



THE INSTITUTION OF ENGINEERS, MALAYSIA

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EVENING TALK ON “SUSTAINABLE WATER SUPPLY TECHNOLOGIES FOR RURAL COMMUNITIES”.

(Organised by the Water Resources Technical Division, IEM)
BEM Approved CPD/PDP Hours: **2** Ref No: **IEM15/HQ/007/T**

Date : 10-02-2015 (Tuesday)
Time : 5.30 pm– 7.30 pm (*Refreshment will served in 2nd Flr at 5.00pm*)
Venue : Auditorium Tan Sri Prof. Chin Fung Kee, 3rd Flr, Wisma IEM, PJ
Speaker : Ir. Elias Saidin

SYNOPSIS

The recent floods in Malaysia indicate the importance of clean water, essential for basic daily needs to maintain good health and survival. Is there a need to transport bulky bottled water when there are available low tech techniques to treat and supply clean water for isolated communities? The World Health Organisation recommends a minimum of 2.5 to 3.0 litres per day for survival (drinking and food), 2.0 to 6.0 litres per day for Hygiene and another 3.0 to 6.0 litres per day for cooking; making a total of 7.5 to 15 litres per day minimum requirements. Sources of water supply can be from water surfaces, rainwater and atmospheric water. However the water needs to be treated for consumption to standards on microbial and chemical properties. Some simple water treatment techniques in emergency situation are cloth filtration, SODIS (Solar Disinfection), solar distillation, Bio-sand Filters, Homemade Ceramic Filters and low pressure membrane filtrations. SODIS is widely practiced and accepted by UNICEF, Red Cross and Rotary as a treatment method for water. A household Bio-Sand Filter is easy to maintain supplying 48 to 60 litres daily whilst removing 98.5% of Bacteria, 99.9% of Protozoa and viruses and also some heavy metals. The technical aspects, methods and effectiveness of the various methods of treatment will be presented.

BIODATA OF SPEAKER



Elias Saidin graduated from the University of Tasmania, Australia, in 1980 with a Bachelor's Degree in Civil Engineering. He obtained a Master's Degree in Environmental Engineering from the University Putra Malaysia in 2008. He has worked for various Consultant Engineering Firms and presently is the principal of a Consultant Engineering Firm he founded in 1991.

Ir Elias is a Professional Engineer (P.Eng.), Fellow of the Institution of Engineers Malaysia (FIEM) an ASEAN Engineer, Member of the Malaysian Water Association (MWA), Member of the International Rainwater Catchments Systems Association (IRCSA), President of the Environmental Research and Management Malaysia (ENSEARCH), Vice President of the Selangor Water Association (SWAn), Past-President of the Rotary Club of Shah Alam and a Charter Member of the Water and Sanitation Rotary Action Group (WASRAG), Rotary International.

Ir Elias is currently a Council member of IEM and sits on the Excomm of IEM. He is past Chairman of the Water Resource Technical Division and also has served on various committee and subcommittee of IEM.

Ir Elias has a strong interest in environmental topics with a focus on water. He has contributed to journals, given talks and presented papers at various international conferences, seminars and colloquiums on the subject of the environment and water. He has participated and led Rotarians in rural community water supply projects in Thailand, Cambodia, Myanmar, Indonesia and Malaysia.

ANNOUNCEMENTS TO NOTE:

- Preferential admission to talk shall be accorded to IEM members (**pre-registration and online registration are NOT required**). (**telephone and/or fax reservation will NOT be entertained**)
- **Non members** may also attend the talk but will be charged a registration fee of **RM50** and an administrative fee of **RM15**.
- For affiliate members, there will be no registration fee. However, they are requested to produce their membership card as proof of membership. For the list of affiliates, please refer www.myiem.org.my/content/memorandum_of_understanding-469.aspx.
- Limited seats are available on a "first come first served" basis (maximum 110 participants).
- IEM members are required to produce your membership cards for confirmation of attendance (CPD purpose).
- Latecomers will not be allowed to enter if the lecture hall is full nor be entitled to CPD. *IEM members who fail to produce their membership cards will be charged a fee of RM25.00.*

FUNDS FOR IEM BUILDING FUND (WISMA IEM)

- Kindly be informed that IEM will be charging participants **RM15** as administrative fee for talks organized by IEM.
 - The fee would be used to cover overhead costs, building maintenance expenses as well as to support the purchase of the new building.
 - All contributions will be deeply appreciated by IEM
 - Students are however exempted.
- Your understanding is greatly appreciated.

CPD HOURS CONFIRMATION

Name :

Membership No:

Signature:

Dato' Ir. Hj. Hanapi b. Mohamad Noor
Chairman
Water Resources Technical Division, IEM