

Talk on “Water Quality Improvement and Pollution Control: Ways to Implement TMDL Measures in Malaysia”

(Organized by the Water Resources Technical Division, IEM)
BEM Approved CPD/PDP Hours: 2 Ref No : IEM16/HQ/485/T

Date : 21st December 2016
Time : 5.30pm to 7.30pm
Venue : Cs & TUS Lecture Hall, 2nd Floor, Wisma IEM
Speaker : Ir. Dr. Zaki Zainudin

SYNOPSIS

Various issues related to water pollution have arisen of late; these include matters concerning water supply, recreation as well as other beneficial uses. Traditionally, matters regarding pollution control have come under the purview of legislations such as the Environmental Quality Act, 1974. These regulations prescribe specific limits for contaminants before they can be discharged into surface water bodies (rivers, coastal etc.). Unfortunately, the current control approach has certain very prevalent shortcomings; most glaringly, compliance to limits in the regulations DOES NOT guarantee preservation of surface water bodies. For example, ammonia from a sewage treatment plant, released at Standard A compliance of the regulations, at 10 mg/L has to undergo dilution to less than 1.5 mg/L in the receiving river, before water from the river can be extracted and treated for potable water supply. Whether or not this sufficient “dilution” is achieved, is the million-ringgit question. It is time to change our control approach to something more effective. One of the options is load based control, aka, the TMDL approach. Actually, Total Maximum Daily Load (TMDL) is a regulatory term in the U.S. Clean Water Act, describing a value of the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards. In essence, TMDL is an allocation of a pollutant deemed acceptable to the receiving waters. Calculating the TMDL for any given body of water involves the combination of factors that contribute to the problem. Bodies of water are tested for contaminants based on their intended use. Each body of water is tested similarly but designated with a specific TMDL. The size of the water body also is taken into consideration when TMDL calculation is undertaken. This talk will discuss about these load control/TMDL measures as well as mechanisms for their possible implementation in Malaysia.

BIODATA OF SPEAKER

Ir. Dr. Zaki Zainudin is a Professional Engineer with the Board of Engineers Malaysia (BEM) Chartered Engineer (CEng) with the Engineering Council, UK and Chartered Environmentalist (CEnv) with the Society for the Environment (SocEnv, UK). Zaki is a renowned environmental specialist in the area of water quality assessment and modeling, having led and played key roles in numerous (> 100) environmental studies for both private and government sectors. He often appears in the media giving input about surface water quality issues in Malaysia and is a source of reference for various organizations on water quality management. This includes being an expert panelist for the Department of Environment Malaysia (DOE, EIA, Water and Marine units) and is advisor to many prominent environmental consultancy firms. He has conducted various workshops and talks on water quality and modeling at both local and international venues. Zaki is also on the management committee of the International Water Association (IWA), Watershed and River Basin Management (W&RBM) Specialist Group. The above is a glimpse of his credentials. His CV and full list of activities can be viewed at : <http://www.facebook.com/zakizainudin>.

Ir. Dr. Wong Wai Sam
Chairman
Water Resources Technical Division, IEM

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 need to pay a registration fee of **RM50** and an administrative fee of **RM15**. GST is inclusive.
- For members of affiliated organisations, there will be no registration fee payable. However, they are requested to produce their membership card as proof of membership. For the list of affiliated organisations, please refer to IEM website at www.myiem.org.my under International/MoU.
- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- IEM members are required to produce 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**. GST is inclusive.*

ADMINISTRATIVE FEE

- Kindly be informed that an administrative fee of **RM15** is payable for talks organized by IEM. GST is inclusive.
- The fee would be used to cover overhead costs, building maintenance expenses as well as contribute to Wisma IEM Building Fund.
- All contributions will be deeply appreciated by IEM.
- Student Members are however exempted.

CPD HOURS CONFIRMATION

Name:

Membership No:

Signature: