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NO: SAMM 384
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of SAMM 384 dated 14 October 2022)

LABORATORY LOCATION:
(PERMANENT LABORATORY)

MY CO2 (PG) SDN. BHD.
16, LENGKOK KIKIK 1
TAMAN INDERAWASIH
13600 PERAI
PULAU PINANG
MALAYSIA

FIELDS OF TESTING: **CHEMICAL, MECHANICAL, MICROBIOLOGY, GMO, NUCLEIC ACID & TOXICITY**

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).

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Environmental Monitoring Raw water Sewage Industrial Effluent Wastewater	pH	APHA 4500-H^+ B (2005)
	Biological Oxygen Demand (BOD_5)	APHA 5210 B (2005)
	Chemical Oxygen Demand (COD)	APHA 5220 B (2005) APHA 5220 D (2005)
	Suspended solid	APHA 2540 D (2005)
	Chromium Hexavalent	APHA 3500-Cr B (2005)
	Sulphate	APHA 4500-SO_4^{2-} D (2005)
	Oil & Grease	APHA 5520 B (2005)
	Selenium	APHA 3500-Se C (2005)
	Colour	APHA 2120B (2005)
	Phosphorus	APHA 4500-P B&C (2005)
	Sulphide	APHA 4500-S^2-D (2005)
	Arsenic	APHA 3500-As B (2005)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Environmental Monitoring Raw Water Sewage Industrial Effluent Wastewater (cont.)	Total Hardness	APHA 2340 C (2005)
	Total Dissolved Solid	APHA 2540 C (2005)
	Chloride	APHA 4500-Cl D (2005)
	Mercury	APHA 3112 B (2005)
	Boron	APHA 4500-B C (2005)
	Nitrate	APHA 4500-NO_3 B (2005)
	Nitrite	APHA 4500-NO_2 B (2005)
	Aluminium	APHA 3500-Al B (2005)
	Phenol	In house method MY/STP/069 based on Manual UDK126 D & APHA 5530-D (2005)
	Sample pre-treatment for metal analysis – Nitric acid digestion	APHA 3030 E (2005)
	Total Chromium Cadmium Lead Copper Manganese Nickel Zinc Iron Tin Magnesium Sodium Calcium Potassium	APHA 3111 B (2005)
Environmental Monitoring Sewage Water Industrial Effluent Wastewater	Ammoniacal Nitrogen	APHA 4500NH_3 – B&C (2005)
	Colour (ADMI)	APHA 2120 F (2005)
	Cyanide	APHA 4500 CN E (2005)
	Free chlorine	APHA 4500-Cl G (2005)
	Silica	APHA 4500 SiO_2 C (2005)
	Formaldehyde	US EPA 8315 A (Rev. 1) 1996
	Chromium Trivalent	In House Method MY/STP/015 Based on APHA 3111B, (2005) APHA 3500-Cr D, (2005)
	Temperature	APHA 2550B, (2005)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Environmental Monitoring Sewage Water Industrial Effluent Leachate	Aluminium Antimony Barium Beryllium Cadmium Calcium Copper Iron Lead Magnesium Manganese Nickel Potassium Selenium Silver Sodium Thallium Total Chromium Zinc	APHA 3120 B (2005)
	Tin	In house method MY/STP/225 based on APHA 3120B (2005)
	Formaldehyde	In house method MY/STP/227 based on AOAC 964.21, 17th Edition
Environmental Monitoring Soil Sediment Solid & semisolid waste Sludge TCLP extracts	Aluminium Antimony Arsenic Barium Boron Beryllium Calcium Cadmium Chromium Copper Iron Lead Magnesium Manganese Molybdenum Nickel Potassium Selenium Silver Sodium Strontium Thallium Tin Vanadium Zinc Mercury	EPA Method 3050B (1996, Rev.2) EPA Method 3052 (1996, Rev.2) EPA Method 6010B (1996, Rev.2)
	Toxicity Characteristics Leaching procedure (TCLP)	EPA Method 1311 (1992)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Water Distilled demineralized Dialysis Water Ground Water Industrial/Cooling Purposes Mineral Water Pharmaceutical Water Potable / Drinking and Domestic Processed Water Recycled Water Reverse Osmosis Water Saline Water Steam Raising / Boiler Water Surface Water Swimming Pool and Spa Ultrapure Water Others	pH	APHA 4500-H^+ B (2005)
	Biological Oxygen Demand (BOD_5)	APHA 5210 B (2005)
	Chemical Oxygen Demand (COD)	APHA 5220 B (2005) APHA 5220 D (2005)
	Suspended solid	APHA 2540 D (2005)
	Chromium Hexavalent	APHA 3500-Cr B (2005)
	Sulphate	APHA 4500-SO_4^{2-} D (2005)
	Oil & Grease	APHA 5520 B (2005)
	Selenium	APHA 3500-Se C (2005)
	Colour	APHA 2120B (2005)
	Phosphorus	APHA 4500-P B&C (2005)
	Sulphide	APHA 4500-S^2-D (2005)
	Arsenic	APHA 3500-As B (2005)
	Total Hardness	APHA 2340 C (2005)
	Total Dissolved Solid	APHA 2540 C (2005)
	Chloride	APHA 4500-Cl^-D (2005)
	Mercury	APHA 3112 B (2005)
	Boron	APHA 4500-B C (2005)
	Nitrate	APHA 4500-NO_3 B (2005)
	Nitrite	APHA 4500-NO_2 B (2005)
	Aluminium	APHA 3500-AI B (2005)
	Phenol	In house method MY/STP/069 based on Manual UDK126 D & APHA 5530-D (2005)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Water Distilled demineralized Dialysis Water Ground Water Industrial/Cooling Purposes Mineral Water Pharmaceutical Water Potable / Drinking and Domestic Processed Water Recycled Water Reverse Osmosis Water Saline Water Steam Raising / Boiler Water Surface Water Swimming Pool and Spa Ultrapure Water Others (Cont.)	Sample pre-treatment for metal analysis – Nitric acid digestion	APHA 3030 E (2005)
	Total Chromium Cadmium Lead Copper Manganese Nickel Zinc Iron Tin Magnesium Sodium Calcium Potassium	APHA 3111 B (2005)
	Ammoniacal Nitrogen	APHA 4500NH_3 – B&C (2005)
	Chemical Oxygen Demand (COD)	APHA 5220 D (2005)
	Colour (ADMI)	APHA 2120 F (2005)
	Cyanide	APHA 4500 CN E (2005)
	Free chlorine	APHA 4500-Cl G (2005)
	Silica	APHA 4500 SiO_2 C (2005)
	Formaldehyde	US EPA 8315 A (Rev.1) 1996
	Fluoride Chloride Nitrate Nitrite Sulphate Phosphate Bromide	APHA Method 4110B (2005) (Ion Chromatograph)
	Fluoride	APHA 4500 F-D (2005)
	Ammoniacal Nitrogen	AOAC 973.49, 17th Edition
	Turbidity	APHA 2130 B (2005)
	Anionic surfactant – Detergent MBAS	APHA 5540 C (2005)
	Acidity	AOAC 973.42, 17th Edition
	Alkalinity	AOAC 973.43, 17th Edition
	Temperature	APHA 2550 B (2005)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Water Distilled demineralized Dialysis Water Ground Water Industrial/Cooling Purposes Mineral Water Pharmaceutical Water Potable / Drinking and Domestic Processed Water Recycled Water Reverse Osmosis Water Saline Water Steam Raising / Boiler Water Surface Water Swimming Pool and Spa Ultrapure Water Others (Cont.)	Aluminium Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Manganese Nickel Selenium Silver Thallium Zinc	APHA 3125 B (2012)
	Barium Calcium Iron Magnesium Mercury Potassium Sodium	In House Method MY/STP/319 based on APHA 3125 B (2012)
	Chromium Trivalent	In House Method MY/STP/015 based on APHA 3111B, (2005) APHA 3500-Cr D, (2005)
	Aluminium Antimony Barium Beryllium Cadmium Calcium Copper Iron Lead	APHA 3120 B (2005)
	Magnesium Manganese Nickel Potassium Selenium Silver Sodium Thallium Total chromium Zinc	APHA 3120 B (2005)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Water Distilled demineralized Dialysis Water Ground Water Industrial/Cooling Purposes Mineral Water Pharmaceutical Water Potable / Drinking and Domestic Processed Water Recycled Water Reverse Osmosis Water Saline Water Steam Raising / Boiler Water Surface Water Swimming Pool and Spa Ultrapure Water Others (Cont.)	Tin	In house method MY/STP/225 based on APHA 3120B (2005)
	Formaldehyde	In house method MY/STP/227 based on AOAC 964.21, 17th Edition
	Organo Chlorine Pesticide Aldrin Dieldrin Chlordane DDT Heptachlor Heptachlor epoxide Hexachlorobenzene Lindane Methoxychlor	APHA 6630D (2005)
	Bromoform Chloroform Bromodichlorometane Dibromochloromethane Monostyrene	In House Method MY/STP/320 based on APHA 6200 B (2012) & Journal Chromatography A1395 (2015) 41-47
Liquid Waste	pH	APHA 4500-H^+ B, 2005
	Flash Point	In House Method MY/STP/121 Based on ASTM D93-12 (Procedure B)
	Specific Gravity	ASTM D891-95 (Reapproved 2004)
	Boiling Point	In House Method MY/STP/339 Based on ASTM D1120-94 (Reapproved 2004)
	Sediment	In House Method MY/STP/341 Based on ASTM D473-07 (Reapproved 2017)
	Kinematic Viscosity @ 20,23 & 25 °C	In House Method MY/STP/343
Solid Waste	pH	USEPA 9045D, Revision 4 (2004)
	Flash Point	In House Method MY/STP/12 Based on ASTM D93-12
	Particle Size	In House Method MY/STP/344 Based on ASTM D1921-06
	Total Organic Carbon	In house Method MY/STP/364 Based on Walkley Black Method

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Liquid Waste, Solid Waste (Cont.)	Calorific Value	In House Method MY/STP/341 based on ASTM D5468-02 (Reapproved 2007)
	Total Chlorine	ASTM E776-16 (Oxygen Bomb Method)
	Reactivity (with water, detection of Cyanide and sulfide)	In House Method MY/STP/346 Based on 40 CFR 261.23
	Total Petroleum Hydrocarbons (Total Hydrocarbon)	In House Method MY/STP/349 Based on TNRCC Method 1005
	Metals by ICP-OES Aluminium Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Manganese Mercury Molybdenum Nickel Selenium Silver Thallium Vanadium Zinc	USEPA 3050B – Revision 2 (1996), Sample preparation by Acid Digestion USEPA 3051A – Revision 2 (1996), Sample preparation by Microwave digestion USEPA 6010D – Revision 4 (2014), by ICP-OES
	Metals by ICP-OES Gold Palladium Phosphorus Phosphate Platinum Tellurium Thorium Tin Titanium Vanadium Nitride	In House Method MY/STP/348 Based on USEPA 3050B – Revision 2 (1996), Sample preparation by Acid Digestion In House Method MY/STP/348 Based on USEPA 3051A – revision 2 (1996), Sample preparation by Microwave digestion In House Method MY/STP/348 Based on USEPA 6010D – Revision 4 (2014), by ICP-OES

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Liquid Waste, Solid Waste (Cont.)	Phenol	In House Method MY/STP/069 Based on Manual UDK 126 D & APHA 5530-D (2005)
	Formaldehyde	US EPA 8315 A (Rev.1) 1996
	Water	USEPA 9000, Revision 0 (2007)

Signatories:

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2. **Siti Nurfadilah Abu Hanifah** — **IKM No.: M/5559/9063/21**
3. **Ooi Jiaxin** — **IKM No.: L/3053/9062/21**

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Solvent, Chemical, or Lubricant Oil	Water Content	BP 2007 (Appendix IX C-Method III)
	Flash point	ASTM D93
Industrial product Plastic Toy Solid Semisolid Metal Electric Parts Polymers	Cadmium	In House Method MY/STP/169 based on BS EN 1122:2001
	Total Mercury	USEPA 7471A, Rev. 1 (1994)
	Hexavalent chromium as Cr^{6+}	EPA 3060 (1996)
	Polybrominated Bipheyl (PBB) : Monobromobiphenyl Dibromobiphenyl Tribromobiphenyl Tetrabromobiphenyl Pentabromobiphenyl Hexabromobiphenyl Heptabromobiphenyl Octabromobiphenyl Nonabromobiphenyl Decabromobiphenyl	Determination levels of regulated substances in electrotechnical products IEC ACEA Ad Hoc working group USEPA 3540C, USEPA 8270C (2004)
	Polybrominated diphenyl ether (PBDE) : Monobromodiphenyl ether Dibromodiphenyl ether Tribromodiphenyl ether Tetrabromodiphenyl ether Pentabromodiphenyl ether Hexabromodiphenyl ether Heptabromodiphenyl ether Octabromodiphenyl ether Nonabromodiphenyl ether Decabromodiphenyl ether	Determination levels of regulated substances in electrotechnical products IEC ACEA Ad Hoc working group USEPA 3540C, USEPA 8270C (2004)
	Soluble Metal : Antimony Arsenic Barium Cadmium Chromium Lead Mercury Selenium	MS ISO 8124-3 (2002) and USEPA 6010D by ICP-OES
	Migration of Element Chromium	EN71-3: 1994 and USEPA 6010D by ICP-OES

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Industrial product Plastic Toy Solid Semisolid Metal Electric Parts Polymers (cont.)	Migration of element: Antimony Arsenic Barium Cadmium Lead Mercury Selenium	EN71-3: 2013 and USEPA 6010D by ICP-OES
Petroleum & Petroleum product Lubricant Oil Petrol Engine Oil Diesel Engine Oil	Aluminium Boron Calcium Chromium Copper Iron Lead Magnesium Molybdenum Nickel Phosphorus Potassium Silicon Sodium Tin Zinc	ASTM D5185-09 by ICP-OES
Uncured Resin Containing Organic Solvent or Heavy Metals	Total Epoxide	ASTM 1652-04
Metals and Alloys Blade	Mineral Oil	In House Method MY/STP/388 based on BS EN 14039:2004
Urine	Metals in Urine - Lead - Cadmium - Mercury - Nickel	In House Method MY/STP/397 based on NISOH Method 8310
Agricultural Products and Materials - Fertilizer	Nitrogen - Ammoniacal Nitrogen - Urea Nitrogen - Nitrate Nitrogen - Total Nitrogen	MS 417:Part 3: 1994 Clause 5 Clause 7 Clause 8 Clause 11
	Phosphorus - Total Phosphorus as P_2O_5 - Citric Soluble Phosphorus as P_2O_5 - Water Soluble Phosphorus as P_2O_5	MS 417: Part 4: 1994 Clause 5 Clause 8 Clause 7
	Potassium as K_2O	In House Method MY/STP/392 Based on MS 417:Part 5: 1994

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Agricultural Products and Materials - Fertilizer (Cont.)	Magnesium as MgO	In House Method MY/STP/393 Based on MS 417: Part 6: 1994
	Calcium as CaO	MS 417: Part 8: 1997 (Clause 11)
Foods Foodstuff, Other (Animal and Pet Food)	Protein Crude	AOAC 988.05 17th Edition
	Moisture	AOAC 930.15 17th Edition
	Ash	AOAC 942.05 17th Edition
	Crude Fibre	AOAC 978.10 17th Edition
	Crude Fat	AOAC 920.39 17th Edition
Traditional Medicine/ Animal Feed/ Food	Carbohydrate & Energy by Calculation	MOH (2003), Guide to nutrition labelling and claims pg 10 & 14
Food & Feed – Seafood, Food, Vegetables, Feed	Determination of cyanuric acid and melamine residue (LC-MS/MS)	In House Method, MY/STP/184 Based on FDA LIB No. 4421, Vol. 24 (2008)
	Iodine	AOAC 935.14 17th Edition
	Phosphorus	AOAC 965.17 17th Edition
	Sodium chloride	Metrohm manual – Method 21 D3
	Sudan Red I,II,III,IV, para red	Government Chemist Publication list: LGC/GC/2007/005
Coffee Powder & Premix Coffee	Caffeine & Coffee Content	MS 1360: 1994
Tea & Tea Product	Caffeine	In House Method MY/STP/386 Based on MS 1360:1994
Dairy Products	Majonnier Fat	AOAC 932.06, 17th Edition
Meats and Meat Products	Benzo (a) pyrene	In house method MY/STP/252 based on Trish Journal of agriculture and food research 47:187-193:2008
Oily foods	Gluten	In House method MY/STP/235 Based on Direct Competitive Elisa Method
Solid, Semisolid Food and Liquid Food	Formaldehyde	AOAC 931.08, 17th Edition
Cordial and Liqueurs	Acidity	In House method MY/STP/241 Based on AOAC 940.15, 17th Edition
Flour and Bread	Propionic Acid	In House method, MY/STP/242 Based on International Food Research Journal 17:1107-1112 (2010)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Sauces and Ketchup	Free 3-Monochloropropane-1,2 - diol (3-MCPD)	In House method MY/STP/243 Based on Czech J. food Sci Vol.22, No.5:182-189
Feed, Fishmeal Fish and Fish Products (Including shrimp, prawns and other aquatic life edible by human being)	Histamine	In House Method MY/STP/179 based on enzymatic Assay Kit (2009)
Food (Sauce, Flour, drinks, frozen seafood, noodles)	Boric acid (qualitative)	AOAC 970.33
	Boric acid (quantitative)	AOAC 970.34
	Benzoic Acid	In House method based on AOAC 994.11
	Sorbic Acid	
	Sulphur Dioxide	Velp Scientific Manual UDK 126D
	Sodium Nitrite	AOAC 973.31 17th Edition
Food Products • Feed & Fishmeal • Fish & Fish Products • Meat, Poultry & Derived Products	Chloramphenicol	In House Method MY/STP/369 Based on Agilent Application Note: Analysis of Chloramphenicol by Negative Ion Electrospray LC/MS/MS
	Nitrofuran Metabolites (AMOZ, AHD, AOZ, SEM)	In House Method MY/STP/370 Based on Agilent Application Notes: ESI LC/MS/MS
Seafood & Seafood Product Fishmeal Feed meal	Total Volatile Base Nitrogen (TVBN)	In house Method MY/STP/389 Based on AOAC 920.03, 17th Edition
Traditional Medicine / Animal Feed / Food	Amino acid profile	AOAC 994.12 & JAOAC, Vol 71 No. 6, 1988
	Fatty Acid Composition	AOAC 996.06 17th Edition
	Monounsaturated Fat	
	Polyunsaturated Fat	
	Saturated Fat	
	Trans Fatty Acid	
	EPA	AOAC 991.39 17th Edition
	DHA	

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Traditional Medicine / Animal Feed / Food	Cholesterol	JAOAC Vol. 78, No.6, 1995
	Total Dietary Fiber	AOAC 985.29 17th Edition
Oily Food Products and Non-Oily Food Products	Diethyl hexyl phthalates (DEHP) Benzyl butyl phthalates Dibutyl phthalates Diisononyl phthalates Di-n-octyl phthalates	GBT 21911-2008
Canned Vegetable Products	Water Activity	AOAC 978.18, 17th Edition
Ice Pop & Jelly and Beverage	Artificial Colouring Tartrazine Sunset Yellow Carmoisine Allura Red Brilliant Blue	In House method MY/STP 250 based on Chemical analysis of food Pearson (UV-Vis spectrophotometer)
Bird Nest & Bird Nest Product	Nitrite	In House method MY/STP/244, based on AOAC 973.31, 17th Edition GB5009.33-2010 (IC)
	Nitrate	In house method MY/STP/245 based on AOAC 990.33, 17th Edition
	Sialic Acid	In house method MY/STP/246, based on Food Science Vol.31, Iss 8, 233-236 (2010)
Vegetables and Fruits	- Chlorpyriphos - Malathion - Fenitrothion - Aldrin - Alpha-BHC - Beta-BHC - Delta-BHC - Dieldrin - Endosulfan I - Endosulfan II - Endosulfan Sulphates - Endrin - Endrin Aldehyde - Gamma-BHC - Heptachlor - Heptachlor Epoxide - 4,4-DDD - 4,4-DDE - 4,4-DDT - Dichlorvos - Disulfoton - Bdursban - Gulthion - Methyl parathion - MOCAP - Runnel - Tokuthion	In- house Method, MY/STP/149 based on AOAC 2007.01 (2007)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Food Products, Nutritional and Dietary supplements, Nutritional food, Beverages	Alcohol Content	In House Method MY/STP/359 based on J.Chem. Metrol: (2013) 7-9
Vitamized food and Cereal	Vitamin B12	In house method MY/STP/238 based on Enzyme Immunoassay for quantitative
Food Products • Non-alcoholic • Food Additives & Supplements • Dairy Products • Honey & Honey Products • Edible Oils, Fats & Their Products • Meat, Poultry & Derived Products • Egg & Egg Products • Nuts, Fruits & Vegetables & Derived Products • Essential Nutrients • Feed, Sauces, Herbs, Spices & Condiments • Fish & Fish Products • Sugar & Sugar Products • Frozen Food • Traditional Medicine • Flour & Confectionery	Vitamin C	In House Method MY/STP/325 based on HPLC with UV Detection
	Vitamin D (as Cholecalciferol)	GB 5413.9-2010
Baby Foods and Milk Products	Vitamin E (Total tocopherol) Vitamin D3	GB 5413.9-2010
Corn and Peanut Butter	Aflatoxin (B1, B2, G1, G2)	AOAC 990.33, 17th Edition (by HPLC)
Vitamin premix / Food/ Feed/ Pharmaceutical Products	Vitamin B1, Vitamin B2, Vitamin B3 & Vitamin B6	BP 2007 (Vitamin B and C injection) and LGC/GC/2007/2019
	Vitamin C	AOAC 967.21
	Vitamin C	Metrohm manual –Method 23 D5
	Vitamin A	USP30-NF25 Page 214
Traditional Medicine / Animal Feed / Food	Aflatoxin	In house method MY/STP/112 based on Direct competitive Elisa method
	Zearelenone	In house method MY/STP/111 based on Direct competitive Elisa method
	T-2 Toxin	In house method MY/STP/114 based on Direct competitive Elisa method

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Traditional Medicine / Animal Feed / Food (cont.)	DON	In house method MY/STP/116 based on Direct competitive Elisa method
	Beta - agonist	In house method MY/STP/144 based on Direct competitive Elisa method
	Melamine	In house method MY/STP/146 based on FDA melamine quantification (HPLC-UV screening method)
	Fumonisin	In house method MY/STP/115 based on Direct competitive Elisa method
	Ochratoxin A	In house method MY/STP/113 based on Direct competitive Elisa method
	Chloramphenicol	In house method MY/STP/119 based on Direct competitive Elisa method
Traditional Medicine / Animal Feed / Food	Arsenic	AOAC 952.13 15th Edition
	Cadmium	AOAC 973.34 17th Edition
	Lead	AOAC 972.23 17th Edition
	Mercury	AOAC 971.21 17th Edition & APHA 3112B (2005)
	Zinc	AOAC 969.32 17th Edition
	Antimony	AOAC 964.16 15th Edition
	Tin	AOAC 985.16 17th Edition
	Calcium Cobalt Copper Iron Magnesium Manganese Sodium Zinc	AOAC 968.08 17th Edition
Traditional Herbs Nutritional and Dietary Supplements Nutritional food Edible Oil Nuts Fruits Beverages	Arsenic	In House Method MY/STP/294 based on AOAC 971.21 17th Edition
	Mercury	In House Method MY/STP/ 293 based on AOAC 971.21 17th Edition
	Cadmium	In House Method MY/STP/292 based on AOAC 999.11 17th Edition
	Lead	

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Food Products • Non-alcoholic • Food Additives & Supplements • Dairy Products • Honey & Honey Products • Edible Oils, Fats & Their Products • Meat, Poultry & derived products • Egg & Egg Products • Nuts, Fruits & Vegetables & Derived Products • Essential Nutrients • Feed, Sauces, Herbs, Spices, & Condiments • Fish & Fish Products • Sugar & Sugar Products • Frozen Food	Potassium	In House Method MY/STP/402 based on AOAC 968.08 17th Edition
Food Products • Food Additives & Supplements • Dairy Products • Honey & Honey Products • Meat, Poultry & Derived Products • Egg & Egg Products • Nuts, Fruits & Vegetables & Derived Products • Essential Nutrients • Feed, Sauces, Herbs, Spices & Condiments • Fish & Fish Products • Frozen Food • Traditional Medicine • Flour & Confectionery	Total Sugar	AOAC 968.28 17th Edition
	Added Sugar (as sucrose)	In House Method MY/STP/377 Based on AOAC 968.28 17th Edition
Food and beverage	Sum of Ethylene oxide and 2-chloroethanol (expressed as ethylene oxide)	In House Method MY/STP/436 based on Journal of Food Composition and Analysis 19 (2006) 83-87

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Palm Oil Product & Edible Oils	Moisture and volatile matter	MPOB P2.1 Part 1 :2004
	Impurities	MPOB P2.2
	Peroxide value	MPOB P2.3
	Acidity / FFA	MPOB P2.5
	Saponification Value	MPOB P3.1
	Unsaponificable matter	MPOB P2.7
	Iodine value	MPOB P3.2
	DOBI of crude palm oil	MPOB P2.9
	Slip melting point	MPOB P4.2
Antibiotics / liquid	Colistin Sulphate	BP 2007 (monograph 0320)
	Tylosin Tartrate	BP 2007 (monograph 1274)
	Amoxicillin	USP30-NF25 page 1402
	Cephalexin monohydrate	BP 2007 (monograph 0708)
	Sulfadimethoxine	USP30-NF page 3242
	Sulfaquinoxaline	USP30-NF25 page 3250
	Contents of gentamicin	USP30-NF25 page 2219
Cosmetics	Salicyclic Acid	In house method MY/STP/247 based on BP 2007
	Hydroquinone	ACM Ino 03, 2005
	Formaldehyde	In house method MY/STP/249 based on Journal of Food and Drug Analysis, Vol.11, No.1, 2003 (HPLC)

Signatories:

1. **Chong Moi Me** — **IKM No.: M1845/4189/2001**
2. **Ooi Chin Giap** — **IKM No.: M/3502/6406/12**
3. **Ooi Kah Wai** — **IKM No.: L/2452/7352/16**
4. **Muhammad Afif Wahdi bin Salleh** — **IKM No.: M/5118/8405/19**
5. **Nurul Afiqah Ibrahim** — **IKM No.: M/5117/8403/19**
6. **Siti Norfadilah Abu Hanifah** — **IKM No.: M/5589/9063/21 (environmental monitoring)**
7. **Anis AtiqahShazwani bt Mohd Yusoff** — **IKM No.: L/3056/9066/21 (food only)**

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Medical devices	Non-polar organic compounds (Total Hydrocarbon)	In House Method MY/STP/433 Based on ISO 10993-12: 2012 and ISO 9377-2: 2000.
	Polar organic compounds (total organic carbon)	In House Method MY/STP/434 Based on ISO 10993-12: 2012 and EN 1484: 2002
	Particulate residue	In House Method MY/STP/437 Based on ASTM F2459-12
	Polar inorganic compounds (Metallic Impurities)	In House Method MY/STP/432 Based on ISO 10993-12: 2012 and ICP-MS
	Residual acid (as nitric acid)	In house method MY/STP/438 for quantification of Residual Acid by Conductivity Measurement.
	Ethylene oxide	In House Method MY/STP/435 Based on ISO 10993-12: 2012 and ISO 10993-7: 2008.
	Ethylene chlorohydrin (2-chloroethanol)	
	Ethylene glycol	

Signatories:

1. **Chong Moi Me** — **IKM No.: M/1845/4189/01**
3. **Ooi Kah Wai** — **IKM No.: L/2452/7352/16**
4. **Muhammad Afif Wahdi bin Salleh** — **IKM No.: M/5118/8405/19**
5. **Nurul Afiqah Bt Ibrahim** — **IKM No.: M/5117/8403/19**
6. **Siti Norfadilah Bt Abu Hanifah** — **IKM No.: M/5589/9063/21**

SCOPE OF TESTING: CHEMICAL

SITE: CATEGORY I

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Air Emission	Particulate matter	USEPA 40 CFR60, App A, Method 5 (1991)
	Sulphuric Acids & Sulphur Dioxide	USEPA 40 CFR60, App A, Method 8 (1991)
	HCl, HBr, HI, HF, H2S and halogen (Cl-, Br-, I-, F-, S2-)	USEPA 40 CFR60, App A, Method 26A (1991)
	Nitrogen Oxide	USEPA 40 CFR60, App A, Method 7 (1991)
	Metals (Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, P, Se, Ag, TI, Zn)	USEPA 40 CFR60, App A, Method 29 (1991)
	Particulate matter	MS 1596 : 2003
	Dark Smoke	BS 2742:2009
	Volatile Organic Compound (Refer to Appendix 1)	In House Method MY/STP/387 Based on USEPA 0030 & USEPA 5040
Ambient Air (on site)	Arsenic and compounds as As	NIOSH Method 7900 (4th Ed)
	Managanese and compounds as Mn	In-house method MY/STP/157 based on NIOSH Method 7030 (4th Ed)
	Cadmium and compounds as Cd	NIOSH Method 7048 (4th Ed)
	Chromium and compounds as Cr	NIOSH Method 7024 (4th Ed)
	Iron and compound as Fe	In-house method MY/STP/160 based on NIOSH Method 7030 (4th Ed)
	Zinc and compound as Zn	NIOSH Method 7030 (4th Ed)
	Nickel and compound as Ni	In-house method MY/STP/162 based on NIOSH Method 7030 (4th Ed)
	Copper and compound as Cu	NIOSH Method 7029 (4th Ed)
	Lead and compound as Pb	NIOSH Method 7082 (4th Ed)
	Mercury in Air	NIOSH Method 6009 cold vapour (4th Ed)
	Total dust in Air	NIOSH Method 0500 (4th Ed)
	Suspended Particulate Matter – PM10	EPA 625/R-96/010a Compendium Method IO-2.2:1999

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SCOPE OF TESTING: CHEMICAL

SITE: CATEGORY I

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Ambient Air (on site)	Suspended Particulate Matter – PM2.5	EPA 625/R-96/010a Compendium Method IO-2.2:1999
	Total Suspended Particulates (TSP)	EPA 625/R-96/010a Compendium Method IO-2.1:1999
	Volatile Organic Compound (Refer to Appendix 1)	In House Method MY/STP/395 Based on EPA METHOD TO-1
Ambient Air (on site)	Aluminium Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Iron Lead Manganese Nickel Silver Zinc	NIOSH Method 7300 (4th Edition)

Signatories:

1. **Chong Moi Me** — **IKM No.: M/1845/4189/2001 (All Chemical)**
2. **Ooi Chin Giap** — **IKM No.: M/3502/6406/12 (All Chemical)**
3. **Ooi Kah Wai** — **IKM No.: L/2452/7352/16 (All Chemical)**

APPENDIX 1
TABLE 4: VOLATILE ORGANIC COMPOUND (VOC)

1. 1,2,3-Trichlorobenzene
2. 1,2,4-Trichlorobenzene
3. 1,2,4-Trimethylbenzene
4. 1,3,5-Trimethylbenzene
5. Benzene
6. Bromobenzene
7.Ethylbenzene
8.M-Xylene
9. N-Butylbenzene
10.P-Isopropyltoluene
11.Styrene
12.Toluene
13.Napthalene
14.Chloroform
15.Bromoform

SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Toy Materials, Plastic Toy, Metal Toy, Wooden Toy, and Paper Toy	Material Quality	ISO 8124-1:2018(E) (Sec 4.3.1) EN71-1:2014 + A1:2018(E) (Sec 4.1)
	Small Part Test	ISO 8124-1:2018 (E) (Sec 5.2) EN71-1:2014 + A1:2018(E) (Sec 8.2)
	Sharp Edge Test	ISO 8124-1:2018 (E) (Sec 5.8) EN71-1:2014 + A1:2018(E) (Sec 8.11)
	Sharp Point Test	ISO 8124-1:2018 (E) (Sec 5.9) EN71-1:2014 + A1:2018(E) (Sec 8.12)
	Packing film Thickness	ISO 8124-1:2018 (E) (Sec 5.10) EN71-1:2014 + A1:2018(E) (Sec 8.25)
	Accessibility of Part or Component	ISO 8124-1:2018 (E) (Sec 5.7) EN71-1:2014 + A1:2018(E) (Sec 8.10)
	Drop Test	ISO 8124-1:2018 (E) (Sec 5.24.2) EN71-1:2014 + A1:2018(E) (Sec 8.5)
	Torque Test	ISO 8124-1:2018 (E) (Sec 5.24.5) EN71-1:2014 + A1:2018(E) (Sec 8.3)
	Tension Test	ISO 8124-1:2018 (E) (Sec 5.24.6) EN71-1:2014 + A1:2018(E) (Sec 8.4)
	Impact Test	EN71-1:2014 + A1:2018(E) (Sec 8.7)
	Compression Test	ISO 8124-1:2018 (E) (Sec 5.24.7) EN71-1:2014 + A1:2018(E) (Sec 8.8)
	Small Ball Test	ISO 8124-1:2018 (E) (Sec 5.4) EN71-1:2014 + A1:2018(E) (Sec 8.32)
	Shape and Size Test	ISO 8124-1:2018 (E) (Sec 5.3) EN71-1:2014 + A1:2018(E) (Sec 8.16)
	Flammability	ISO 8124-2:2014 EN71-2:2011 + A1:2014
	Marking & instruction	MS IEC 62115:2017 (Sec 7) BS EN IEC 62115:2020 + A11:2020 (Sec 7)
	Screw & Connections	MS IEC 62115:2017(Sec 17) BS EN IEC 62115:2020+A11:2020 (Sec 16)
	Creepage & Clearance	MS IEC 62115:2017(Sec 18) BS EN IEC 62115:2020 +A11:2020 (Sec 17)

Signatories:

1. **Chong Moi Me**
2. **Ooi Chin Giap**
3. **Ooi Wan Koon**
4. **Ooi Kah Wai**

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SCOPE OF TESTING: MECHANICAL

SITE: CATEGORY 1

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Noise (on site)	Noise Level	ISO 1996-1 : 2016

Signatories:

1. **Chong Moi Me**
2. **Ooi Wan Koon**
3. **Ooi Chin Giap**
4. **Ooi Kah Wai**

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Nutritional and dietary supplement, pharmaceutical, traditional medicine, toiletries and cosmetic	Total aerobic microbial count – plate method	USP30-NF25 (2007) – 2021
	Total yeast and mold count	USP30-NF25 (2007) – 2021
Nutritional and Dietary supplement Pharmaceutical products Toiletries Herbal Medicinal Products Powder / Granules Tablets Hard Gel Capsule Soft Gel Capsule Pill Oil Liquid (Syrup/Water) Cream Ointment	Total Aerobic Microbial Count (TAMC)	BP 2020 Appendix XVI B
	Total Yeast and Mold Count (TYMC)	
	Bile Tolerant Gram-Negative Bacteria	
	Candida albicans	
	Clostridia	
	Escherichia coli	
	Pseudomonas aeruginosa	
	Salmonella	
	Staphylococcus aureus	
Herbal Medicinal Products Powder/Granules Tablets Hard Gel Capsule Soft Gel Capsule Pill Liquid (Syrup/Water)	Bile Tolerant Gram-Negative Bacteria	BP 2020 Appendix XVI F
	Salmonella	
	Escherichia coli	

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Medical devices / injection liquid	Sterility testing	BP 2020 Appendix XVI A
	Endotoxin	Multi-test Limulus Amoebocyte Lysate (LAL) kit
Medical devices	Determination of population of microorganisms on products (Estimation of product bioburden)	In House Method MY/STP/430 based on ISO 11737-1: 2018
Microbiological monitoring (Environmental Monitoring – air & work surfaces)	Air monitoring for total bacteria, total fungus count by cascade impactor	In-house Method MY/STP/185 based on NIOSH Method 0800 (Issue 1: 15 Jan. 1998)
	Swab Contact Method: Sponge Contact Method: Air Sedimentation Method: Total Plate Count Yeast & Mold Count Coliform *Escherichia coli* *Staphylococcus aureus* *Enterobacteriaceae* *Enterococci* *Bacillus cereus* *Clostridium perfringens* *Salmonella spp.* *Listeria spp.*	In-house Method MY/STP/175 based on Compendium of Methods for the Microbiological Examination of Foods, 5th Edition, 2015, Chapter 3
Environmental (Swab and Sponge)	*Salmonella spp.*	In-house Method MY/STP/175 based on Compendium of Methods for the Microbiological Examination of Foods, 5th Edition, 2015, Chapter 3 and FDA-BAM Chapter 5
	Listeria monocytogenes *Listeria spp.*	In-house Method MY/STP/175 based on Compendium of Methods for the Microbiological Examination of Foods, 5th Edition, 2015, Chapter 3 and FDA-BAM Chapter 10

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Canned Foods	Thermophilic bacteria	FDA-BAM Chapter 21, 2014
	Anaerobic Organisms	
	Leakage organisms	
All types of food and food related samples	*Escherichia coli* (Petrifilm method)	AOAC 991.14 17th Edition, 2000
	Coliform (Petrifilm method)	AOAC 991.14 17th Edition, 2000
	Enterobacteriaceae (Petrifilm method)	AOAC 2003.01 18th Edition, 2007
	Salmonella	FDA-BAM Chapter 5, 2014
	Coagulase Positive *Staphylococcus aureus* (Petrifilm method)	AOAC 2003.07 18th Edition, 2007
	Aerobic plate count / Total Plate Count	FDA-BAM Chapter 3, 2014
	Yeast & Mold count	FDA-BAM Chapter 18, 2014
	Bacillus cereus	FDA-BAM Chapter 14, 2014
	Clostridium perfringens	FDA-BAM Chapter 16, 2014
	Vibrio cholerae	FDA-BAM Chapter 9, 2014
	Vibrio parahaemolyticus	FDA-BAM Chapter 9, 2014

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
All type of food including: - Foods - Alcoholic Beverages - Dairy Products - Edible Oils, Fats and their products - Egg and Egg Products - Essential Nutrients, including Vitamins - Fish and Fish Products - Flour and Confectionary - Food Additives and Supplements - Honey and Honey Products - Infant Foods - Meat, Poultry and derived products - Pet Foods - Sauces, Herbs, Spices and Condiments - Sugar and sugar product	Coliform (Solid Medium Method)	In house method MY/STP/253 based on FDA-BAM Chapter 4, 2014
	Escherichia coli (Solid Medium Method)	
	Coliform (MPN Method)	In house method MY/STP/254 based on FDA-BAM Chapter 4, 2014
	Escherichia coli (MPN Method)	
	Coagulase Positive *Staphylococcus aureus* (Direct Plate)	In house method MY/STP/257 based on FDA-BAM Chapter 12, 2014
	Coagulase Positive *Staphylococcus aureus* (MPN method)	In house method MY/STP/256 based on FDA-BAM Chapter 12, 2014
Foods Fruit Juice	Alicyclobacillus	In-house Method MY/STP/175 based on Compendium of Methods for the Microbiological Examination of Foods, 5th Edition, 2015, Chapter 25

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Foods Products - Food Additives & Supplements - Beverages - Cereal & Cereal Products - Dairy Products - Fish & Fish Products - Sauces, Herbs, Spices & Condiments - Meat, Poultry & Derived Products - Honey & Honey Products - Egg & Egg Products - Nuts, Fruits & Vegetables & Derived Products - Essential Nutrients - Sugar & Sugar Products - Frozen Food - Flour & Confectionery - Feed	Anaerobic Bacteria Count	In-house Method MY/STP/351 based on FDA-BAM Chapter 3, 2014
	Shigella species	FDA-BAM Chapter 6, 2014
	Aerobic Plate Count (Petrifilm Method)	AOAC 990.12 17th Edition, 2000
	Yeast and Mold (Petrifilm Method)	AOAC 2014.05, 2015
	Clostridium species	In House method MY/STP/373 Based on ISO 15213:2003
	Vibrio species	ISO/TS 21872-2 : 2007
	Listeria monocytogenes *Listeria species*	FDA-BAM Chapter 10, 2017

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SCOPE OF TESTING: MICROBIOLOGICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Food Products - Food Additives & Supplements - Beverages - Cereal & Cereal Products - Dairy Products - Fish & Fish Products - Sauces, Herbs, Spices & Condiments - Meat, Poultry & Derived Products - Honey & Honey Products - Egg & Egg Products - Nuts, Fruits & Vegetables & Derived Products - Essential Nutrients - Sugar & Sugar Products - Frozen Food - Flour & Confectionery - Feed Water • Potable water • Drinking water • Raw water	*Campylobacter* - Colony count technique	ISO/TS 10272-2 : 2006

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Cereal, Cereal Products & Starch Sugar & Sugar Products Flour & Confectionery	Thermophilic Spore Count Including - Thermophilic Aerobic Sporeformers - Thermophilic Flat Sour Sporeformers - Thermophilic Anaerobic Spore Producing H2S (Sulfide Spoilage Sporeformers) - Thermophilic Anaerobic Gas Producing Spores	AACC International, Approved Methods of Analysis, Method 42-40.01, 11th Edition, 2009
Sugar & Sugar Products	Total Mesophilic Bacterial Count - Pour plate method - Membrane filtration Method	MS 5: Part 2: 2006
	Total Yeast & Mould - Pour plate method - Membrane filtration Method	
	Thermophilic Spore-forming Bacteria - Pour plate method - Membrane filtration Method	
	Flat Sours Spore - Pour plate method	
	Sulphides Spoilage Spores	
	Thermophilic Gas-producing Anaerobes	

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Water, Waste water, Potable water, Drinking water	Total plate count / Heterotrophic plate count	APHA 9215 B, 21st Edition, 2005
	Total plate count (membrane filtration method)	APHA 9215 D, 21st Edition, 2005
	Total Coliform (membrane filtration method)	APHA 9222 B, 21st Edition, 2005
	Fecal Coliform (membrane filtration method)	APHA 9222 D, 21st Edition, 2005
	Legionellaceae	APHA 9260 J, 21st Edition, 2012
- Potable Water and Domestic - Ground Water - Mineral Water - Reverse Osmosis Water - Industrial / Cooling Purposes - Steam Raising / Boiler Water - Swimming Pool water and SPA - Surface Water	Total Colifrom (Multiple Tube Method)	APHA 9221 B, 21st Edition, 2012
	Escherichia coli (Multiple Tube Method) Fecal Coliform (Multiple Tube Method)	APHA 9221 E/F, 21st Edition, 2005

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SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Drinking water, Mineral water, Deionised water, Potable water, River water, Ground water, Swimming pool water, Raw and Treated water, Cooling Tower water, Reverse osmosis water, Haemodialysis water	*Clostridium perfringens* (Membrane Filtration Technique)	BS ISO 14189:2013
	Fecal Streptococcus and Enterococcus (Membrane Filtration Technique)	APHA 9230 C, 22nd Edition, 2012
	Sulphite Reducing Anaerobe (Clostridia) (Membrane Filtration Technique)	BS EN 26461-2:1993
	Pseudomonas aeruginosa (Membrane Filtration Technique)	APHA 9213 E, 22nd Edition, 2012
	Examination for *Legionella spp.* Including *Legionella pneumophila*	AS/NZS 3896:2008
	Escherichia coli (Membrane Filtration Partition Procedure)	APHA 9222 G, 22nd Edition, 2012

1.	**Nazirah Bt. Shahrom**	**MJMM 0146 (except medical device)**
2.	**Kee Kai Loon**	**MJMM 0469**
3.	**Lim Wui Chen**	**MJMM 0555**
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SCOPE OF TESTING: NUCLEIC ACID

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Foods - Raw Meat - Processed Food	Pork Origin Identification	MY/STP/261 using real time PCR

Signatories:

1.	**Chong Moi Me**	**IKM No. M/1845/4189/01**
2.	**Kee Kai Loon**	**MJMM 0469**
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SCOPE OF TESTING: NUCLEIC ACID

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Foods Products - Dairy & Dairy Products - Meat, Poultry & derived Products - Herbs, Spices & Condiments - Environmental (Swab and Sponge)	Detection of *Salmonella*	MY/STP/365 using real time PCR

Signatories:

1.	**Nazirah Bt. Shahrom**	**MJMM 0146**
2.	**Kee Kai Loon**	**MJMM 0469**
3.	**Lim Wui Chen**	**MJMM 0555**

SCOPE OF TESTING: GENETIC MODIFIED ORGANISM (GMO)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Foods - Raw Soybean - Processed Food	Genetic Modified Organisms (35S Promoter, NOS Terminator)	MY/STP/262 using real time PCR

Signatories:

1.	**Chong Moi Me**	**IKM No.: M/1845/4189/01**
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SCOPE OF TESTING: TOXICITY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Medical devices	In vitro-cytotoxicity	In House Method MY/STP/431 based on ISO 10993-12: 2012 and ISO 10993-5: 2009 (Annex C: MTT assay)

Notes:
AACC: Cereals & Grains Association (formerly AACC International, American Association of Cereal Chemists)
ACM: ASEAN Cosmetic Methods
AOAC: Official Methods of Analysis
APHA: American Public Health Association
AS/NZS: Australian / New Zealand Standard
ASTM: American Society for Testing and Materials
BP: British Pharmacopeia
BS: British Standards
EPA: United States Environmental Protection Agency Methods
FDA-BAM: Food and Drugs Administration / Bacteriological Analytical Manual
GB: China National Standard
ISO/TS: International Oganisation for Standardisation /Technical specification
MPOB: Malaysia Palm Oil Board
MS: Malaysia Standard
NIOSH: National Institute of Occupational Safety and Health
USEPA: United States Environmental Protection Agency
USP: United States Pharmacopeia

Signatories:

1. Kee Kai Loon MJMM 0469

2. Lim Wui Chen MJMM 0555