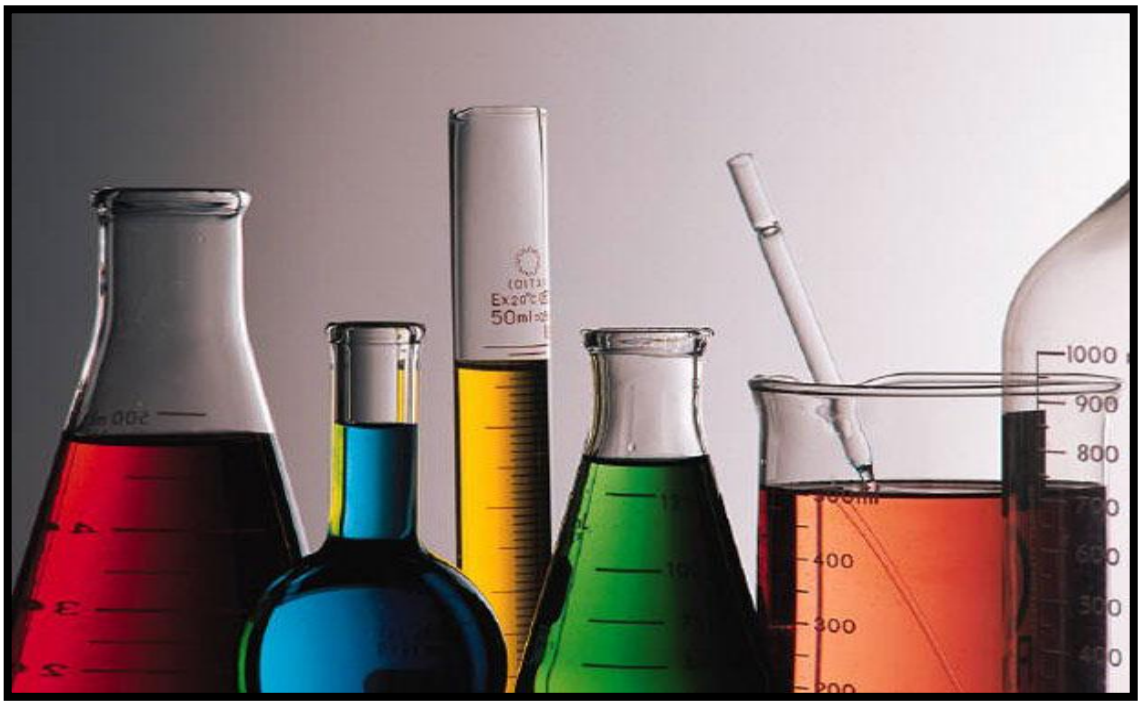
UiTM - A&A LABORATORY

Malaysia's 1st University Affiliated Environmental Laboratory

MS ISO/IEC 17025:2005
SAMM NO: 084

CORPORATE PROFILE



A & A SCIENTIFIC RESOURCES SDN BHD
627922-U

UiTM-A & A Laboratory
Bangunan Makmal Penyelidikan Alam sekitar,
Kolej Kediaman Kenanga 2,
Universiti Teknologi Mara,
40450 Shah Alam,
Selangor Darul Ehsan.

OUR COMPANY BACKGROUND

A&A Scientific Resources Sdn Bhd manages the operation of UiTM-A&A Laboratory. We received our accreditation from the Department Standard Malaysia (DSM) on 24th of November, 1995 under the Laboratory Accreditation Scheme of Malaysia SAMM, MS ISO/IEC 17025.

UiTM-A&A Laboratory is a joint entity when A&A Scientific Resources Sdn Bhd officially formed an alliance with Universiti Teknologi MARA in September 2005 via the Faculty of Chemical Engineering. We provide services to consultancy companies, various industries, government bodies, private companies and universities on Environmental & Health sampling and testing.

With the highest of ethical standards and pure dedication to excellence in all operational aspects, we aspire to exceed our customers' expectations.

The management and employees of UiTM-A&A Laboratory are guided by our Quality Policy in all decisions and actions on a daily basis. Our goal is to provide the following:

- Striving to our utmost ability to meets or exceeds our customer's needs and satisfaction.
- A highly trustworthy and ethical work environment that provides long-term employment, development, and growth for all employees.
- Providing all employees with the training and tools necessary to perform the job in the most efficient manner possible.
- Providing the necessary resources and personal support required for success implementation of our MS ISO/IEC 17025:2005 Quality System and Quality Objectives.
- Continuous improvements in whatever we do.

"Let's Make the Future Green Again".

S/N: **0685**

STANDARDS MALAYSIA

Certificate of Accreditation

No: SAMM 084

Accredited since: 24 November 1995

This is to certify that

UiTM- A & A LABORATORY
A & A SCIENTIFIC RESOURCES SDN. BHD.
UNIVERSITI TEKNOLOGI MARA
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).

(DATUK FADILAH BAHARIN)
Director General
Department of Standards Malaysia

Date of issue: 22 November 2017

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

Schedule

Issue date: 9 February 2018
Valid until: 24 November 2020

MS ISO/IEC 17025

NO: SAMM 084
(Issue 2, 9 February 2018 replacement of SAMM 084 dated 22 November 2017)

LABORATORY LOCATION: (PERMANENT LABORATORY)

UiTM- A & A LABORATORY
A & A SCIENTIFIC RESOURCES SDN. BHD.
BANGUNAN MAKMAL PENYELIDIKAN ALAM
SEKITAR KOLEJ KEDIAMAN KENANGA 2
UNIVERSITI TEKNOLOGI MARA
40450 SHAH ALAM
SELANGOR
MALAYSIA

FIELD(S) OF TESTING: **CHEMICAL & MECHANICAL**

This laboratory has demonstrated its technical competence to operate in accordance with MS ISO/IEC 17025:2005 (ISO/IEC 17025:2005).

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/ ProductsTested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Environmental Monitoring		
Industrial Effluent - Waste Water	pH	APHA 4500 - H^+B (2005)
Water	Temperature	APHA 2550 (2005)
Water - River Water, Drinking Water, Ground Water	BOD_5	APHA 5210B (2005)
	COD	APHA 5220B (2005)
	Ammoniacal Nitrogen	APHA 4500-NH_3 B (2005)
	Total Suspended Solids	APHA 2540 D (2005)
	Total Solids	APHA 2540 B (2005)
	Oil and Grease	APHA 5520 B, D (1998)
	Dissolved Oxygen	APHA 4500 - O G (2005)
	Cadmium Copper Iron Nickel Lead Manganese Zinc	APHA 3111 - B, APHA - 3030 F (2005)
	Arsenic	APHA 3114 - B (2005)

SCOPE OF TESTING: CHEMICAL

Materials/ ProductsTested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Environmental Monitoring Industrial Effluent - Waste Water Water - River Water, Drinking Water, Ground Water	Chromium (VI)	APHA 3500 - Cr B (2005)
	Aluminium	In-House Method, LTM 2.24, Based on MERCK 14825 Using Chromazurol S
	Phenol	APHA 5530 A, B, C (2005)
	Cyanide	APHA 4500-CN, C, D (2005)
	COD, Closed Reflux	APHA 5220 C, (2005)
	Silver (Ag)	APHA 3030 F 21st Edition 2005 APHA 3011-B, 21st Edition 2005
	Selenium (Se)	APHA 3500-Se C, 21st Edition 2005
	Formaldehyde	In house method based on Merck Application Note, UV-Vis Spectroscopy byChristopher Lynch, Perkin Elmer USA
	Color	APHA 2120 F 21st Edition 2005
	Nitrite, NO_{2}^{-}	APHA 4500- NO_{2}^{-} 21st Edition 2005
	Nitrate, NO_{3}^{-}	APHA 4500- NO_{2}^{-} 21st Edition 2005

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Water Water - River Water, Drinking Water, Ground Water	Chloride Fluoride Chlorine (Residual) Phosphorus Potassium Sodium Sulphide Mercury Turbidity Total Chromium Calcium & Calcium Hardness Hardness	APHA 4500 - Cl^- B (2005) APHA 4500 - F^- D (2005) APHA 4500 - Cl B (2005) APHA 4500 - P B, C (2005) APHA 3500 - K B (2005) APHA 3030 - B (2005) APHA 3030 - B (2005) APHA 3500 - Na B (2005) APHA 4500 - S^{2-} C (2005) APHA 4500 - S^{2-} F (2005) APHA 3112 - B (2005) APHA 2130 - B (2005) APHA 3030 - F (2005) APHA 3111 - B (2005) APHA 3500 - Ca B (2005)

SCOPE OF TESTING: CHEMICAL

Materials/ ProductsTested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Water Water - River Water, Drinking Water, Ground Water	Magnesium	APHA 3500 - Mg B (2005)
	Sulphate	APHA 4500 - SO_4^{2-} E (2005)
	Tin	In-House Method No. 1 (Hydride Method)
Environmental Monitoring Rubber and Palm Oil Effluents	BOD_3	DOE (M'sia, 1995) (ALT)
	COD	DOE (M'sia, 1995) (REF) DOE (M'sia, 1995) (ALT)
	Ammoniacal Nitrogen	DOE (M'sia, 1995) (REF)
	Total Kjeldahl Nitrogen	DOE (M'sia, 1995) (REF)
	Total Suspended Solids	DOE (M'sia, 1995) (ALT)
	Oil and Grease	DOE (M'sia, 1995) (REF)
Workplace Environmental Hazards Air sample (Analysis Only)	Methanol	NIOSH 2000, Issue 3, using Gas Chromatography FID
	Ethanol, 2-Propanol	NIOSH 1400, Issue 2, using Gas Chromatography FID
	n-Hexane	NIOSH 1500, Issue 3, using Gas Chromatography FID
	Acetone	NIOSH 1300, Issue 2, using Gas Chromatography FID
	Hydrocarbon Aromatic (BTEX) (Benzene, Toluene, Ethyl-Benzene, O-Xylene, M-Xylene, P-Xylene	NIOSH 1501, Issue 3, using Gas Chromatography FID

SCOPE OF TESTING: CHEMICAL

SITE: CATEGORY I

Materials/ ProductsTested	**Type of Test/ Properties Measured/ Range of Measurement**	**Standard Test Methods/ Equipment/Techniques**
Environmental Monitoring Water -Waste Water, River, Drain, Sea, Ground and Boiler Water	pH	APHA 4500 - H+B (2005)
	Temperature	APHA 2550 (2005)
	Dissolved Oxygen	APHA 4500 - OG (2005)
	Conductivity	In-House Method LTM 4.4
	Total Dissolved Solids	In-House Method LTM 4.5 Instrumentation Method
Ambient Air Monitoring	Total Suspended Particulate	LTM 3.1 Based on APHA IC 11101-01-70T
	PM10	LTM 3.2 Based on APHA IC 11101-01-70T
	Nitrogen Dioxide	LTM 3.3 Based on APHA IC 42602-03-73T
	Sulfur Dioxide	LTM 3.4 Based on APHA IC 42401-01-69T
Air Emission Monitoring	Isokinetic Stack Monitoring-Particulate Matter	LTM 2.1 - MS 1596:2003
	Stack Velocity & Volumetric Flow Rate	LTM 2.2 - USEPA Method 2
	Moisture Content in Stack Gases	LTM 2.3 - USEPA Method 4
	Gas Analysis for the Determination of Dry Molecular Weight for CO, CO_2	LTM 2.4 - USEPA Method 3
	Measurement of CO_2, CO, O_2, NO, NO_2, SO_2, H2S using Portable Gas Analyzer	LTM 2.5 - In-House Method Based on FEM- 7 Manual

SCOPE OF TESTING: MECHANICAL

SITE: CATEGORY 1

Materials/ ProductsTested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Environmental Monitoring		
Noise Measurement	Sound Pressure Level	LTM 4.1 - In-House Method Based on ISO 1996-1;2003-1 and ISO 1996-2; 2007

Note:

DOE - DOE Revised Standard Methods (1985) for Analysis of Rubber & Palm Oil Effluents, Second Edition, 1995
REF - Reference Method of DOE revised standard procedure
ALT - Alternative Method of DOE revised standard procedure
APHA - American Public Health Association, 20th Edition, 1998
APHA - American Public Health Association, 21th Edition, 2005
IMR - IMR ® Environmental Equipment
APHA IC - APHA Inter science Committee
ISO - International Organisation for Standardisation

Signatories:

1. **Azita Ayu Bt. Abdul Halim** — **IKM No. M/2448/5081/2007**
2. **Nurul Syahnidz Adila Zaini** — **IKM No. L/2136/7213/15**
3. **Mohamad Shukri Kamarudin** — **IKM No. M/4309/7192/15**

Laboratory Analytical Services

We do analysis on the chemical contents of Industrial Effluent & Influent, Soil, Sludge, Air, Sea Water, Sewage, Drinking Water, Ground Water, Boiler Water, Swimming Pool and more. These chemicals are analyzed qualitative and quantitatively against related Malaysian Regulations. The methods are based on or as per International and Malaysian Standards i.e. USEPA, APHA, British Standard, ASTM, WHO, DOE, DOSH

Environmental Impact Assessment & Environmental Management Program

Via the expertise provided by Universiti Teknologi Mara and highly selective few associates we are offering this service to the industry. Developers of mixed housing estate, road builders, recycle industry players, recreational developers and a lot more group of industry can now enjoy a very satisfying quality of service.

Environmental Monitoring for EIA & EMP

We are able to conduct most of the monitoring required for the Environmental Impact Assessment, thus making the EIA process simple and effective.

- *Air Quality Monitoring: TSP, PM10, SO2, NO2, VOC, Ozone, Humidity, Wind Rose, Metals and other gaseous substance.*
- *Noise & Vibration Monitoring: During the day, evening, night for all kind of industries.*
- *Water & Soil Analysis: The Full Standard parameters (as per specified by DOE) and beyond.*

Air Quality Monitoring

We do the monitoring for ambient air / air quality against corresponding Malaysian Ambient Air Quality Guidelines. Parameter to be tested including Total Suspended Particulate, Oxides of Sulphur, and Oxides of Nitrogen, Volatile Organic Compound, Humidity, Wind Rose, Metals and other gaseous substances.

Water Sampling and Analysis

We do the sampling for water, marine water, ground water, sewage, industrial effluent, and more. The Full Standard parameters being measured as per specified by the Department of Environment (DOE) and beyond. The analyses on the parameters (i.e. chemical contents and other impurities) from these kinds of samples are done against corresponding Environmental Quality Act 1974 regulation.

Boundary Noise Monitoring

Monitoring for boundary noise done during the day, evening, and night for all kind of industries. This exercise is to measure whether the noise level emitted is within the stipulated limit at the boundaries of that particular place/ premise. The findings are normally compared against the Malaysian Noise Guidelines.

Stack/Chimney/Air Emission Monitoring

- *Including Malaysia Standard MS 1569:2003)*
- *Isokinetic and non-isokinetic stack monitoring: we offer sampling and analysis services of all parameters listed in the Standard C of the Clean Air Regulation, 1978).*
- *Also capable of doing sampling and quantitative analysis of Sox, NOx, Carbon Monoxide (CO), Oxygen (O2), Hydrogen Sulphide, etc.*

Vibration Analysis

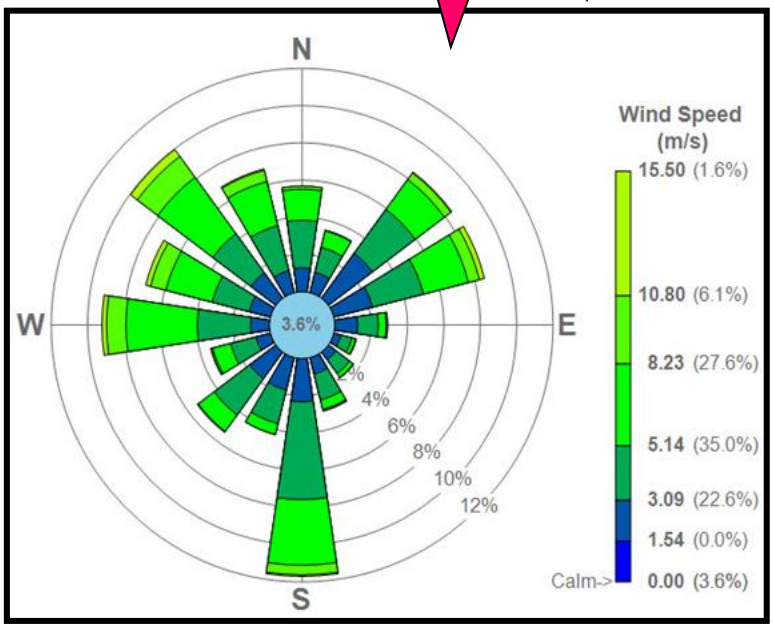
Applying up-to-date technology, our Seismograph is able to measure vibration level at any potentially unstable environmental spot, be it construction site, damn, railways, ship liners, airliners, roads, etc.. The data logging capability allows us monitor and record vibration level at any specified length of time. This monitoring is mainly to satisfy requirement of Environmental Impact Assessment. This monitoring is also required by the ISO 6954 (for noise/ vibration on ship/ vessel), also by the International Maritime Organization.

NEW SERVICES!!

Atmospheric Monitoring @WEATHER STATION

Our laboratory is providing a service on observing atmospheric conditions to supply information for weather forecasts and to study the weather and climate. The portable AWS (Automatic Weather Station) allows us to document the real-time weather condition at any sites. The measurements taken include temperature, barometric pressure, humidity, wind speed, wind direction, and precipitation amounts. Combinations with other sensors are also available upon special request.

Results can be presented in a wind rose



READING WIND ROSES:

Wind roses are a graphical way of summarizing the frequency of wind directions and speeds over a period of time. The rings labeled with percentages are the scale for the spokes. If a spoke reaches a ring labeled 12%, this means that the wind blew from that direction about 12% of the time. Each spoke is partitioned into several sections which correspond to the wind speed categories (in the legend). The length of each section represents how often the wind speed was in that category. "Wind speed" refers to the average speed. The Calm: x% label on the bottom-left indicates that the wind was calm (no direction) x% of the time. The wind rose here has 16 spokes (N, NW, ...)

Macrobenthos Analysis

Due to the ecological importance, our laboratory had started to provide the macrobenthos analysis used to evaluate the health of the marine environments. Several equations are used to inteprete the abundance and presence of macrobenthos at the sampling sites.

Macrobenthos is living organisms that live at the bottom of a water column that can be seen with naked eye, larger than 0.5 mm. They include polychaete worms, pelecypods, anthozoans, echinoderms, sponges, ascidians, crustaceans. Macrobenthos are very suitable biological indicator tools due to their longer life span, visibility to the naked eye and sedentary nature. They also play a major role in aquatic food webs, are easily identified and well distributed. Many studies have shown that changes in benthos community have good correlations with the water quality changes (Hellawell 1986;

INTERPRETATION OF DATA USES AMONG OTHERS THE FOLLOWING INDICES:

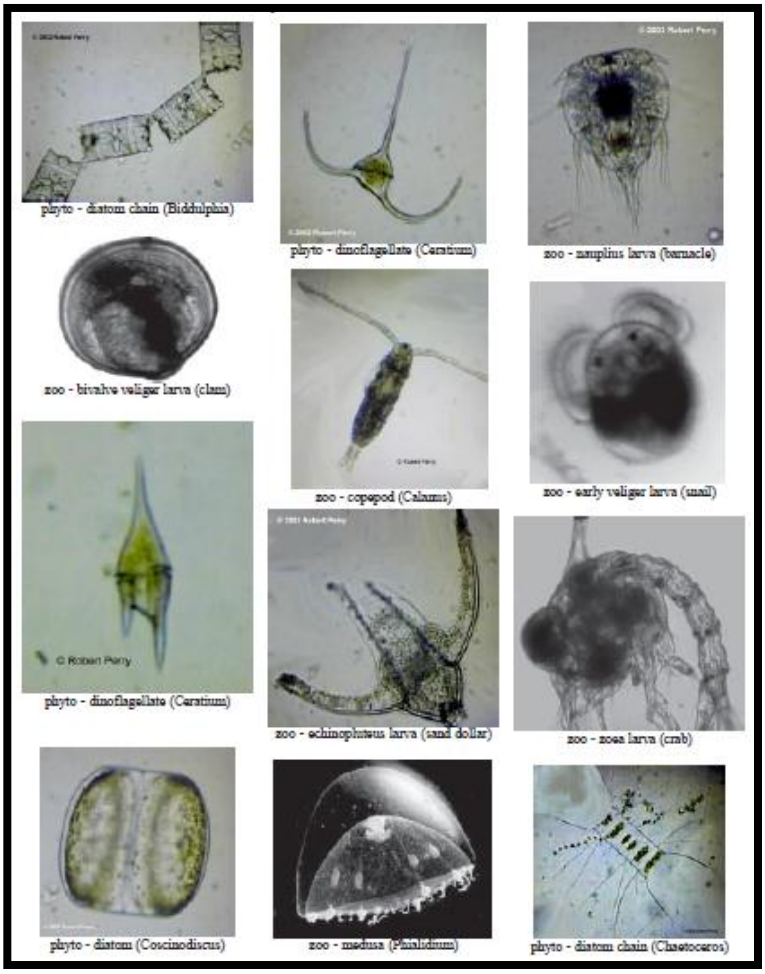
- Shannon Diversity Index
- Simpson Dominance Index
- Margaleff Richness Index
- Equitability Index
- AZTI's Marine Biotic Index (AMBI)
- Feeding Guild Analysis

NEW SERVICES!!

Zooplanktons are the tiny animals that float around on the surface of the ocean and feed on the microscopic plants that make up the phytoplankton, or on each other.

Status /Significance

Zooplankton is found to be transferring biological production from phytoplankton to large organisms in the marine food web and to the sea floor. Most grazing on phytoplankton is carried out by microscopic protozoa, tunicates, copepods, and other Crustacea. These in turn become food for other animals further along the food web. Therefore, variability in the reproduction of copepods would affect the survival of young fish that depend on them.



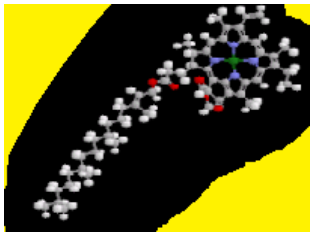
Phytoplanktons are tiny photosynthetic organisms that are the major producers of marine life. Phytoplanktons are in a group because of the ecological role, or niche, that they play. They consist of plants, animals, archaea and bacteria. Three of the major types of phytoplankton include diatoms, dinoflagellates and microflagellates.

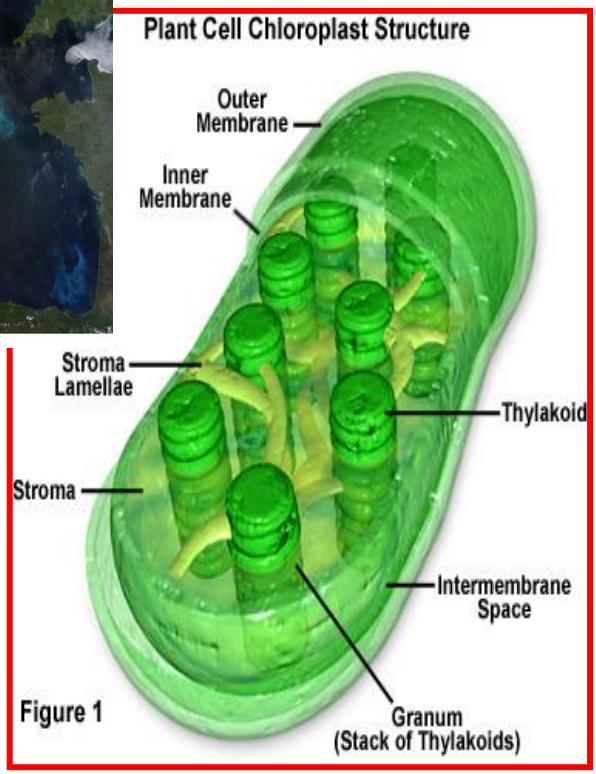
Status/Significance

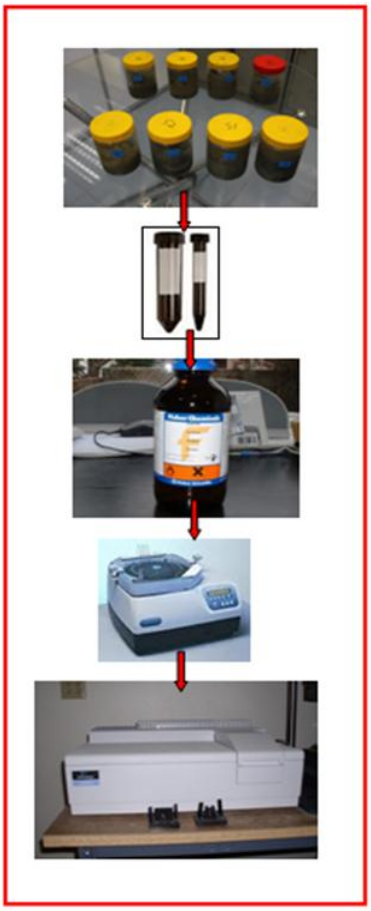
They are producers, or autotrophs, that form the foundation of most marine food webs. As photosynthetic organisms, they are able to convert solar energy into chemical energy and store it as sugars. Consumers, or heterotrophs, must consume energy that has already been converted into chemical energy. Consumers can either eat autotrophs directly, or eat other consumers.

CHLOROPYLL-A

NEW SERVICES!!







Chlorophylls are complex molecules found in all photosynthetic plants, including phytoplankton. Chlorophyll, contained within the plant's cells, allows the plant to utilize sunlight as part of their metabolism. There are several types of chlorophyll identified by slight differences in their molecular structure and constituents. These include chlorophyll a, b, c, and d. Chlorophyll a is the principal photosynthetic pigment and is common to all phytoplankton. Chlorophyll a can thus be used as a measure of phytoplankton biomass. Most phytoplankton is too small to be individually seen with the unaided eye. However, when present in high enough numbers, they may appear as a green discoloration of the water due to the presence of chlorophyll within their cells (although the actual color may vary with the species of phytoplankton present due to varying levels of chlorophyll or the presence of accessory pigments such as phycobiliproteins, xanthophylls, etc).

WRITTEN NOTIFICATION & WRITTEN DECLARATION

Environmental Quality (Clean Air) Regulation 1978 & Environmental Quality (Dioxin & Furan) 2004

has change to

Environmental Quality (Clean Air) Regulation 2014

Therefore, Written Approval (**KB**) for control system is **no longer applicable**.

Apply to who??

Any premises which matter is burnt in connection with any industrial including waste, every chimney, every industrial plant, every fuel burning equipment.

Compliance of New Regulation

- **New premise** should comply immediately after the enforce of this new regulation.
- **Existing premise** in a **5 YEARS GRACE!!** Period should take measure to comply with the new limit.

Chemical Exposure Monitoring, Local Exhaust Ventilation (LEV) system monitoring

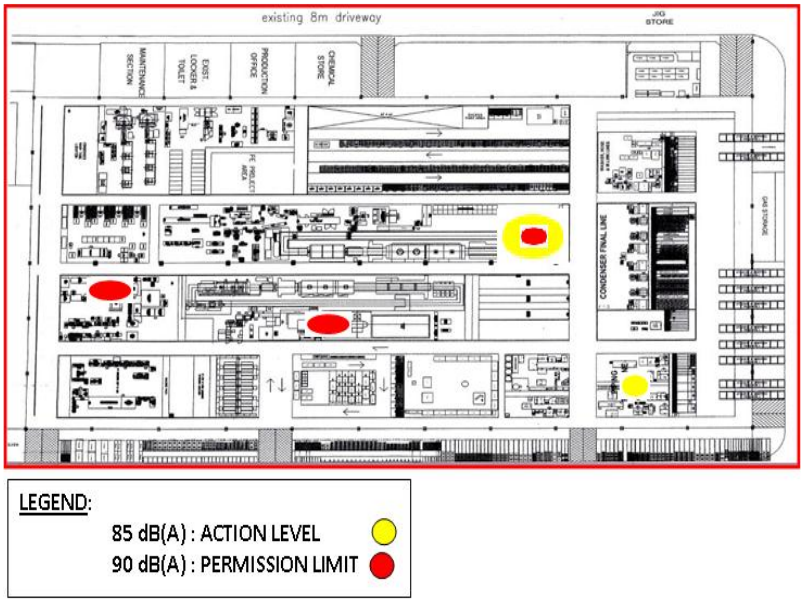
We conduct both the monitoring as well as the analysis of the chemical contents in indoor air. These are also under the governance of Occupational Safety & Health Act 1994, USECHH 2000 Regulations.

Chemical Health Risk Assessment (CHRA)

Our certified Hygiene Technician assesses the level of chemical exposure towards workers, the chemical and workstation classification. Also identifies the level of danger in factories. This is in line with the Occupational Safety & Health Act 1994, USECHH 2000 Regulation.

Noise Mapping/ Zoning & Personal Noise Exposure Monitoring, Audiometric Test

These monitoring which are meant to study the noise exposure level at workplace are mandatory under Factories and Machinery Act 1967.



MSDS/ CSDS Preparation

- *This sheet is important in providing workers or emergency personnel with procedures for handling in a safe manner including storage, disposal, protective equipment and spill-handling procedures, physical properties such as density, boiling point, flash point, melting point and also information on toxicity, health effects, first aid and reactivity.*
- *We have the competency to assist companies to comply with the Occupational Safety and Health Act 1994 (Act 514) in Classification, Packaging and Labeling of Hazardous Chemicals Regulation 1997 and Use and Standards of Exposure of Chemicals Hazardous to Health Regulation 2000.*

Training and Consultation

We also provide training and consultation for ISO14001, OSH Training Series, Green Purchasing, Green Productivity, 5S, 7 QC Tools, Laboratory Training. These trainings, and beyond, are now available with our long list of experts in our flanks.

NEW SERVICES!!

Indoor Air Quality Monitoring (IAQ)

Indoor Air Quality is a relatively recent phenomenon being related in many cases to modern building occupants. It is associated with Sick Building Syndrome, Building Related Illness, Multiple Chemical Sensitivity and many more.

Therefore, the Malaysian Department of Occupational Safety & Health has introduced the Industry Code of Practice (ICOP) as a guideline to achieve a better working environment.

The assessment protocols were based on the Malaysian Department of Occupational Safety Health (DOSH) Industrial Code of Practice (ICOP) for Indoor Air Quality.

The sampling and analysis of indoor air quality parameters were performed in accordance to international accepted methods and techniques.

This includes NIOSH Manual Analytical Method (NMAM), American Society of Heating, Refrigeration, and Air Conditioning Engineering (ASHRAE) and Manufacturer's manual for direct reading gas monitor.

COMPANY REGISTRATION & BUSINESS REGISTRATION

Registered Name : A & A SCIENTIFIC RESOURCES SDN BHD

Registered Address : UiTM - A & A Laboratory,
Bangunan Makmal Penyelidikan Alam sekitar,
Kolej Kediaman Kenanga 2,
Universiti Teknologi Mara,
40450 Shah Alam,
Selangor Darul Ehsan.
Tel: 03-5512 0663
Fax: 03-5510 3701
E-mail: info@environment.com.my

Date of Incorporation : 12th of September, 2003 (CETEC Laboratory commenced its operation in September 1993).

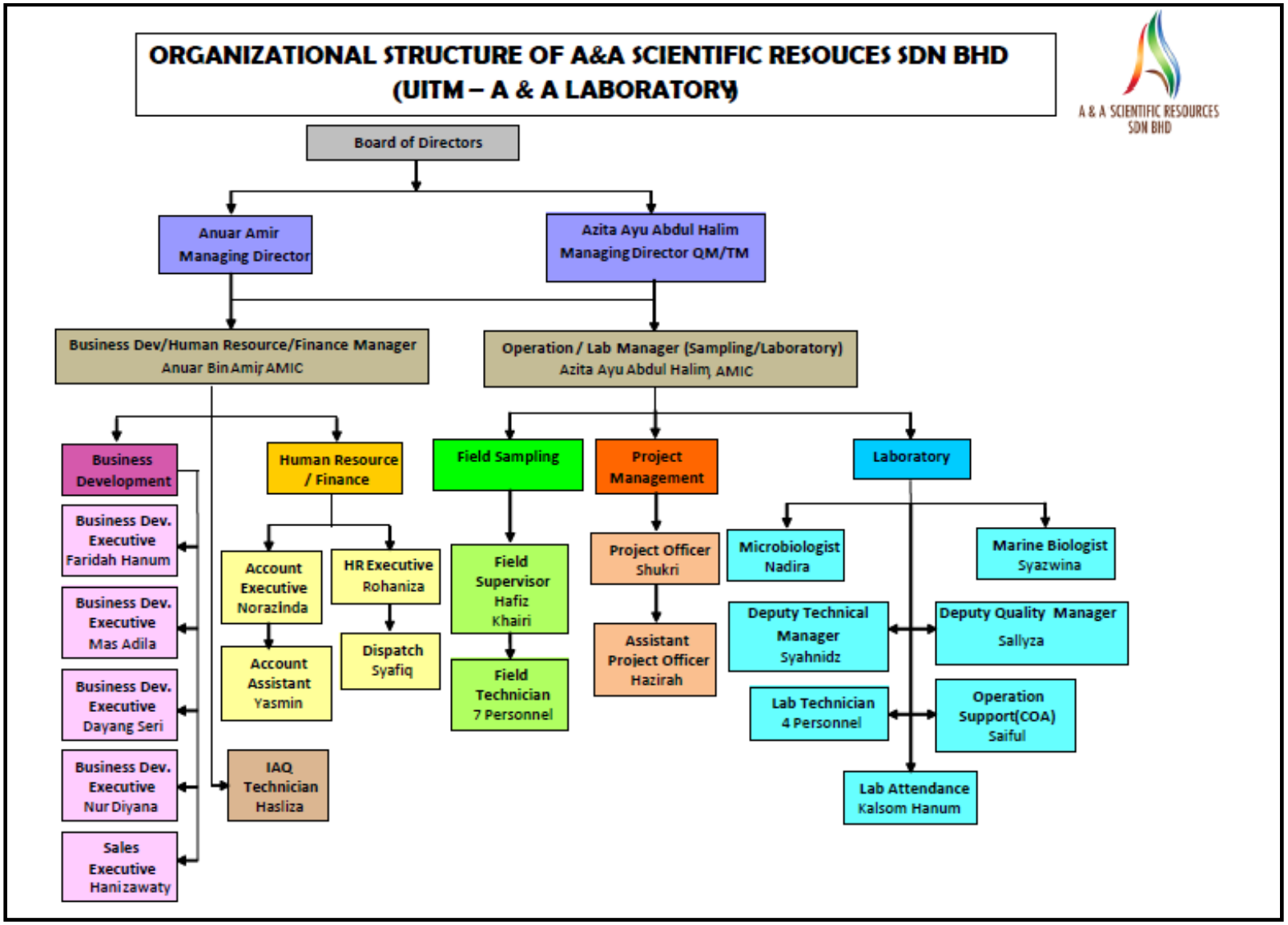
Co. Registration No. : 627922-U

Authorized Capital : RM500, 000.00

Paid-up Capital : RM300, 000.00

Banker : Maybank Berhad, Shah Alam Branch.

OUR ORGANIZATIONAL STRUCTURE



AMONG OUR VALUED CUSTOMER

SOME OF OUR CUSTOMERS AND WORK DESCRIPTION

No.	Name of Client	Name of Project / Project Site	Type of Monitoring
1.	Sekitar Ceria Sdn Bhd And Carigali-PTTEPI Operating Company (CPOC) Sdn Bhd.	Marine Water Sampling, Sediment and Marine Biological Sampling around the Muda Riser Platform for Operational Phase of Offshore JDA Gas Balancing Evacuation (EVA) Facilities for Carigali-PTTEPI Operating Company (CPOC) Sdn Bhd.	Marine Water Sampling, Sediment and Marine Biological Sampling (Macrobenthos, Zooplankton & Phytoplankton)
2.	SFE Consultant Sdn Bhd	Benthic Monitoring for the Proposed Fish Landing Complex and Breakwater at Pungai, Pengerang, Johor Darul Takzim.	Marine Water Sampling, and Marine Biological Sampling (Macrobenthos, Zooplankton & Phytoplankton)
3.	SGS (M) Sdn Bhd	Ecological Marine Monitoring for PETRONAS Chemical Methanol (Labuan) Sdn Bhd.	Marine Water Sampling, and Marine Biological Sampling (Macrobenthos, Zooplankton & Phytoplankton)
4.	NAHRIM	River Water TMDL Modeling Data Collection and Monitoring of Sungai Ikan and Sungai Bertam, Cameron Highlands for, NAHRIM	River Water Quality Monitoring
5.	SGS (M) Sdn Bhd	Integrated Environmental Monitoring Services to PETRONAS Chemical Methanol Sdn Bhd.	Ambient Air Monitoring, Boundary Noise monitoring and Stack Emission Monitoring
6.	Shinryo Sdn Bhd	EMP for EPCC of Cogeneration Plant at Gas Processing Plant Complex A & Complex B (GPP A & GPP B), Kerteh & Paka Terengganu for PETRONAS.	Ambient Air Monitoring, Boundary Noise monitoring and Stack Emission Monitoring
7.	Intergrated Envirotech Sdn Bhd	EIA for the Proposed JDA Gas Balancing Evacuation Project at Malaysia-Thailand Joint Development Area (MTJDA) and Onshore SlugCatcher (OSC) Kerteh, Terengganu for PETRONAS.	Environmental Monitoring such as water & soil sampling and analysis, Boundary Noise Monitoring and Ambient Air Monitoring.
8.	MC Brumby Beverage Sdn Bhd	Water Analysis for Bottle Drinking Water Industry	Water Analysis
9.	Dowell Schlumberger (Eastern) Inc.	Wastewater Characteristic Study for Wastewater Treatment Plant Design and Build Project	Water Sampling & Analysis
10.	Tanjung Kapal services Sdn Bhd	Drinking Water Analysis for Shipping	Water Analysis
11.	Borneo Nature Management Sdn Bhd	Indoor Noise Exposure Monitoring for "FMC Wellhead Equipment Sdn Bhd Wilayah Persekutuan Labuan	Indoor Noise Exposure Monitoring

SOME OF OUR CUSTOMERS AND WORK DESCRIPTION

No.	Name of Client	Name of Project / Project Site	Type of Monitoring
12.	Ranhill Power O&M Sdn Bhd	Laboratory Fume Cupboard Inspection at Teluk Salut Power Station	Local Exhaust Ventilation Monitoring (LEV)
13.	Sarawak Shell Berhad / Ikhlas Resmi (M) Sdn Bhd	Water Based Project for Sarawak Shell Berhad at Bintulu, Sarawak.	Water Sampling & Analysis
14.	Esso Malaysia	Port Dickson Refinery	Water, Sludge
15.	AsPac Lubricants (Malaysia) Sdn. Bhd.	Environmental Safety and Health Monitoring	Chemical Health Risk Assessment (CHRA) & Indoor Noise Exposure Monitoring
16.	Exxon Mobile	Wastewater Characteristic Study at surround Exxon Mobile	WWCS
17.	Petronas Carigali Berhad / Cekap Technical Services Sdn Bhd	Weekly Waste Water Samples Analysis for Petronas Carigali Berhad (PGB).	Water Analysis
18.	Petronas Carigali Berhad / GSR Consultant	Marine Water Quality Study Off Labuan Shore	Water Analysis
19.	Efogen Marine Sdn Bhd	Vibration Mapping / Testing in Accordance to DOSH / OSHA / ISO Standard n6954 for efogen Altamis at bintulu Port	Vibration Monitoring
20.	Worldwide Landfills Sdn. Bhd.	Environmental Monitoring Works at Kg. Sungai Kembong Dumpsite, Selangor	Surface Water, Groundwater, Ambient Air, Noise and Raw Leachate
21.	Syarikat Bekalan Air selangor Sdn. Bhd.	Kerja-Kerja Analisis Kualiti Air bagi Program Pemantauan Kualiti Air 'In House' untuk SYABAS Sdn. Bhd.	Water Analysis
22.	Indah Water Konsortium Sdn. Bhd	Sampling and Analysis of surface Water, Groundwater and Soil for Environmental Assesment (EA) Study at Rancha-Rancha, Labuan Proposed Sludge Disposal site.	Water and Soil Analysis
23.	TNB Repair and Maintenance Sdn. Bhd.	Analysis on Effluents and Air Emmission at TNB REMACO, Repair Centre, klang.	Water and Stack
24.	DENSO (Malaysia) Sdn Bhd	Environmental Safety and Health Monitoring	Stack, Boundary Noise, Chemical Exposure, Water, Ambient Air, and Local Exhaust Ventilation (LEV)

SOME OF OUR CUSTOMERS AND WORK DESCRIPTION

No.	Name of Client	Name of Project / Project Site	Type of Monitoring
25.	Projek Lebuhraya Utara-Selatan Berhad (PLUS)	The Measurement of Wastewater Quality at Selected OBRs, RSAs and LAYBYs along the North-South Expressway	Water Analysis
26.	Percetakan Nasional Malaysia Berhad (PNMB)	Chemical Exposure Monitoring for all Site in Malaysia Except Johor Bharu, Kuantan and PNMB Putrajaya	Chemical Exposure Monitoring
27.	JPS Negeri Kedah	Pemulihan Kualiti Air Sungai Raja, sungai Alor Siam dan Sungai Derga di Negeri Kedah	Water Analysis
28.	Tenaga Nasional Berhad.	Kerja-Kerja Analisa Kualiti Efluen Sisa Rawatan Kumbahan di Premis-Premis TNB bagi Memenuhi Keperluan Pendaftaran Lesen Kelas Suruhanjaya Perkhidmatan Air Negara (SPAN)	Water Analysis
29.	Ibuzawa Corporation Sdn. Bhd.	Environmental Management Plan (EMP) for 32 Additional School Blocks.	Water, Ambient Air, Boundary Noise, and Vibration Monitoring
30.	Sime Darby Medical Centre Subang Jaya	Environmental Monitoring and Analysis at SDMC Subang Jaya	Indoor Noise Exposure Monitoring
31.	Ciptamas Consult Sdn Bhd	Menaiktaraf dan Rasionalisasi Loji-Loji Sedia Ada di Kawasan Tadahan Tampin Tengah, Negeri Sembilan Darul Khusus.	Water Analysis
32.	Medilaund Sdn. Bhd.	Panel Chemist for Environmental Monitoring Activities at Teluk Panglima Garang	Water, Stack, Indoor Air Quality and Local Exhaust Ventilation (LEV) Monitoring.
33.	DiGi Telecommunications Sdn Bhd	Environmental Monitoring at Kuantan, Johor Bharu and Senawang	Boundary Noise, Ambient Air, Stack and Water Analysis
34.	Technology Park Malaysia Corporation Sdn Bhd	Environmental Monitoring Works for Year 2011 for Technology Park Malaysia Corporation Sdn Bhd	Water, Ambient Air and Boundary Noise Monitoring
35.	Ayamas Food Corporation Bhd	Water Analysis at Port Klang	Water Analysis
36.	Damansara Specialist Hospital Sdn Bhd	Environmental Monitoring program	Local Exhaust Ventilation (LEV), Chemical Exposure, Stack and Boundary Noise

SOME OF OUR CUSTOMERS AND WORK DESCRIPTION

No.	Name of Client	Name of Project / Project Site	Type of Monitoring
37.	Pakar Management Technology (M) Sdn Bhd	Environmental Baseline Measurements at Kompleks Bunga Raya KLIA	Boundary Noise and Ambient Air
		Environmental Monitoring at MTDC, Serdang Selangor	Boundary Noise, Water and Ambient Air
		Water Quality Sampling at Retention Pond at YTL Sungai Besi Site, Kuala Lumpur	Water Analysis
		Road Upgrading Works at Serdang Raya - Sungai Besi	Water Analysis
		Mixed-use Development Project in Petaling, Sungai Besi, Wilayah Persekutuan Kuala Lumpir for Tetuan YTL	Noise and Water
38.	Gamuda Water Sdn Bhd	Environmental Monitoring program at Sungai Selangor Dam	KB for Stack, Chemical Exposure, General Exhaust Ventilation (GEV) and Stack
39.	On Semiconductor (SGS Industries Malaysia Sdn Bhd)	Environmental Safety and Health Monitoring	Indoor Noise Exposure Monitoring, General Exhaust Ventilation (GEV) Monitoring and Chemical Exposure Monitoring
40.	Ramly Food Industries	Batu Caves	WWCS
41.	KPJ Selangor Specialist Hospital Sdn. Bhd.	Environmental Safety and Health Monitoring	Chemical Exposure Monitoring, Indoor Noise Exposure Monitoring, and Local Exhaust Ventilation (LEV) Monitoring
42.	Alam Maritim (M) Sdn. Bhd.	Drinking Water Analysis for Shipping	Drinking Water Analysis
43.	Gleneagles Hospital (Kuala Lumpur) Sdn Bhd	Environmental Safety and Health Monitoring	Chemical Exposure Monitoring, General Exhaust Ventilation (GEV) Monitoring and Local Exhaust Ventilation (LEV) Monitoring
44.	Evermore Latex Product	Industrial Pollution Reduction Demonstration Project – Melaka River Rehabilitation Projects	Wastewater Characterisation
45.	Konsortium Gadang Perembun	Environmental Management Plan (EMP) and Environmental Monitoring Program at Cheras	Water, Boundary Noise and Ambient air Monitoring

SOME OF OUR CUSTOMERS AND WORK DESCRIPTION

No.	Name of Client	Name of Project / Project Site	Type of Monitoring
46.	Alam Flora Sdn Bhd	Sungai Semantut, Bentong	Landfill - Leachate
		Kuantan	Landfill – Leachate
		Temerloh	Landfill – Leachate
		Taman Beringin, Selangor	Landfill – Leachate
		Kubang Badak, Batang Berjuntai	Landfill – Leachate
		Camang, Pahang	Landfill – Leachate
		Penjom, Pahang	Landfill – Leachate
		Pekan Nanasi, Pahang	Landfill – Leachate
		Kampong Feri, Pahang	Landfill – Leachate
		Rompin, Pahang	Landfill – Leachate
		Sungai Kembong, Kajang Selangor	Landfill – Leachate
		Maran, Pahang	Landfill – Leachate
		Sungai Kundang, Rawang	Landfill – Leachate
		Sedu, Kuala Langat, Selangor	Landfill – Leachate
		Cheroh, Pahang	Landfill – Leachate