



Current Position	PRINCIPAL, <i>EDGEWALKS SDN. BHD.</i>
Date of Birth	23rd October 1957
Nationality	Malaysian
Residence	Putrajaya, Malaysia
Qualifications	Bachelor of Science (1989) Troy State University - U S A Master of Arts (1992) University of Minnesota at Mankato - U S A
Other Training	Lead Auditor, ISO 45001:2015 OSHAS 18001 Lead Auditor, ISO 9001:2015 Lead Auditor, ISO 14001: 2015 Lead Auditor, ISO 27001:2013: 2015 <i>AUDITpower</i> Software, Empower InfoTech, Sydney, Australia Thermal Dispersion Modelling, Inst. of Envir Sc & Research, Auckland, New Zealand
Membership	Member, International Association of Impact Assessment Member, Disaster Emergency Response Association
Languages	English / Bahasa Malaysia / French
Countries Worked In	Malaysia; U S A; Singapore; Australia; New Zealand; Pakistan

Career Summary

***From Jan. 1997 EDGEWALKS SDN BHD,
PRINCIPAL***

TRAINING**YEAR 2022**

Client: Delta Galaxy Sdn Bhd
QMS; OHSMS Awareness Training
QMS Risk & Opportunity Training
OHSMS HIRARC Training
QMS; OHSMS; Internal Auditor Training
QMS; OHSMS Documentation Training

Client: Mastel Engineering Sdn Bhd
QMS Awareness Training
QMS Risk & Opportunity Training
QMS Internal Auditor Training
QMS Documentation Training

Client: ZR Synergy Sdn Bhd
QMS Awareness Training
QMS Risk & Opportunity Training
QMS Internal Auditor Training
QMS Documentation Training

Client: Sara Muhibah Sdn Bhd
QMS Awareness Training
QMS Risk & Opportunity Training
QMS Internal Auditor Training
QMS Documentation Training

Client: Petrosar Sdn Bhd
QMS Awareness Training
QMS Risk & Opportunity Training
QMS Internal Auditor Training
QMS Documentation Training

Client: Akobest Sdn Bhd
OHSMS; EMS Awareness Training
OHSMS HIRARC Training
EMS Aspect Impact Training
OHSMS; EMS Internal Auditor Training
OHSMS; EMS Documentation Training

YEAR 2021

Client: Gerbang Timur Jaya Construction Sdn Bhd
OHSMS; Awareness Training
OHSMS HIRARC Training
OHSMS Internal Auditor Training
OHSMS Documentation Training

Client: EPR (Kuching) Sdn Bhd
QMS; OHSMS; EMS Awareness Training
QMS; Risk & Opportunity Training
OHSMS; HIRARC Training
EMS Aspect Impact Training
QMS; OHSMS; EMS Internal Auditor Training
QMS; OHSMS; EMS Documentation Training

Client: Saraphil Industrial Corporation Sdn Bhd
QMS; OHSMS; EMS Awareness Training
QMS; Risk & Opportunity Training
OHSMS; HIRARC Training
EMS Aspect Impact Training
QMS; OHSMS; EMS Internal Auditor Training
QMS; OHSMS; EMS Documentation Training

Client: GMG Engineering Sdn Bhd
QMS; OHSMS; EMS Awareness Training
QMS; Risk & Opportunity Training
OHSMS; HIRARC Training
EMS Aspect Impact Training
QMS; OHSMS; EMS Internal Auditor Training
QMS; OHSMS; EMS Documentation Training

Client: Berjaya University College
OHSMS; Awareness Training
OHSMS HIRARC Training
OHSMS Internal Auditor Training
OHSMS Documentation Training

Client: EXPG Engineering Sdn Bhd
QMS Awareness Training
QMS Risk & Opportunity Training
QMS Internal Auditor Training
QMS Documentation Training

Client: ACHAIA Environmental Consultancy Sdn Bhd
QMS Awareness Training
QMS Risk & Opportunity Training
QMS Internal Auditor Training
QMS Documentation Training

Client: Mussul Sdn Bhd
QMS Awareness Training
QMS Risk & Opportunity Training
QMS Internal Auditor Training
QMS Documentation Training

Client: Plastflute Manufacturing Sdn Bhd
QMS; EMS Awareness Training
QMS; Risk & Opportunity Training

OHSMS HIRARC Training
QMS; EMS Aspect Impact Training
QMS; EMS Internal Auditor Training
QMS; EMS Documentation Training

Client: Sanjung Khas Sdn Bhd
QMS Awareness Training
QMS Risk & Opportunity Training
QMS Internal Auditor Training
QMS Documentation Training

Client: SEME Industrial Corporation Sdn Bhd
QMS Awareness Training
QMS Risk & Opportunity Training
QMS Internal Auditor Training
QMS Documentation Training

YEAR 2020

Client: F&N DAIRIES
OHSMS Awareness Training
OHSMS HIRARC Training
OHSMS; Internal Auditor Training
OHSMS; Documentation Training

Client: MONASH UNIVERSITY MALAYSIA
AS 4801; OHSMS; EMS Awareness Training
AS 4801; OHSMS HIRARC Training
EMS Aspect Impact Training
AS 4801; OHSMS; EMS Internal Auditor Training
AS 4801; OHSMS; EMS Documentation Training

Client: ASIAN COMPOSITE MANUFACTURING SDN BHD
OHSMS Awareness Training
OHSMS HIRARC Training
OHSMS; Internal Auditor Training
OHSMS; Documentation Training

Client: OKAYASU RUBBER (M) SDN BHD
EMS Awareness Training
EMS Aspect Impact Training
EMS Internal Auditor Training
EMS Documentation Training

Client: KEE YANG CONSTURCTION SDN BHD
QMS Awareness Training
QMS Risk & Opportunity Training
QMS Internal Auditor Training
QMS Documentation Training

YEAR 2019

Client: UNIMETAL SDN BHD
QMS Internal Auditor Training

YEAR 2018

Client: INFINITE PROJECT MANAGEMENT SDN BHD
QMS Internal Auditor Training

Client: FLEXIRITE SDN BHD
Certification Audit Review
ISO 9001 Certification Audit

Client: JURUKUR TERRA CONSULT SDN BHD
Certification Audit Review
ISO 9001 Certification Audit

Client: SYARIKAT MUHIBBAH PERNIAGAAN SDN BHD
Certification Audit Review
OSHAS 18001 Certification Audit

Client: MOTIBINA SDN BHD
Certification Audit Review
OSHAS 18001 Certification Audit

Client: PERMAI IHSAN SDN BHD
Certification Audit Review
OSHAS 18001 Certification Audit

Client: AQRS SDN BHD
Auditor
ISO 9001 Certification Audit

Client: TINTA ANGGUN SDN BHD
Certification Audit Review
ISO 9001 Certification Audit

Client: KEE YANG CONSTURCTION SDN BHD
Auditor
OSHAS 18001 Certification Audit

Client: INFIINTE PROJECT MANAGEMENT SDN BHD
Certification Audit Review
OSHAS 18001 Certification Audit

Client: DIAN MAKMUR SDN BHD
Certification Audit Review
ISO 9001 Certification Audit

Client: PEMBINAAN SIMA SDN BHD
Certification Audit Review
ISO 9001 Certification Audit

Client: TBT WIDE HOLDINGS SDN BHD
Certification Audit Review
ISO 9001 Certification Audit

YEAR 2017

Client: ZATAWA CORPORATION SDN BHD
Certification Audit Review
ISO 9001 Certification Audit

Client: PEMBINAAN JAYA CERGAS SDN BHD
Auditor
OSHAS 18001 Certification Audit

Client: PERMAI IHSAN SDN BHD
Certification Audit Review
ISO 9001 Certification Audit

Client: Tenaga Nasional Berhad (ILSAS Training Centre)

Environmental Impact Assessment (EIA) Training for Tenaga Nasional Berhad Engineers. The EIA Training focused on Environmental Science, Preliminary Impact Assessment, Detailed Impact Assessment, Environmental Monitoring and Auditing, Environment Management Plans, Terms of Approval Conditions, Erosion Sediment Control Plans and Roles and Responsibilities of an Environment Officer

Client: Monash University Malaysia

OHSAS 18001: Hazard Identification, Risk Assessment and Determining Controls Training. The HIRARC training focused on design, tabulation and establishment of HIRARC risk register

Client: Monash University Malaysia

ISO 14001: Aspect Impact Training; The Aspect Impact training focused on design, tabulation and establishment of Aspect Impact risk register

Client: Monash University Malaysia

ISO 14001: Internal Audit Training; The Internal Audit training focused on Auditor requirements, ISO 14001 specifications, Audit Planning; Execution, Report writing and Non- Conformance Closure.

Client: F & N Berhad

Environmental Management Systems (EMS) F & N, Petaling Jaya, Selangor. The EMS focussed on consultancy services including awareness and auditing training courses.

Client: ACM (M) Sdn Bhd

Occupational Safety and Health Assessment Series (OSHAS 18001) of an Aircraft Composite Manufacturer in Kedah. The

EMS focussed on consultancy services including awareness and auditing training courses.

ENVIRONMENTAL IMPACT ASSESSMENT

Client: Metro Garden Resources Sdn Bhd

Specialist Consultancy

Project Manager

Preliminary Environmental Impact Assessment for 24 Units on Lot 35 Section 2 (PN443) Mukim Brinchang, Cameron Highlands The EIA focused on soil, geotechnical, water, noise, and air quality impacts of the project, and recommended a comprehensive list of mitigation measures.

Client: TNB Research

Specialist Sub Consultancy

Project Manager

Environmental Impact Assessment of the 238 MW Gelugor Power Station (GPS) Combined Cycle Power Station at Penang for Tenaga Nasional Berhad. The EIA focused on vibration, noise, and air quality impacts of the air cooled condensers, and recommended a comprehensive list of mitigation measures.

Client: Genting Sanyen Berhad

Specialist Sub Consultancy

Project Manager

Environmental Impact Assessment of the proposed Genting Sanyen Waste-to-Energy Incinerator Project. The EIA focused on noise, and recommended mitigation measures.

Client: TNB Research

Specialist Sub Consultancy

Project Manager

Environmental Impact Assessment of the Brookland Estate Power Station The EIA focused on air quality and recommended a comprehensive list of mitigation measures.

Client: TNB Research

Specialist Sub Consultancy

Project Manager

Environmental Impact Assessment of the 1310 MW Combined Cycle Power Station at Dengkil for MRCB, Selangor. The EIA focused on vibration, noise, and air quality and recommended a comprehensive list of mitigation measures.

Client: Tenaga Nasional Research and Development

Specialist Sub Consultancy

Project Manager

In-principle noise modelling of 2 x 750 MW Combined Cycle gas turbines for Tuanku Jaafar Power Station in Port Dickson. The in-principle noise modelling focused on threshold noise levels, and subsequently ranked noise sources. Recommendation was submitted to project the proponent to mitigate potential significant adverse impacts to the surrounding vicinity.

Client: Genting Sanyen Berhad

Specialist Sub Consultancy**Project Manager**

Environmental Impact Assessment of the proposed Brown Paper Mill (PM1) Expansion Project for Genting Sanyen. The EIA focused on noise, and recommended mitigation measures.

Client: TNB Research

Specialist Sub Consultancy**Project Manager**

Environmental Impact Assessment of a 2 X 350 MW combined cycle MW Combined Cycle gas turbines for a consortium is made up of Malaysian Resources Corporation Berhad (MRCB), Tenaga Nasional Berhad (TNB) and the Selangor State Government through its investment arm Kumpulan Darul Ehsan Berhad (KDEB). The EIA focused on air quality, and recommended a comprehensive list of mitigation measures.

Client: TNB Research

Specialist Sub Consultancy**Project Manager**

Detailed Environmental Impact Assessment of the Ulu Terengganu Hydroelectric Dam Project in Terengganu. The EIA focused on vibration, noise, air quality, water quality, ecology, riparian investigation, socio-economic, environmental health, dam break analysis, hydraulic simulation in addition to dam risk assessment, and recommended a comprehensive list of mitigation measures.

Client: Tenaga Nasional Research and Development

Specialist Sub Consultancy**Project Manager**

Environmental Impact Assessment of 2 x 750 MW Combined Cycle gas turbines for Tuanku Jaafar Power Station Rehabilitation Project in Port Dickson. The EIA focused on vibration, noise, air quality, and water quality, hydraulic water dispersion in addition to risk assessment parameters of the fuel storage facility, and recommended a comprehensive list of mitigation measures.

Client: Tenaga Nasional Research and Development

Specialist Sub Consultancy**Project Manager**

Environmental Impact Assessment (EIA) for the Repowering of Prai Power Station - 1X750MW Combine Cycle, at Seberang Prai, Penang. The EIA focused on vibration, noise, air quality,

and water quality, hydraulic water dispersion in addition risk assessment parameters of the fuel storage facility and recommended a comprehensive list of mitigation measures.

Client: Tenaga Nasional Research and Development

Specialist Sub Consultancy

Project Manager

Environmental Impact Assessment of 2 x 750 MW Combined Cycle gas turbines for Tuanku Jaafar Power Station Rehabilitation Project in Port Dickson, **Phase 2 A**. The EIA focused on vibration, noise, air quality and recommended a comprehensive list of mitigation measures.

Client: Tenaga Nasional Research and Development

Specialist Sub Consultancy

Project Manager

Preliminary Environmental Impact Assessment of the Ulu Terengganu Hydroelectric Dam Project in Terengganu. The EIA focused on, noise vibration, air quality water quality, ecology, socio-economic and environmental health studies and recommended a comprehensive list of mitigation measures.

Client: Tenaga Nasional Research and Development

Specialist Sub Consultancy

Project Manager

Environmental Impact Assessment of Sultan Iskandar Power Station in Johor. The EIA focused on air, and water quality, and recommended a comprehensive list of mitigation measures.

VISUAL PERCEPTION STUDY

Client: Tenaga Nasional Research and Development

Project Coordinator

Visual Perception of the Serdang Power Station, Serdang, Selangor. The EIA focused on potential adverse environmental impact to Putrajaya, and blended a socio-economic component to establish weighted components of the Power Station Infrastructure. and recommended mitigation measures

ENVIRONMENTAL MANAGEMENT PLANS

Client: Metro Garden Resources Sdn Bhd Sdn Bhd

Project Manager

Preparation of an environmental management plan (EMP) for Metro Garden Resources Sdn Bhd during construction and operation of their site facility in Brinchang, Cameron Highlands. The EMP also tabulated an environmental monitoring and auditing programme for Metro Garden Resources Sdn Bhd.

Client: Cypark Sdn Bhd

Project Manager

Preparation of an environmental management plan (EMP) for Cypark Sdn Bhd during construction and operation of their site facility in Cyberjaya. The EMP also tabulated an environmental monitoring and auditing programme for Cypark Sdn Bhd.

Client: TNB Research

Project Manager

Preparation of an environmental management plan (EMP) for TNB Research during construction and operation of the Kenyir II hydroelectric dam in Kenyir, Terengganu. The EMP also tabulated an environmental monitoring and auditing programme for TNB Research.

Client: TNB Research

Project Manager

Preparation of an environmental management plan (EMP) framework for TNB Research during construction and operation of Dengkil Power Station in Dengkil, Selangor. The EMP also tabulated an environmental monitoring and auditing programme for the Power Station.

Client: MRCB

Project Manager

Preparation of an environmental management plan (EMP) framework for MRCB during construction and operation a Power Station in Brookland Estate, Selangor. The EMP also tabulated MRCB.

Client: Charterfield Corporation

Project Director/Manager

Preparation of an environmental management plan (EMP) for Charterfield Development Corporation during construction and operation of their site facility in Putrajaya. The EMP also tabulated an environmental monitoring and auditing programme for Charterfield.

Client: TNB Research

Project Manager

Preparation of an environmental management plan (EMP) framework for Tuanku Jaafar Power Station during construction and operation of the Power Station in Port Dickson, Negeri Sembilan. The EMP also tabulated an environmental monitoring and auditing programme for the Power Station.

Client: TNB Research

Project Manager

Preparation of an environmental management plan (EMP) framework for TNB Research during construction and operation of Prai Power Station in Pulau Pinang. The EMP also tabulated an environmental monitoring and auditing programme for the Power Station.

ENVIRONMENTAL MONITORING AND AUDITING

Client: Multiplex, Australia

Forensic Audit

Conducting a forensic audit of Qantas Heavy Maintenance Hangar in Brisbane, Australia. The forensic audit addressed design brief, project management, legal and systems compliance and non-compliance. The forensic audit focused on detailed aspects regarding design to building of the Hangar before commissioning and handover to Qantas Airlines.

Client: Mayang Jelatek Sdn Bhd

Project Director/ Manager

Conducting of a Environmental Monitoring programme for Mayang Jelatek Sdn Sdn during construction and operation of their site facility in Tanah Rata, Cameron Highlands. The EMA addresses compliance / non-compliance to the Terms of Approval Conditions of the Environment Impact Assessment for the approved project.

Client: Metro Garden Resources Sdn Bhd

Project Director/ Manager

Conducting of a monthly Environmental Monitoring and Audit (EMA) programme for Metro Garden Resources Sdn Bhd during construction and operation of their site facility in Brinchang, Cameron Highlands.. The EMA addresses compliance / non-compliance to the Terms of Approval Conditions of the Environment Impact Assessment for the approved project.

Client: Charterfield Development Corporation Sdn Bhd

Project Director/ Manager

Conducting of a monthly Environmental Monitoring and Audit (EMA) programme for Charterfield Development Corporation during construction and operation of their site facility in Putrajaya. The EMA addresses compliance and non-compliance of water, air and noise quality parameters in the workers' camp housing 4000 construction workers. The EMA, in addition, addresses non-compliance to the Terms of Approval Conditions of the Environment Impact Assessment *and* Putrajaya development guidelines for contractors on site.

Client: Cyberpark

Project Manager

Preparation of an Environmental Monitoring and Audit (EMA) programme for Cypark Sdn Bhd The EMA addresses both compliance and non-compliance of water, air and noise quality. The EMA, in addition, addresses non-compliance to the Terms of Approval Conditions of the Environment Impact Assessment *and* Cyberjaya development guidelines for contractors on site.

EMERGENCY RESPONSE PLANS

Client: Bintulu Port Holdings Berhad

Specialist Consultancy

Project Manager

Dissemination of existing Emergency Management Systems of Bintulu Port Holdings to Senior staff and the execution of table top exercise of potential emergencies at their Emergency Response Centre.

Client: Berjaya Corporation

Specialist Consultancy

Project Manager

Production of an Crisis Management Response (CMR) for Berjaya Corporation Berhad. The CMR focused Organisation And Planning for Emergencies, General Threat Assessment, Emergency Response Program, Emergency Response Genertal Instruction , production of Emergency Action Sheets and Emergency Information Sheets.

Client: Tenaga Nasional Research and Development

Specialist Sub Consultancy

Project Manager

Production of an Emergency Response Plan for the proposed Dredging and Relocation of Sediments at Ringlet Reservoir, Cameron Highlands. The ERP focused on minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with the dredging and relocation of sediments, and recommended mitigation measures.

Client: TNB Research

Specialist Sub Consultancy

Project Manager

Production of an Emergency Response Plan framework for Dengkil Power Station, Selangor. The Emergency Response Plan emphasised minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with combine cycle operation.

Client: TNB Research

Specialist Sub Consultancy

Project Manager

Production of a Emergency Response Plan framework for Sultan Iskandar Power Station, Johor. The Emergency Response Plan emphasised minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with combine cycle operation.

Client: UNITEN

Project Director/ Manager

Project Manager

Production of an Emergency Response Plan Emergency Response Plan for Daharki Power Station in the Sind Province of Pakistan. The Emergency Response Plan emphasises minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with distillate, lube oil and chemicals used during the construction and later during operation stages.

Client: Putrajaya Holdings Sdn Bhd

Project Director/ Manager

Production of an Emergency Response Plan Emergency Response Plan for Putrajaya Holdings Sdn Bhd. The Emergency Response Plan emphasises minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with distillate, lube oil and chemicals used during the construction and later during operation stages.

Client: Melaka Power Station

Specialist Sub Consultancy**Project Manager**

Production of an Emergency Response Plan for Melaka Power Station, Melaka. The Emergency Response Plan emphasised minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with the 5000m³ distillate storage tanks, combine cycle operation, transformer and gas explosions.

RISK ASSESSMENT

Client: Janamanjung Coal Fired Power Station

Specialist Sub Consultancy**Project Manager**

Risk Assessment study of the operation of the *Janamanjung Coal Fired Power Station*, focusing on distillate tanks and the coal yard storage area. The study presented to Tenaga Nasional any risk posed by the station during construction and operation of the Power Station.

Client: Serdang Power Station

Specialist Sub Consultancy**Project Manager**

Risk Assessment study of the operation of the Serdang Power Station, focusing on two distillate tanks to the Putrajaya wetlands. The study categorically presented to Tenaga Nasional any risk posed by the station to the Wetlands / Lake area, infrastructure and human health.

Client: Prai Power Station

Specialist Sub Consultancy**Project Manager**

Risk Assessment study of the operation of the Prai Power Station, focusing on distillate tanks and gas pipelines. The study categorically presented to Tenaga Nasional any risk posed by the station, surrounding environment, infrastructure and human health.

Client: TNB Research

Specialist Sub Consultancy

Project Manager

Risk Assessment study of the operation of the Dengkil Power Station, focusing on distillate tanks and gas pipelines. The study categorically presented to Tenaga Nasional any risk posed by the station to the surrounding environment, infrastructure and human health.

Client: MRCB

Specialist Sub Consultancy

Project Manager

Risk Assessment study of the operation of a power station in Brookland Estate, focusing on bulk storage distillate tanks and gas pipelines. The study categorically presented to any risk posed by the station, surrounding environment, infrastructure and human health.

HYDRAULIC STUDY

Client: TNB Research

Specialist Sub Consultancy

Project Manager

Preliminary Two Dimensional (2D) modelling study for TNB Research of the tidal current in the channel that separates the island (on which sits the Manjung Power station) from the mainland. The purpose was to investigate the effect the presence of the causeway on flushing of the channel and siltation in the approaches to local fishing villages and shellfish farms

Client: TNB Research

Specialist Sub Consultancy

Project Manager

Three Dimensional (3D) modelling study for TNB Research of the tidal current in the channel that separates the island (on which sits the Manjung Power station) from the mainland. The purpose was to investigate the effect the presence of the causeway on flushing of the channel and siltation in the approaches to local fishing villages and shellfish farms, and to evaluate the change that would occur if the causeway were removed and replaced with a bridge. The study recommended mitigation measures.

From 1996 to 1997

***Aspinwall Clouston (M) Sdn Bhd, K. Lumpur,
Malaysia
Environment Business Manager***

ENVIRONMENTAL MANAGEMENT SYSTEMS

Client: Minolta Precision (M) Sdn Bhd

Project Director

Environmental Management Systems (EMS) of Minolta at Sungei Way Free Trade Zone, Petaling Jaya, Selangor. The EMS focussed on consultancy services including awareness and auditing training courses.

Client: Matsushita Electric Motor (M) Sdn Bhd

Project Director

Environmental Management Systems (EMS) of a computer disk manufacturer at Sungei Petani, Kedah. The EMS focussed on consultancy services including awareness and auditing training courses.

Client: Petronas Carigali (M) Sdn Bhd

Project Director

Environmental Management Systems (EMS) of an Oil and Gas company in Kerteh, Trengganu. The EMS focussed on consultancy services including awareness and auditing training courses.

Client: MTBE (M) Sdn Bhd

Project Director

Environmental Management Systems (EMS) of a Petrochemical company in Kuantan, Pahang. The EMS focussed on consultancy services including awareness and auditing training courses.

Client Gelugor Power Station

Project Co-Ordinator

Emergency Response Plan for Gelugor Power Station, Penang. The Emergency Response Plan emphasised minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with the 2 x 2,000 t and 1x400t distillate storage tanks.

From 1993 to. 1996

***T & T Konsult Sdn Bhd, Petaling Jaya,
Malaysia
Senior Environmental Scientist***

ENVIRONMENT IMPACT ASSESSMENT

Client: W R Grace

Project Co-Ordinator

Environmental impact Assessment (EIA) of Shrink Film packaging and Micronised Amorphous Silica plants at the Gebeng Industrial Estate, Kuantan, Pahang. The EIA focused on noise, water and air quality and recommended measures to mitigate significant adverse impacts.

Client: Amcor Corporation

Project Co-Ordinator

Environmental Impact Assessment of the Linerboard facility at Ladang Haron, Selangor. The EIA focused on noise, solid waste, air and water quality parameters and recommended mitigation, abatement and monitoring measures to minimise potential impact to the environment.

Client: Tenaga Nasional Berhad

Project Co-Ordinator

Environmental Impact Assessment of 2 x 110 MW Open Cycle gas turbines for the Glugor Power Station, Penang. The EIA focused on noise and air quality parameters in addition to risk assessment of the fuel storage facility and recommended a comprehensive list of mitigation measures.

Client: Tenaga Nasional Berhad

Project Co-Ordinator

Environmental Impact Assessment of 3 x 110 - 135 MW Open Cycle gas turbines to be installed at the Yong Peng's sub-station, Yong Peng Power Station, Yong Peng, Johor. The EIA focused on noise and air quality impacts and recommended measures to mitigate significant adverse impacts.

Client: Tenaga Nasional Berhad

Project Co-Ordinator

Environmental Impact Assessment of 2 x 16,000 tonnes distillate tanks, Connaught Bridge Power Station, Selangor. The EIA study included a semi-quantitative risk assessment and provided a comprehensive list of mitigation measures.

Client: Tenaga Nasional Berhad

Project Co-Ordinator

Environmental Impact Assessment of 6 x 30 MW and 3 x 100 - 130 MW open-cycle gas turbines for the Sultan Aziz power Station, Kapar, Selangor. The EIA focused on noise and air

quality impacts and recommended measures to mitigate significant adverse impacts.

Client: Tenaga Nasional Berhad

Project Co-Ordinator

Environmental Impact Assessment for Pulau Tioman Power Station Plant - up Project, Pulau Tioman, Pahang. The EIA focused on effects of thermal plume on aircraft, risk assessment, marine ecosystem, noise and air quality impacts and recommended measures to mitigate significant adverse impacts.

Client: Amcor Corporation

Air Quality Specialist

Environmental Impact Assessment of the Linerboard facility at Kemayan Industrial Park, Senawang, Negeri Sembilan. The EIA focused on noise, solid waste and water quality parameters and recommended mitigation, abatement and monitoring measures to minimise potential impacts to the environment.

Client: Tenaga Nasional Berhad

Project Co-Ordinator

Environmental Impact Assessment of 30 MW open - cycle gas turbine for Tuanku Jaafar Power Station, Port Dickson, Negeri Sembilan. The EIA focused on noise and air quality impacts and recommended measures to mitigate significant adverse impacts.

Client: Tenaga Nasional Berhad

Project Co-Ordinator

Environmental Impact Assessment of 2 x 30 MW open - cycle gas turbine to be installed at the Sultan Iskandar Power Station, Pasir Gudang, Johor. The EIA focused on noise and air quality impacts and recommended measures to mitigate significant adverse impacts.

Client: Tenaga Nasional Berhad

Project Co-Ordinator

Environmental Impact Assessment of 330 MW combined cycle turbines to be installed at the Glugor Power Station, Glugor, Penang. The EIA focused on noise and air quality impacts and recommended measures to mitigate significant adverse impacts.

Client: Tenaga Nasional Berhad

Project Co-Ordinator

Supplementary Environmental Impact Assessment of the 2 x 30 MW Bangsar Co-generation plant at Bangsar, Kuala Lumpur. The EIA focused on noise and air quality risk assessment and socio - economic impacts and recommended measures to mitigate significant adverse impacts.

MONITORING

Client: Department of Irrigation and Drainage

Project Co-Ordinator

Water quality improvement and feasibility study of Sungai Mas river, Batu Ferringhi, Pulau Pinang for Majlis Perbandaran Pulau Pinang and Jabatan Pengairan dan Saliran. The study focused on the identification and water quality measurement of all point and non - point discharges into the river and the preparation of a comprehensive water quality management plan.

Client: Amcor Corporation

Project Co-Ordinator

Salt water intrusion and water quality study of the Sungei Klang, Selangor. The project focused on salinity and water quality parameters between Port Klang and Shah Alam.

Client: W R Grace

Project Co-Ordinator

Baseline surface water monitoring of the Gebeng Industrial site, Kuantan, Pahang Darul Makmur. The study tabulated baseline surface water parameters and recommended permanent surface water monitoring stations.

Client: Amcor Corporation

Project Co-Ordinator

Baseline surface groundwater monitoring of the Ladang Haron Industrial Estate, Selangor. The study focused on pre - feasibility testing and recommended monitoring schedules.

EMERGENCY RESPONSE PLANS

Client: Malacca Power Station

Project Co-Ordinator

Emergency Response Plan for Malacca Power Station, Malacca. The Emergency Response Plan emphasised minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with the 2 x 15,000 t distillate storage tanks.

Client: Connaught Bridge Power Station

Project Co-Ordinator

Emergency Response Plan for Connaught Bridge Power Station, Selangor. The Emergency Response Plan reviewed existing response procedures, suggested minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with 2 x 16,000 t distillate storage tanks.

Client: W R Grace

Project Co-Ordinator

Emergency Response Plan for the Shrink Film Plants for W R Grace. The Emergency Response Plan emphasised minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with the on site bulk storage of resins and potentially hazardous chemicals held at the facility.

Client: Serdang Power Station

Project Co-Ordinator

Emergency Response Plan for Serdang Power Station, Serdang, Selangor. The Emergency Response Plan emphasised minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with the 2 x 12,000 t distillate storage tanks.

Client: Sultan Iskandar Power Station

Project Co-Ordinator

Emergency Response Plan for Sultan Iskandar Power Station, Pasir Gudang, Johor. The Emergency Response Plan emphasised minimisation of environmental risks and hazards due to leak, spillage and / or fire associated with the site bulk fuel storage facilities and potentially hazardous chemicals held at the facility.

RISK ANALYSIS

Client: Cegelec

Project Co-Ordinator

Risk analysis study of YTL Pasir Gudang Gas Metering Station at Pasir Gudang, Johor for Cegelec. The risk analysis study evaluated potential hazard scenarios, which could lead to pipeline leak, or rupture and recommended mitigating measures to minimise identified potential risk.

Client: Tenaga Nasional Berhad

Project Co-Ordinator

Risk Assessment study of the fuel storage facilities of the Glugor, Connaught Bridge and Bayan Lepas power stations (as part of the above mentioned Environmental Impact Assessments). Probability and consequent analysis for leak, spills and / or fire were studied. Modelled radiation contours were presented for various scenarios.

THERMAL PLUME STUDIES

Client: Department of Civil Aviation

Project Manager

Specialised Thermal Plume study, in association with Flinders University of South Australia, National Institute of Water and Atmospheric Research Ltd (New Zealand) and Institute of Flight Guidance, Braunschweig (Germany) on the effects of Genting Sanyen Paper Mill and Independent Power Plant (IPP) on Aircraft Operations at Kuala Lumpur International Airport at Sepang, Selangor for the Kuala Lumpur International Airport Bhd. The thermal plume study focused both on obstruction and actual measurement study (using a Cessna 340A) to predict effects to commercial airlines during takeoff and approach over the IPP on all three runways and

recommended measures to mitigate any significant adverse impacts.

Client: Tenaga Nasional Berhad

Air Pollution Specialist

Thermal plume modelling of the Sultan Abdul Aziz, Connaught Bridge, Yong Peng, Tuaanku Jaffar, Glugor, and Bayan Lepas power stations as part of the above mentioned EIA's.

INSTITUTIONAL STRENGTHENING

Client: Department of Environment

Environmental Specialist

Preparation, in association with the Department of Environment, of the Environmental Impact Assessment Guidelines for Key Sectors of Groundwater and / or Surface water supply: Thermal Power Generation and / or transmission; Fishing Harbours and / or reservoirs for Aquaculture and Dams and / or Land Based Aquaculture and Dams and / or Reservoirs for the Asian Development Bank (ADB). These guidelines have been prepared under a technical assistance form the ADB to the Government of Malaysia and lists legal aspects, integrated project planning, site selection, scoping process, environmental baseline data, prediction and evaluation of impacts, mitigation measures, environmental management plan, checklist and report format.

AUDITING

Client: Kuala Lumpur International Airport Bhd

June 1995 to December 1997

Project Manager

Independent Environmental Monitoring Auditing (EMA) of the Kuala Lumpur International Airport (KLIA) at Sepang during construction (June 1995 to Dec 1997) The EMA focuses on independent monitoring on air, surface water and marine water and independent auditing of all KLIAB contractors to ensure compliance of KLIA and Department of Environment approval conditions.

Client: Sultan Salahuddin Power Station, Kapar (5 weeks)

Project Manager

Independent Auditing of the Sultan Salahuddin Abdul Aziz power station, Selangor. The audit focused on a systemic review of operation and procedures of facility to ensure compliance with all applicable environmental regulatory requirements.

Client: Sultan Salahuddin Power Station (1 week)

Project Manager

Development of audit protocol utilising draft ISO 14000 format for the Power station which included training staff in the use of

Software tool, AUDITpower for creating and conducting a review in a windows environment.

OTHERS

Client: Amcor Corporation

Project Co-Ordinator

Paper Mill EIA scoping study of six (6) short listed sites covering the states of Selangor, Negeri Sembilan, Malacca and Johor. The study ranked sites, based on environmental, technical and financial considerations. A comparative evaluation of all sites using weighted - rating decision methodology was employed.

Client: Tenaga Nasional Bhd

Project Co-Ordinator

Assessment and design of Emission Inventory spreadsheets for the Sultan Salahuddin Power Station, Kapar, Selangor. The two spreadsheets (CALCEMIS & REALMIS) prepared in a Lotus 123 format, calculates emission rates using USEPA emission factors and the application of measured emission data respectively for regulatory standards compliance.

From 1990 to 1992

***Employer: Mankato State University,
Minnesota, USA***

Laboratory Lecturer / Environmental Research

Lecturing and Environmental Research - Monitoring and analysing farm runoff of nitrates, heavy metals, pesticides and herbicides in Wells, Minnesota.

Designing sampling programme including flow measurements to determine water quality parameters of the Blue Earth County river near Mankato, Minnesota.

Comparative study of Quality Assurance and Quality Control of sampling methods used to measure heavy metals in the Minnesota River.

Hydraulics study of asbestos, mercury and formaldehyde in the Trafton Science Centre in Mankato, Minnesota and the subsequent design of monitoring programme to detect above parameters.

From 1989 to 1990

***Springborn Environmental Laboratory,
Massachusetts, USA
Environmental Scientist***

Areas of direct responsibility included aquatic toxicology, analysing biocide compounds quality assurance / quality control and statistical analysis of data compiled.

Testing and statistical analyses of the Exxon Valdez oil spill for the Exxon Corporation.

Analysis of biocide compounds for Rhone-Poulenc, Ciba - Giegy and Monsanto.

Quality control / quality assurance of samples including hazardous compounds to protect the employees of Springborn Environmental Laboratory.

Designing and running systems for analysing industrial cleaning agents for Dow Chemicals.

Air and water quality monitoring included work on a nuclear power site near Dothan, Alabama. Parameters measured were radiation emissions, wastewater and cooling water.