

Capacity building NGO in the Environmental Field to be An Enabler to Malaysian Professional's Growth

BERITA ENSEARCH

MAY – DECEMBER 2014 / 2nd-4th QUARTER

e-Bulletin at www.ensearch.org/resources/beritaensearch



BRIEF HISTORY OF ENSEARCH

ENSEARCH was formed in 1984 by a pioneer group of local professionals and academics from multidisciplinary backgrounds. Its first President (1984-2000) was Ir. K. Kumarasivam and its first Hon. Secretary General was Dato' Dr. Abu Bakar Jaafar. Today, ENSEARCH has more than 300 members consisting of corporate, individual and life members.

It is acknowledged that enhanced awareness and capacity building of organizations and individuals through education and training is essential to achieve the objectives of Malaysian Environmental Quality Act, 1974.

Therefore ENSEARCH began formulating and implementing training programs to enhance the capacity for environmental management in Malaysia.

In addition, ENSEARCH organizes Tea Talks and Public Lectures to enhance awareness on pertinent and comprehensive issues on the environment.

ENSEARCH has also been actively involved in dialogue sessions with relevant authorities in development of legislative and regulatory frameworks that are supportive of good environmental management practices.

In recognition of ENSEARCH's objectives, it has been given tax-exempt status whereby the donations to ENSEARCH are exempted by from tax.

TABLE OF CONTENTS

Editor 's Note	1
Profile of Council Member Ahmed Tariq Datuk Aripin	2
Feature Incorporating Risk Management into Oil Storage Terminal Operation and Planning	4
Events & Activities (May - November 2014)	9
Announcements	10
ENSEARCH Sabah Branch News	31
ENSEARCH Calendar	38
ENSEARCH In News	39
ENSEARCH COUNCIL 2014/2015	40
ENSEARCH SECRETARIAT 2014	41



“Here is your country. Cherish these natural wonders, cherish the natural resources, cherish the history and romance as a sacred heritage, for your children and your children's children. Do not let selfish men or greedy interests skin your country of its beauty, its riches or its romance.”

— Theodore Roosevelt



EDITOR'S NOTE

ENSEARCH

is a non-profit association of organizations, professionals, students and people with interest in learning and promoting effective ways to manage the impact of human activities on the environment.

We at ENSEARCH believe that everyone is responsible for managing and mitigating the impacts of their corporate, professional and daily living activities on the environment.

ENSEARCH is also involved in indigenous fruit tree species conservation and poverty eradication through its project Cyber Plant Conservation Network www.cpcnet.atbioversity.net

Hello Members,

Welcome to another edition of Berita ENSEARCH. As we find ourselves heading toward December, we can look back at 2014 and fondly remember many exciting events that ENSEARCH has been involved in.

In May, we had our AGM and elected our new President for the 2014-2015 term, Ir. Elias Saidin, and in the following month of June, our Sabah chapter also convened their AGM and ushering Ahmed Tariq Datuk Aripin as their new leader.

The AGM revealed a few new faces in the council eager to serve and contribute fresh ideas, while retaining the remaining faithful council members who continue to soldier on and fully committed to the ENSEARCH cause.

The CPCNet hosted a booth together with with Jabatan Tasik & Wetlands, Putrajaya at the two week-long Floria Putrajaya in June, which was popular and constantly populated by curious visitors.

We organised site visits and conducted trainings; notably the visit to the Bukit Tagar landfill in October and the New Clean Air Regulations 2014 Forum in November, where both were very well attended and received.

We are also collaborating with the DOE to promote their *Rakan Alam Sekitar* programme to ENSEARCH members.

Overall it has been a hectic year at ENSEARCH with the usual flurry of events, made possible also through the tireless efforts of the very skeletal Secretariat ENSEARCH team, Edna and Audrey.

We constantly seek to increase our membership and to continuously provide value to our members through events, talk and trainings.

KHOO BOON KEAT
Chairperson,
Website & Publication

OUR VISION

"Malaysians are environmentally aware and are committed to taking personal responsibility to manage and mitigate the impacts of their corporate, professional and daily living activities on the environment"

OUR MISSION

"To promote excellence in environmental management among organizations, professionals and interested persons."



PROFILE OF COUNCIL MEMBER

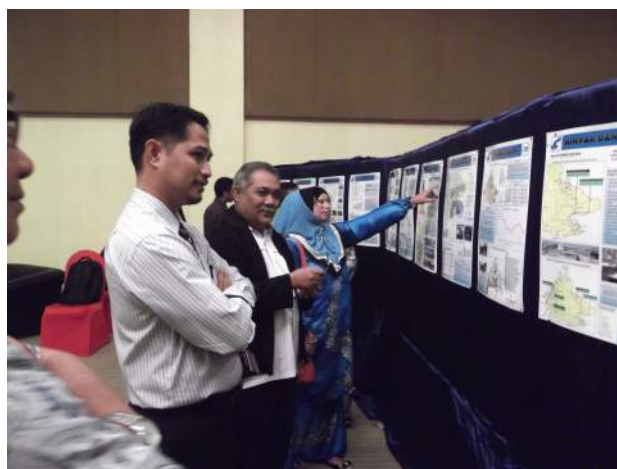
Ahmed Tariq Datuk Aripen

Mr. Ahmed Tariq Datuk Aripen is well known in Sabah as the Chairperson of the ENSEARCH Sabah Branch for the term 2014/2015. Tariq has been an ENSEARCH member since the formation of the Sabah Branch in 2012 where he was also involved in the setting up of the ENSEARCH Sabah Branch with Mr. Eng Weng Hong, Mr. Gobinathan and Datuk Adeline Leong.

Tariq 's early education began at St. Agnes Primary School (1979-1984) and All Saints Secondary School (1985 - 1989) at Kota Kinabalu, Sabah, then Taylor's College (1990) at Subang Jaya, Selangor before pursuing a Degree (1991-1993) and a Post Graduate Diploma (1995) in town planning at the University of South Australia, Australia. Tariq also studied a year in England (Park Grove School, Birmingham, 1984 - 1985) when his father took a one year post graduate course at the University of Birmingham and brought the whole family to England.

Before establishing ATA Planners and MB Enviro-Healers Sdn. Bhd. in 2007, Tariq worked with several companies and agencies. This include Borneo Development Corporations (Sabah) Sdn. Bhd., the Institute for Development Studies (Sabah) Sdn. Bhd. and ERE Consulting Group Sdn. Bhd. During his tenure with these companies, he had been involved with a range of development studies, planning and environmental work throughout Sabah and abroad including study on the highlands of Sabah and Sarawak, facilitating the setting up of Heart of Borneo (HoB), conducting Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) reports and workshops on ISO14001 Environmental Management System (EMS).

Tariq was also involved as a short term planning consultant for various projects such as the Integrated Coastal Management (ICZM) project under the Town and Regional Planning Department (TRPD), and the Landscape Master Plans for Kota Kinabalu, Tawau, Sandakan, Ranau and Semporna under the Federal Department of Landscape. Today under ATA Planners and MB Enviro-Healers Sdn. Bhd., his works involve mostly on preparing Planning, EIA and EMP Reports. He is also still involved with various planning and environmental studies such as the Wildlife Corridor or Ecolinc, Agropolitans, Water Supply Coverage projects, and his most recent and very important projects are the Sabah Structure Plan 2033 and the National Physical Plan 3.



Tariq with stakeholders during one of the many Public Consultation Workshop for the Sabah Structure Plan 2033 Project.



PROFILE OF COUNCIL MEMBER

Ahmed Tariq Datuk Ar ipen

Besides ENSEARCH, Tariq is also involved in the Scouting movement which he has been doing since he was in school. He is currently voluntarily serving the movement as the Assistant State Scout Commissioner. Scouting enables him to connect with people all around the world, be in touch with the environment and giving him opportunities to educate young boys and girls about the environment. Collecting Scouting items from around the world is also part of his hobby in Scouting. Occasionally, Tariq does cycling.



“ Scouting enables me to instil environmental awareness in young boys and girls ” . Picture taken during the Singapore International Jamboree 2010 serving as an International Service Team looking into environmental education.

Tariq has 3 siblings; his eldest sister, his twin brother, and his younger sister. He is now married and blessed with 5 children, 2 boys and 3 girls (1 stepson and 2 stepdaughters). This coming Christmas Eve will be his 17th wedding anniversary.



Tariq and family.



FEATURE

Incorporating Risk Management into Oil Storage Terminal Operation and Planning

By Ed Fahnlne, P.E.

In recent years there have been a number of significant accidents involving storage of petroleum. The prevention of major incidents at oil storage terminals is of critical importance to both the facility and the public. Risk management is a structured process to identify, assess (either qualitatively or quantitatively), and evaluate risks, and develop a practical plan to systematically address areas of excess risk. Typical methods to manage risk at oil storage facilities include engineered controls, facility upgrades, monitoring, emergency response and countermeasure plans, and worker training. Recognizing that it is not commercially viable to manage all risks to a negligible level, risk management aims to identify all risks and then prioritize solutions to meet risk reduction goals while optimizing the use of man-hours, CAPEX, and OPEX. This is especially important as terminals in Malaysia start to face the need for significant CAPEX to replace older storage tanks and upgrade terminal infrastructure.

For every oil storage terminal, the following series of questions should be considered in order to incorporate risk management into your operation and planning.

ARE YOU AWARE OF ALL RELEVANT REGULATIONS AND STANDARDS?

Malaysian regulations and industry standards provide a set of minimum technical safety requirements for facility permitting, design, operation, and monitoring, and it is critical to understand the current and anticipated changes in regulations and standards. It is also important to review tank life cycle plans and anticipated future facility upgrades relative to changes in regulations and industry best practices.

Oil storage terminals must adhere to a wide variety of regulations involving many different technical disciplines. The approach to risk management must be comprehensive, considering the broad range of potential risks and their causes and effects. For example, tank overfills or other oil releases can trigger an explosion, and fire/explosion damage often causes release of oil into the environment. However, fire/explosion and environmental risks tend to be regulated by different agencies and standards, and managed by personnel with different technical skills. It is important that the causes and effects of all potential risks are considered in order to optimize the risk management strategy and measures.

Malaysian terminal operators are of course familiar with requirements such as the Petroleum (Safety Measure) Act 1984, the Petroleum (Storage and Handling) Regulation 1997, and MS 761—*Code of Practice for the Storage and Handling of Flammable and Combustible Liquids*. However, the Contaminated Land Management and Control Guidelines (CLMCGs) issued by Department of Environment (DOE) in June 2009 may not be as well know.

The DOE has stated that the CLMCGs will become the technical basis of the Contaminated Land Regulations under the Environmental Quality Act 1974. These Regulations may be gazetted as early as next year and therefore tank terminals should start to understand the CLMCGs and incorporate necessary actions into their facility planning.

IS YOUR STORAGE TANK SYSTEM INFORMATION COMPLETE?

A thorough evaluation of storage tank systems requires review of information such as design and operation descriptions, equipment cut sheets, as-built drawings, major upgrades, maintenance/repair history, and inspection results. However, access to such information can be challenging even for new facilities due to the very large volume of information. Older tank systems are even more at risk in terms of information gaps. Missing tank information can result in incorrect operation, higher risk of tank and associated equipment failure, and increased worker risk. Decisions concerning regulatory compliance and system upgrades also require an accurate understanding of the tank system. Ready access to system information becomes particularly important as changes to the original design are implemented, and a robust system of change management is essential.

ARE ACCIDENT PREVENTION AND MITIGATION MEASURES IN PLACE?

Most oil terminals are required to have accident prevention and mitigation measures in place to address risks like fuel spills, fires, explosions, natural disasters, and worker safety. Malaysian regulations and guidance along with extensive industry guidance are available to address design and operational issues, such as:

- Process Safety
- Distance between tanks and structures
- Separation of incompatible liquids
- Incident planning and response
- Spill prevention, control, and countermeasures
- Tank, pipe, and equipment integrity

Oil terminals also now have an abundance of potential safety features, including:

- Protection devices
- Hydrocarbon sensors
- Alarms and transmitters
- Fill level gauges
- Overfill protection valves
- Leak detection devices
- Independent high-level switches
- Shut-off valves
- Monitoring and control instrumentation

- SCADA systems
- Water and foam delivery systems
- Lightning protection
- Nitrogen inerting/blanketing
- Fire/gas detection systems
- Firewater monitors
- Venting systems
- Automatic trips
- Deluge systems
- Bunding and drainage
- Corrosion protection
- Protective paint coatings

ARE YOUR STORAGES AND SAFETY FEATURES PROPERLY OPERATED AND MAINTAINED?

While there are a large number of safety features available to significantly reduce the possibility of a major accident, these features can lead to a false sense of security. Studies of storage tank accidents have found that a major contributor to accidents is human error. A study by the US EPA used a DOT database to review 312 accidents at long-term storage facilities and breakout tanks in the US between 1990 and 2000. Human error caused or contributed to 100% of accidents that resulted in fatalities, 88% involving stock loss, and 87% that resulted in property damage. The investigation conclusions for some of the major storage tank accidents in recent history such as Buncefield and Texas City identified contributing factors such as failure of key alarms and transmitters, insufficient process safety management, failure of fill level gauges, and inoperable high-level switches.

System data collection and review is one of the primary methods to determine if the storage tank system and its safety equipment are operating correctly within the design envelope. For instance, the data provided by operational fill logs enable fatigue loading to be assessed, particularly in relation to inerting/blanket gas fill while depleting liquid stock. Inhibit and over-ride logs provide indications of safety systems that are functioning incorrectly or inappropriately for the mode of operation. Such data can be used to evaluate whether the plant can continue to be operated safely, or whether additional safeguards are needed and the original functionality of the plant restored. Scheduled preventative maintenance is also critical to keeping the tank system running as intended.

IS A CERTIFIED INSPECTION PROGRAM IN PLACE, AND ARE THE RESULTS USED TO BEST ADVANTAGE?

The most common bulk steel storage tank and piping inspection standards are:

- API 653: Tank Inspection, Repair, Alternation, and Reconstruction
- API 570: Piping Inspection Code, Inspection, Repair, Alternation, and Rerating of In - Service Piping Systems
- EEMUA Standard 159: Maintenance and Inspection of Above Ground Vertical Steel Cylindrical Storage Tanks

These standards require certified inspections based on service history. Certified inspectors must have proper training, pass an exam by the certification board, and undergo periodic re-certification.

United States (US) Environmental Protection Agency (EPA), 2000, *Oil Spill Program Update, Vol 3, No 2*.

Tank cleaning and certified inspection of the internal tank system is a time-consuming and relatively costly procedure. However, the information gathered during internal inspection can be of great value to the facility and the risk management process, especially if the inspector knows what information is most needed. For example, if tank information is missing, the inspection can fill the data gaps.

Certified internal inspection provides a thorough check of the storage tank and associated equipment. API 653 certified internal inspection includes a visual inspection of the tank floor, shell, roof, nozzles, welds, foundation, supports, drain valves, secondary containment, ancillary equipment, piping, vents, gauges grounding, stairways, fire deluge, and coatings. Non-destructive testing (such as ultrasonic, magnetic particle, vacuum box) is performed to check the tank integrity and provides extremely useful data, such as a prediction of remaining steel plate service life based on corrosion rates.



Tank cleaning prior to internal inspection

WHEN WAS THE LAST COMPREHENSIVE PROCESS HAZARD ANALYSIS?

The most important step in risk management is performance of a Process Hazard Analysis (PHA). A PHA or similar analysis is often performed during the design stage for a terminal or for new tank systems on an existing terminal. However, with the complexity of modern oil terminals, ongoing periodic PHAs are required just as for refineries and chemical production facilities. Periodic PHAs help the facility demonstrate that it is committed to a risk-based approach to process safety, understands its hazards, has assessed its risks, and is able to manage those hazards and risks.

The PHA framework and level of detail should be developed by process safety engineers experienced with oil terminal design and operation. In particular, the periodic review should identify changes in processes or operational conditions that may have an impact on the safe operating life of the facility. The PHA may include Hazard and Operability (HAZOP), What-if checklists, Failures Modes and Effects Analysis (FMEA), and Fault Tree Analysis (FTA).

Periodic PHA offers several benefits beyond risk management. The analysis can be used to optimize decisions concerning tank life cycle, tank upgrades, and new terminal construction. The information from a PHA can also promote more efficient operation and maintenance of the terminal and optimize the use of man-hours, CAPEX, and OPEX to meet regulatory and business requirements.

ARE FACILITY UPGRADES OCCURRING IN AN OPTIMAL MANNER?

One of the most challenging issues for any storage facility is strategizing how to upgrade the facility for regulatory or business reasons. Risk management is a critical tool in understanding the relevant issues concerning storage facility operation and condition, and developing a practical plan to perform upgrades. Only a fraction of storage tanks can be removed from service for repairs at once due to inventory and budget constraints, and major facility upgrades can take years. Therefore, the plan needs to consider not only infrastructure and equipment upgrades but other measures to reduce risk, such as emergency response plans and worker training. By understanding and evaluating likely near-term and longer-term facility upgrades, and the drivers for those upgrades, a systematic approach can be developed which optimizes the short-term reduction of risk in a cost-effective manner.

CONCLUSION

Risk management provides a well-defined framework to identify all issues, prioritize and optimize expenditures, plan a comprehensive approach, track implementation of the selected measures, and allow for flexibility as priorities change. The information gained from a thorough risk management program can be used to operate your terminal more efficiently and plan for future works. However, it requires a strong commitment to incorporate effective risk management into terminal operations and develop a comprehensive program, implement the program, and continually use the information gained to maximize the facility's safety and operation.



Massive fuel tank fire at Miami International Airport

(<http://globetribune.info/2011/03/24/>)



**Murphy oil spill, New Orleans,
Hurricane Katrina (2005)**

(http://www.nola.com/katrina/index.ssf/2010/08/extent_of_oil_spills_from_2005_hurricanes_is_still_being_assessed.html)

About the author: Mr. Fahnlne is a senior engineer with Geosyntec Consultants in Kuala Lumpur, Malaysia. He has 20 years professional experience with a focus on risk management issues including fuel storage tank inspection and compliance, health and safety, and environmental remediation. He has served clients in a variety of sectors, including oil and gas, pharmaceutical, chemical, governmental, and manufacturing, for facilities in more than 20 countries. Mr. Fahnlne received his Masters of Environmental Engineering Degree in 1994 from the Pennsylvania State University (USA), and is a USA-registered Professional Engineer. He can be contacted at EFahnlne@Geosyntec.com.

FORUM ON ENVIRONMENTAL MANAGEMENT 2014 (FEM 2014)
In conjunction with ENSEARCH 's 30th Annual General Meeting

- Date** : 15th May 2014 (Thursday).
- Venue** : Kelab Golf Negara Subang (KGNS), Selangor.
- Keynote Address** : Y. Bhg. Dato ' Dr. Nadzri Yahaya, DG of Jabatan Pengurusan Sisa Pepejal Negara
- Speakers** :
- 1) Pn. Ijan Khushaida bt. Mohd. Jan, DOE
Title: DOE Requirements for Contaminated Land Management
 - 2) Prof. Dr. P. Agamuthu, University of Malaya
Title: 3R Challenges and Innovative Approaches for Sustainable Waste Management
 - 3) Major Gen. Dato ' Dr. Mohd. Zin Bidin & Mr. Joevy Beh, BP Environmental Testing
Title: Environmental Health and Advances in Environmental Testing
 - 4) Mr. Lars Moller, Aikan Technology, Denmark
Title: Aikan Dry AD MSW Treatment Technology (Garbage to Biogas, Compost Fertilizer and RDF)
 - 5) Mr. Daniel Tan Su Ming, Solmax International
Title: Innovative Geosynthetics for Enhanced Landfill Security
- Summary** : The Forum on Environmental Management was held in conjunction with ENSEARCH 's 30th AGM. Environmental Forums are key tools in ensuring sustainable practices are in the forefront of all management of valuable land resources. This Forum discussed the local perspective of moving forward in this area of sustainable options even though there are many limitations. Integration and streamlining of approaches would bring the system into environmental compliance and build the infrastructure necessary to maintain more effective and sustainable operations. The Forum was organised in partnership with BP Healthcare Group, Food & Environmental Testing Department.
The event was followed by the 30th Annual General Meeting.

Supported By:



In Partnership With:





Welcome Address by President, En. Abdul Aziz bin Long

Keynote by YBhg. Dato ' Dr. Nadzri Yahaya on " Waste Management Beyond 2013. "



A total of 70 participants attended the Forum at KGNS

Pn. Ijan presenting her paper on "DOE 's Requirements for Contaminated Land Management "





“ Environmental Health & Advances in Environmental Testing ” by Mr. Joevy Beh, BP Healthcare Group, our event partner

“ Aikan Dry AD MSW Treatment Technology ” by Mr. Lars Moller, Aikan Technology, Denmark



Q & A Session

Panel Discussion moderated by Ir. Lee Heng Keng





CPCNet

Cyber Plant Conservation Network

Conservation Through Public Participation

CYBER PLANT CONSERVATION NETWORK

FLORIA PUTRAJAYA EXHIBITION BOOTH

In Collaboration with the Putrajaya Environmental, Lake & Wetlands Section

Date : 14th - 22nd June 2014.

Venue : Promenade, Precinct 4, PUTRAJAYA

Summary : CPCNet participated in the Floria Putrajaya Flower and Garden Fest by hosting a booth with the Putrajaya Environmental, Lake & Wetlands Section. The purpose of this activity was to promote the CPCNet project as well as to create public awareness about conserving Malaysia 's indigenous fruit trees. Among the activities that were held at the booth were:

1) Go Green Board Game:

- ◆ Board game which aimed to educate the students about Going Green and Malaysia 's indigenous fruit trees.

2) F.R.I.E.N.D.S of CPCNet Art Competition

- ◆ Students were given a talk on environmental conservation and then asked to use their creativity to draw a scene based on the words given. A collage was made out at the end of the event in a form of a story about environmental conservation.

In Collaboration With:



Putrajaya Environmental, Lake and Wetlands Section

EVENTS & ACTIVITIES



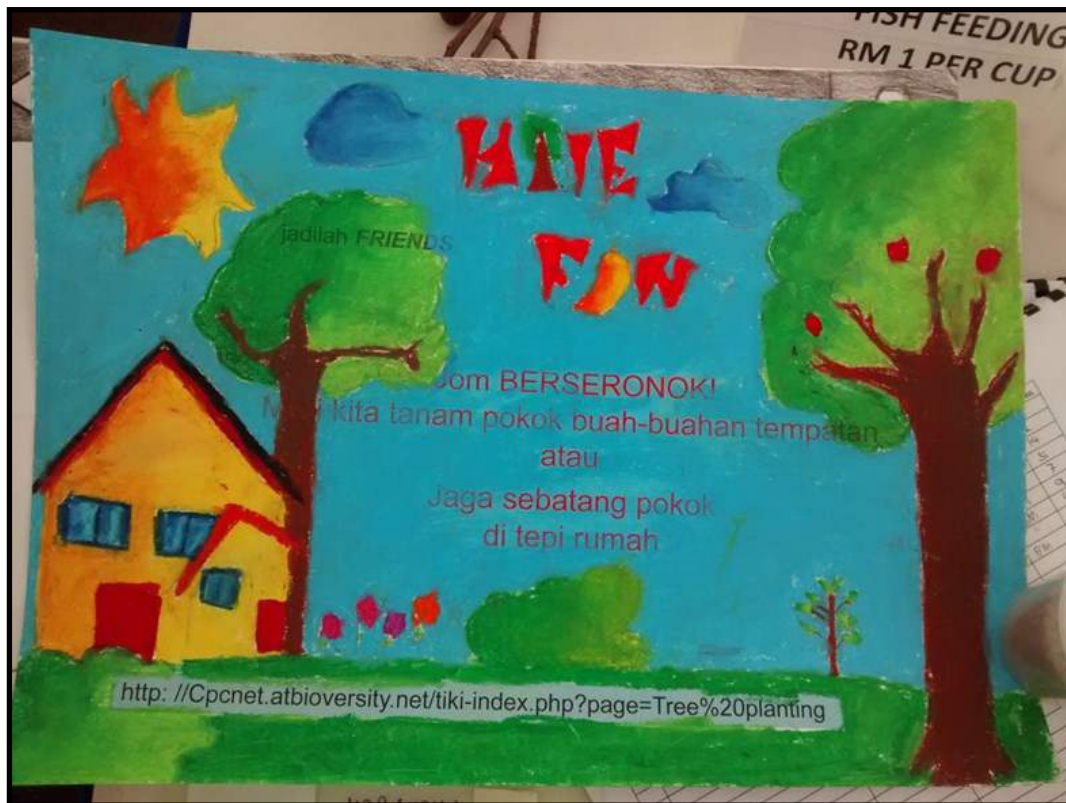
Exhibition Booth at Floria Putrajaya



Students participating in the Drawing Activity and Go Green Board Game



Students participating in the Drawing Activity and Go Green Board Game



WORKSHOP ON ENVIRONMENTAL MANAGEMENT SYSTEMS

LIFE CYCLE ASSESSMENT:

What, Why, the Carbon and Water Footprints?

- Date** : 2nd & 3rd July 2014 (Wednesday & Thursday)
- Venue** : SEGi University, KOTA DAMANSARA
- Trainers** :
1) Dr. Vijaya a/p Subramaniam, MPOB
2) Dr. Chen Sau Soon, SIRIM Berhad
3) Assoc. Prof. Dr. Zainura Zainon Noor, UiTM
- Summary** : ENSEARCH collaborated with SEGi University and SIRIM to organise a Workshop on Life Cycle Assessment. The workshop aimed to introduce participants to the fundamentals of Life Cycle Assessment, demonstrate the steps for implementation and to introduce the new Carbon and Water Footprint methodologies. It served as an introduction for starting LCA practitioners and a refresher for existing practitioners with the latest information being provide on the approach and methodologies for the new and forthcoming LCA Footprints. A mixture of teaching and learning techniques were applied by the trainers who are experienced LCA practitioners; lectures, problem-solving exercise and participant case scenarios Q&A sessions. Participants were also encouraged to bring their case problems for the problem-solving and Q&A sessions.



Participants listening attentively during Dr. Vijaya 's
" Water Footprint " session

PROGRAM 'ENGAGEMENT' RAKAN ALAM SEKITAR BERSAMA RAKAN
STRATEGIK JABATAN ALAM SEKITAR DAN PIHAK INDUSTRI,
" Say YES for an Environmentally Cultured Society "

Date : 25th August 2014 (Monday)

Venue : IOI Palm Garden Resort, PUTRAJAYA

Summary : As a Member of *Rakan Alam Sekitar (RAS)* ENSEARCH was invited by DOE to jointly organize an event to promote their *Rakan Alam Sekitar* programme to ENSEARCH Members. The event was in the form of a "Strategic Engagement between DOE & ENSEARCH" with the theme "Say Yes for an Environmental Cultured Society". Dato' Abu Hassan Mohd. Isa, Director of Strategic Communication Division officiated the event which was followed by a 'Luncheon Get-Together' to facilitate networking between ENSEARCH Members from various industries and the Department of Environment.

In Collaboration With:





“ Strategic Engagement Between DOE ’s *Rakan Alam Sekitar* & ENSEARCH ” event at IOI Palm Garden Resort, Putrajaya



The event was well received with an attendance of 100 people, including 65 ENSEARCH Members.

BUKIT TAGAR SANITARY LANDFILL TECHNICAL VISIT

Date : 9th October 2014 (Thursday)

Venue : Bukit Tagar Sanitary Landfill, KUB-Berjaya Enviro Sdn. Bhd., Selangor.

Summary : On 9th October 2014, ENSEARCH organized a technical visit to the Bukit Tagar Sanitary Landfill (BTSL). The purpose of the technical visit was to expose the participants on on BTSL 's comprehensive landfill gas (LFG) management strategy that generates renewable energy registered with FiTs and certified carbon credits (1.2MW and 3.2MW Biogas Engines & 2 Units of 2500Nm³/hr Flares), their 125 kilowatt Solar Power Project, theei state of the art Leachate Treatment with SCADA system controls, with a treatment capacity in excess of 1,000 m³/day for methanogenic leachate plus reed beds for final polishing, BTSL 's zero-discharge policy where all treated effluent are irrigated in a 120-acre field and their Emergency Containment System which prevents accidental leachate break-out into external water-courses. A total of 38 participants joined the trip, representing a wide spectrum of stakeholders which included professionals institutions, industry and trade association and environmental consultants. It was a very informative trip experienced by the participants. The response from members and the public for the visit was overwhelming but due to the limited number of seats in the bus, we only managed to bring along a small group. ENSEARCH has plans to organize a next technical visit to the PETRONAS Refinery in Melaka, scheduled for next year.

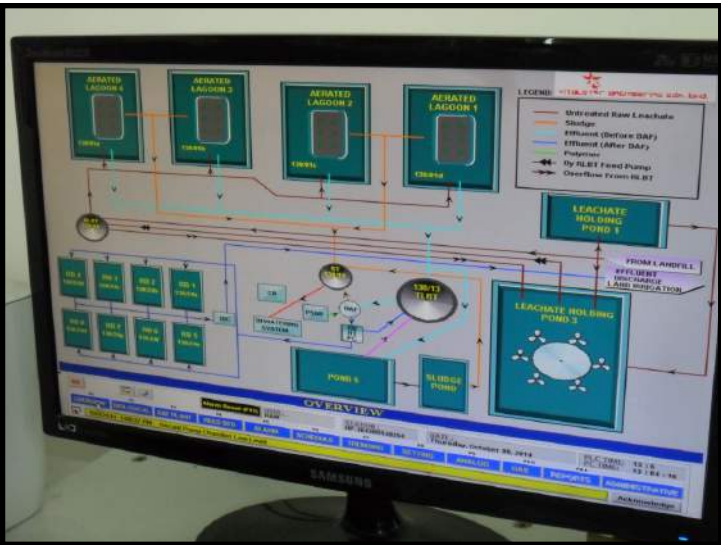


Group photo taken on top the Sanitary Landfill



Technical briefing by En. Mohd. Fatimi Said, GM of Operations

Gas Engine 1.2MW & 2 Units of 2500Nm³/hr Flares



SCADA System Controls



Leachate Treatment Plant

Comparison between the raw leachate and treated leachate with Reedbeds



President, Ir. Ellias Saidin presenting a token of appreciation to En. Fatimi

**5TH INTERNATIONAL GREENTECH AND ECO PRODUCTS EXHIBITION & CONFERENCE
MALAYSIA (IGEM 2014)**

Date : 16th - 19th October 2014 (Thursday - Sunday)
Venue : Kuala Lumpur Convention Centre (KLCC)

Summary : As one of the Supporting Organisations of the annual International Greentech and Eco Products Exhibition and Conference Malaysia (IGEM 2014), ENSEARCH was given the privilege to host a booth at the event. The booth was visited by many professionals, trade investors, academics and members of the public; including Deputy Prime Minister Tan Sri Muhyiddin Yassin and Datuk Elizabeth Wong.



ENSEARCH 's Booth at IGEM 2014

FORUM ON CLEAN AIR REGULATIONS 2014 (CAR 2014)

- Date** : 4th November 2014.
- Venue** : Kelab Golf Negara Subang (KGNS), Selangor.
- Speakers** :
- 1) En. Mohd. Famey Yusoff, Air Division, DOE
Title: Environmental Quality (Clean Air) Regulations 2014.
 - 2) Pn. Azita Ayu, UiTM A & A Laboratory (A & A Scientific Resources Sdn. Bhd.
Title: MS1596: Determination of Concentration and Mass Flow of Particulate Matter in Flue Gas for Stationary Source Emissions.
 - 3) En. Muhd. Khairul Najib bin Ahmad, Environmental Science (M) Sdn. Bhd.
Title: MS1723: Performance Evaluation of Air Pollution and Treatment Systems: Mechanical Dust Collectors.
 - 4) Ir. Woo Ah Keong, Master Jaya Engineering Sdn. Bhd.
Title: Current Best Available Techniques for Air Pollution Control Equipment in Malaysia.
 - 5) En. Izhan Zani, Alam Sekitar Malaysia Sdn. Bhd.
Title: Current Continuous Monitoring System Available in Malaysia.
 - 6) Pn. Rusnani Abdullah, EiMAS
Title: Current Certified Environmental Professional Courses Available in Environment Institute of Malaysia.
- Summary** : The Second in ENSEARCH ' s series of Forums on Environmental Management focused on the New Clean Air Regulations 2014. The CAR2014 Forum was also a platform for consultants to understand the legislative requirements and thus enabled them to explain the compliance requirements better.
- The Forum addressed the best available technologies on air pollution control, continuous emission monitoring systems available in the market and performance monitoring requirements. It was also a platform for dialogues on the compliance requirements via the panel discussion with the presence of industry leaders and the regulators. This event was organised in partnership with A & A Laboratory (A & A Scientific Resources Sdn. Bhd.) and Alam Sekitar Malaysia Sdn. Bhd.

Supported By:



In Partnership With:





Welcome Address by Ir. Elias Saidin,
President of ENSEARCH.

Full house at the event



DOE 's En. Mohd. Famey ' s presentation on the New
Clean Air Regulations 2014

Exhibition booth of our event Partner,
Alam Sekitar Malaysia Sdn. Bhd.





Exhibition booth of our Event Partner,
UiTM- A & A Laboratory

Environment Institute of Malaysia, EiMAS,
exhibition booth



Panel Discussion moderated by
Mr. Tan Poh Aun

“Current Best Available Techniques for Air Pollution
Control Equipment in Malaysia.” by Ir. Woo Ah
Keong, Master Jaya Engineering Sdn. Bhd.





Participants visiting the Exhibition Booths during the breaks

HAZARDOUS WASTE MANAGEMENT AND COMPLIANCE TRAINING

Date: 25th & 26th Nov 2014 (Tuesday & Wednesday)
Time: 08:30 am - 05:00 pm
Venue: ENSEARCH Training Centre
30-3, Jalan PJU 5/16, Dataran Sunway, Kota Damansara,
47810 Petaling Jaya, Selangor.

ANNOUNCEMENTS

OUTLINE

OVERVIEW

The training course will expose the participants to the principles and practices of environmentally sound management of hazardous waste which include understanding of the waste management hierarchy; waste minimisation, reduction and recovery; best practices of hazardous management and the understanding of the hazardous waste current and emerging challenges both at local and international levels. It will also provide guidance to a comprehensive understanding of the Environmental Quality (Scheduled Wastes) Regulations 2005 and hazardous waste management policies in Malaysia. Participants will be provided with some understanding on the rationale of the hazardous waste policies and control practices. What are the common violations of the scheduled waste regulations and remedial actions will also be shared with the participant so that they can learn from other mistakes.

OBJECTIVES

1. To provide participants with a holistic understanding on the management of hazardous waste in Malaysia;
2. To provide understanding of legal requirements and policies on hazardous waste management in Malaysia;
3. To facilitate compliance to the regulatory requirements of the Environmental Quality (Scheduled Wastes) Regulations, 2005.

* Upon completion of the course, the participant should be able to develop their own management approach in handling and managing hazardous waste in an environmentally sound manner and targeting for full compliance to the national and international legislation.

TRAINER

Datin Paduka Che Asmah Ibrahim

(former Director of Hazardous Substances
Division, DOE)

Ir. Lee Heng Keng

(former Deputy Director General of DOE and
currently Director of Geosyntec Consultants Sdn. Bhd.)

TARGET AUDIENCE

- Environmental Management System Committee Members.
- Environmental, Health and Safety Officers
- Industries
- Consultants

TRAINING FEE

- **RM 800.00 (ENSEARCH Member)**
- **RM 900.00 (Non-ENSEARCH Member)**

* Register **3 or more** participants from the same organization and enjoy **10% discount**

* includes Lunch, Refreshments, Training Materials and Certificate of Attendance

Note :

- HRDF Claimable

**12 CPD
Hours by DOE**

ORGANISED BY :



ENVIRONMENTAL MANAGEMENT & RESEARCH ASSOCIATION OF MALAYSIA

NO 30-2, JALAN PJU 5/16, DATARAN SUNWAY, KOTA DAMANSARA,

47810 PETALING JAYA, SELANGOR.

Tel: 03-61569807 / 08, Email: cpcn@ensearch.org

PROGRAMME

ANNOUNCEMENTS

DAY 1: 25th November 2014, TUESDAY

TIME	TOPIC	FACILITATOR
08:30 AM - 09:00 AM	Registration	
09:00 AM - 10:15 AM	Session 1: <i>Introduction to Scheduled Waste Management</i>	Ir. Lee Heng Keng
10:15 AM - 10:30 AM	Q & A Session	
10:30 AM - 10:50 AM	COFFEE BREAK	
10:50 AM - 12:30 PM	Session 2: <i>Policies and Legal Requirements of Scheduled Wastes Management in Malaysia</i>	Ir. Lee Heng Keng
12:30 PM - 12:45 PM	Q & A Session	
12:45 PM - 02:00 PM	LUNCH	
02:00 PM - 03:15 PM	Session 3: <i>Notification, Inventory and e-Consignment</i>	Datin Paduka Che Asmah
03:15 PM - 03:30 PM	Q & A Session	
03:30 PM - 03:45 PM	COFFEE BREAK	
03:45 PM - 04:40 PM	Session 4: <i>Hazardous Waste Recovery, Treatment and Disposal Facilities</i>	Datin Paduka Che Asmah
04:40 PM - 05:00 PM	Q & A Session	

DAY 2: 26TH November 2014, WEDNESDAY

08:30 AM - 09:00 AM	Registration	
09:00 AM - 10:30 AM	Session 5: <i>Packaging, Labelling and Storage of Scheduled Waste</i>	Datin Paduka Che Asmah
10:30 AM - 10:50 AM	COFFEE BREAK	
10:50 AM - 12:30 PM	Session 6: <i>Special Waste Management of Scheduled Waste</i>	Datin Paduka Che Asmah
12:30 PM - 02:00 PM	LUNCH BREAK	
02:00 PM - 03:30 PM	Session 7: <i>Transboundary Movement of Scheduled Waste Destined for Recovery</i>	Datin Paduka Che Asmah
03:30 PM - 03:45 PM	COFFEE BREAK	
03:45 PM - 05:00 PM	Q & A Session and collection of Feedback forms	

WHY YOU CAN'T IGNORE ISO 14001: 2015!

Date: 3rd December 2014 (Wednesday)
Time: 08:30 am—05:00 pm
Venue: ENSEARCH Training Centre,
 30-3, Jalan PJU 5/16, Dataran Sunway, Kota Damansara,
 47810 Petaling Jaya.

ANNOUNCEMENTS

Overview of Training

Organisations around the world have been using ISO 14001 and ISO 14004 to manage their environmental impacts and improve their environmental performance since the standards' first publication in 1996. Since then new approaches in environmental management have emerged and the world's environmental challenges have increased both in size and complexity. The latest revision to the standards provides organisations with an environmental management system that would enable them to incorporate those new approaches and address evolving environmental challenges. This session aims to provide participants with an understanding of key features of the latest revised standards and an insight into the implications including the benefits to their organisation across its value chain.

Objectives:

1. To provide information on the background of ISO 14001 and ISO 14004.
2. To provide an understanding of the key features of ISO 14001:2015.
3. To provide an understanding of the implications and benefits of the standards.
4. To show the link between ISO 14001:2015 with other related standards.

(*This session is based on the Draft International Standard ISO/DIS 14001 and participants should be aware that the draft requirements may be amended by ISO on final publication of the standard)

TRAINER

Ms. Amarjit Kaur M Env Mgmt, B AppSc (Hons) Env Biology, Grad. Dip Environmental Toxicology and Pollution Monitoring, AIEMA. Technical expert on the ISO technical subcommittee revising ISO 14001 and ISO 14004 (ISO/TC 207/SC 1/WG 5 & 6).

TARGET AUDIENCE

Individuals that are accountable and/or responsible for implementing or maintaining an environmental management system based on ISO 14001.

Training Fee

- RM 400 (ENSEARCH Member)
- RM 500 (Non-ENSEARCH Member)
- * Register **3 or more** participants from the same organization and enjoy **10% discount**

Note:

- * CPD Hours from DOE
- * HRDF Claimable

Contact Us

For more information, please contact Ms. Audrey at:

ENVIRONMENTAL MANAGEMENT & RESEARCH ASSOCIATION OF MALAYSIA

No. 30-2, Jalan PJU 5/16, Dataran Sunway, Kota Damansara, 47810 Petaling Jaya, Selangor.

Tel: 03-61569807 / 08

Email: cpcn@ensearch.org

Visit us on the web at <http://ensearch.org>



Trainer's Biodata



Ms. Amarjit Kaur, Senior Consultant, SHEMSI Sdn. Bhd.

Amarjit has been involved in delivering EMS, OHSMS and food safety and integrated management system related training courses and consultancy and auditing services to a range of industrial and service based clients in Malaysia, Indonesia, New Zealand and Australia in her capacity as Senior Consultant at SHEMSI Sdn. Bhd., Malaysia. She has conducted sustainability assessments of organisations in Malaysia, Indonesia and New Zealand. She is a member of the Business Council for Sustainability and Responsibility Malaysia (BCSRM) Technical Standards Working Group and an expert on the National Mirror Committee for ISO TC207 SC1 (Technical Committee for the development and revision of ISO 14001&4) and was the Malaysian representative to ISO TC207 SC1 WG3 that developed ISO 14005, a guidance standard on the staged implementation of an environmental management system and more latterly the revision of ISO 19011 (Guidelines for Auditing Management Systems) as well as the development of ISO TR 14069 'Organisational Carbon Footprinting'. She was appointed as an Assessor for the Prime Minister's Hibiscus Award in 2009 and 2013. She is an approved trainer for several IEMA recognised courses.

TRAINING PROGRAMME

3RD DECEMBER 2014, WEDNESDAY

TIME	TOPIC
08:30 am - 09:00 am	REGISTRATION
09:00 am - 09:15 am	Introduction
09:15 am - 10:15 am	Background to ISO 14001 and ISO 14004 and the revision process
10:15 am - 10:35 am	MORNING BREAK
10:35 am - 01:15 pm	Key Features of ISO 14001:2015 ♦ Group Exercise
01:15 pm - 02:15 pm	LUNCH BREAK
02:15 pm - 03:40 pm	Key features of ISO 14001:2015 (cont.) ♦ Group Exercise Implications and benefits of ISO 14001:2015 ♦ Group Exercise
03:40 pm - 03:50 pm	AFTERNOON BREAK
03:50 pm - 04:50 pm	ISO 14001:2015 linkage with other management system standards
04:50 pm - 05:00 pm	Course Evaluation
05:00 pm	End of Training



ENSEARCH SABAH BRANCH NEWS

Welcome to our new section, The ENSEARCH SABAH BRANCH NEWS;
where all news and announcements related to our Branch in Sabah
will be published.

ENSEARCH Sabah Branch 's 3rd Annual General Meeting and Tea Talk on Sabah 's Biodiversity

The Sabah Branch 's 3rd Annual General Meeting and Tea Talk was held at Novotel 1, Kota Kinabalu, Sabah on 28th June 2014, Saturday. The AGM began with a Tea Talk on "The Biodiversity Crisis: Not Knowing What We Don 't Know In Time" presented by Prof. Ghazally Ismail, the Vice Chancellor of Universiti Kolej Yayasan Sabah.

SABAH BRANCH COMMITTEE 2014 / 2015

Chairperson	: Ahmed Tariq Datuk Aripin
Hon. Secretary	: Tania Golinggi
Treasurer	: Dean Yee
Committee Members	: Vanessa Jipin
	: Nora Liew
	: Mohd. Iskandar Shah Ali
	: Vijay Panickar
Co-opted Members	: Eng Weng Hong
	: Datuk Adeline Leong
Executive Secretary	: Wynnie Jong



The newly appointed Committee of the Sabah Branch conducted a series of courtesy visits to address the Environmental issues occurring in the State:

1) Courtesy visit to the Ministry of Tourism Culture & Environment Sabah, 25th August 2014

◆ The group met with Minister, Honorable Datuk Seri Panglima Masidi Manjun & the Permanent Secretary, Datuk Michael Emban. Among the topics that were discussed were the proposed Tanjung Aru development, plastic wastes in the State, Environmental training for professionals and setting up an Institute for Environmental Consultants in the State. Datuk Seri Panglima Masidi Manjun called upon all Government Departments to come together with ENSEARCH Sabah to address the various Environmental issues affecting the Environmental health of the State. The Minister also pledged his Ministry's support for ENSEARCH Sabah Branch to act as an independent party to evaluate matters that may require an outside technical point of view with reports and factual data to support their findings.

2) Courtesy visit to State Environment Protection Department (EPD), 26th August 2014

◆ As a follow up to the courtesy visit to the Ministry of Tourism, Culture & Environment Sabah, the committee made a courtesy visit to the EPD, which was met by its Director, Mr. Yabi Yangkat, the assistant Director Dr. Jammy Gabriel, and senior officers Vitalis Moduying and Daisy Aloysius. The Director and his senior officers welcomed the initiative proposed by ENSEARCH Sabah to set up an institute to help regulate the registered consultants in the State. This would greatly help one of the smallest Departments in the State handle some of the most challenging and widespread environmental issues in Sabah. This proposed institute could even assist in training Tour guides and other professionals that come in direct contact with the natural environment that is a major influence in bringing tourists to the State.

3) Courtesy visit to Sabah Economic Development and Investment Authority (SEDIA), 12th September 2014

◆ Executive Members of ENSEARCH Sabah paid a courtesy visit to the office of SEDIA and met up with its CEO, Datuk Dr. Yaakub Johari. Objectives of the meeting were to share ENSEARCH Sabah Branch's desire to ensure that all future projects under the SEDIA purview take into consideration proper Environment practices for Stability and preservation of Sabah's pristine Environmental conditions. Datuk Dr. Yaakub expressed his interest in ENSEARCH proposing Environmental friendly projects for the State to consider like refurbishing run down areas of Sabah into thriving centres of human activity.

4) Courtesy visit to Sabah Housing and Real Estate Developers Association (SHARED A), 21st October 2014

◆ The group met with the current SHARED A President, Datuk Francis Goh at Wisma Kinsabina. ENSEARCH Sabah's visit was a continuation of the Awareness program that it has embarked on this year to raise the awareness of ENSEARCH in Sabah and build relationships with the likes of Government agencies and Associations, like SHARED A. The purpose of this relationship building with SHARED A is to explore a working relationship to organize environmental training for SHARED A members and to promote an environmentally friendly agenda. Datuk Francis Goh shared some of SHARED A's programs for the Environment and is looking forward to working with ENSEARCH Sabah on raising the awareness of Sabah's green environment and to find ways to preserve and care for it.



Sabah Branch Committee with Minister, Datuk Seri Panglima Masidi Manjun & Permanent Secretary, Datuk Michael Emban, Ministry of Tourism, Culture & Environment Sabah



Courtesy visit to the Sabah State Environment Protection Department



Sabah Branch Committee with Datuk Dr. Yaakub, CEO of SEDIA



Sabah Branch Committee with Datuk Francis Goh,
President of SHARED,

Workshop on Life Cycle Assessment

OVERVIEW

Life Cycle Assessment (LCA) is a basic building block for the application of environmental management systems, especially for industry. With Malaysia pushing to move its industrial sector from up and mid-stream to the down-stream end of the production line, together with the increasing value placed on environmentally sustainable products, LCA is a critical tool in meeting consumer and market demands.

In a globalized market place, understanding and applying LCA is vital for marketing of products as it forms the basis for labelling. The environmental standard for products and services is developed through the International Organisation of Standards (ISO) Environmental Management System series of standards. The application of LCA is under one of these standards. These standards are reviewed every three years to ensure relevancy to market needs. **Application of LCA to Malaysian products have many times been the only reason why they have been acceptable to be supplied and marketed abroad in high-value markets. This workshop intends to inform and prepare the participants for LCA application**

TARGET AUDIENCE

The target group are professionals who interested in using Life Cycle approach to improving product development and environmental management. They may be from industry, product designers, technology innovators, public sector agencies, academia, environmental and industrial consultants, consumer groups and non-governmental organisations.

The workshop serves as an introduction for starting LCA practitioners and a refresher for existing practitioners with the latest information being provide on the approach and methodologies for the new and forthcoming LCA Footprints.

ORGANISED BY:



For inquiry please contact:

Vanessa Jipiu - 088-316926/016-8230971

Wynnie Jong - 016-3222889

E-mail: ensearchsabah@gmail.com

Date: 27 November 2014 (Thursday)

Time: 08:30 am - 05:00 pm

Venue: SWEPA Meeting room, Wisma

Wanita, 2nd Floor, Jalan Tuaran 3.5km,

88999, Kota Kinabalu, Sabah

PENDING CPD HOURS APPROVAL FROM EIMAS



PROGRAMME	
TIME	TOPIC
8.30 AM — 9.00 AM	Registration Welcome Address
9.00 AM— 10.30 AM	What is Life Cycle Assessment and the need for LCA The standards for LCA—ISO 14040 series ISO 14044—LCA ISO 14046—Water footprint Footprint Standards Questions and Answers
10.30 AM— 10.45 AM	Tea Break
10.45 AM—1.00 PM	Continuation as above
1.00 PM—2.00 PM	Lunch
2.00 PM—3.30 PM	How to conduct LCA
3.30 PM—3.45 PM	Tea Break
3.45 PM—5.00 PM	Examples of LCA case study Questions and Answers
5.00 PM	Closing



ENSEARCH CALENDAR 2014

NOVEMBER

Hazardous Waste Management & Compliance Training

25 & 26 (Tuesday & Wednesday)

**Life Cycle Assessment Workshop - Kota Kinabalu,
Sabah**

27 (Thursday)

DECEMBER

3 (Wednesday)

Why You Can 't Ignore ISO 14001:2015 Training

The Tentative ENSEARCH 2015 Training Calendar will be
uploaded on our website in December at

<http://ensearch.org/>



NEWS

'Cameron rivers failed to cope with heavy rain'

AVERTING TRAGEDY: DID to excavate, widen and construct flood walls along rivers

THARANYA ARUMUGAM
KUALA LUMPUR
tharanyainst.com.my

THE floods in Cameron Highlands were caused by discharge following heavy rainfall that the river system in the district could not cope with.

Drainage and Irrigation director-general Datuk Seri Ahmad Husaini Sulaiman said the Natural Resources and Environment Ministry and relevant authorities would look into measures to mitigate the issue to prevent such tragedies from recurring.

"DID officials will work on improving the rivers, which includes widening, excavating and constructing flood walls. We will also provide flood plains.

"No buildings or any activity will be allowed along river banks or reserves," he told the *New Sunday Times* yesterday.

Ahmad Husaini said RM40 million had been allocated for work to improve Sungai Bertam, which would commence soon.

As for Sungai Ringlet, he said the department was in the midst of finalising the planning and design, as well as awaiting the allocation of another RM40 million to be approved



Drainage and Irrigation director-general Datuk Seri Ahmad Husaini Sulaiman says no buildings or activities will be allowed along riverbanks

by the ministry for the upgrading works.

He also said the authorities would manage or stop development along the river basins because the extra discharge into the river was caused by land clearing activities, as well as the use of plastic houses for agricultural activities.

He said the public should also stop throwing rubbish into rivers.

Rough seas off east coast, rivers rise in Kelantan

KOTA BARU: Strong winds and high waves are expected to lash the coasts off Kelantan and Terengganu until today, the Meteorological Department warned.

The condition, it said, would pose a risk to fishermen in small boats and those involved in recreational and sporting activities at sea.

"Strong northeasterly winds of 40 to 50kph, with waves up to 3.5m over the waters off Kelantan and Terengganu, are expected to continue until Sunday," the department said.

Kelantan had experienced rain spells over the past few days which caused a rise of water levels in Sungai Golok, Sungai Lebir and Sungai Galas above their normal readings.

As of 3pm yesterday, the measuring station at Sungai Golok in Rantau Panjang recorded a level of 6.33m, which was above the normal mark of 5m. The level of Sungai Galas in Kampung Lembaga measured at 81.74m (normal level 80m) while Sungai Lebir at Kuala Koh was at 62.19m (normal level 62m).

The worse is yet to come, warn environmentalists

CAMERON HIGHLANDS: Wednesday's mud floods and landslides in Bertam Valley, Ringlet and Kuala Terla are just the beginning of more disasters to strike the highlands, warn environmentalists.

They said the highlands would see the horror of more floods and landslides if land-clearing continues. They are asking for regular monitoring and stringent enforcement on all land-clearing activities to be in place to ensure that they are not carried out at the expense of the environment.

Regional Environmental Awareness Cameron Highlands (Reach) president K. Ramakrishnan said the situation would turn from bad to worse if no short-term and long-term solutions were found.

"The similar disaster in Bertam Valley here on Oct 23 last year merely served as a warning. Wednesday's incident is the beginning of more disasters to come. We are currently on auto-pilot mode and have yet to hit turbulence. The worse is yet to come," he said after taking reporters to see the destruction happening on the highlands.

Checks showed that the road and river reserves from Kampung Raja right up to Bertam Valley and Ringlet had been encroached on for illegal farming activities.

Hidden behind the Cameron Highlands trunk road were vast plots of illegal dumping sites. Rotten vegetables, flowers and bags of fertiliser were thrown into the rivers.

According to Ramakrishnan, water from these rivers flowed through a 10km tunnel to the Sultan Abu Bakar Dam in Bertam Valley.

He alleged that the "out-of-control" illegal land-clearing activities was made worse "with rampant corrupt practices from top-down".

"I can show you that illegal land-clearing activities are taking place despite the authority's 'No Encroachment' signs being put up. If this is not corruption, then prove me wrong."

He claimed that political interference also aggravated the situation.

Environmental Management & Research Association of Malaysia president Elias Saidin cited the improper planning of agriculture land in the highlands as the main cause of the tragedy in Bertam Valley.



Environmental Management & Research Association of Malaysia president Elias Saidin says bad planning of agricultural land led to the tragedy in Bertam Valley



Permata Greenland Organisation deputy president Dr Sharifah Mazlina Syed Abdul Kadir says development should come with contingency plans

"The whole world is affected by climate change and extreme weather conditions. The rainfall pattern has changed and it's high time for the authorities and developers to engage in proper development planning to not worsen the condition.

"Land is exposed when it is used for agriculture and it seems difficult, or rather, we don't see any enforcement to address this issue," he told the *New Sunday Times*.

Elias said developers needed to be responsible and adhere to guidelines, such as by building drainage and water retention systems.

Malaysian Nature Society president Professor Dr Maketab Mohamed said the Natural Resources and Environment Ministry, the National Security Council, Pahang government and other agencies should play a major role in enforcement.

"Coordination of various agencies

is crucial. Floods, if not 100 per cent preventable, can be controlled. Ignoring the facts is just asking for the repeat of past tragedies."

Permata Greenland Organisation deputy president Dr Sharifah Mazlina Syed Abdul Kadir said the authorities should be proactive, stressing that development should come with contingency plans.

"All felling of trees must be followed-up with replanting. The authorities must control all development on hills and ensure a proper drainage system. Besides the local authorities, the developers should obtain approval from a geologist."

Ramakrishnan called on the relevant parties to get their act together if they were serious in solving the problems on the highlands.

"If nothing is done in another 10 years, Cameron Highlands will no longer be a pristine hill resort."



A farm on a cleared site in Cameron Highlands. Environmentalists are asking for regular monitoring and stringent enforcement on land clearing in the area to prevent mudslides and floods.

Isolated storms to hit this week

KUALA LUMPUR: Cameron Highlands is expected to experience isolated thunderstorms in the afternoons from today until Friday, the Malaysian Meteorological Department (MMD) said.

An MMD spokesman said no rain

was forecast in the mornings, evenings and nights in the district.

She added that the minimum and maximum temperature in the district over the next seven-days would be between 16°C and 24°C.

She advised members of the pub-

lic to stay indoors and to reduce activities in open areas in the afternoons to avoid untoward incidents. For more information, visit the MMD portal at www.met.gov.my or contact its 24-hour line at 1-300-22-1638.



ENSEARCH COUNCIL 2014 / 2015

ENSEARCH COUNCIL 2014 / 2015

President	:	Ir. Elias Saidin
Vice-President	:	Mr. Gobinathan Kumaran Nair
	:	Dr. Foo Say Moo
Honorary Secretary General	:	Ms Geetha P. Kumaran
Asst. Honorary Secretary General:	:	Mr. Joel Lawrence Jayasunthar
Honorary Treasurer	:	Ir. Abu Harith Shamsuddin
Immediate Past President	:	En. Abdul Aziz bin Long
Council Members	:	En. Mohamed Siraj Abdul Razack
	:	En. Akashah Hj. Majizat
	:	Mr. Khoo Boon Keat
	:	Ir. Lee Heng Keng
	:	En. Abdul Aziz bin Long
	:	Ms. Adibah Sabrina Mohd Sebri
Co-opted Members	:	Mr. Ed Fahnlne
	:	Ms. Jenny Tan Suat Eam
	:	Mr. Hari Ramalu
	:	Ms. Lee Tzee Wan
	:	(Petronas Rep.)
	:	Ms. Suzanne McGowan
	:	(University of Nottingham Rep.)
	:	Dr. Subramaniam a/l Karuppannan
	:	Ms. Ruhaida Md. Hassan
	:	(Indah Water Konsortium Sdn. Bhd. Rep.)
	:	Mr. Peter Ho Yueh Chuen
	:	(CPCNet Rep.)
	:	Mr. Ahmed Tariq Datuk Aripin
	:	(ENSEARCH Sabah Branch Rep.)



ENSEARCH SECRETARIAT 2014

Executive Secretary	: Ms. Edna Xavier
Project Officer (ENSEARCH & CPCNet)	: Ms. Audrey Percival
External Accountant	: Ms. Tan Siok Yin

ENSEARCH SECRETARIAT



*On behalf of the
ENSEARCH Council, the
ENSEARCH
Secretariat would like to
wish all our
members and associates a
very
Merry Christmas & New
Year 2015!*

"For a Better Environment"



ENVIRONMENTAL MANAGEMENT & RESEARCH
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