniacal Nitrogen	APHA 4500-NH3N (B&F)
	Temperature	APHA 2550 B
	Turbidity	APHA 2130 B
	Dissolved Oxygen	APHA 4500 O-G
	Temperature	APHA 2550B-2017 / Liquid in Glass Thermometer
	pH	APHA 4500H+B-2017 / pH Meter
	Conductivity	APHA 2510B-2017 / Conductivity Meter
	Iron, Fe	None
	None	None
	None	house test method MKA TM04 by Ion
	None	Chromatography
	Total Phosphorus	HACH Method 8190, 10" Edition, 2017
	pH	APHA 4500 H*B
	BODs	APHA 5210 B
	pH	APHA 4500 H*B Electrometric
	(Continued)	None
	Cadmium (Cd)	None
	Aluminium (Al)	APHA 3111 D. Direct Nitrous-Oxide
	Temperature (On Site)	APHA 2550 B
	None	based on APHA 2510 B, Edition
	Boron	APHA 3125 B, 21st Edition 2005
	pH	None
	Hexavalent Chromium	APHA 3500-Cr B

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	Fixed and Volatile Solids	APHA 2540 G
	Digestion	None
	- on Metals	APHA 3030 E
	- on Metals	APHA 3030 F
	Metals Determination by Cold	None
	Vapour	None
	- Mercury	APHA 3112 B
	Cyanide	APHA 4500 CN- C & D
	Cyanide	APHA 4500 CN- C & E
Workplace Environment	None	None

SCOPE OF TESTING : BIOLOGICAL (TOXICITY)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
And Hazards	Moisture	BS:EN 12880:2000
Chemical Substances, Cosmetics And Skin Care	Daphnia sp.: Acute	OECD Guideline for Testing of
Compounds	Oil and Grease	APHA 5520 E (2005)
	Anions (chloride, sulphate,	K 0504, JKM K 0505
Environmental Monitoring Soil	Hexavalent Chromium	APHA 3500 Cr-B (2005) Colorimetric Method
	Hexane Extractable Material	USEPA 9071B, April 1998
Environmental Samples	Algae : Growth Inhibition Test	OECD Guideline for Testing of
	Detection and enumeration of	ISO 21528-1: 2017
	None	69
	None	Vaccines for Terrestrial Animal (Ver.
	Salmonella spp.	AOAC OMA 2016.01 (3M-,¢ Molecular
	None	None
Ground Water Processed Water	Arsenic	None
Leachate Aqueous Extract	Sulphate, Phosphate	None
Industrial Effluent	Biological Oxygen Demand	APHA 5210 B (2005)
	Sulphide	APHA 4500 S* Methylene Blue Method
	Total Suspended Solids	APHA 2540 D (2005)
Liquid Sample Solvent Liquid Product	Determination of boiling point Range: 0°C -" 280°C	QW-257-PS-50 In house Method Based on OECD 103 Guideline for Testing Chemicals (1995) and European Pharmacopoeia 5.0
Metal And Metal E	None	Determination of Dry Residue and Water Content
Petroleum-based Liquid	None	Chromium

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Processed Water Recycled Water Wastewater	Phenol	APHA 5530 D (2005) Direct Photometric Method
Product	None	QW-257-PS-43
	None	None
	None	None
	None	2015 Appendix XVI B
	None	In-house method based on AOCS Te
	None	None
	None	None
	None	None
	None	Traceable to:
	None	Food Microwave Digestion
	Furaltadone (AMTZ)	None
	None	None
	Boron	None
	Nitrite	based on AOAC 973.31, 17" Edition
	None	None
	Detection	Method
	Fatigue Test	MS 146:2014 Clause 7.3.4
	c) X, Y, Z Direction	None
Products, Waste And	Immobilisation Test	Chemicals Method No. 202:2004
Recycled Water Wastewater Leachate Aqueous Extract Industrial Effluent Workplace Environment And Hazards Metal And Metal E Compounds	Aluminium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Barium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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	Boron	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Cadmium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Calcium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Chromium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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	Cobalt	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Copper	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Iron	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Lead	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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	Magnesium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Manganese	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Molybdenum	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Nickel	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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	Potassium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Selenium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Silicon	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Silver	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Sodium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Tin	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Vanadium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Zinc	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Bismuth	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Beryllium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Antimony	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Titanium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Thalium	EPA SW 846 -" Method 6010C (2007) Inductively Coupled Plasma- Atomic Emission Spectrometry APHA 3120 B (2005) Inductively Coupled Plasma Method (2005) APHA 3030 E Nitric Acid Digestion (2005) EPA SW 846 3051A Microwave Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007)
	Mercury	EPA SW 846 7473 using NIC
Sediment Solid Wastes	Hexavalent Chromium	EPA SW-846 Method 3060A (1996) Alkaline Digestion for Hexavalent
Sludge Sediment Solid Wastes	Aluminium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Arsenic	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Barium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Boron	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Cadmium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Calcium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Chromium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Cobalt	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Copper	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Iron	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Lead	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Magnesium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Manganese	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Molybdenum	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Nickel	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Potassium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Selenium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Silicon	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Silver	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Sodium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Tin	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Vanadium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Zinc	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Bismuth	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Beryllium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Antimony	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Titanium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Thalium	EPA SW 846 3051A Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils (2007) EPA SW 846 6010C Inductively Coupled Plasma-Atomic Emission Spectrometry (2007)
	Mercury	EPA SW 846 7473 (2007) using NIC Mercury Analyzer
Soil Sludge	None	Determination of the Loss of Ignition of Dry Mass
	None	Trap GC-MS)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Volatile Organic Compounds (Refer to Appendix 1 for the list of	In-house method SGS-TM-ENVI-S- 001 (Solvent Extraction / Purge-and-
Toxicity Testing For:	Fish: Acute Toxicity Test	OECD Guideline for Testing of
Wastewater	None	None
	None	None
	Biochemical Oxygen Demand	APHA 5210 B
	Chemical Oxygen Demand	APHA 5220 C
	Ammoniacal Nitrogen	APHA 4500-NH3N (B&F)
	Temperature	APHA 2550 B
	Turbidity	APHA 2130 B
	Dissolved Oxygen	APHA 4500 O-G
	Temperature	APHA 2550B-2017 / Liquid in Glass Thermometer
	pH	APHA 4500H+B-2017 / pH Meter
	Conductivity	APHA 2510B-2017 / Conductivity Meter
	Iron, Fe	None
	None	None
	None	house test method MKA TM04 by Ion
	None	Chromatography
	Total Phosphorus	HACH Method 8190, 10" Edition, 2017
	pH	APHA 4500 H*B
	BODs	APHA 5210 B
	pH	APHA 4500 H*B Electrometric
	(Continued)	None
	Cadmium (Cd)	None
	Aluminium (Al)	APHA 3111 D. Direct Nitrous-Oxide
	Temperature (On Site)	APHA 2550 B
	None	based on APHA 2510 B, Edition
	Boron	APHA 3125 B, 21st Edition 2005
	pH	None
	Hexavalent Chromium	APHA 3500-Cr B
	Fixed and Volatile Solids	APHA 2540 G
	Digestion	None
	- on Metals	APHA 3030 E
	- on Metals	APHA 3030 F
	Metals Determination by Cold	None
	Vapour	None
	- Mercury	APHA 3112 B
	Cyanide	APHA 4500 CN- C & D
	Cyanide	APHA 4500 CN- C & E
Workplace Environment	None	None

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SCOPE OF TESTING : BIOLOGICAL (BIODEGRADATION)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
1) Chemical Substances,	None	None
2) Cosmetics, 3) Skin Care Products, 4) Waste And Environmental	In-Vitro Chromosome Aberration Test (CAT)	OECD Guideline For Testing Of Chemicals Method No. 473:2016
5) Medical Device	None	None
Aberration Testing For:	None	None
In-vitro Chromosome	None	None
Samples, And	None	None

SCOPE OF TESTING : BIOLOGICAL (IN-VITRO CHROMOSOME ABERRATION TEST)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
1) Chemical Substances,	None	None
2) Cosmetics, 3) Skin Care Products, 4) Waste And Environmental	In-Vitro Chromosome Aberration Test (CAT)	OECD Guideline For Testing Of Chemicals Method No. 473:2016
5) Medical Device	None	None
Aberration Testing For:	None	None
In-vitro Chromosome	None	None
Samples, And	None	None

SCOPE OF TESTING : BIOLOGICAL (TOXICITY)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
1) Chemical Substances,	None	None
2) Cosmetics, 3) Skin Care Products, 4) Waste And Environmental	In-Vitro Chromosome Aberration Test (CAT)	OECD Guideline For Testing Of Chemicals Method No. 473:2016
5) Medical Device	None	None
Aberration Testing For:	None	None
In-vitro Chromosome	None	None
Samples, And	None	None

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SCOPE OF TESTING : BIOLOGICAL (BIODEGRADATION)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
5) Gloves	None	None
Biodegradation Testing For: 1) Plastic Material, 2) Plastic Resin, 3) Biodegradable Products, Biomass Products And	1. Ultimate aerobic biodegradability	ISO 14855-2:2018
	2. Determination of the degree of disintegration of plastic materials	ISO 20200:2015

SCOPE OF TESTING : BIOLOGICAL (IN-VITRO CHROMOSOME ABERRATION TEST)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
5) Gloves	None	None
Biodegradation Testing For: 1) Plastic Material, 2) Plastic Resin, 3) Biodegradable Products, Biomass Products And	1. Ultimate aerobic biodegradability	ISO 14855-2:2018
	2. Determination of the degree of disintegration of plastic materials	ISO 20200:2015

SCOPE OF TESTING : BIOLOGICAL (TOXICITY)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
5) Gloves	None	None
Biodegradation Testing For: 1) Plastic Material, 2) Plastic Resin, 3) Biodegradable Products, Biomass Products And	1. Ultimate aerobic biodegradability	ISO 14855-2:2018
	2. Determination of the degree of disintegration of plastic materials	ISO 20200:2015

SCOPE OF TESTING : CHEMICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Environmental Monitoring	ammoniacal Nitrogen	APHA 4500-NH ₃ B & C (1998)
	pH	APHA 4500-H ⁺ B (2005)
	Hexavalent Chromium	APHA 3500 Cr-B (2005)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Loss of Ignition	BS: EN 12879:2000
	Aerobic	OECD Method 301 C (1992)
	Nitrate	In-House Method TOM 13, based on
	Metals	None
	Tin	None
	Anion	None
	None	None
	None	None
	None	None
	BOD 3	DOE -" Reference Method
	None	None
	None	None
	Potassium	None
	Microbiological testing	In-house method 21BSAM-B081
	Microbiological testing	In-house method 21BSAM-B080
	Microbiological testing	In-house method 21BSAM-B081
	Microbiological testing	In-house method 21BSAM-B080
	None	None
	Colour ADMI	APHA 2120 F
	Mercury	In-house Method, CL/WT/007, based
	None	None
	None	None
	pH Value (pH)	APHA 4500-H* B, edition
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	Aluminium	USEPA 6010 D (ICP OES)
	None	None
	Nitrate (as NO ₃ -• or	APHA E
	None	None
	Fluoride	APHA & D
	Colour (True & Apparent)	APHA 2120 C
	Total Coliform Count (TCC)	APHA 9221 B
	Total Nitrogen	In-house test method MKA TMO3 by TOC/TN Analyzer
	None	None

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Total Solid	2540 B
	None	None
	None	None
	None	None
	pH value	APHA 4500-H* B Electrometric
	None	None
	None	None
	Particulate Matter	MS 1596: 2003 Determination of
	Heavy Metals:	None
	None	None
	None	None
	Moisture	(i) Gravimetric Method: BS:EN
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	Metals	In-house Method PCL-HMW-01
	None	None
	None	None
	Turbidity	APHA 2130 B, 2005
	Turbidity	APHA 2130 B, 2005
	Biochemical Oxygen Demand	APHA 5210 B & C, 2005
	Biochemical Oxygen Demand	DOE 2019, Reference Method,
	pH	APHA 4500 H*B, 2005
	Metals by ICP	None
	Metals by ICP	None
	Metals by ICP	None
	None	In-house method, WI-TEC-S001,
	None	None
	None	None
	None	None
	Determination of Concentration and Mass Flow of Particulate	MS 1596: 2003
	Determination of Total Suspended Particulate Matter in	ASTM: D4096-91 (2003)
	Sound pressure level	Guidelines for Environmental Noise Limits and Control, Third Edition
	None	None
	None	None
	None	None
	Boron	APHA 4500-B C, 2005 APHA 4500-B C, 2017
	Sulphide	APHA 4500- D, 2005 APHA 4500-D, 2017
	Metal Analysis by ICP-OES	None

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Hydrocarbon	APHA 5520 F 2005
	None	None
	Hydrogen Bromide (HBr)	OSHA Method ID-165SG
	Temperature	APHA 2550 B, 2005
	None	None
	None	None
	Formaldehyde	In-house Method C/WTR/012
	None	None
	Aluminium	None
	Aluminium	None
	Nickel	APHA 3120 B, 24" Edition
	pH	APHA 4500 H*B
	pH	APHA 4500 H*B
	None	None
	None	None
	None	None
	COD	APHA 5220 D
	Heavy Metals	None
	Moisture	EPA Method 9000 (Karl Fischer Titration)
	None	EPA Method 1010 A
	None	Information Circular 8333,
	Total Bacteria Count	Compendium of Methods for the
	Aerobic Plate Count	In-house swab contact method
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
None	None	
None	None	
None	None	
None	None	
None	None	
None	None	
Ground Water	None	Preliminary Distillation Step Nesslerization Method
	None	pH value
	Iron	APHA 3111 B
	Lead	None
	Beryllium	None
	Sulphate	None
	Bromodichloromethane	US EPA 5030C & 8260D (2017)
	None	None
	Iron, Chromium, Calcium &	Determination of Metals by Atomic
	None	None
	None	None

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Magnesium	JKM E 0403 based on APHA 3112 B:
	None	Quality, 1997 Vol. 3
	Color (Hazen)	In-house Method No: STP/Chem/W01 Based on Merck
	Determination of Total	APHA 2540D, edition 2005
	None	None
	None	None
	None	None
	Total Suspended Solids (TSS)	APHA 2540 D
	Free Chlorine	HACH 8021, 9 Edition (2014)
	Mercury (Hg)	In-House Method TM/WEP/012 based on Agilent Application Note
	Polynuclear Aromatic	USEPA 3510C
	Pseudomonas aeruginosa	APHA 9213 F
	None	None
	None	None
	None	None
	Tin	3120 B
	Magnesium	3120 B
	None	None
	Bacterial Endotoxins	BP 2018, Vol. XIV C, Method C:
	None	None
	pH	APHA 4500-H+ B
	None	None
	None	None
	Temperature	APHA - 2550B
	Fluoride as F	APHA - 4500F-B&D
	Cadmium as Cd	APHA - 3030 E & F (HNOs or HNOs-
	Barium as Ba	None
	Sodium as Na	None
	Nitrite as NO ₂	None
	Bromoform	None
	Dimethoate	None
	Gamma-lindane	None
	Acenaphthylene	None
	n-Dotriacontane	None
	(Refer Appendix II)	None
	Total Coliform	APHA - 9221B; 2017 (MPN Method)
	None	and APHA 3500 Cr B, Edition
	Acidity	APHA 2310 B, 2017
	None	None
	None	None
	None	None
	Bromate	S-170 & APHA 4110 B
	None	None

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Color (color units)	APHA 2120 C 2017
	Oil and Grease (Mineral)	APHA 5520 F, 2017
	Metals by Inductively Coupled Plasma	APHA 3120 B
	None	None
	Faecal Coliform	APHA 9222 D
	Lead	None
	None	None
	Endosulfan Hexachlorobenzene	None
	Cobalt	APHA 3120 B, Edition
	(Refer to Appendix 8 for the list of compounds)	Method 8260C: 2006
	BODs at 20°C	APHA 5210 B & G
	None	(Membrane Filtration Method)
	None	None
	None	None
Processed Water	None	None
	None	None
	- Dibromochloromethane	None
	Hardness, EDTA Trimetric	APHA 2340 C, 2017
	Tin	None
	Heptachlor epoxide	None
	Fluoride Nitrate	APHA 4110 B (Ion Chromatography), 24' Edition
Recycled Water Wastewater	Anions: Fluoride, Bromide, Chloride, Nitrite, Nitrate,	APHA 4110 B (2005) Anions by Ion Chromatography
Sludge Chemical Substances	Qualitative Organic Analysis	In-house Method using GC-MSD

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