



# Berita ENSEARCH

**Capacity Building NGO in the Environmental Field to be and Enabler to Malaysian Professional's Growth**

JULY—SEPTEMBER 2016 (3RD QUARTER)

e-bulletin at <http://ensearch.org/resources/>



## ENVIRONMENTAL MANAGEMENT & RESEARCH ASSOCIATION OF MALAYSIA (ENSEARCH)

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### 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.

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*Nature provides a free lunch, but only if we control our appetites.*

- William Ruckelshaus -

### ANNOUNCEMENT

To serve members better, please let us know if there are any changes to your contact details. For Corporate Members, please provide more than one contact e-mail address to facilitate better dissemination of ENSEARCH information. Receive news through Whatsapp! Please drop us a line and provide your name to 016-2780191. Please write to [admin@ensearch.org](mailto:admin@ensearch.org) for any changes or updates in contact details.





# 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](http://www.cpcnet.atbioversity.net)



## 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"

## MISSION

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





# Featured Council Member

## Philip C. Reidy



Philip C. Reidy was born in 1959 at Boston, Massachusetts. He received his Bachelor Degree in Civil Engineering back in 1983 from University of Massachusetts and later on obtained his Masters Degree at Northeastern University, Boston in 1986. He is currently the Principal of Geosyntec Consultants Sdn Bhd (Malaysia).

Philip Reidy carries over 25 years of geotechnical, stormwater and environmental engineering experience throughout his career. He has served in various companies in the United States since 1984 before he moved to Malaysia in July 2013. He also started running his own firm from 2003 to 2010, which was later acquired by his current firm, Geosyntec Consultants.

Philip has always admired Michael Bloomberg, who was the former Mayor of New York City and also a founder of Bloomberg Enterprise. Yet, his father is the most influential person for him, who, according to Philip, is the consummate engineer and the voice of reason. However in his career development, Philip Reidy has always looked up to Walter Jaworski, a consultant and thesis advisor.

While not having a regret with his current career opportunities, he does wish that he could have pursued his Doctorate degree. Philip was exposed to road racing at an early age and have grown to love it ever since. It is now his hobby to get involved in sport motorbikes and MotoGP. Despite his hobby, his interests still lie in environmental conservation, waste reduction and volunteering.

Philip has always upheld his life philosophy, which is to *do the right thing; if it looks too good to be true, it probably is; and live a life where you cause no harm or impairment to other people, animals and the planet.*

Philip was first involved in ENSEARCH in 2015 when a colleague relocated and he saw the opportunity to become directly involved in the group. The managing director of his firm's South East Asia operations, Robert Bruce, influenced his decision to join ENSEARCH. He thinks that ENSEARCH is a committed and intelligent group of professionals who are focused on ENSEARCH's mission and for the betterment of the environment.

His first involvement with ENSEARCH activity was when he helped organise a site tour to ResourceCo Asia and LaFarge Cement. For Philip, being a volunteer to ENSEARCH is culturally and professionally fulfilling. With hope that more people get engaged in NGOs like ENSEARCH, he advises that getting involved in NGOs will teach people on how others work and what is going on around, and in return, they will gain opportunity to contribute towards the environment in which we live.





# Featured Article



## Challenges in Scheduled Wastes Management During the Demolition of Old Generation Thermal Power Plants in Malaysia (Part 2)

- Ir Dr Casey S.P. Ngo and Vincent C.L. Ngo -

*Part 1 of this Article was published in the previous edition of the Berita Ensearch.*

### Chimney and Brickliners

The issue with the management of wastes from the demolition of the chimney is the presence of ash (contained in hopper, **Figure 5**) from burning of MFO. Old generation power plants do not incorporate technology to separate the ash (which are potentially-laden with heavy metals) from the flue gas and the flue gas are channelled directly to the chimney. Due to gravitational forces, larger ash particles will tend to settle to the bottom of the chimney into the hopper. The chimney for power plant burning MFO is designed to be very tall (in the range of 100 - 120 m) apparently to allow for sufficient dispersion of pollutants (SO<sub>2</sub> and dust) to the surroundings. Such mega structure requires stability in design to prevent toppling due to wind force. As such, such chimneys are contained in specially-casted and -reinforced high strength concrete windshield (seen in **Figure 6** as the outer structure painted in red and white stripes).

The inner flue ductings are brickliners held together with insulation (rockwool). Due to inherent close contact with the entrained ash particles in the flue gas, the brickliners are potentially contaminated, resulting in them being categorised as SW 422 (mixture of scheduled and non-scheduled wastes) (**Figure 7**). In the event contamination occurs, huge financial implication arises as all the brickliners (estimated to be approximately 2,250 metric tonnes) are destined to be sent for secured landfilling and disposal cost was estimated to be at least RM2 million. However, there is the legal option to apply for Special Management for Scheduled Wastes under Regulation 7 (1), Environmental Quality (Scheduled Waste) Regulation 2005 by testing the brickliners for composition of heavy metals against the allowable threshold limit set out in Appendix 1: Hazardous Characteristics of Waste contained in the Guidelines for the Application of Special Management of Scheduled Wastes.

It is prudent that the testing criteria set out in the guideline are given priority by project planners considering the huge disposal cost involved while at the same time preventing the illegal disposal of such materials. The materials have the potential to contaminate the water sources (surface and groundwater) if the contaminants are above the allowable threshold limit and are known to leach out when in contact with water. Besides, contact of the contaminants with soil in the dumping site will inadvertently cause the land to be contaminated as well.



Figure 5: Ash (SW 104) at the Hopper Located at the Base of the Chimney





# Featured Article

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- Ir Dr Casey S.P. Ngo and Vincent C.L. Ngo -



Figure 6: The 110 m Tall Chimney Contained in Windshield



Figure 7: Brickliner from the Demolished Chimney Potentially-Contaminated with Heavy Metal Ash (SW 104) Due to Close Contact Throughout Plant's Operational Lifespan



# Featured Article



## Challenges in Scheduled Wastes Management During the Demolition of Old Generation Thermal Power Plants in Malaysia (Part 2)

- Ir Dr Casey S.P. Ngo and Vincent C.L. Ngo -

### Oil-Filled Circuit Breakers at the Switchyard

The switchyard of power plants consists of two (2) types of circuit breakers i.e. air-cooled and oil-cooled. The management of oil-cooled circuit breakers pose challenges in the aspects of handling of huge size and amount of materials (estimated to be approximately 110 metric tonnes) (Figure 8). Oil-filled circuit breakers consist of key parts made of metals, ceramics and plastics parts, an oil tank underneath and sand matrices filled with oil. Due to the presence of oil as contaminant, the circuit breakers are classified under SW 409 after the oil is drained out. The challenge then lies in getting a prescribed premises with sufficient resources to handle such large amount and large units of circuit breakers. It is prudent to select recycling facilities that can dismantle the circuit breakers part by part and then clean each part so that the resulting recovered materials can then be sold as scraps.

This approach is more environmental-friendly than disposal in secured landfills (costly and does not conform to the zero waste principle). In the current case study, all the circuit breakers are sent to a DOE-licensed prescribed premises in Prai, Penang (thus also conforming to the proximity principle), whereby each circuit breaker are stripped part by part and cleaned with solvents (Figure 9). The only resulting scheduled wastes requiring disposal is the oil-contaminated sand (Figure 10) which might need further treatment at Kualiti Alam (through incineration to remove the hydrocarbons).



Figure 8: Transporting the Oil-Filled Circuit Breakers Declared as SW 409 to Prescribed Premises for Recycling and Recovery Process



# Featured Article

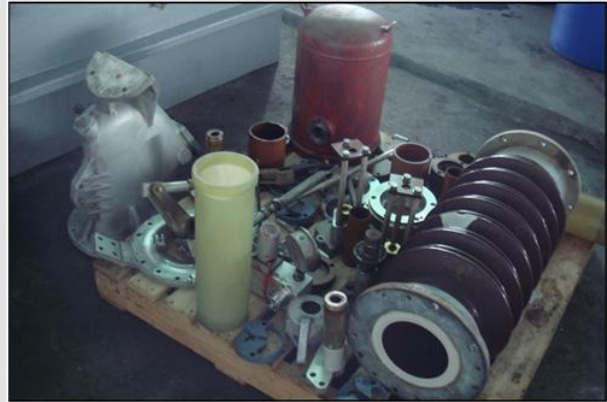


## Challenges in Scheduled Wastes Management During the Demolition of Old Generation Thermal Power Plants in Malaysia (Part 2)

- Ir Dr Casey S.P. Ngo and Vincent C.L. Ngo -



*Cleaning Process with Solvents*



*Cleaned Materials (Plastics, Ceramics and Metal Parts)*

Figure 9: Recycling and Recovery Process of the Oil-Filled Circuit Breakers at Prescribed Premises



Figure 10: Scheduled Wastes Generated from the Cleaning Process (SW 408: Sand Contaminated with Oil) for Disposal to Kualiti Alam

### Transformers at Switchyard

The challenge in handling the discarded transformer units (Figure 11) are related to the traditional use of polychlorinated biphenyls (PCBs) as transformer fluid due to its fire-resistance potential. In the event PCBs are detected in the transformer fluid (cooling medium), the entire transformer unit weighing several tonnes shall be classified as SW 318: Wastes, substances and articles containing or contaminated with polychlorinated biphenyls (PCB) or polychlorinated triphenyls (PCT). The dire consequence to project owners are the strict protocols to be followed and huge disposal costs to be incurred.

The United Nations Environment Programme (UNEP) had published an article detailing the handling of PCB-contaminated items in an article titled 'PCB Transformers and Capacitors: From Management to Reclassification and Disposal' (First Issue, May 2002).





# Featured Article

## Challenges in Scheduled Wastes Management During the Demolition of Old Generation Thermal Power Plants in Malaysia (Part 2)

- *Jr Dr Casey S.P. Ngo and Vincent C.L. Ngo* -

The article provides a simple field test to determine if the transformer fluid is laced with PCB (pg. 18). The specific gravity of chlorinated organic fluid is 1.5 whereas the specific gravity of oil is less than 1.0 (with 1.0 being the specific gravity of water at room temperature).

When mixed with water, PCB-laced transformer fluid will sink to the bottom whereas those without PCB will float to the top (**Figure 12**). In the current case study, the transformer fluid were found to be PCB-free as apparently the use of PCB-laced transformer fluid had been phased out worldwide since the 1980s and the project owner in question had adopted similar approach.

With the hurdle of potential PCB contamination overcame, the next challenge is handling the large unit of transformer which is technically a metal (steel) frame containing copper-solenoid and filled with oil (transformer fluid).

After the oil are drained out from the transformer and conservator tank, the unit is essentially an 'empty container' contaminated with oil and thus, the scheduled wastes code of SW 409 is deemed appropriate. In such case, the transformer cannot be traded freely as scrap metals to scrap metal dealers as they are destined to be cut open (to salvage the precious copper coils from the solenoid) (**Figure 13**).

Since the coils are contaminated with oil, the transformer casing and copper coils will be flushed with water for cleaning, and the oil-contaminated water will eventually flow to our water courses, resulting in water pollution.

It is for this reason that prescribed premises licensed to handle SW 409 are established as these facilities shall be equipped with wastewater treatment plant to treat the cleaning water to meet the limit for oil and grease [depending on the location of the prescribed premises i.e. below 10 mg/L for Standard B or below 1.0 for Standard A of the Environmental Quality (Industrial Effluent) Regulations 2009]] prior to discharge to watercourses.



**Figure 11: Discarded Transformer from the Switchyard**



# Featured Article



## Challenges in Scheduled Wastes Management During the Demolition of Old Generation Thermal Power Plants in Malaysia (Part 2)

- Ir Dr Casey S.P. Ngo and Vincent C.L. Ngo -



**Figure 12: Physical Test for Presence of Polychlorinated Biphenyls (PCB) in Transformer Cooling Oil**



**Figure 13: Copper Coils Within a Transformer**  
(Source: Copper Alliance UK)

Proper management of scheduled wastes in particular the final disposal routes are crucial in ensuring protection of human health and our delicate environment. The above case study shows that mismanagement is prone to occur if ignorant, inexperienced or incompetent parties are involved in the demolition works.

It is hoped that this article will shed some light into the critical issues to be addressed when planning for demolition of a power plant or similar industrial set-up for that matter.

The spirit is that there shall never be the mental block of 'not-in-my-backyard' syndrome or popularly known as NIMBY syndrome as the mismanagement of scheduled wastes especially the toxic ones will eventually contaminate the air we breathe, the water we drink, the soil we cultivate for produce and the groundwater we obtained our mineral water from.

### **About the Key Author**

*Ir. Dr. Casey Ngo is a chemical engineer by training with scheduled wastes management registered as one of her field of expertise with DOE Malaysia under the EIA Consultant Registration Scheme. Her first involvement in consultancy project involving scheduled wastes was assisting (via EIA study) a Singaporean-based company to establish the first SW 110 full recovery plant in Penang from 1999 to 2001. She attained her actual experience in dealing with the management of scheduled wastes by joining the same SW 110 facility from June 2006 to May 2007 as its Environmental, Health and Safety (EHS) Manager. During her tenure in the said recovery facility, she was the Programme Manager for DELL Battery Recall Programme in Asia Pacific and Japan (covering 16 countries) and tasked to handle transboundary movement of hazardous wastes according to the Basel Convention. She was involved for permitting requirements directly with the regulatory bodies in Singapore, Hong Kong, Australia and Switzerland. After leaving the SW facility, she continues to be actively involved in scheduled wastes management studies, ranging from EIA, environmental audits and scheduled wastes spillage clean ups projects.*

**ENSEARCH welcomes any interested readers to send in their articles to be featured in upcoming Berita ENSEARCH. Articles must be at least 2 pages in length, written in Times New Roman, font 11. Articles can be sent to [spo@ensearch.org](mailto:spo@ensearch.org).**





# Events and Activities

## 12th ASIA PACIFIC ROUNDTABLE FOR SUSTAINABLE CONSUMPTION AND PRODUCTION

Date : 12th - 13th July 2016  
Time : 9.00 am - 5.00 pm  
Venue : Apsara Angkor Hotel, Siem Reap, Cambodia  
Summary :

**The Asia Pacific Roundtable on Sustainable Consumption and Production (APRSCP)** is an international, nongovernmental, non-profit, network institution that promotes sustainable consumption and production in the Asia-Pacific. The APRSCP is a multi-stakeholder dialogue that aims to enhance and strengthen regional cooperation in the development and implementation of sustainable consumption and production (SCP) strategies, and to promote best practices, programs, local initiatives, and lessons learned on SCP related projects in Asia and the Pacific region.

The **12<sup>th</sup> Asia Pacific Roundtable for Sustainable Consumption and Production (12<sup>th</sup> APRSCP)** was held at the Apsara Angkor Hotel in Siem Reap, Cambodia, on 12 - 13 July 2016 with back-to-back events on 14 July 2016, and was attended by more than 300 delegates, consisting of about 50% local delegates. This Roundtable organized by the Asia Pacific Roundtable on Sustainable Consumption and Production (APRSCP) was hosted by the Ministry of Environment, Kingdom of Cambodia, in partnership with the International Institute for Scientific Research (IISR). It was supported by the United Nations Environment Programme (UNEP) through the SWITCH-Asia Regional Policy Support Component (RPSC) of the European Union (EU) and by other partners including EU SWITCHAsia Network Facility, the Network on Resource Efficiency and Cleaner Production (RECPnet) with the United Nations Industrial Development Organization (UNIDO) and the China National Cleaner Production Center (CNCPC).

The theme for the 12<sup>th</sup> APRSCP was “**Call for Action - Acting Together for our Future Sustainability**”. The objectives were to call for action on developing and implementing innovative policy solutions, scaling up technology transfer and strengthening knowledge sharing on approaches for best practices on Sustainable Consumption and Production (SCP). The 12<sup>th</sup> APRSCP drew from the results and recommendations of the concluded activities and events of the EU SWITCHAsia Programme in 2015-2016, the 10 Year Framework of Programme on SCP (10YFP), the Sustainable Development Agenda 2030, and related APRSCP research and projects, such as the preparation of the Asia Pacific SCP Roadmap.





# Events and Activities

There were five Roundtable Sessions focusing on selected priority areas on SCP: 1. Sustainable Food Systems and Agriculture, 2. Sustainable Cities and Livelihoods: Green economic growth and social inclusiveness, 3. Sustainable Tourism, 4. Education and Sustainable Lifestyles, 5. Eco-labelling and Sustainable Public Procurement.

Outputs included recommendations on how stakeholders could contribute to the implementation of the Asia Pacific SCP Roadmap at the regional and national level, including possible regional and national programs/activities for research, communication, capacity building, technology transfer, financing and monitoring and evaluation to scale up SCP best practices and initiatives, such as on SDG 12 (“Responsible Consumption and Production Patterns”) and other SCP related SDG targets and indicators.

At the closing session there was a handing over ceremony of the APRSCP insignia to ENSEARCH who will be the co-host in Kuala Lumpur, Malaysia, for the 13<sup>th</sup> APRSCP on 10 -12 October 2017.







# Events and Activities

## SUSTAINABILITY AND ENVIRONMENTAL MANAGEMENT CONFERENCE AND EXHIBITION (SEM 2016)

Date : 25th and 26th July 2016  
Time : 9.00 am - 5.00 pm  
Venue : Sunway Putra Hotel, Kuala Lumpur  
Summary :

On 25<sup>th</sup> & 26<sup>th</sup> July 2016, ENSEARCH, with the endorsement and support of the Ministry of Natural Resources & Environment Malaysia (NRE) the Ministry of Energy, Green Technology & Water (KeTTHA), and the Department of Environment (DoE) successfully hosted the Sustainability and Environmental Management Conference & Exhibition (SEM2016), at the Sunway Putra Hotel in Kuala Lumpur.

Officiated by the Minister of NRE, YB Dato' Seri Dr. Haji Wan Junaidi bin Tuanku Jaafar, SEM2016 featured four thematic sessions representing current issues affecting Sustainability and Environmental Management in Malaysia, namely Air Quality (Pollution, Emissions and Climate Change), Marine Resources, Sustainable Energy and Hazardous Wastes. These sessions included 4 Keynotes and 13 presentations from policy makers and industry players such as the Sustainable Energy Development Authority (SEDA), the Malaysian Nuclear Power Corporation (MNPC), Tenaga Nasional Berhad (TNB), Petroliaam Nasional (Petronas), World Wildlife Fund (WWF), Rolls-Royce and Sime Darby Properties Berhad, to name a few.

More than 100 delegates attended the 2-day Programme, which also featured a modest exhibition featuring local green technologies from various providers such as Sage Promaster Sdn. Bhd., Tex Cycle Sdn. Bhd., Cenviro Sdn. Bhd., Precise Abundance Sdn. Bhd. and Industrial Minerva Sdn. Bhd.







# ENSEARCH In News



Wan Junaidi Tuanku Jaafar diberikan penerangan mengenai teknologi kitar semula oleh Pengarah Urusan Tex Cycle, S. Peery (kanan) selepas merasmikan Pameran dan Persidangan Pengurusan Alam Sekitar dan Kemampanan 2016 di Kuala Lumpur, semalam. Turut hadir, Presiden Persatuan Penyelidikan dan Pengurusan Alam Sekitar Malaysia (Ensearch), Gobinathan Kumaran Nair. UTUSAN/TAUZI BAHARUDIN

Sustainability and Environmental Management Conference (SEM 2016) in UTUSAN MALAYSIA, 26 July 2016

**KUALA LUMPUR 25 Julai - Kementerian Sumber Asli dan Alam Sekitar komited untuk menjadikan bandar raya-bandar raya utama di Malaysia sebagai bandar raya teknologi hijau sepenuhnya dalam tempoh 10 tahun akan datang.**

Menterinya, Datuk Seri Dr. Junaidi Tuanku Jaafar berkata, Melaka dan Iskandar, Johor dijadikan sebagai perintis kepada projek berkenaan yang berkonsepkan teknologi hijau dan model sebagai antara bandar hijau pertama di negara ini.

"Kita juga telah mengenal pasti beberapa bandar utama seperti Ipoh, Perak dan Kuching, Sarawak yang berpotensi untuk dibangunkan sebagai bandar teknologi hijau yang mampu memperlihatkan kewujudan sebuah perbandaran yang sihat," katanya dalam sidang akhbar selepas merasmikan Pameran dan Persidangan Pengurusan Alam Sekitar dan Kemampanan di sini hari ini.

[BP theborneopost.com/2016/07/26/nre-requires-industries-to-submit-reports-on-emissions-produced/](http://theborneopost.com/2016/07/26/nre-requires-industries-to-submit-reports-on-emissions-produced/)

7/26/2016

Sustainability and Environmental Management Conference (SEM 2016) in Borneo Post, 26 July 2016



Wan Junaidi (right) greeting participants of the 'Sustainability and Environmental Conference and Exhibition 2016'. — Bernama photo

**KUALA LUMPUR:** The Natural Resources and Environment Ministry (NRE) requires top industry players to submit reports on the amount of emissions produced as well as targeted reduction by them in line with the country's aim to reduce pollution.

Its minister, Datuk Seri Dr Wan Junaidi Tuanku Jaafar said those targeted sectors were energy, industrial processes, agriculture, land use, land use change, and forestry and waste.

He said the technical reports would then determine the amount of emission production and reduction in the country.

"At the moment, ministry officials are actively explaining to the relevant sectors on how to produce the technical report, and at the same time, we want them to report on how much emission can be reduced," he told reporters after officially opening the Sustainability and Environmental Conference and Exhibition 2016 here, yesterday.





# Announcements



## Training

### Introduction to Odour Sampling and Determination, Modelling and Assessment (Level 1- Beginner)

**Date: 18th October 2016**

**Time: 8.30am—5.00pm**

**Venue: ENSEARCH Training Centre,  
30-3, Jalan PJU 5/16, Dataran Sunway, Kota Damansara, 47810,  
Petaling Jaya, Selangor**

#### Overview

Participants will be introduced to established odour sampling and determination, modelling and assessment methodology. Industrial sharing by Malaysian established odour related companies on the current odour abatement systems ends the training.

#### Objectives

1. To introduce established methods for odour sampling and determination for both point source and ambient;
2. To introduce established air quality models used for odour modelling;
3. To introduce established odour criteria adopted for odour assessment; and
4. Industrial sharing by Malaysian established odour related companies.

#### Target Participants

Environmental Practitioner (such as Environmental Consultant, Assistant Consultant and Subject Specialist), Industry (such as Competent Professional dealing with Environmental) and Academic (those interested in odour related research works)

#### Trainer

**Mr Tan Poh Aun**

Mr Tan Poh Aun graduated from University of Malaya (UM), in 1997 with a Bachelor of Science Degree (Chemistry) and has completed his Master of Technology (Environmental Management) from UM in 2002. He has attended the AERMOD, ISC-Prime and ISCST3 Air Dispersion Modelling with Risk Assessment at USA in 2005. In May 2013, he had completed a 3-day Course on CALPUFF Air Dispersion Modelling in Las Vegas, Nevada, USA. He is a registered EIA Consultant with the Department of Environment Malaysia. In Air Quality Management, Mr Tan has extensive experience in the use of established air pollution computer models such as CALPUFF, AERMOD, ISCST3, AUSPLUME, SCREEN3 and AERSCREEN. As one of the recognised air dispersion modellers in Malaysia, he has trained officers from Malaysian Department of Environment and corporate entity such as PETRONAS in air pollution modelling assessments. In 2009, he has conducted a two-weeks internship programme on Air Pollution Management and Air Quality Modelling organised by ENSEARCH for officers of Department of Environment, Bangladesh. In June 2012, he had conducted an Odour Modelling and Assessment Workshop for Malaysian Rubber Board and in December 2015, he was an invited speaker for the 12th Environmental Impact Assessment & Auditing 2015 Seminar for Faculty of Health Science, UiTM Kampus Puncak Alam. Since 2008 to date, Mr Tan has conducted numerous trainings which are mostly on Air Quality Management.

DOE - EIMAS

CPD Hours



Will be granted

To Registered Certified Environmental Professionals

#### Training Fee

- ♦ RM 450.00 (ENSEARCH Member)
- ♦ RM 550.00 (Non-ENSEARCH Member)
- \* Register **3 or more participants** from the same organization to enjoy **10% discount**
- ♦ RM 150.00 (ENSEARCH Student Member)
- ♦ RM 200.00 (Student Non-ENSEARCH Member)
- \* To qualify for the student price, please submit a copy of your **Student ID** as proof

#### Contact Us

**Environmental Management & Research Association of Malaysia (ENSEARCH) (70/84 WP)**

30-2, Jalan PJU 5/16, Dataran Sunway, Kota Damansara, 47810 Petaling Jaya, Selangor.

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E-mail: spo@ensearch.org

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

**Disclaimer:** ENSEARCH reserves the right to postpone/cancel the said Training due to unforeseen circumstances. ENSEARCH will keep participants updated on the status **3 working days** in advance by **e-mail**.





# Announcements



## TRAINING

### Odour Sampling and Determination, Modelling and Assessment (Level 2—Intermediate)

Date: 19th October 2016

Time: 8:30 am — 05:00 pm

Venue: ENSEARCH Training Centre (*Map enclosed*),  
30-3, Jalan PJU 5/16, Dataran Sunway, Kota Damansara, 47810 Petaling Jaya, Selangor.

#### Overview

Participants will be introduced to established odour sampling and determination, modelling and assessment methodology. For odour sampling, the facilitator will be demonstrating the Nasal Ranger® Field Olfactometer which is mainly used for ambient odour sampling and determination exercise. For odour modelling, the facilitator will demonstrate simulation using screening models such as SCREEN3 and AERSCREEN air quality models. From the modelling simulation, the participant will be introduced to established odour criteria for odour assessment.

#### Objectives

1. To introduce established methods for odour sampling and determination for both point source and ambient.
2. To introduce established air quality models used for odour modelling.
3. To introduce established odour criteria adopted for odour assessment.

#### Target Participants

Environmental Practitioner (such as Environmental Consultant, Assistant Consultant and Subject Specialist), Industry (such as Competent Professional dealing with Environmental), Academic (those interested in odour related research works) and those that had attended the Level 1 (Beginner) training workshop.

#### Trainer

##### Mr Tan Poh Aun

Mr Tan Poh Aun graduated from University of Malaya (UM), in 1997 with a Bachelor of Science Degree (Chemistry) and has completed his Master of Technology (Environmental Management) from UM in 2002. He has attended the AERMOD, ISC-Prime and ISCST3 Air Dispersion Modelling with Risk Assessment at USA in 2005. In May 2013, he had completed a 3-day Course on CALPUFF Air Dispersion Modelling in Las Vegas, Nevada, USA. He is a registered EIA Consultant with the Department of Environment Malaysia. In Air Quality Management, Mr Tan has extensive experience in the use of established air pollution computer models such as CALPUFF, AERMOD, ISCST3, AUSPLUME, SCREEN3 and AERSCREEN. As one of the recognised air dispersion modellers in Malaysia, he has trained officers from Malaysian Department of Environment and corporate entity such as PETRONAS in air pollution modelling assessments. In 2009, he has conducted a two-weeks internship programme on Air Pollution Management and Air Quality Modelling organised by ENSEARCH for officers of Department of Environment, Bangladesh. In June 2012, he had conducted an Odour Modelling and Assessment Workshop for Malaysian Rubber Board and in December 2015, he was an invited speaker for the 12th Environmental Impact Assessment & Auditing 2015 Seminar for Faculty of Health Science, UiTM Kampus Puncak Alam. Since 2008 to date, Mr Tan has conducted numerous trainings which are mostly on Air Quality Management.

DOE - EiMAS

CPD Hours

Will be granted

To Registered Certified Environmental Professionals



#### Training Fee

- ◆ RM 450.00 (ENSEARCH Member)
- ◆ RM 550.00 (Non-ENSEARCH Member)
- \* Register **3 or more** participants from the same organization to enjoy **10% discount**
- ◆ RM 150.00 (ENSEARCH Student Member)
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# Announcements



## Training

### Evaluating the Performance of Products: Life Cycle Assessment (LCA) Methodology

Date: 15—16 November 2016 (Tuesday & Wednesday)

Time: 8:30 am — 05:00 pm

Venue: ENSEARCH Training Centre (*Map enclosed*),

30-3, Jalan PJU 5/16, Dataran Sunway, Kota Damansara, 47810 Petaling Jaya, Selangor.

#### Overview of Training:

The training includes the following topics:

1. Sustainability: drivers & definitions
2. Introduction to LCA
3. LCA Drivers: Business value of LCA
4. LCA main Standards & References
5. LCA terminology
6. Methodological framework of LCA
7. Main steps of an LCA project:
  - a. Project Goal and Scope
  - b. Life Cycle Inventory, data quality
  - c. Life Cycle Impact Assessment
  - d. Result Interpretation
  - e. Basics of Allocation
  - f. LCA report and critical review
8. Case-studies and demo using GaBi software

#### Objective:

The main objective of this training is to get participants familiarised with the LCA methodology as well as with the terminology and concepts. The training includes many examples, exercises, case-studies, and will end by the showcase of a simple case study using the LCA software GaBi.

- ✓ Understand what is sustainability and what are its drivers
- ✓ Understand what LCA is about and why companies do it.
- ✓ Learn main LCA definitions and understand the workflow.
- ✓ Learn to formulate the goal and scope to make your LCA work efficient & learn to design your project efficiently.
- ✓ Data needs for a good LCA: learn tips and tricks for data collection.
- ✓ Learn what allocation is about and how to choose one.
- ✓ Understand environmental problems and how we measure them in LCA.
- ✓ Learn how to derive meaningful results from your LCA project.
- ✓ Learn how to communicate your LCA Project. Critical review process.

At the end of the training the participants should have all the knowledge to be able to undertake basic LCA

#### Target Participants

Research & development experts, product managers, environmental engineers, innovation managers, and academics that are new to the concept and method of LCA and Environmental consultants.

DOE - EIMAS

CPD Hours



Will be granted

To Registered Certified Environmental Professionals

#### Trainer

**Ms Sophie Costes**

- ◆ Managing Partner & Consultant at **Susten Solutions PLT (Malaysia)**
- ◆ 5 years experience in European and International Industrial and scientific partnership, environmental risk applications, R&D Projects

#### Training Fee

- ◆ RM 900.00 (ENSEARCH Member)
- ◆ RM 1000.00 (Non-ENSEARCH Member)
- \* Register **3 or more participants** from the same organization to enjoy **10% discount**
- ◆ RM 300.00 (ENSEARCH Student Member)
- ◆ RM 350.00 (Student Non-ENSEARCH Member)
- \* To qualify for the student price, please submit a copy of your **Student ID** as proof

#### Contact Us

Environmental Management & Research  
Association of Malaysia (ENSEARCH)  
(70/84 WP)

30-2, Jalan PJU 5/16, Dataran Sunway, Kota  
Damansara,  
47810 Petaling Jaya, Selangor.

Phone: 03-6156 9807 / 08

Fax: 03- 6156 9803

E-mail: [spo@ensearch.org](mailto:spo@ensearch.org)

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

**Disclaimer:** ENSEARCH reserves the right to **postpone/cancel** the said Training due to unforeseen circumstances.  
ENSEARCH will keep participants updated on the status **3 working days** in advance by **e-mail**.





# Announcements

11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



1st Announcement

**ELEVENTH MALAYSIA PLAN**  
2016-2020  
ANCHORING GROWTH ON PEOPLE



## 13th Asia Pacific Roundtable on Sustainable Consumption & Production (APRSCP)

**Enabling Sustainable Consumption & Production  
Towards Achieving Green Growth**

10-12 October 2017  
Kuala Lumpur, Malaysia

Co-Hosted By:



Supported By:



Ministry of Natural Resources & Environment, Malaysia



Ministry of Energy, Green Technology & Water Malaysia



Please register your interest with ENSEARCH!

Contact Persons: Sharon/Sofie T: 603-6156 9807/08 F: 03- 6156 9803  
E: spo@ensearch.org W: www.ensearch.org





# ENSEARCH SABAH BRANCH NEWS

The ENSEARCH SABAH BRANCH NEWS; where  
all news and announcements related to our  
branch in Sabah will be published





# ENSEARCH Sabah Branch Committee 2016/2017

Chairperson : Mr Mohd Iskandar Ali  
Secretary : Ms Tania Golingi  
Treasurer : Mr Ahmed Tariq Datuk Aripin  
Committee : Dr Ejria Salleh  
Mr Badery Suod  
Dr Mahadi Harris Murshidi



*Seated from left : Ms Tania Golingi, Mr Mohd Iskandar Ali, Mr Ahmed Tariq Datuk Aripin  
Standing from left : Dr Ejria Salleh, Mr Badery Suod, Dr Mahadi Harris Murshidi*





# ENSEARCH Calendar 2016

**20 September 2016**

Training: Overview of ISO 14001: 2015 & Its Key Themes  
Trainer: Ms Amarjit Kaur

**11 October 2016**

Training: Odour Sampling & Determination, Modelling & Assessment (Level 1)  
Trainer: Mr Tan Poh Aun

**12 October 2016**

Training: Odour Sampling & Determination, Modelling & Assessment (Level 2)  
Trainer: Mr Tan Poh Aun

**15 & 16 November 2016**

Training: Evaluating Performance of Products: Life Cycle Assessment of  
Trainer: Ms Sophie Costes





# SNAP SHOTS (SEM 2016)



Dato' Sri Dr Haji Wan Junaidi bin Tuanku Jaafar officiating the Sustainability and Environmental Management Conference 2016 (SEM 2016) at Sunway Putra Hotel, Kuala Lumpur







# ENSEARCH Council 2016/2017

|                                 |   |                                |
|---------------------------------|---|--------------------------------|
| <b>President</b>                | : | Mr K.N. Gobinathan             |
| <b>Vice President I</b>         | : | Dr Foo Say Moo                 |
| <b>Vice President II</b>        | : | Mr Akashah Haji Majizat K.M.N. |
| <b>Hon. Sec. General</b>        | : | Ms Geetha P Kumaran            |
| <b>Hon. Treasurer</b>           | : | Ms Jenny Tan Suat Eam          |
| <b>Immediate Past President</b> | : | Ir Elias bin Saidin            |

## **COUNCIL MEMBERS:**

Mr Abdul Aziz bin Long  
Mr Mohamed Siraj Abdul Razack  
Mr Khoo Boon Keat  
Ir Lee Heng Keng  
Dr Subramanian A/L Karuppannan  
Dato' Ir Othman bin Abdul Rahim  
Mr Tan Poh Aun

## **CO-OPTED MEMBERS:**

Mr Philip Reidy  
Dr Hari Ramalu Ragavan  
Ms Ruhaidah Md Hassan (Indah Water Konsortium Sdn Bhd Rep)  
Ms Adelene Anthony Sinniah (Petronas Rep)  
Dr Suzanne McGowan (University of Nottingham Rep)  
Mr Mohd Iskandar Shah bin Mohd Ali (ENSEARCH Sabah Rep)  
Ms Ismawati Mohd Shah (Cenviro Sdn Bhd Rep)





# ENSEARCH Secretariat 2016

**EXECUTIVE SECRETARY** : Ms Edna Xavier  
**SENIOR PROJECT OFFICER** : Ms Sharon Woo  
**PROJECT OFFICER** : Mr Mohamad Khairi  
**EXTERNAL ACCOUNTANT** : Ms Tan Siok Yin

*“For a Better Environment”*



ENVIRONMENTAL MANAGEMENT & RESEARCH  
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