From
Managing Director

We are pleased to enclose herewith our company profile for your attention!

Chemvi Laboratory Sdn. Bhd. was formed in early 2000 by a group of professionals. They have several years of experience in environmental management, pollution control and monitoring, environmental impact assessment, environmental education and training. The company has associated themselves with other local and international companies that have vast experience in related fields.

We take pride in our position as an effective provider of efficient and quality services. We are continuously striving to enhance this through quality improvement initiatives.

We welcome an opportunity to extend our services to your organization and to build a mutually beneficial business relationship. Please do not hesitate to contact the undersigned to further discuss your environmental needs.

Remember !….. Your environment is as much a concern to you as it is to us at Chemvi Laboratory.

Thank You

Sincerely Yours,
Chemvi Laboratory Sdn. Bhd.

Dr. Shanmugam
B.Sc. (Hons)(UM)., M.Sc. (Chem)(UM).,
DBA (Env. Mngt)(MMU).,
AMIC., MRSC (UK)
Managing Director
H/P. No: *+6016 - 225 6283*
Email : *shan@chemvi.com.my*
: shanchemvi5426@gmail.com
: info@chemvi.com.my
Web site : *www.chemvi.com.my*

QUALITY POLICY

Strives to seek excellence in customer services by providing the following to our esteemed customer:

- Guaranteed Quality Services
- Competitive Cost
- On Time Delivery

QUALITY OBJECTIVES

- To achieve an average of equal to or less than one customer complaint per year
- To be a leader in the field of Laboratory Services
- To maintain the ISO/IEC-17025 Accreditation throughout

ENVIRONMENTAL POLICY

We at Chemvi Laboratory Sdn.Bhd. are proud to be one of the leading Laboratory's in Malaysia, firmly believe in the preservation of the environment and safeguarding the management, staff and the public. Towards this end, we are committed to practice **CHEMVI** by;

C **C**ompliance to relevant environmental legal and other requirements;

H **H**aving training for all employees and continually improving our Environmental Management Systems;

E **E**nhancing the image of the company as an environmental friendly organization;

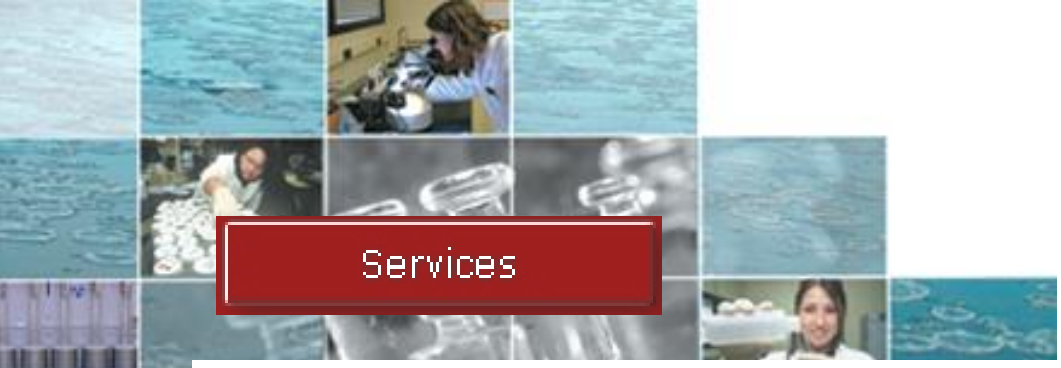
M **M**inimizing waste through better management of resources;

V **V**iewing and looking after our environment through the prevention of pollution;

I **I**nstituting a sustainable policy for ensuring and enhancing a better quality of life for employees, public and future generations.

This policy will be periodically reviewed, ***communicated to all persons working for or on behalf of Chemvi and made available to public.***

r.Shanmugam
Managing Director
Date: ***02nd January 2019***



Services

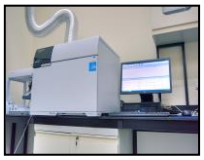
We from **Chemvi**, take great pleasure in introducing our services to your esteemed organization. **Chemvi** is involved in various aspects of independent analytical services tailored to meet your demands either routine analysis or prompt attendance to your analytical needs.

Chemvi is fully committed to provide high quality and efficient services and equipped with the latest laboratory instruments, sampling equipments and profesionals to cater for the ever-demanding needs for analytical precision, sampling, monitoring and assessments

- Chemical Testing, Scheduled Waste Characteristic and Composition Analysis
  - As per First Schedule, Environmental Quality (Scheduled Wastes) 2005 Regulations. Department of Environment (DOE) for Scheduled Waste (TCLP, TTLC and STLC and Waste Acceptance Criteria (WAC)
  - Water Quality Analysis/Marine Water
  - Effluent, Wastewater, River Water, Seawater, Groundwater and Potable Water Quality Analysis
- Environmental Monitoring and Related Analysis
- Occupational Safety and Health Related Services
- Asbestos and Inventory of Hazardous Material (IHM)
  - Inventory of Hazardous Material (IHM) testing in compliance to the Resolution MEPC.269(68), 2015 Guidelines for the Development of the Inventory of Hazardous Material (IHM), Appendix 9.
- Biomonitoring, Microbiological and Food Related Analysis
  - Heavy Metal in Blood and Urine
  - Microbiological analysis, Food Analysis and Nutrition Labelling
- Medical surveillance, Health surveillance, Biological Monitoring and Audiometric test by Occupational Health Doctor (OHD)
  - Medical surveillance, as defined by the Department of Occupational Safety and Health (DOSH) Malaysia, is a process to monitor a person's health for changes due to workplace exposure to hazardous chemicals
  - As per Guidelines on Medical Surveillance Programme at The Workplace 2023
- Education, Training and Product
- Agriculture based analysis

Put Our People to the test.

We realize our people are key members of your organisation team. In order to provide accurate and timely test results we carefully scrutinize all procedures and scheduling, evaluate new technologies and stay abreast of the many charges and advance being made in the field of medical technology. This process has become a way with us and will be an ongoing commitment to our clients.



How can ChemVi Laboratory help your business?

We can offer testing and support services covering all aspects of the environmental profiles of chemical products and manufacturing operations.

We operate in **c**ompliance to relevant environmental legal and other requirements to ensure the highest quality of our services. Our clients also appreciate that all enquiries, project discussions and results will be treated with the strictest confidence.

Higher Tier Studies

- Our expertise in conducting long term studies is extensive and backed by new state-of-the-art facilities.
- If you require studies to meet your individual requirements, eg extended life cycle studies with additional biomarkers, our dedicated team of experts can advise and tailor our procedures to meet your needs. We will perform Data Searches using Read-Across *in vitro* data.
- Collaborative programs on environmental consultancy to acquire the skills and expertise to support your business needs.
- We can perform the tests required for the generation of data for factory / project development.


ACCREDITATION

Qualifications

CERTIFICATE OF ACCREDITATION

S/N: 1599

STANDARDS MALAYSIA

Certificate of Accreditation

No: SAMM 213

Accredited since: 27 July 2001

This is to certify that

CHEMVI LABORATORY SDN. BHD.
SHAH ALAM, SELANGOR
MALAYSIA

Scan this QR Code or visit
www.jsm.gov.my/cab-directories
for the current scope of accreditation

has been granted accreditation in respect of the scope of accreditation described in the schedule, subject to the terms and conditions governing the *Skim Akreditasi Makmal Malaysia* (SAMM), the Laboratory Accreditation Scheme of Malaysia.

Laboratories accredited under SAMM meet the requirements of MS ISO/IEC 17025. This Malaysian Standard is identical with ISO/IEC 17025 published by the International Organization for Standardization (ISO).

(SHAHARUL SADRI BIN ALWI)
Director General
Department of Standards Malaysia

Date of issue: 29 May 2020

Issuance of this Certificate is governed by Section 16 Subsections (2) and (3) of Standards of Malaysia Act 1996 (Act 549)

SCOPE OF ACCREDITATION

Schedule

Issue date: 31 May 2023
Valid until: 27 July 2028

NO: SAMM 213

LABORATORY LOCATION:
(PERMANENT LABORATORY)

CHEMVI LABORATORY SDN. BHD.
NO 22A, JALAN SUNGAI JELUH 32/192,
NOUVELLE KEMUNING INDUSTRIAL PARK
BUKIT RIMAU, SEKSYEN 32,
40460 SHAH ALAM
SELANGOR, MALAYSIA

FIELDS OF TESTING: **CHEMICAL AND MICROBIOLOGICAL**

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
Potable and Domestic / Industrial Water, Effluent Surface Water Ground Water Natural Water Mineral Water Drinking Water Portable Water River Water Raw Water	pH	APHA 4500 H^+B Electrometric Method
	Total Suspended Solids	APHA 2540 D dried at (103 - 105 °C)
	BOD_5 at 20°C	APHA 5210 B & 4500-O G
	COD	APHA 5220 C
	Cadmium as Cd	APHA 3111 B
	Chromium as Cr	APHA 3111 B
	Lead as Pb	APHA 3111 B
	Copper as Cu	APHA 3111 B
	Manganese as Mn	APHA 3111 B
	Nickel as Ni	APHA 3111 B
	Zinc as Zn	APHA 3111 B
	Iron as Fe	APHA 3111 B
	Free-Cl_2	APHA 4500 Cl-F
	Oil & Grease	APHA 5520 B
	Dissolved Oxygen	APHA 4500 O-G
	Preliminary Treatment of Samples for Metal Analysis	APHA 3030 E
	Sulphide	APHA 4500 S^{2-}F
	Boron	APHA 4500 B : C
	Phenol	APHA 5530 B&D
	Chromium, Trivalent	In House Method, SM059 Based on Spectroquant 14552 (by calculation)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Potable and Domestic / Industrial Water, Effluent Surface Water Ground Water Natural Water Mineral Water Drinking Water Portable Water River Water Raw Water	Fluoride	APHA 4500F D
	Formaldehyde	HACH Method 8110
	Color ADMI	APHA 2120 F
	Ammonia Nitrogen	APHA 4500 NH3 B & F
	Chloride	APHA 4500 Cl- B
	Total Dissolved Solid	APHA 2540 C
	Total Solid	APHA 2540 B
	Hydrocarbon (Water)	APHA 5520 B & F
	Nitrate (NO_3)	HACH METHOD 8039
	Phosphate (PO_4)	HACH METHOD 8048
	Hardness	APHA 2340 B (By Calculation)
	Silica as SiO_2	HACH METHOD 8185
	Nitrite (NO_2)	HACH METHOD 8507
	Sulfate (SO_4)	HACH METHOD 8051
	Phosphorus	APHA 4500-P B(5)&C
	Nitrogen	APHA 4500-N (org) (B)
	Surfactants Anionic Detergents	HACH Method 8028
	Carbon Dioxide	HACH Method 8223
	O & G (Mineral Oil)	APHA 5520 B & F
	O & G (Emulsified)	APHA 5520 B
	Polychlorinated Biphenyls (PCBs) (Appendix 1)	USEPA Method 525.2
	Organochlorine Pesticides (Appendix 2)	USEPA Method 525.2
	Alkalinity	HACH Method 8221
	Cyanide as CN	HACH Method 8027

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Surface Water Ground Water Natural Water Mineral Water Drinking Water River Water Raw Water	Chlorinated Acid (Herbicides)	
	2,4-D (2,4-Dicholorphenoxyacetic acid)	USEPA 555
	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	USEPA 555
	2,4,5-TP (2,4,5-Trichlorophenoxypropionic acid)	USEPA 555
	Paraquat	USEPA 549.2
	Diquat	USEPA 549.2
Potable and Domestic/Industrial Water, Effluent, Surface Water, Ground Water, Natural Water, Mineral Water, Drinking Water, Portable Water, River Water, Raw Water	Tin as Sn	In-house Method SM065 based on APHA 3120B
	Arsenic as As	APHA 3120B
	Mercury as Hg	In-house Method SM066 based on APHA 3120B

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Potable and Domestic / Industrial Water, Effluent Surface Water Ground Water Natural Water Mineral Water Drinking Water Portable Water River Water Raw Water	Chromium Hexavalent as Cr^{6+}	APHA 3500 Cr B Colorimetric Method
	Cyanide as CN	OSRMA p.456 Photoelectric Method
	Arsenic as As	APHA 3114 C Continuous Hydride Generation/Atomic Absorption Spectrometric Method
	Tin as Sn	In-House Method: CV/002, (Based on APHA 3114 C Continuous Hydride Generation/Atomic Absorption Spectrometric Method)
	Mercury as Hg	APHA 3112 B Cold-Vapor Atomic Absorption
	Ammonical-Nitrogen (NH3 – N)	APHA 4500 NH3 B&C
	Preliminary Treatment of Sample	APHA 3030 F
	Aluminum as Al Boron as B Barium as Ba Cadmium as Ca Chromium as Cr Cobalt as Co Copper as Cu Iron as Fe Lead as Pb Magnesium as Mg Manganese as Mn Nickel as Ni Silver as Ag Strontium as Sr Thallium as Tl Zinc as Zn	APHA 3120 B (ICP – OES)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Potable and Domestic / Industrial Water, Effluent Surface Water Ground Water Natural Water Mineral Water Drinking Water Portable Water River Water Raw Water	Preliminary Treatment of Sample	APHA 3030 F
	Low Level Metals	
	Silver as Ag	In-house Method SM065 based on APHA 3125B with High Matrix Introduction (HMI) and Octopole Ion guide, ICPMS
	Aluminum as Al	
	Arsenic as As	
	Barium as Ba	
	Beryllium as Be	
	Copper as Cu	
	Cobalt as Co	
	Chromium as Cr	
	Cesium as Cs	
	Iron as Fe	
	Gallium as Ga	
	Mercury as Hg	
	Lithium as Li	
	Manganese as Mn	
	Nickel as Ni	
	Lead as Pb	
	Rubidium as Rb	
	Selenium as Se	
	Strontium as Sr	
	Titanium as Ti	
	Uranium as U	
	Zinc as Zn	
Marine Water Drinking Water Ground Water	Preliminary Treatment of sample	APHA 3030 F
	Calcium as Ca	In-house method SM065 based on APHA 3125B with High Matrix Introduction (HMI) and octopole ion guide, ICPMS
	Potassium as K	
	Magnesium as Mg	
	Sodium as Na	
	Silica as Si	

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Marine Water Estuarine Water Coastal Water	TSS	APHA 2540 D
	Colour	APHA 2120 F
	Oil and Grease	APHA 5520 B
	Ammoniacal Nitrogen	APHA 4500- NH_3 B & F
	Nitrite (NO2)	HACH 8507
	Nitrate (NO3)	HACH 8192
	Phenol	APHA 5530 B & D
	Arsenic	APHA 3120 B
	Cadmium	APHA 3120 B
	Chromium	APHA 3120 B
	Chromium(Cr 6+)	APHA 3500 Cr B
	Copper	APHA 3120 B
	Lead	APHA 3120 B
	Nickel	APHA 3120 B
	Mercury	In House Method SM064 (modify based on APHA 3120 B
	Zinc	APHA 3120 B
	Phosphate	HACH METHOD 8048
	Total Organic Carbon (TOC)	APHA 5310 B
	Cyanide	OSRMA P.456
	Tributyltin (TBT)	APHA 6710 B
	Polycyclic Aromatic Hydrocarbon (PAHs) (Appendix 3)	APHA 6410 B
	Organic Nitrogen	APHA 4500 N (ORG)
	Cyanide as CN	HACH Method 8027

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Marine Water Estuarine Water Coastal Water	Unionized Ammonia (NH3	In-house Method SMO63 based on Florida Department of Environment Protection Chemistry Laboratory Methods Manual Tallahasee Calculation Method
	Preliminary Treatment of Sample	APHA 3030 F
	Low Level Metals Silver as Ag Aluminum as Al Arsenic as As Barium as Ba Beryllium as Be Cadmium as Cd Copper as Cu Cobalt as Co Chromium as Cr Cesium as Cs Iron as Fe Gallium as Ga Mercury as Hg Lithium as Li Manganese as Mn Nickel as Ni Lead as Pb Rubidium as Rb Selenium as Se Strontium as Sr Titanium as Ti Uranium as U Zinc as Zn	In-house Method SM065 based on APHA 3125B with High Matrix Introduction (HMI) and Octopole ion guide, ICPMS

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Sediment, Sludge, Soil, Solid Samples	Preliminary Treatment of Samples: Acid Digestion	USEPA 3050 B (1996)
	Metal By Acid Digestion:	
	Aluminum as Al	USEPA 3050 B (1996) (ICP – OES)
	Barium as Ba	
	Cadmium as Cd	
	Calcium as Ca	
	Chromium as Cr	
	Cobalt as Co	
	Copper as Cu	
	Iron as Fe	
	Lead as Pb	
	Magnesium as Mg	
	Manganese as Mn	
	Nickel as Ni	
	Silver as Ag	
	Thallium as Tl	
	Zinc as Zn	
	Alkaline digestion and determination of Hexavalent Chromium as Cr^{6+}	USEPA 3060 A (1996) & USEPA 7196 A (1992)
	Total Hydrocarbon	APHA 5520 E & F (21st Edition)
Solid Waste, Municipal Solid Waste (MSW), Refuse-Derived Fuel (RDF)	<u>Proximate Analysis</u>	
	Total Moisture Content	ASTM E 949-96
	Volatile Matter	ASTM E 897-93
	Ash Content	ASTM E 830-96
	Fixed Carbon	In-House Method: CV/001, (Based on ASTM E 949-96, ASTM E 897-93 and ASTM E 830-96)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Solid Waste, Municipal Solid Waste (MSW), Refuse-Derived Fuel (RDF) (continued)	Ultimate Analysis	
	Preliminary Treatment of Samples for Metal Analysis	ASTM E 926-94 (Practice B-Nitric-Sulphuric-Hydrofluoric Acid Digestion)
	Cadmium as Cd	ASTM E 885-96 (Direct Aspiration)
	Copper as Cu	ASTM E 885-96 (Direct Aspiration)
	Iron as Fe	ASTM E 885-96 (Direct Aspiration)
	Lead as Pb	ASTM E 885-96 (Direct Aspiration)
	Zinc as Zn	ASTM E 885-96 (Direct Aspiration)
	Chromium as Cr	ASTM E 885-96 (Direct Aspiration)
	Manganese as Mn	ASTM E 885-96 (Direct Aspiration)
	Nickel as Ni	ASTM E 885-96 (Direct Aspiration)
	Tin as Sn	ASTM E 885-96 (Direct Aspiration)
	Mercury as Hg	ASTM E 885-96 (Cold Vapour)
Sludge/ Sediment/ Refuse – Derived Fuel (RDF)/ Semi compose Fibre	Standard Test Method for Nitrogen in The Analysis Sample of Refuse-Derived Fuel	ASTM E 778-87 (Reapproved 1996)
	Ultimate Analysis	
	Potassium as K	ASTM E 926-94 (Practice B) Standard Practices For Preparing Refuse-Derived Fuel (RDF)
	Phosphorus as P	ASTM D 5198-92 (Reapproved 2003) Standard Practice for Nitric Acid Digestion of Solid Wastes

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
EU RoHS & EU REACH Compliance Paper, Paperboard & Wood Pulp Chemicals Metal Paints Papers Plastics Electrical and Electronic product	Lead Mercury Cadmium Chromium Hexavalent Chromium **Polybrominated Biphenyls (PBB)** 2-Bromobiphenyl 4,4-Dibromooctaflourobiphenyl 3-Bromobiphenyl 4-Bromobiphenyl 2,2-Dibromobiphenyl 2,5-Dibromobiphenyl 2,6-Dibromobiphenyl 4,4-Dibromobiphenyl 2,4-Dibromobiphenyl 2,2,5-Tribromobiphenyl 2,4,5-Tribromobiphenyl 2,3,5-Tribromobiphenyl 2,2,4,5-Tetrabromobiphenyl 2,4,6-Tribromobiphenyl 3,3,5,5-Tetrabromobiphenyl 2,2,4,5,6-Pentabromobiphenyl 2,2,4,5,5-Pentabromobiphenyl **Polybrominated diphenyl ether (PBDE)** 2,2,4,4-Tetrabromibiphenyl 2,2,4,4,6-Pentabromobiphenyl 2,2,4,4,5-Pentabromobiphenyl Bist(2-ethylexyl) phthalate (DEHP) Butyl benzyl phthalate (BBP) Dibutyl phthalate (DBP) Diisobutyl phthalate (DIBP) Dimethyl phthalate (DMP) Diethyl phthalate (DEP Bis(2-ethoxyethyl) phthalate Dipentyl phthalate (DPP) Di-n-hexyl phthalate (DNHP) Dicylohexyl phthalate (DCHP) Di-n-Octyl phthalate (DNOP) Dinonyl Phthalate (DNP)	In-house Method SM067 based on USEPA 3050B USEPA 3060A & USEPA 7196A IEC 62321: 2008 IEC 62321: 2008 USEPA Method 3540C & USEPA Method 8270C

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Building Material, Thermal system insulation (TSI), Roofing Material, Bulk Samples, Onboard Ship Material,Consumer Products (Components for Electronic & Electrical Products, Polymer and Textiles)	Asbestos (bulk) by PLM (Sampling and Analysis)	NIOSH 9002
Solid Waste, Sediment, Sludge, Soil, Solid, Scheduled Waste.	Toxicity Leaching Characteristic Procedure (TCLP) For Metal Analysis: Arsenic as As Barium as Ba Boron as B Cadmium as Cd Chromium as Cr Copper as Cu Lead as Pb Mercury as Hg Nickel as Ni Selenium as Se Tin as Sn Zinc as Zn	EPA 1311
	Semi Volatile Organic Compound (Appendix 4)	USEPA 8270 USEPA 3540 C (Soxhlet Extraction)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Materials contained in ship structure or equipment	Asbestos (Bulk) by PLM (Sampling and Analysis)	NIOSH 9002
In reference to the Resolution MEPC 269 (68), 2015 Guidelines for the Development of the Inventory of Hazardous Material (IHM) and EU Regulation 1257/2013 on Ship Recycling	Polychlorinated Biphenyls (PCBs) (Appendix 5) **(organic)**	USEPA Method 3540C & USEPA Method 8270C
	Polychlorinated Napthalenes (PCNs) (Appendix 6) **(organic)**	USEPA Method 3540C & USEPA Method 8270C
	Ozone Depleting Substances (ODS) (Appendix 7) (**organic)**	USEPA Method 5021A
	1,2,5,6,9,10 – Hexabromocyclodecane [Brominated Flame Retardant (HBCDD)] **(organic)**	IEC 62321: 2008
	Perflouroctane Sulfonic Acid (PFOS)	EM 201: 2010
	Polybrominated Biphenyls (PBB) (Appendix 8)	IEC 62321:2008
	Polybrominated Diphenyl Ether (PBDE) (Appendix 9)	IEC 62321:2008
	Short Chain Chlorinated Paraffins (C10-C13) SCCP	USEPA Method 3540C & USEPA Method 8270C (Screening)
	Anti-fouling compound [Tin as percentage (% tin)]	In-house Method SM068 based on USEPA 3050B (ICP OES)
	Cadmium and Cadmium Compounds (as Total Cadmium)	In-house Method SM067 based on USEPA 3050B
	Lead and Lead Compounds (as Total Lead)	In-house Method SM067 based on USEPA 3050B
	Chromium and Chromium Compound (as Total Chromium)	In-house Method SM067 based on USEPA 3050B
	Mercury and Mercury Compound (as Total Mercury)	In-house Method SM067 based on USEPA 3050B
	Chromium Hexavalent (Cr^{6+})	USEPA 3060A & USEPA 7196 A

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Palm Oil Mill Effluent	BOD_3	D.O.E Revised Standard Method (1985) for analysis of rubber and palm oil mill effluent, 3rd Edition Alternative Method
Co-compost	Ash	In-house Method SM094 based on MS 417: Part 2: 1994
	Moisture	In-house Method SM095 based on MS 417: Part 2: 1994 (Method I)
	Phosphorus (P)	In-house Method SM103 (Modified based on MS 417: Part 4: 1994) UV
	Potassium (K)	In-house Method SM107 (Modified based on MS 417: Part 5: 1994) ICP
	Boron (B)	In-house Mehod SM106 (Modified based o MS 417: Part 7: 2001) UV
	pH	In-house method SM092 based on MS 2457: 2012
	Zinc Iron Manganese Copper	In-house Method SM096 based on USEPA 3050B: SAMPLE PREPARATION & In-house Method SM096 based on USEPA 3050B SAMPLE ANALYSIS BY ICP-OES
	Calcium	In-house Method SM104 based on MS 417: Part 8: 1997/ICP
	Magnesium	In-house Method SM 105 based on MS 417: Part 6: 1994/ICP
Plant/Foliar /Rachis	Zinc Iron Manganese Copper	In-house Method SM096 based on USEPA 3050B: SAMPLE PREPARATIO & In-house Method SM096 based on USEPA 3050B SAMPLE ANALYSIS BY ICP-OES
	Ash	In-house Method SM094 based on MS 417: Part 2: 1994
	Moisture	In-house Method SM095 based on MS 417: Part 2: 1994 (Method 1)
	pH	In-house Method SM092 based on MS 2457: 2012

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Fertilizer	pH	In-house Method SM092 based on MS 2457: 2012
	Moisture	In-house Method SM095 based on MS 417: Part 2: 1994 (Method 1)
	Total Phosphorus (as $\%P_2O_5$)	MS 417: Part 4: 1994/UV
	Water Soluble Phosphorus (as $\%\ P_2O_5$)	MS 417: Part 4: 1994/UV
	Calcium (as CaO)	In-house Method SM099 (Modified based on MS 417: Part 8: 1997)/ICP
	Total Magnesium (as MgO)	In-house Method SM101 (Modified based on MS 417: Part 6: 1994/ICP
	Total Boron as (B_2O_3)	MS 417: Part 7: 2001 (UV)
	Total Potassium (as K_2O)	In-house method SM 100A (Modified based on MS 417: Part 5: 1994)/ICP
Soil	pH	In-house Method SM092 based on MS 2457: 2012
	Conductivity	In-house Method SM093 based on MS 2458: 2012 (Confirmed: 2018)
	Sodium (Na)	Acid Digestion for sediment, sludge and soil (USEPA 3050B)
	Potassium (K)	
	TOC	In-house Method SM125 – Dumas Method using CN Analyser (by calculation)
Co-compost Fertilizer Soil Plant/Foliar /Rachis	Nitrogen (N)	In-house Method SM121 – Dumas Method using CN Analyser
	Carbon / Nitrogen Ratio	In-house method SM123 – Dumas Method using CN Analyser (Calculation)
	Carbon (C)	In-house Method SM122 – Dumas Method Using CN Analyser (by calculation)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Agricultural Products and Materials		
Foliar, Rachis, Plant	Dry Ashing and Preparation of Sample Extract Solution	MS 677 : Pt. II : 1980
	Nitrogen	MS 677 : Pt. III : 1980
	Phosphorus	In House Method SM085 (Modify based on MS 677: Pt.IV: 1980 (ICP))
	Potassium	In House Method SM085 (Modify based on MS677: Pt.V: 1980 (ICP))
	Magnesium	In House Method SM085 (Modify based on MS677: Pt.VII: 1980 (ICP))
	Calcium	In House Method SM085 (Modify based on MS677: Pt.VI: 1980 (ICP))
	Boron	In House Method SM085 (Modify based on MS417 Part VII: 2001)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Soil	Volatile Organic Compound (VOC) 1) 1,1-Dichloroethane 2) Chloroprene 3) 2,2-Dichloropropane 4) Bromochloromethane 5) Chloroform 6) 1,1,1-Trichloroethane 7) Carbon Tetrachloride 8) Benzene 9) 1,2-Dichloroethane 10) Trichloroethene 11) 1,2-Dichloropropane 12) Dibromomethane 13) Bromodichloromethane 14) 1,3-Dicholoropropene 15) Toluene 16) Trans 1,3-Dichloropropene 17) 1,1,2-Trichloroethane 18) Tetrachloroethene 19) 1,3-Dichloropropane 20) Dibromochloromethane 21) Dibromoethane 22) 1,1,2,2-Tetrachloroethane 23) m-Xylene 24) o-Xylene 25) Bromoform 26) Cumene 27) Bromobenzene 28) 1,2,3-Trichloropropane 29) n-propylbenzene 30) o-chlorotoluene 31) p-chlorotoluene 32) 1,2,4-Trimethylbenzene 33) Cymene 34) 1,3,5-Trimethylbenzene 35) Sec-butylbenzene 36) 1,2-Dichlorobenzene 37) 1,3-Dichlorobenzene 38) n-butylbenzene 39) 1,2.3-Trichlorobenzene 40) Hexachloro-1.3-butadiene 41) 1,2,4-Trichlorobenzene	USEPA 5021A

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Industrial Hygiene Personal and Area Chemical Exposure Monitoring (Sampling and Analysis) In compliance to the OSHA Act 1994 and the USECHH Regulation 2000 (Use & Standards Of Exposure Of Chemical Hazardous To Health Regulations 2000).	Asbestos and Other Fiber by PCM	NIOSH 7400
	Mercury	NIOSH 6009
	Aluminium Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Molybdenum Nickel Tin Zinc	NIOSH 7303
Local Exhaust Ventilation (LEV), Fume hood. In compliance to the OSHA Act 1994 and the USECHH Regulation 2000 (Use & Standards Of Exposure Of Chemical Hazardous To Health Regulations 2000).		**In house method SM 063:**
	Face Velocity Capture Velocity	Air Velocity Meter using Hot Wire Anemometer
	Static Pressure (SP) Duct Velocity	Air Velocity Meter using Pitot Tube
	Revolution Per Minute (RPM)	Laser Tachometer

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Indoor Air Quality (IAQ) Assessment monitoring In compliance to The Indoor Air Quality as per Industry Code of Practice on Indoor Air Quality 2010 (ICOP IAQ 2010), Department Of Occupational Safety And Health, Ministry Of Human Resources, Malaysia, JKKP DP(S) 127/379/4-39.		**In House Method SM 062:**
	Total Volatile Organic Compound	VOC monitor using PID sensor
	Carbon Dioxide (CO_2)	Carbon dioxide monitor using non-dispersive infrared sensor
	Carbon Monoxide(CO)	Carbon monoxide monitor using electrochemical sensor
	Relative Humidity Air Temperature Air movement	Air Velocity Meter using hot wire anemometer
	Respirable Particulates	Digital Dust Monitor using light scattering
	Ozone	Ozone monitor using OZL sensor.
	Formaldehyde	Formaldemeter using electrochemical formaldehyde sensor
	Total bacterial counts (Sampling and Analysis)	In house method SM062 based on NIOSH 0800 (1998) (Tryptic Soy Agar (TSA)
	Total fungal counts (Sampling and Analysis)	In house method SM062 based on NIOSH 0800 (1998) (Malt Extract Agar (MEA)

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Blood	Aluminium (Al) Arsenic (As) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Copper (Cu) Iron (Fe) Lead (Pb) Magnesium (Mg) Manganese (Mn) Nickel (Ni) Tin (Sn) Zinc (Zn)	In-house Method SM002 (Metals in Blood) based on NIOSH 8005
Urine	Aluminium (Al) Arsenic (As) Barium (Ba) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Copper (Cu) Iron (Fe) Lead (Pb) Magnesium (Mg) Manganese (Mn) Nickel (Ni) Tin (Sn) Zinc (Zn)	In-house Method SM001 (Metals in Urine) based on NIOSH 8310
Drinking Water Surface Water River Water Ground Water	SVOC PAH TOC	APHA 6410B APHA 6410B APHA 5310B

Signatories:

1. **Dr. Shanmugam Suberamaniam (All)** **IKM No.: M/1095/2640/96/99**
2. **Punitha a/p Perumall** **IKM No.: M/2795/5536/2009**
3. **Kalaivani a/p Varadarajan** **IKM No.: L/1892/6259/12 (**

SCOPE OF TESTING: CHEMICAL

SITE: CATEGORY I

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Effluent/ Water/ River Water/ Surface Water (Site Testing)	pH	APHA 4500 H^+B
	Temperature	APHA 2550 B
	Dissolved Oxygen	APHA 4500 O G
	Turbidity	APHA 2130 B
Noise Measurement/Acoustic	Description and Measurement of Environmental (Factory Boundaries) Noise Level (Intensity and Frequency) – Basic Quantities and Procedures	ISO 1996-1:2003 (E)
Vibration Measurement	Description and Measurement of Vibration Level on Construction and Open Site	BS 5228: Part 2:2009
Chimney/ Stack Air Emission – Flue Gas Sampling	Determination of Concentration and Mass Flow of Particulate Matter Using Isokinetic Method	MS 1596: 2003
	PCDDs and PCDF Dioxin and Furan (Sampling)	USEPA 23
Effluent/Water/River Water/ Surface Water Groundwater Marine water Esturine water Coastalwater (Site Testing)	Flow rate	In house method SM 090 Based On Manufacturer Instruction Manual GLOBAL WATER
	Temperature	APHA 2550B
	Dissolved Oxygen	APHA 4500 O G
	Salinity	APHA 2520 A
	Turbidity	APHA 2130 B
	Conductivity	APHA 2520 B
	pH	APHA 4500 H^+ B

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 (Site Testing)	Sulphur dioxide(SO_2),	In house method SM 089. Based On Manufacturer Instruction Manual using B-smart sensor
	Ozone (O3)	In house method SM 088 Ozone monitor using OZL sensor
	Carbon Monoxide (CO)	In-house Method SM099A based on ToxiRAE Pro User's Guide Carbon Monoxide monitor using non-dispersive infrared sensor
	Carbon Dioxide (CO_2)	In-house Method SM0099B based on ToxiRAE Pro CO_2 User's Guide Carbon Dioxide monitor using non-dispersive infrared sensor
	Relative Humidity	In-house Method SM099C based on Velocicale Air Velocity Meter using hot wire anemometer
	Total Volatile Organic Compound	In-house Method SM099D based on MiniRAE Lite User's Guide VOC monitor using PID sensor

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	Sampling and Analysis of Particulate Matter (PM2.5) in the Atmosphere by using High Volume sampler (Tisch International)	In house method SM 087 based on EPA code of federal regulations. Extension of USEPA 40 Part 50, Appendix J
	Sampling and Analysis of Particulate Matter (PM10) in the Atmosphere by using High Volume sampler	USEPA 40 Part 50, Appendix J
	Sampling and Analysis of Particulate Matter (PM 10) in the Atmosphere Using PM 10 High Volume Sampler	ISC 501 (11101-01-70T)
	Determination of Suspended Particulate Matter (TSP) in the Atmosphere (High-Volume Method) Using High Volume Sampler (HVS)	USEPA 40 Part 50, Appendix B
	Lead (Pd)	NIOSH 7303
	Cadmium (Cd)	NIOSH 7303
	Calcium (Ca)	NIOSH 7303
	Total Chromium (Cr)	NIOSH 7303
	Copper (Cu)	NIOSH 7303
	Iron (Fe)	NIOSH 7303
	Mercury (Hg)	NIOSH 7303
	Nitrogen Dioxide (NO_2)	APHA ISC 408 (42602-03-73T)

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 - Flue Gas Monitoring	Nitrogen Oxide (NO_x)	In-house Method SM100 based on B-smart sensor operation manual
Dust/Particulate Emission	Determination of Particulate Emissions from Stationary Sources	USEPA Method - 5 (Isokinetic Stack Monitoring)
H_2SO_4, SO_2	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources	USEPA Method - 8 (Isokinetic Stack Monitoring)
Cu, Zn, As, Sb, Pb, Cd, Hg	Determination of Metals Emissions from Stationary Sources	USEPA Method - 29 (Isokinetic Stack Monitoring)
Air Emission	Dark Smoke	BS 2742:2009 (Ringelmann Smoke Chart)

Note:

1. USEPA: United State Environmental Protection Agency, 2000 (5th Edition)
2. APHA: American Public Health Association, 2005 (21st Edition)
3. OSRMA: Official, Standardised & Recommended Methods of Analysis, 1973 (2nd Edition)
4. ISO : International Organization for Standardization
5. ASTM : American Society for Testing and Materials
6. BS : British & International Standards
7. ISC : Intersociety Committee Methods of Air Sampling and Analysis, 3rd ed., 1989
8. NIOSH - National Institute of Occupational Safety and Health.

Signatories:

1.	**Dr. Shanmugam Suberamaniam (All)**	**IKM No.: M/1095/2640/96/99 (All)**
2.	**Punitha a/p Perumall**	**IKM No.: M/2795/5536/2009 (Water/Effluent, Materials Contained in Ship Structure of Equipment, Compost, Plant, Fertilizer and Soil Only)**
3.	**Kalaivani a/p Varadarajan**	**IKM No.: L/1892/6259/12 (Stack Montoring, Dark Smoke, ROHS and Organic only)**
4.	**Megala a/p Muniandy**	**Air, Noise, Vibration. Water (WQ1) (Under supervision)**
5.	**Sharmila a/p Rajahenderan**	**Air, Noise, Vibration. Water (WQ1) (Under supervision)**
6.	**Asrifa binti Saari**	**Air, Noise, Vibration. Water (WQ1) (Under supervision)**
7.	**Jivitha a/p Veralingam**	**IKM No.: L/1893/6260/12 (Air, Noise, Vibration. Water) (WQ1) (Under supervision)**
8.	**Kayathri a/p Karunanithi**	**Asbestos testing (under supervision)**

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 Industrial Water River Water	Heterotrophic Plate Count/ Total Plate Count	APHA 9215 B (2022) (23rd Edition) (Pour Plate)
	Total Coliform Count	APHA 9222 B (2022) (23rd Edition) (Membrane Filtration Technique)
	Total Faecal Coliform Count	APHA 9222 D (2022) (23rd Edition) (Membrane Filtration Technique)
	E.coli count	APHA 9222 I (2022) (23rd Edition) (Membrane Filtration Technique) USEPA 1603 (2014) (Membrane filtration Technique modified M-TEC agar
	Legionella spp	APHA 9260J (2022) (23rd Edition) (Detection)
Marine Water Estuarine Water Coastal Water	Total Coliform Count	APHA 9222 B (2022) (23rd Edition) (Membrane Filtration Technique)
	Total Faecal Coliform Count	APHA 9222 D (2022) (23rd Edition) (Membrane Filtration Technique)
	E.coli count	APHA 9222 I (2022) (23rd Edition) (Membrane Filtration Technique) USEPA 1603 (2014) (Membrane filtration Technique modified M-TEC agar
	Enterococci spp	APHA 9230 C (2022) (23rd Edition) (Membrane Filtration Technique)

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Clean Room Assessment	Total bacterial counts (Sampling and Analysis)	In house method (SM062) based on NIOSH 0800 (1998) (Tryptic Soy Agar (TSA)
	Total fungal counts (Sampling and Analysis)	In house method (SM062) based on NIOSH 0800 (1998) (Malt Extract Agar (MEA)
Pharmaceutical Item/Traditional Medicines/Toiletries	Total Aerobic Microbial Count Total Yeast and Mold Count Bile Tolerant Gram Negative Bacteria *Escherichia coli* *Staphylococcus aureus* *Pseudomonas aeruginosa* *Salmonella spp*	BP (Harmonised Method) 2022 (Appendix XVI BV 543-551)

Signatories:

1. **Thamayanthi a/p Rajendran (Microbiology, Biology)**
2. **Megala a/p Muniandy (Microbiology, Biology)**
3. **Satish Raj a/l Krishnan** — **MJMM 1096 (Microbiology)**
4. **Vanitha a/p Ganison** — **MJMM 1095 (Mircobiology)**

Notes:

1. **APHA** — **American Public Health Association**
2. **BP** — **British Pharmacopoeia**
3. **USE PA** — **United States Environmental Protection Agency**
4. **NIOSH** — **National Institute of Occupational Safety and Health**

APPENDIX 1
POLYCHLORINATED BIPHENYLS (PCBs)

1. 2-Chlorobiphenyl (2051-60-7)
2. 2,3-Dichlorobiphenyl (16605-91-7)
3. 2,4,5-Trichlorobiphenyl (15862-07-4)
4. 2,2',4,4'-Tetrachlorobiphenyl (2437-79-8)
5. 2,2',3',4,6-Pentachlorobiphenyl (60233-25-2)
6. 2,2',4,4',5,6'-Hexachlorobiphenyl (60145-22-4)
7. 2,2',3,3',4,4',6-Heptachlorobiphenyl (52663-71-5)
8. 2,2',3,3',4,5',6,6'-Octachlorobiphenyl (40186-71-8)

APPENDIX2
ORGANOCHLORINE PESTICIDES

1. 4,4'-DDD (72-54-8)
2. 4,4'-DDE (72-55-9)
3. 4,4'-DDT (50-29-3)
4. Aldrin (309-00-2)
5. alpha-BHC (319-84-6)
6. Beta-BHC (319-85-7)
7. Cis-Chlordane (5103-71-9)
8. Delta-BHC (319-86-8)
9. Dieldrin (60-57-1)
10. Endosulfan1 (959-98-8)
11. Endosulfan II (33213-65-9)
12. Endosulfansulfate (1031-07-8)
13. Endrin (72-20-8)
14. Endrinaldehyde (7421-93-4)
15. Endrinketone (53494-70-5)
16. gamma-BHC(Lindane) (58-89-9)
17. Heptachlor (76-44-8)
18. Heptachlorepoxide (isomer B) (1024-57-3)
19. Methoxychlor (72-43-5)
20. Trans-Chlordane (5103-74-2)

APPENDIX 3
POLYAROMATIC HYDROCARBONS (PAHs)

1. 2,4-Dinitrotoluene (121-14-2)
2. Acenaphthylene(208-96-8)
3. Benzo(a)pyrene(50-32-8)
4. Benzo(b)fluoranthene(205-99-2)
5. Benzo(g,h,i)perylene(191-24-2)
6. Benzo(k)fluoranthene(207-08-9)
7. Benzyl butyl phthalate(85-68-7)
8. Bis(2-ethylhexyl)phthalate (117-84-0)
9. Diethylphthalate(84-66-2)
10. Dimethylphthalate(131-11-3)
11. Di-n-butylphthalate(84-74-2)
12. Fluoranthene(206-44-0)
13. Fluorene(86-73-7)
14. Hexachlorobenzene(118-74-1)
15. Hexachlorocyclopentadiene(77-47-4)
16. Indeno(1,2,3-cd)pyrene (193-39-5)
17. Isophorone (CAS 78-59-1)
18. Phenanthrene(85-01-8)
19. Pyrene(129-00-0)

APPENDIX 4
SEMIVOLATILE ORGANIC COMPOUNDS (SVOC)

1. 1-Methylnapthalene (90-120-0)
2. 2-Methylnapthalene (91-57-6)
3. 1,4-Dichlorobenzene (106-46-7)
4. 2-Chlorophenol (95-57-8)
5. 2-Chloronapthalene (91-58-7)
6. 2-Methylphenol (95-48-7)
7. 2-Nitroaniline (88-74-4)
8. 2,4-Dichlorophenol (120-83-2)
9. 2,4-Dimethylphenol (105-67-9)
10. 2,4-Dinitrotoluene (121-14-2)
11. 2,4,5-Trichlorophenol (95-95-4)
12. 2,4,6-Trichlorophenol (88-06-2)
13. 2,3,4,6-Tetrachlorophenol (58-90-2)
14. 3-Methlyphenol (108-39-4)
15. 4-Bromophenyl phenyl ether (101-55-3)
16. 4-Chloroaniline (106-47-8)
17. 4-Chloro-3-methylphenol (59-50-7)
18. 4,6-Dinitro-2-methylphenol (534-52-1)
19. Acenaphthylene (208-96-8)
20. Aniline (62-53-3)
21. Benzo (a) pyrene (50-32-8)
22. Benzo (b) fluoroanthene (205-99-2)
23. Benzo (g,h,i) perylene (191-24-2)
24. Benzo (k) fluoroanthene (207-08-09)
25. Benzyl alcohol (100-51-6)
26. Benzyl butyl phthalate (85-68-7)
27. Bis (2-chloroethyl) ether (114-44-4)
28. Bis (2-chloroethoxy) methane (111-91-1)
29. Bis (2-chloroisopropyl) ether (108-60-1)
30. Bis (2-ethylhexyl) phthalate (117-81-7)
31. Dibenzofuran (132-64-9)
32. Diethyl phthalate (84-66-2)
33. Dimethyl phthalate (131-11-3)
34. Di-n-butyl phthalate (84-74-2)
35. Diphenylamine (122-39-4)
36. Fluoranthene (206-44-0)
37. Fluorene (86-73-7)
38. Hexachlorobenzene (118-74-1)
39. Hexachlorobutadiene (87 68 3)
40. Hexachlorocyclopentadiene (77 47-4)
41. Hexachloroethane (67-72 1)
42. Indeno (1,2,3 cd) pyrene (207 08 9)
43. Isophorone (78-59-1)
44. Phenanthrene (8S 01-8)
45. Phenol (108 95 2)
46. Pyrene (129-00 0)

APPENDIX 5
POLYCHLORINATED BIPHENYLS (PCBs)

1. 2-chlorobiphenyl
2. 2,3-Dichlorobiphenyl
3. 2,2',5- Trichlorobiphenyl
4. 2,4',5- Trichlorobiphenyl
5. 2,2'3,5'-Tetrachlorobiphenyl
6. 2,2',5,5'-Tetrachlorobiphenyl
7. 2,3',4,4'-Tetrachlorobiphenyl
8. 2,2',3,4,5'-Pentachlorobiphenyl
9. 2,2',4,5,5'-Pentachlorobiphenyl
10. 2,3,3',4',6-Pentachlorobiphenyl
11. 2,2',3,4,4',5-Hexachlorobiphenyl
12. 2,2',3,4,5,5'-Hexachlorobiphenyl
13. 2,2',3,5,5',6-Hexachlorobiphenyl
14. 2,2',4,4',5,5'-Hexachlorobiphenyl
15. 2,2',3,3',4,4',5-Heptachlorobiphenyl
16. 2,2',3,4,4',5,5'-Heptachlorobiphenyl
17. 2,2',3,4,4',5',6-Heptachlorobiphenyl
18. 2,2',3,4',5,5',6-Heptachlorobiphenyl
19. 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl

APPENDIX 6
POLYCHLORINATED NAPTHALENES (PCN)

1. 1,2,3,4-Tetrachloronapthalene
2. Octachloronapthalene

APPENDIX 7
OZONE DEPLETING SUBSTANCES (ODS)

1. 1,1,1 – Trichloroethane
2. 1,1,2 – Trichloroethane
3. 1,1 – Dichloroethane
4. 1,2 – Dichloroethane
5. 1,2 – Dichloropropane
6. 1,3 – Dichloropropene
7. 2,2 – Dichloropropane
8. Bromo chloroethane
9. Carbon tetrachloride
10. Chloroform
11. Hexachlorobutadiene
12. Tetrachloroethene

(Continued)

13. Trans – 1,3 – dichloropropene
14. Trichloroethene
15. Trichlorofluoromethane (CFC-11)
16. 1,1,2-Trichlorotrifluoroethane (CFC-113)
17. 1,2-DIchlorotetrafluoroethane (CFC-114)

APPENDIX 8
POLYBROMINATED BIPHENYLS (PBB)

1. 2-Bromobiphenyl
2. 4,4- Dibromooctafluorobiphenyl
3. 3-Bromobiphenyl
4. 4-Bromobiphenyl
5. 2,2'- Dibromobiphenyl
6. 2,5- Dibromobiphenyl
7. 2,6- Dibromobiphenyl
8. 4,4' – Dibromobiphenyl
9. 2,4- Dibromobiphenyl
10. 2,2',5 –Tribromobiphenyl
11. 2,4,5 –Tribromobiphenyl
12. 2,3,5 – Tribromobiphenyl
13. 2,2',4,5- Tetrabromobiphenyl
14. 2,4,6-Tribromobiphenyl
15. 3,3',5,5' –Tetrabromobiphenyl
16. 2,2',4,5,6-Pentabromobiphenyl
17. 2,2',4,5,5- Pentabromobiphenyl

APPENDIX 9
POLYBROMINATED DIPHENYL ETHER (PBDE)

1. 2, 2',4,4' – Tetrabromodiphenyl
2. 2,2',4,4',6 – Pentabromobiphenyl
3. 2,2',4,4',5 – Pentabromobiphenyl

APPENDIX 10
SVOC (WATER)

1. Phenol
2. Bis (2-chloroethyl) ether (111-44-4)
3. 2-chlorophenol
4. 1,4-dicholorobenzene
5. 2-methylphenol
6. Bis-(2-chloroisopropyl)
7. 3-methylphenol
8. Isophorone
9. 2,4-dimethylphenol
10. Bis (2-chloroMethane)
11. 2,4-dichlorophenol
12. 4-chloroaniline
13. Hexachlorobutadiene
14. 4-chloro-3-methylphenol
15. 2,4,6-Trichlorophenol
16. 2,4,5-Trichlorophenol
17. 2-Chloronapthalene
18. Dibenzofuran
19. 2,3,4,6-Tetrachlorophenol
20. Diethylphthalate
21. Diphenylamine
22. 4-Bromophenyl phenyl ether
23. Hexachlorobenzene
24. 36. Di-n-butyl phthalate
25. Benzyl butyl phthalate
26. Bis(2-ethylhexyl) phthalate

APPENDIX 11
PAH (WATER)

1. 2-methylnaphtalene
2. 1-methylnaphtalene
3. Acenapthalene
4. Fluorene
5. Phenantherene
6. Fluoranthene
7. Pyrene
8. Indeno (1,2,3-cd) pyrene
9. Benzo(k) fluoranthene
10. Benzo(b) fluoranthene
11. Benzo (a) pyrene
12. Benzo (ghi) perylene

Award from IKM

Institut Kimia Malaysia

This is to certify that

CHEMVI LABORATORY SDN BHD

NO. 22A, JALAN SUNGAI JELUH 32/129,
NOUVELLE KEMUNING INDUSTRIAL PARK, BUKIT RIMAU,
SEC. 32, 40460 SHAH ALAM, SELANGOR

has been bestowed the

IKM LABORATORY EXCELLENCE AWARD

In the testing of

1. Potable and Domestic/Industrial Water
2. Effluent
3. Sediment, Sludge, Soil
4. Municipal Solid Waste, Refuse-derived Fuel
5. Industrial Hygiene & Air Monitoring

DATE: 02 DECEMBER 2016

Dato' Dr Ong Eng Long
President
Institut Kimia Malaysia

Mr Chang Hon Fong
Chairman
IKM Laboratory
Excellence Awards
Committee 2016

ISO 14001:2015 Certificate

ISO 14001 : 2015

Certificate of Registration

This is to certify that compliance of Environmental Management System of

CHEMVI LABORATORY SDN. BHD.

No. 22A, Jalan Sungai Jeluh 32/192,
Nouvelle Kemuning Industrial Park, Bukit Rimau,
Seksyen 32, Selangor - 40460 Shah Alam, Malaysia.

Has been assessed and approved to the requirements of

ISO 14001 : 2015

for the scope of activities :

Environmental , Chemical, Microbiological, Testing Analysis and Industrial Related Services

Certificate No.	: RE65/JA/RE/2818	Initial Issue date	: 15.04.2022
JAS-ANZ Accreditation No	: M4430310IC	Re-Certification Date	: 17.05.2025
		Valid Date	: 14.04.2026

JAS-ANZ

www.jas-anz.org / register

Quality Seal

For and on behalf of Quest Certification (P) Ltd

Head of Certification

Certification is valid till (14.04.2028) subject to the successful completion of surveillance audit on 14.04.2026 and 14.04.2027.
Upon successful completion of surveillance audit, a new certificate with extended validity will be issued.
The Validity of this Certificate can be verified from www.questcertification.com
The Registration does not assure the quality of yields under the firm's production / Services

Quest Certification (P) Ltd

Accreditated by Joint Accreditation System of Australia and New Zealand (www.jas-anz.org / register)

SAFETY AND HEALTH POLICY

CHEMVI LABORATORY SDN. BHD.

SAFETY AND HEALTH POLICY

CHEMVI, as a specialized recycling of materials, shall fully committed to ensure our responsibility towards providing a safe and healthy working environment which is fundamental to sustain the co-existence of our business operations.

We are committed to :-

- Comply to all applicable laws and regulations of the country, international agreements and requirements related to safety and health and the appropriate code of practice.
- Responsible to encourage everyone to support the company's overall safety and health programs which includes all our contractors, suppliers, customers and also public.
- Facilitate and maintain safe buildings, equipments services and operating safe system of work.
- Responsible to provide the necessary resources, systems and trainings to all levels of employees.
- Identify , assess and manage risk through regular safety and health inspection and a proactive action to prevent accidents during our operations.

This policy shall be made available to the public where appropriate.

We, the management of CHEMVI, are fully committed to this policy as part of our contribution to society.

Managing Director
CHEMVI LABORATORY SDN. BHD.
23 FEBRUARY 2012

IKM Registration (Dr Shanmugam)

Kaedah 5(3)
Rule

INSTITUT KIMIA MALAYSIA

PERAKUAN PENGEKALAN TAHUNAN
ANNUAL RETENTION CERTIFICATE

Maka inilah diperakui bahawa

This is to certify that

Shanmugam a/l Suberamaniam, ChM Dr.

(Nama penuh) *(Name in full)*

beralamat *of (Address)* **Chemvi Laboratory Sdn Bhd, No 22A, Jalan Sungai Jeluh 32/192, Nouvelle Kemuning Industrial Park, Bukit Rimau, Seksyen 32, 40460 Shah Alam, Selangor**

yang didaftarkan di bawah Akta Ahli Kimia 1975, dan yang Perakuan Pendaftarannya bernombor **M/1095/2640/96/99**

who is registered under the Chemists Act 1975, and whose Certificate of Registration bears the Number

telah dikekalkan dalam daftar anggota-anggota Institut Kimia Malaysia sehingga 31 haribulan Disember **2025**

has been retained on the register of members of the Malaysian Institute of Chemistry until 31st December

Dikeluarkan pada **11 December 2024**

Issued on

Pendaftar,
Institut Kimia Malaysia.
Registrar,
Malaysian Institute of Chemistry

Bayaran sebanyak RM 100 telah dibayar.
Fee RM 100 paid.

Member of The Royal Society of Chemistry
(Dr Shanmugam)

Founded 1841
Incorporated by Royal Charter 1848
Patron Her Majesty the Queen

THIS IS TO CERTIFY THAT

SUBERAMANIAM SHANMUGAM

HAS BEEN ADMITTED AS A

MEMBER

OF

THE ROYAL SOCIETY OF CHEMISTRY

and is entitled to use the designatory letters MRSC

President

Chief Executive

Date of admission

30 September 2011

Membership Number

474980

The certificate is issued subject to the provisions of the Charter and By-Laws
Registered Charity Number 207890

IKM Registration (Ms Sukunah)

Kaedah 5(3)
Rule

PERAKUAN PENGEKALAN TAHUNAN
ANNUAL RETENTION CERTIFICATE

Maka inilah diperakui bahawa

This is to certify that

Sukunah A/P Pachaiappan, ChM

(Nama penuh) *(Name in full)*

beralamat
of (Address)
Chemvi Laboratory Sdn Bhd,
No 22A, Jalan Sungai Jeluh 32/129,
Nouvelle Kemuning Industrial Park, Bukit Rimau, Seksyen 32,
40460 Shah Alam, Selangor

yang didaftarkan di bawah Akta Ahli Kimia 1975, dan yang Perakuan Pendaftarannya bernombor **M/2718/5404/08**
who is registered under the Chemists Act 1975, and whose Certificate of Registration bears the Number

telah dikekalkan dalam daftar anggota-anggota Institut Kimia Malaysia sehingga 31 haribulan Disember **2025**
has been retained on the register of members of the Malaysian Institute of Chemistry until 31st December

Dikeluarkan pada **31 December 2024**
Issued on

Pendaftar,
Institut Kimia Malaysia.
Registrar,
Malaysian Institute of Chemistry

Bayaran sebanyak RM 100 telah dibayar.
Fee RM 100 paid.

IKM Registration (Ms Punitha)

Kaedah 5(3)
Rule

INSTITUT KIMIA MALAYSIA

PERAKUAN PENGEKALAN TAHUNAN
ANNUAL RETENTION CERTIFICATE

Maka inilah diperakui bahawa

This is to certify that

Punitha a/p Perumall, ChM

(Nama penuh) *(Name in full)*

beralamat
of (Address)

No. 22A, Jalan Jelun 32/192,
Nouvelle Kemuning Industrial Park,
Bukit Rimau, Section 32,
40460 Shah Alam, Selangor

yang didaftarkan di bawah Akta Ahli Kimia 1975, dan yang Perakuan Pendaftarannya bernombor **M/2795/5536/09**

who is registered under the Chemists Act 1975, and whose Certificate of Registration bears the Number

telah dikekalkan dalam daftar anggota-anggota Institut Kimia Malaysia sehingga 31 haribulan Disember **2025**

has been retained on the register of members of the Malaysian Institute of Chemistry until 31st December

Dikeluarkan pada **3 December 2024**
Issued on

Pendaftar,
Institut Kimia Malaysia.
Registrar,
Malaysian Institute of Chemistry

Bayaran sebanyak RM 100 telah dibayar.
Fee RM 100 paid.

Chemvi Laboratory MOF Certificate

KEMENTERIAN KEWANGAN MALAYSIA
SIJIL AKUAN PENDAFTARAN SYARIKAT

NO. SIJIL	:	K60672945074008714
NO. RUJUKAN PENDAFTARAN	:	357-02064237
TEMPOH SAH LAKU	:	02/12/2024 - 07/12/2027

Bahawa dengan ini diperakui syarikat :

CHEMVI LABORATORY SDN. BHD. (514202-D)
NO 22A, JALAN SUNGAI JELUH 32/192
NOUVELLE KEMUNING INDUSTRIAL PARK
BUKIT RIMAU, SECTION 32
PETALING
40460 SHAH ALAM
SELANGOR, MALAYSIA

Telah berdaftar dengan Kementerian Kewangan Malaysia dalam bidang bekalan/perkhidmatan di bawah sektor, bidang dan sub-bidang seperti di Lampiran A. Kelulusan ini adalah tertakluk kepada syarat-syarat seperti yang dinyatakan di Lampiran B. Individu yang diberi kuasa oleh syarikat bagi urusan perolehan Kerajaan adalah seperti berikut :

DOKTOR SHANMUGAM A/L SUBERAMANIAM	700711086283	DIRECTOR
DOKTOR SUKUNAH A/P PACHAIAPPAN	720802105900	DIRECTOR
CIK AZURA AIDA BINTI AZIZ	770822145702	SALES/HR MANAGER

t.t

DATO' INDERA AB RAHIM BIN AB RAHMAN
Bahagian Perolehan Kerajaan
***b.p.* Ketua Setiausaha Perbendaharaan**
Kementerian Kewangan Malaysia

Tarikh Berdaftar Dengan Kementerian Kewangan Malaysia : 02/12/2024

(Sijil ini adalah cetakan komputer dan tidak memerlukan tandatangan)

LAMPIRAN A

NO SIJIL : K60672945074008714
NO RUJUKAN PENDAFTARAN : 357-02064237
TEMPOH SAH LAKU : 02/12/2024 - 07/12/2027

BIL	TARIKH DAFTAR BIDANG	KOD BIDANG	KETERANGAN	STATUS
1	22/11/2024	060101	KIMIA, BAHAN KIMIA DAN PERALATAN MAKMAL/ KIMIA/ KIMIA MAKMAL	Aktif
2	22/11/2024	060102	KIMIA, BAHAN KIMIA DAN PERALATAN MAKMAL/ KIMIA/ KIMIA INDUSTRI	Aktif
3	22/11/2024	060103	KIMIA, BAHAN KIMIA DAN PERALATAN MAKMAL/ KIMIA/ KIMIA PEMPROSES AIR	Aktif
4	22/11/2024	222703	PERKHIDMATAN/ PERKHIDMATAN LAIN-LAIN/ BIOTEKNOLOGI	Aktif
5	22/11/2024	222704	PERKHIDMATAN/ PERKHIDMATAN LAIN-LAIN/ PENSIJILAN DAN PENGIKTIRAFAN	Aktif
6	22/11/2024	222708	PERKHIDMATAN/ PERKHIDMATAN LAIN-LAIN/ PENILAI DAN PENTAKSIR	Aktif

Tarikh Berdaftar Dengan Kementerian Kewangan Malaysia : 02/12/2024

TNB Registration

TENAGA NASIONAL

Dengan ini disahkan bahawa

CHEMVI LABORATORY SDN. BHD.
NO 22A, JALAN SUNGAI JELUH 32/192
NOUVELLE KEMUNING INDUSTRIAL PARK
BUKIT RIMAU, SECTION 32, PETALING
40460 , SHAH ALAM , SELANGOR

Telah berdaftar dengan Tenaga Nasional Berhad sebagai
Pembekal & Kontraktor Perkhidmatan
di bawah kategori yang tercatat dalam sijil ini

****

060101, 060102, 060103, 222703, 222704, 222708***

****

BUTIR-BUTIR PENDAFTARAN

NO PENDAFTARAN TNB	:	**3033510**
NO PENDAFTARAN SYARIKAT	:	**514202D**
NO SIJIL KEMENTERIAN KEWANGAN	:	**K60672945074008714**
TEMPOH SAHLAKU SEHINGGA	:	**07.12.2027**
TARAF	:	**BUKAN BUMIPUTERA**
LAIN-LAIN PENDAFTARAN	:	

Tarikh tempoh sahlaku pendaftaran ini adalah tertakluk kepada tempoh sahlaku Pendaftaran sijil-sijil Kementerian Kewangan(KK), Lembaga Pembangunan Industri Pembinaan Malaysia (CIDB) dan sijil-sijil professional yang berkaitan.

Amir Mahmod bin Abdullah
Ketua Pegawai Perolehan
Bahagian Procurement & Supply Chain
Tenaga Nasional Berhad

Tarikh kelulusan : 04.02.2025

Ini adalah cetakan komputer dan tidak memerlukan tandatangan.

Industrial Hygiene Tech 1 – Dr Shanmugam (I)

H 0299

MALAYSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994

PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN (PENGGUNAAN DAN STANDARD PENDEDAHAN BAHAN KIMIA BERBAHAYA KEPADA KESIHATAN) 2000

Adalah disahkan bahawa

SHANMUGAM A/L SUBERAMANIAM
(K.P.: 700711-08-6283)

telah didaftarkan dengan Ketua Pengarah
Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia

sebagai

JURUTEKNIK HIGIEN I

untuk

kerja-kerja pemantauan bahan kimia
berbahaya kepada kesihatan

No. Rujukan Pendaftaran : JKKP HIE 127/171-3/1(163)

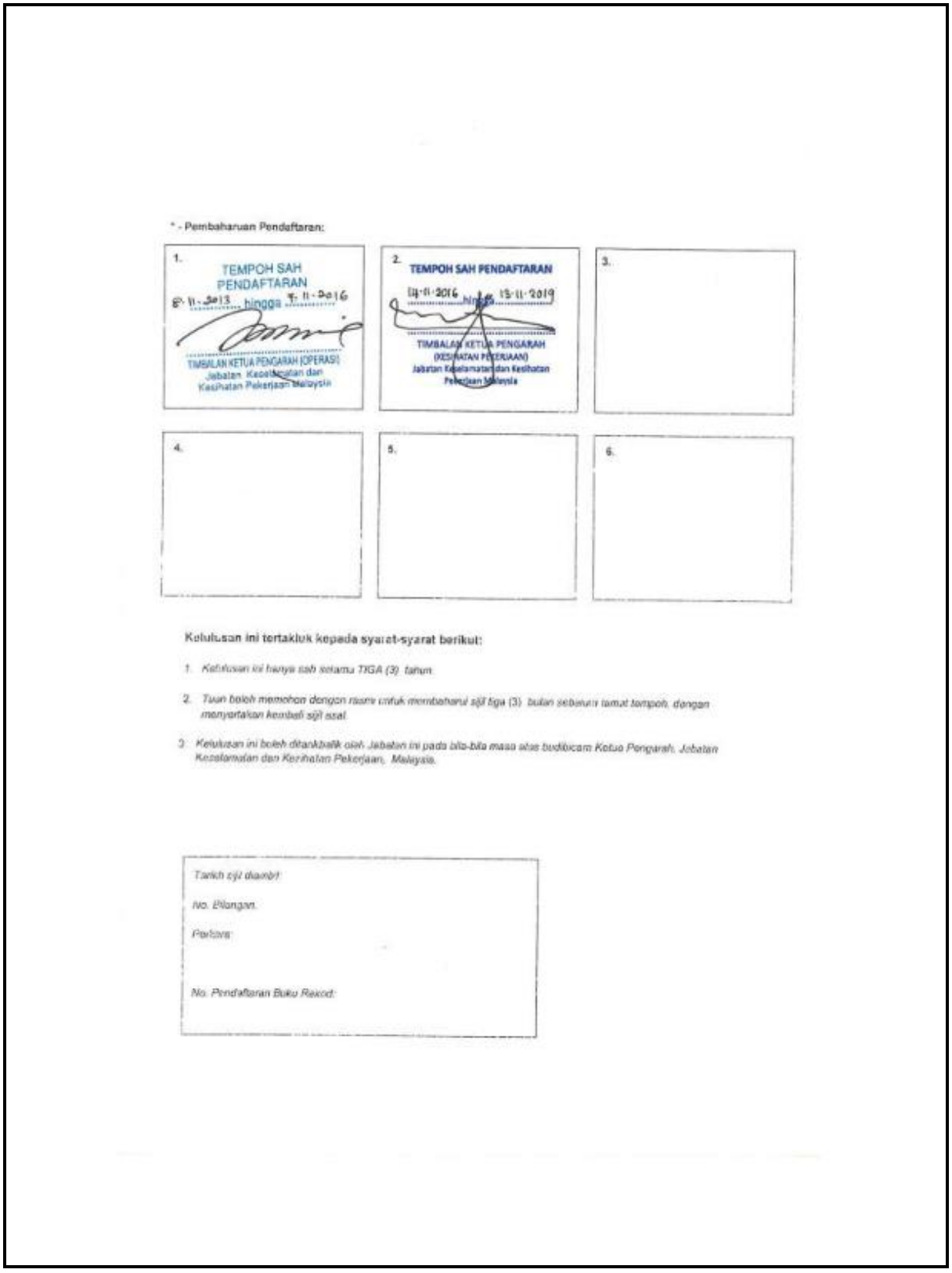
Pendaftaran sah dari 30 Nov. 2010 sehingga 29 Nov. 2013*

Tarikh: 21.12.10

(Dato' Ir. Dr. Johari Basri)
Ketua Pengarah
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

*{sila lihat muka sebelah untuk tarikh pembaharuan sijil}

Industrial Hygiene Tech 1 – Dr Shanmugam (II)



* - Pembaharuan Pendaftaran:

1. TEMPOH SAH PENDAFTARAN 8-11-2013 hingga 7-11-2016 TIMBALAN KETUA PENGARAH (OPERASI) Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia	2. TEMPOH SAH PENDAFTARAN 13-11-2016 hingga 13-11-2019 TIMBALAN KETUA PENGARAH (KESIHATAN PEKERJAAN) Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia	3.
4.	5.	6.

Kelulusan ini tertakluk kepada syarat-syarat berikut:

1. *Kelulusan ini hanya sah selama TIGA (3) tahun.*
2. *Tuan boleh memohon dengan rasmi untuk membaharui sijil tiga (3) bulan sebelum tamat tempoh, dengan menyertakan kembali sijil asal.*
3. *Kelulusan ini boleh ditarikbalik oleh Jabatan ini pada bila-bila masa atas budibicara Ketua Pengarah, Jabatan Keselamatan dan Kesihatan Pekerjaan, Malaysia.*

Tarikh sijil diambil:

No. Pilangan:

Perkara:

No. Pendaftaran Buku Rekod:

Industrial Hygiene Tech 1 – Dr Shanmugam (III)

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN
KEMENTERIAN SUMBER MANUSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994
PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN
(PENGGUNAAN DAN STANDARD PENDEDAHAN BAHAN KIMIA BERBAHAYA KEPADA KESIHATAN) 2000

SLIP PERAKUAN PENDAFTARAN

No. Pendaftaran : HQ/10/JHI/00/163 Ini adalah memperakui bahawa pemegang slip perakuan ini telah didaftarkan sebagai Juruteknik Higien 1 untuk kerja-kerja pemantauan bahan kimia berbahaya kepada kesihatan.

Nama : SHANMUGAM A/L SUBERAMANIAM

No. KP/Pasport : 700711086283 **Tarikh Lahir** : 11/07/1970

TEMPOH SAH		
Jenis	**Dari**	**Hingga**
Pendaftaran	30/11/2010	29/11/2013
Pembaharuan	28/12/2022	27/12/2025

Verifikasi Dokumen

MOHD ANUAR BIN EMBI
KETUA PENGARAH
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

Tarikh : 28/12/2022

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN MALAYSIA

Industrial Hygiene Tech 1 – Ms Logesh Perumall

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN
KEMENTERIAN SUMBER MANUSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994
PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN
(PENGGUNAAN DAN STANDARD PENDEDAHAN BAHAN KIMIA BERBAHAYA KEPADA KESIHATAN)
2000

SLIP PERAKUAN PENDAFTARAN

No. Pendaftaran : HQ/19/JHI/00/00041 Ini adalah memperakui bahawa pemegang slip perakuan ini telah didaftarkan sebagai Juruteknik Higien 1 untuk kerja-kerja pemantauan bahan kimia berbahaya kepada kesihatan.

Nama : LOGESH A/P PERUMALL

No. KP/Pasport : 850324105652 **Tarikh Lahir** : 24/03/1985

TEMPOH SAH		
Jenis	**Dari**	**Hingga**
Pendaftaran	27/05/2019	26/05/2022
Pembaharuan	4/11/2022	3/11/2025

Verifikasi Dokumen

Ir. HAJI MOHD HATTA BIN ZAKARIA
Timbalan Ketua Pengarah
(Kesihatan Pekerjaan)
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

Tarikh : 4/11/2022

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN MALAYSIA

Industrial Hygiene Tech 1 – Mr Ruhan Shanmugam

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN
KEMENTERIAN SUMBER MANUSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994
PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN
(PENGGUNAAN DAN STANDARD PENDEDAHAN BAHAN KIMIA BERBAHAYA KEPADA KESIHATAN) 2000

SLIP PERAKUAN PENDAFTARAN

No. Pendaftaran : HQ/25/JHI/00/00103 Ini adalah memperakui bahawa pemegang slip perakuan ini telah didaftarkan sebagai Juruteknik Higien 1 di bawah peruntukan Peraturan-peraturan Keselamatan dan Kesihatan Pekerjaan (Penggunaan dan Standard Pendedahan Bahan Kimia Berbahaya kepada Kesihatan) 2000.

Nama : RUHAN SHANMUGAM

No. KP/Pasport : 000806100845 **Tarikh Lahir** : 6/08/2000

TEMPOH SAH		
Jenis	**Dari**	**Hingga**
Pendaftaran	20/01/2025	19/01/2028

Verifikasi Dokumen

Ir. HAJI MOHD HATTA BIN ZAKARIA
KETUA PENGARAH
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

Tarikh : 20/01/2025

Industrial Hygiene Tech 2 – Dr Shanmugam (I)

H 0162

MALAYSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994

PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN (PENGGUNAAN DAN STANDARD PENDEDAHAN BAHAN KIMIA BERBAHAYA KEPADA KESIHATAN) 2000

Adalah disahkan bahawa

SHANMUGAM A/L SUBERAMANIAM
(K.P.: 700711-08-6283)

telah didaftarkan dengan Ketua Pengarah
Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia

sebagai

JURUTEKNIK HIGIEN II

untuk

kerja-kerja pemeriksaan dan pengujian
keatas kelengkapan kawalan kejuruteraan

No. Rujukan Pendaftaran : JKKP HIE 127/171-3/2 (60)

Pendaftaran sah dari 30 Mei 2008 sehingga 29 Mei 2011*

Tarikh: 24.6.08

(Dato' Ir. Dr. Johari Basri)
Ketua Pengarah
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

*{sila lihat muka sebelah untuk tarikh pembaharuan sijil}

Industrial Hygiene Tech 2 – Dr Shanmugam (II)

* - Pembaharuan Pendaftaran:

1. [redacted] 30/5/2011 hingga 29/5/2014 Ketua Pengarah Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia.	2. TEMPOH SAH PENDAFTARAN 9.6.2014 hingga 8.6.2017 TIMBALAN KETUA PENGARAH (OPERASI) Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia	3.
4.	5.	6.

Kelulusan ini tertakluk kepada syarat-syarat berikut:

1. *Kelulusan ini hanya sah selama TIGA (3) tahun.*
2. *Tuan boleh memohon dengan rasmi untuk membaharui sijil tiga (3) bulan sebelum tamat tempoh, dengan menyertakan kembali sijil asal.*
3. *Kelulusan ini boleh ditarikbalik oleh Jabatan ini pada bila-bila masa atas budibicara Ketua Pengarah, Jabatan Keselamatan dan Kesihatan Pekerjaan , Malaysia.*

Tarikh Pendaftaran Terdahulu : 08 Disember 2004

Tarikh sijil diambil:

No. Bilangan:

Perkara:

No. Pendaftaran Buku Rekod:

Industrial Hygiene Tech 2 – (III)

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN
KEMENTERIAN SUMBER MANUSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994
PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN
(PENGGUNAAN DAN STANDARD PENDEDAHAN BAHAN KIMIA BERBAHAYA KEPADA KESIHATAN) 2000

SLIP PERAKUAN PENDAFTARAN

No. Pendaftaran : HQ/08/JHII/00/60 Ini adalah memperakui bahawa pemegang slip perakuan ini telah didaftarkan sebagai Juruteknik Higien 2 untuk kerja-kerja pemeriksaan dan pengujian keatas kelengkapan kawalan kejuruteraan.

Nama : SHANMUGAM A/L SUBERAMANIAM

No. KP/Pasport : 700711086283 **Tarikh Lahir** : 11/07/1970

TEMPOH SAH		
Jenis	**Dari**	**Hingga**
Pendaftaran	30/05/2008	29/05/2011
Pembaharuan	5/10/2023	4/10/2026

Verifikasi Dokumen

Ir. HAJI MOHD HATTA BIN ZAKARIA
KETUA PENGARAH
Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia

Tarikh : 5/10/2023

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN MALAYSIA

CHRA Assessor – Dr Shanmugam (I)

P 0234

MALAYSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994

PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN (PENGGUNAAN DAN STANDARD PENDEDAHAN BAHAN KIMIA BERBAHAYA KEPADA KESIHATAN) 2000

Adalah disahkan bahawa

SHANMUGAM A/L SUBERAMANIAM
(K.P.: 700711-08-6283)

telah didaftarkan dengan Ketua Pengarah
Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia

sebagai

PENGAPIT

No. Rujukan Pendaftaran : JKKP HIE 127/171-2(280)

Pendaftaran sah dari 02 Sept. 2010 sehingga 01 Sept. 2013*

Tarikh: 14.10.10

(Dato' Ir. Dr. Johari Basri)
Ketua Pengarah
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

*{sila lihat muka sebelah untuk tarikh pembaharuan sijil}

CHRA Assessor – Dr Shanmugam (II)

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN
KEMENTERIAN SUMBER MANUSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994
PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN
(PENGGUNAAN DAN STANDARD PENDEDAHAN BAHAN KIMIA BERBAHAYA KEPADA KESIHATAN) 2000

SLIP PERAKUAN PENDAFTARAN

No. Pendaftaran : HQ/10/ASS/00/280 Ini adalah memperakui bahawa pemegang slip perakuan ini telah didaftarkan sebagai Pengapit di bawah peruntukan Peraturan-Peraturan Keselamatan dan Kesihatan Pekerjaan (Penggunaan dan Standard Bahan Kimia Berbahaya kepada Kesihatan) 2000.

Nama : SHANMUGAM A/L SUBERAMANIAM

No. KP/Pasport : 700711086283 **Tarikh Lahir** : 11/07/1970

TEMPOH SAH		
Jenis	**Dari**	**Hingga**
Pendaftaran	2/09/2010	1/09/2013
Pembaharuan	4/09/2022	3/09/2025

Verifikasi Dokumen

Ir. HAJI MOHD HATTA BIN ZAKARIA
Timbalan Ketua Pengarah
(Kesihatan Pekerjaan)
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

Tarikh : 4/09/2022

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN MALAYSIA

Indoor Air Quality Assessor – Dr Shanmugam (I)

IAQ 0032

MALAYSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994

TATAAMALAN INDUSTRI KUALITI UDARA DALAMAN

2010

Adalah disahkan bahawa

SHANMUGAM A/L SUBERAMANIAM
(K.P.: 700711-08-6283)

telah didaftarkan dengan Ketua Pengarah
Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia

sebagai

PENGAPIT KUALITI UDARA DALAMAN

No. Rujukan Pendaftaran : JKKP HIE 127/171-4 (24)

Pendaftaran sah dari

7 FEBRUARI 2014 sehingga 6 FEBRUARI 2017*

(Ir. Mohtar Bin Musri)
Timbalan Ketua Pengarah (Operasi)
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

**{sila lihat muka sebelah untuk tarikh pembaharuan sijil}*

Indoor Air Quality Assessor – Dr Shanmugam (II)

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN
KEMENTERIAN SUMBER MANUSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994
TATAAMALAN INDUSTRI KUALITI UDARA DALAMAN
2010

SLIP PERAKUAN PENDAFTARAN

No. Pendaftaran : HQ/14/IAQ/00/24 Ini adalah memperakui bahawa pemegang slip perakuan ini telah didaftarkan sebagai Penaksir Kualiti Udara Dalaman di bawah peruntukan Akta Keselamatan dan Kesihatan Pekerjaan 1994 (Tataamalan Industri Kualiti Udara Dalaman 2010).

Nama : SHANMUGAM A/L SUBERAMANIAM

No. KP/Pasport : 700711086283 **Tarikh Lahir** : 11/07/1970

TEMPOH SAH		
Jenis	**Dari**	**Hingga**
Pendaftaran	7/02/2014	6/02/2017
Pembaharuan	15/03/2023	14/03/2026

Verifikasi Dokumen

MOHD ANUAR BIN EMBI
KETUA PENGARAH
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

Tarikh : 15/03/2023

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN MALAYSIA

Noise Risk Assessor – Dr Shanmugam (I)

NO 180

MALAYSIA

AKTA KILANG DAN JENTERA 1967

PERATURAN-PERATURAN KILANG DAN JENTERA

(PENDEDAHAN BISING) 1989

ORANG YANG KOMPETEN

Adalah dengan ini di dapati bahawa

SHANMUGAM A/L SUBERAMANIAM
(700711-08-6283)

berkelayakan serta berkebolehan dan diluluskan sebagai ORANG YANG KOMPETEN dibawah Peraturan-Peraturan Kilang dan Jentera (Pendedahan Bising) 1989

No. Rujukan Pendaftaran : JKKP HIE 127/5/3-1(NO147)

Pendaftaran sah
dari
10 JULAI 2015 sehingga 9 JULAI 2018*

(Ir. Mohtar Bin Musri)
Ketua Pengarah
Jabatan Keselamatan dan Kesihatan Pekerjaan
~~Malaysia~~

*{sila lihat muka sebelah untuk tarikh pembaharuan sijil}

Noise Risk Assessor – Dr Shanmugam (II)

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN
KEMENTERIAN SUMBER MANUSIA

PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN
(PENDEDAHAN BISING) 2019

SLIP PERAKUAN PENDAFTARAN

No. Pendaftaran : HQ/15/PEB/00/147 Ini adalah memperakui bahawa pemegang slip perakuan ini telah didaftarkan sebagai Penaksir Risiko Bising di bawah peruntukan Seksyen 31E, Akta Keselamatan dan Kesihatan Pekerjaan 1994 dan Peraturan-peraturan Keselamatan dan Kesihatan Pekerjaan (Pendedahan Bising) 2019.

Nama : SHANMUGAM A/L SUBERAMANIAM

No. KP/Pasport : 700711086283 **Tarikh Lahir** : 11/07/1970

TEMPOH SAH		
Jenis	**Dari**	**Hingga**
Pembaharuan	16/06/2025	15/06/2028

Ir. HAJI MOHD HATTA BIN ZAKARIA
KETUA PENGARAH
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

Tarikh : 16/06/2025

Noise Risk Assessor – Logesh a/p Perumall (I)

NO 188

MALAYSIA

AKTA KILANG DAN JENTERA 1967

PERATURAN-PERATURAN KILANG DAN JENTERA

(PENDEDAHAN BISING) 1989

ORANG YANG KOMPETEN

Adalah dengan ini di dapati bahawa

LOGESH A/P PERUMALL
(850324-10-5652)

berkelayakan serta berkebolehan dan diluluskan sebagai ORANG YANG KOMPETEN dibawah Peraturan-Peraturan Kilang dan Jentera (Pendedahan Bising) 1989

No. Rujukan Pendaftaran : JKKP HIE 127/5/3-1(NO 153)

Pendaftaran sah dari

29 DISEMBER 2015 sehingga 28 DISEMBER 2018

(Ir. MOHTAR BIN MUSRI)
Ketua Pengarah
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

Noise Risk Assessor – Logesh a/p Perumall (II)

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN
KEMENTERIAN SUMBER MANUSIA

PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN
(PENDEDAHAN BISING) 2019

SLIP PERAKUAN PENDAFTARAN

No. Pendaftaran : HQ/15/PEB/00/153 Ini adalah memperakui bahawa pemegang slip perakuan ini telah didaftarkan sebagai Penaksir Risiko Bising di bawah peruntukan Peraturan-peraturan Keselamatan dan Kesihatan Pekerjaan (Pendedahan Bising) 2019.

Nama : LOGESH A/P PERUMALL

No. KP/Pasport : 850324105652 **Tarikh Lahir** : 24/03/1985

TEMPOH SAH		
Jenis	**Dari**	**Hingga**
Pendaftaran	29/12/2015	28/12/2018
Pembaharuan	4/06/2022	3/06/2025

Verifikasi Dokumen

Ir. HAJI MOHD HATTA BIN ZAKARIA
Timbalan Ketua Pengarah
(Kesihatan Pekerjaan)
Jabatan Keselamatan dan Kesihatan Pekerjaan
Malaysia

Tarikh : 4/06/2022

JABATAN KESELAMATAN DAN KESIHATAN PEKERJAAN MALAYSIA

Asbestos (BOHS) – Dr Shanmugam

British Occupational Hygiene Society

Faculty of Occupational Hygiene

Shanmugam Suberamaniam

has satisfactorily completed the examination process and has duly been awarded the

Proficiency Certificate

in

P406 - Supervision and Management of the Safe Removal and Disposal of Asbestos

THE BRITISH OCCUPATIONAL HYGIENE SOCIETY

Chief Examiner

December 2010

Certificate No. 180111/004

Working for a healthier workplace

Asbestos (SEI) – Dr Shanmugam

Sei
Singapore Environment Institute
A division of National Environment Agency

MINISTRY OF MANPOWER

CERTIFICATE

This is to certify that

SHANMUGAM SUBERAMANIAM

A1455674I

has completed a course of study on

ASBESTOS REMOVAL AND MANAGEMENT COURSE

from 6 SEP 2007 to 7 SEP 2007

and passed the examination

required for the certificate

ONG ENG KIAN
Director
Singapore Environment Institute
National Environment Agency

DR HO SWEET FAR
Director (OSH Specialist)
Occupational Safety and Health Division
Ministry of Manpower

Occupational Health Doctor – Dr Shalini a/p Shanmugam

BORANG 15

AKTA PERUBATAN 1971
(Seksyen 20)

No. 4169 / 2025

PERATURAN-PERATURAN PERUBATAN, 2017
(Peraturan 28)

PERAKUAN AMALAN TAHUNAN

MAKA ADALAH DENGAN INI DIPERAKUI bahawa

SHALINI A/P SHANMUGAM
980522-10-5480

yang tinggal di

NO.20A JALAN SUNGAI MERBAU 32/76A AMVERTON PARK
BUKIT KEMUNING GOLF AND COUNTRY RESORT
40460 SHAH ALAM
SELANGOR

iaitu seorang pengamal perubatan berdaftar penuh, adalah dengan ini diberikuasa untuk menjalankan amalan sebagai seorang pengamal perubatan (tertakluk kepada sekatan-sekatan dan syarat-syarat jika ada, yang dinyatakan dalam perakuan pendaftaran penuh) selama tempoh bermula dari **01/01/2025** berakhir pada **31/12/2025**, di

HOSPITAL TENGKU AMPUAN RAHIMAH
JALAN LANGAT
41200 KLANG
SELANGOR
iaitu tempat utama amalan, dan di :

SEMUA FASILITI DIBAWAH KEMENTERIAN KESIHATAN MALAYSIA

iaitu tempat/tempat-tempat amalan yang lain

.....
(DATUK DR. MUHAMMAD RADZI BIN ABU HASSAN)
Pendaftar Pengamal Perubatan

Tarikh : **17/04/2024**

*Bayaran sebanyak **RM 100.00** dibayar melalui resit No : **R24015476**
bertarikh : **10/04/2024**

Occupational Health Doctor – Dr Shalini a/p Shanmugam

PROFIL ORANG YANG KOMPETEN

MAKLUMAT AM

Nama	SHALINI A/P SHANMUGAM
Jantina	PEREMPUAN
Bangsa	INDIA
Warganegara	MALAYSIA
Negeri Kelahiran	SELANGOR

SENARAI KOMPETENSI

Dibawah adalah senarai kompetensi yang dimiliki

BIL.	NO. DAFTAR	TARIKH LULUS	TARIKH TAMAT	JENIS KOMPETENSI
1	HQ/24/DOC/00/01447	22/07/2024	21/07/2027	DOKTOR KESIHATAN PEKERJAAN

Approval Letter for doing Chemical Analysis (FOOD)

BAHAGIAN KAWALAN MUTU MAKANAN
(FOOD QUALITY CONTROL DIVISION)
KEMENTERIAN KESIHATAN MALAYSIA
(MINISTRY OF HEALTH MALAYSIA)
KOMPLEKS PEJABAT-PEJABAT KESIHATAN
TINGKAT 3, BLOK B, JALAN CENDERASARI
50590 KUALA LUMPUR

Telefon: 03 - 2694 6601
No. Fax 03 - 2694 6517
http://dph.gov.my/division/fqc/index.htm
Kawat : MINHEALTH, KUALA LUMPUR

Homepages: http://dph.gov.my/fqc
Email: fqc-division@dph.gov.my

Ruj. Tuan :

Ruj. Kami : (4)dlm.KKM-163/L/14

Tarikh : 13 Jun 2003

Pengurus
Chemvi Laboratory Sdn Bhd
No. 5A-B, Lorong Temenggung 15A
Taman Evergreen, 41200 Klang
Selangor

(u.p. : Dr. Shanmugam)

Tuan,

RE : REGISTRATION FOR DOING CHEMICAL ANALYSIS FOR EXPORT PURPOSE

Adalah saya dengan segala hormatnya merujuk perkara di atas.

2. Sukacita dimaklumkan, Bahagian Kawalan Mutu Makanan (BKMM), Kementerian Kesihatan Malaysia (KKM) hanya akan mengiktiraf makmal swasta yang telah memperolehi akreditasi dari Jabatan Standard Malaysia (JSM) di bawah Skim Akreditasi Makmal Malaysia (SAMM). Skop analisis yang diiktiraf bagi tujuan pengeluaran Sijil Kesihatan oleh KKM hanya tertakluk kepada analisis makanan yang telah mendapat akreditasi pihak Jabatan Standard Malaysia.

3. Justeru itu, pengiktirafan adalah diberikan kepada makmal tuan sebagai makmal yang berdaftar dengan KKM berdasarkan skop akreditasi bagi analisis makanan yang tercatat dalam Sijil Akreditasi No : SAMM 213(sah sehingga 27 Julai 2003) yang telah diperolehi oleh pihak tuan dari pihak Jabatan Standard Malaysia. Pihak tuan perlu memaklumkan ke Bahagian ini dan menyertakan bersama salinan Sijil Akreditasi untuk setiap pembaharuan sijil.

4. Namun demikian, pihak tuan diingatkan bahawa pengiktirafan oleh Kementerian Kesihatan Malaysia adalah tertakluk kepada makmal tuan dikekalkan sebagai makmal yang diakreditasi oleh Jabatan Standard Malaysia. Sebarang penarikan balik akreditasi oleh Jabatan Standard Malaysia juga akan menyebabkan pengiktirafan oleh Kementerian Kesihatan Malaysia terbatal secara automatik.

5. Sebagai makmal yang diiktiraf oleh KKM, pihak KKM adalah berhak untuk menjalankan pemeriksaan ke makmal tuan pada masa tertentu. Pihak BKMM berharap agar pihak tuan dapat menggunakan peluang yang diberi ini sebaik mungkin dan menjalankan tugas dengan penuh tanggungjawab bagi memastikan kecekapan makmal tuan sentiasa berada pada tahap yang tinggi dan keputusan analisis tidak dipertikaikan.

Sekian terima kasih.

"BERKHIDMAT UNTUK NEGARA"

Saya yang menurut perintah,

(CHIN CHEOW KEAT)
b.p. Pengarah
Bahagian Kawalan Mutu Makanan,
Jabatan Kesihatan Awam,
Kementerian Kesihatan Malaysia.

s.k. Jabatan Kesihatan Negeri _____ } skop analisis adalah
(u.p. : Pegawai Teknologi Makanan Negeri) } seperti dilampirkan

CCK/ Nak-c:/ norzitah/nak/surat/syarikat/2003/lts-doc

Food Testing – Satish Raj a/p Krishnan

No. Siri : A001096

BORANG C

[Subperaturan 4(2)]

AKTA JURUANALISIS MAKANAN 2011
PERATURAN-PERATURAN JURUANALISIS MAKANAN 2013

PERAKUAN PENDAFTARAN

No. Perakuan Pendaftaran: **MJMM001096**

DENGAN INI DIPERAKUI BAHAWA **SATISH RAJ A/L KRISHNAN** yang beralamat **NO. 19, JALAN BSC 3B/7, BANDAR SERI COALFIELDS, 47000 SUNGAI BULOH, SELANGOR** memegang kelayakan ***MASTER BIOTECHNOLOGY*** pada hari ini didaftarkan sebagai seorang juruanalisis makanan di bawah seksyen 18 Akta Juruanalisis Makanan 2011 tertakluk kepada sekatan dan syarat yang ditetapkan oleh Majlis.

Bidang analisis makanan: **MIKROBIOLOGI**

Tarikh: **13 SEPTEMBER 2021**

.....
Tan Sri Dato' Seri Dr. Noor Hisham bin Abdullah
Pengerusi
MAJLIS JURUANALISIS MAKANAN MALAYSIA

APPROVAL OF SERVICE SUPPLIERS

Certificate no: **KLR 1900035**
Page 1 of 1

Approval of Service Suppliers

Office: **Kuala Lumpur**
Date of issue: **29 January 2019**
This is to certify that: **ChemVi Laboratory Sdn. Bhd.**
No 22A, Jalan Sungai Jeluh 32/192, Nouvelle Kemuning Industrial Park,
Bukit Rimau, Sec 32, 40460 Shah Alam, Selangor Darul Ehsan. (hereinafter referred to as "Supplier")
Tel: **+603 55253505/3506** Fax: **+603 55253508/3509** Email: **info@chemvi.com.my/shan_chemvi@yahoo.com**
having been assessed hereby receives approval in accordance with the requirements of *Lloyd's Register Procedures for Approval of Service Suppliers* as Supplier from the address(es) listed above for the provision of

Visual/sampling checks and testing for hazardous materials, such as asbestos, PCBs, TBTs, CFCs and PFOS onboard ships, including advice on numbers and locations of samples, and preparation of reports on the quantities, locations and estimates of these materials

In Compliance with the Resolution MEPC.269(68)-2015 Guidelines for the Development of the Inventory of Hazardous Materials and Hong Kong International Convention For The Safe Environmentally Friendly and Sound Recycling of Ships, 2009.

This approval is conditional upon the Supplier maintaining the documented scheme as audited by any member of the Lloyd's Register Group and hereby approved; and notifying Lloyd's Register in writing of any change to that scheme including any change in personnel, equipment or procedures.

This certificate is issued to the Supplier and, subject to the Supplier complying with the necessary conditions, is valid to the date referred to below.
This certificate is valid until **28 January 2022**

Lloyd's Register of Shipping (Malaysia) Bhd
Ong Tan Wah
Kuala Lumpur Office
Lloyd's Register

Ong Tan Wah
Surveyor to Lloyd's Register of Shipping (Malaysia) Bhd
A subsidiary of Lloyd's Register Group Limited

APPROVAL OF SERVICE SUPPLIERS

Certificate No:
AOSS0000EEX
Revision No:
2

This is to certify that

Chemvi Laboratory Sdn. Bhd.

Shah Alam, Malaysia

is granted acceptance for
Preparation of inventory of hazardous materials , in accordance with Class Programme DNV-CP-0638.

This service supplier certificate will be accepted for use with all rule sets published by DNV.
See the following page(s) for details regarding application.

This Certificate is valid from **2024-08-19** to (inclusive) **2027-09-13**.

This Certificate is issued on **2024-08-19**.

for **DNV**

This document has been digitally signed and will therefore not have handwritten signatures

Mahmood, Khalid
Surveyor

This Certificate may be withdrawn if:
1. The service provided has been improperly carried out or the results improperly reported.
2. The surveyor has found any deficiencies in the accepted operating systems of the service supplier.
3. The firm has failed to inform of any major changes having effect on the quality of the service rendered.
4. The conditions listed in the certificate are changed and/or are not fulfilled.

Certificate No: **AOSS0000EEX**
Revision No: **2**

Application:

IHM laboratory and testing services as required by

- SR/CONF/45: Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009

- IMO Guidelines for the Development of the Inventory of Hazardous Materials

- Regulation (EU) No 1257/2013 of the European Parliament and of the Council of 20 November 2013 on Ship Recycling and Amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC

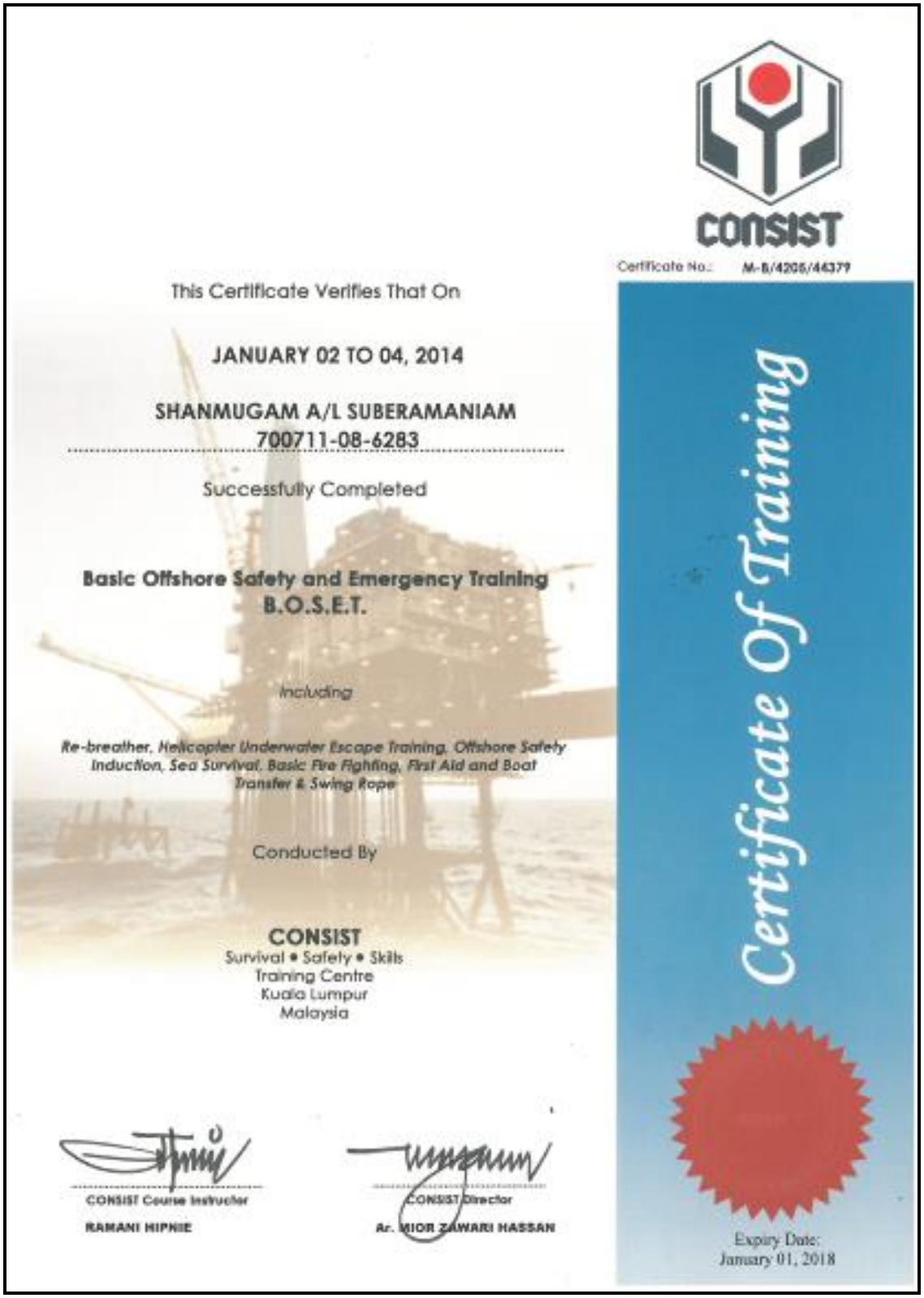
- EMSA Guidance on the Inventory of Hazardous Materials

Before expiry date of the certificate a renewal audit must be conducted for the extension of the certificate.

Remarks:

Before expiry date of the Certificate a renewal audit is required.

BASIC OFFSHORE SAFETY & EMERGENCY TRAINING (B.O.S.E.T)



CONSIST

Certificate No.: M-B/4206/44379

This Certificate Verifies That On

JANUARY 02 TO 04, 2014

SHANMUGAM A/L SUBERAMANIAM
700711-08-6283

Successfully Completed

Basic Offshore Safety and Emergency Training
B.O.S.E.T.

Including

Re-breather, Helicopter Underwater Escape Training, Offshore Safety Induction, Sea Survival, Basic Fire Fighting, First Aid and Boat Transfer & Swing Rope

Conducted By

CONSIST
Survival • Safety • Skills
Training Centre
Kuala Lumpur
Malaysia

CONSIST Course Instructor
RAMANI HIPNIE

CONSIST Director
Ar. MIOR ZAWARI HASSAN

Certificate Of Training

Expiry Date:
January 01, 2018

BTT 2287-O

NIOSH
National Institute of Occupational Safety and Health

Adalah dengan ini disahkan bahawa

DR SHANMUGAM SUBERAMANIAM
No. K.P. : 700711-08-6283

telah tamat dan lulus dengan jayanya dalam semua penilaian yang telah ditetapkan untuk program

Train the Trainer

pada

7 - 11 Julai 2014

TAN SRI DATUK SERI LEE LAM THYE
Pengerusi
NIOSH

Ir HAJI ROSLI BIN HUSSIN
Pengarah Eksekutif
NIOSH

ISO 9001:2008 Certified

Train the Trainer - Dr Shanmugam

NO SIRI
P 1906

A member of **UEM Group**

EDGENTA PROPEL BERHAD
(171667-P)

SIJIL PENDAFTARAN SYARIKAT

Tempoh Sah Laku : Dari **18 Julai 2016** sehingga **17 Julai 2021**

No. Rujukan Pendaftaran : **2378**

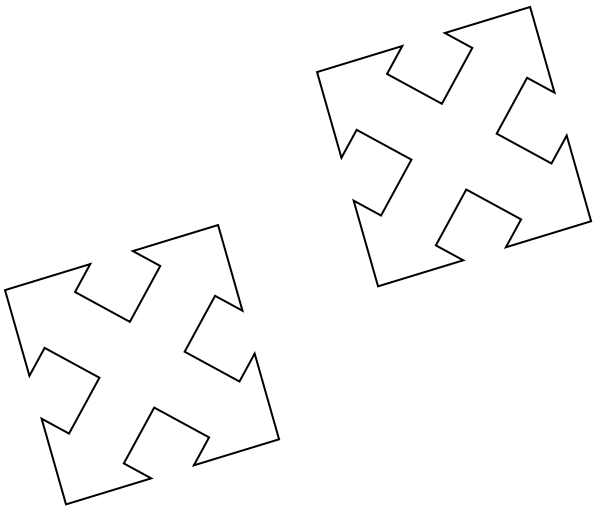
Bahawa dengan ini diperakui syarikat :

CHEMVI LABORATORY SDN BHD (514202-D)
No. 22A, Jalan Sungai Jeluh 32/192
Nouvelle Kemuning Industrial Park
Bukit Rimau, Seksyen 32
40460 Shah Alam
Selangor

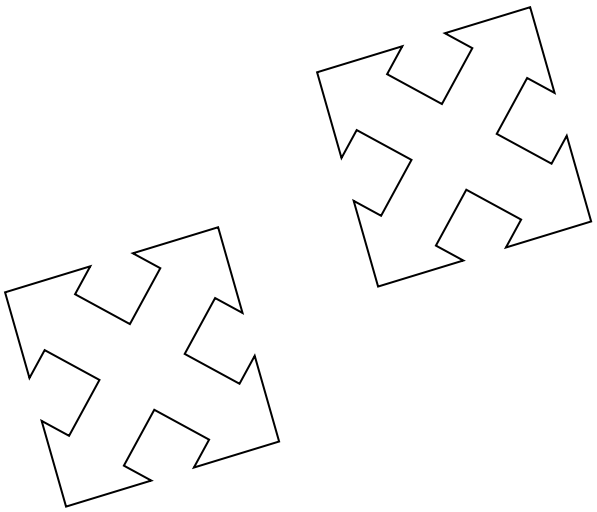
telah berdaftar dengan EDGENTA PROPEL BERHAD sebagai Kontraktor ~~/ Pembekal / Panel Workshop / Perunding (Consultant)~~

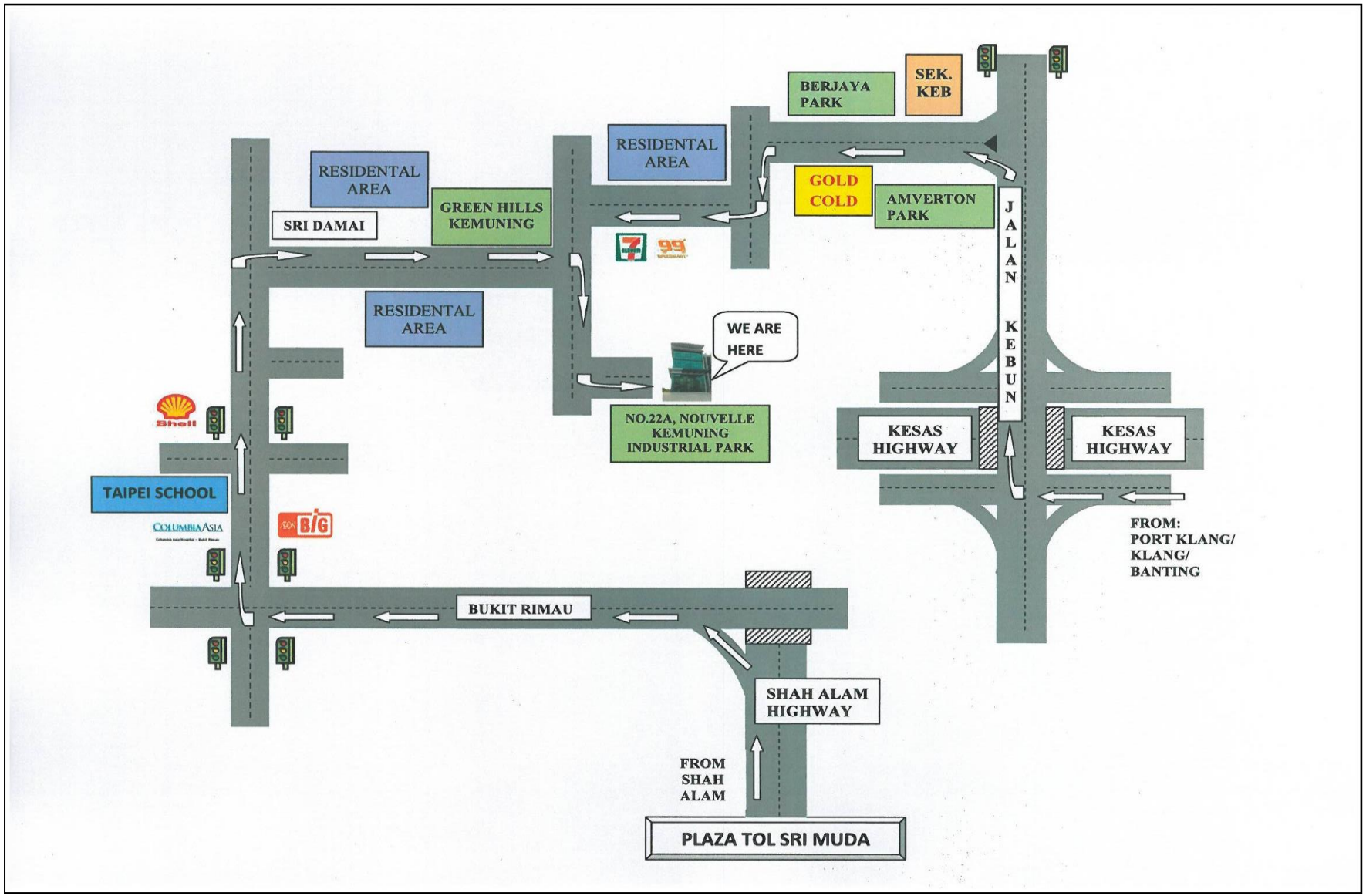
Kelulusan ini adalah tertakluk kepada syarat - syarat seperti dinyatakan di belakang sijil ini.

Ir. WAN AZMAN WAN SALLEH
PENGARAH URUSAN



LOCATION




BERJAYA PARK
SEK. KEB
RESIDENTAL AREA
RESIDENTAL AREA
GOLD COLD
AMVERTON PARK
GREEN HILLS KEMUNING
SRI DAMAI
JALAN KEBUN
RESIDENTAL AREA
WE ARE HERE
NO.22A, NOUVELLE KEMUNING INDUSTRIAL PARK
KESAS HIGHWAY
KESAS HIGHWAY
TAIPEI SCHOOL
FROM: PORT KLANG/ KLANG/ BANTING
BUKIT RIMAU
SHAH ALAM HIGHWAY
FROM SHAH ALAM
PLAZA TOL SRI MUDA