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*"Treated Wastewater Reuse:
A Case Perspective from the
Middle East"*

Presented by Dr. Abulbasher M. Shahalam
Water Resources Division
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**Wednesday, January 31, 2007 at 4:00 pm
Location TBA**

RSVP by January 26, 2007 to Juni Alam
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(Location & Directions will be provided at that
time.)

Abstract

It has been consistently claimed by researchers during the last few decades that water-shortage is leading us to a serious global problem. Particularly the countries in the arid and semi-arid regions such as Middle East face critical deficits in water supply by 2025. The message received mixed response in seriousness from would-be affected regions. The main problem appears to be due to the failure of realizing the intensity of the problem and also the fact that water can be used for different purposes in varying quantities and qualities. Water supply for direct domestic use is a vital necessity for human survival. Other uses substantiate the survival process. Non-domestic water may have different quality than that of domestic water and still serve the purpose satisfactorily.

In search of new sources of water, treated wastewater is a dependable and sustainable water resource that can augment overall water supply significantly. Its use for agriculture is attractive for many types of crops. However, the development of recycled water sector in a region needs proper planning and investment treating it as an integral part of overall water resources.

This presentation focuses on the reuse potential of treated wastewater for beneficial use particularly for agriculture. The recycling of water has been laid-out as an element of overall aspects of water resources program within a geographical boundary. Elements of planning, programming and implementation of a total system for treated wastewater reuse is presented. For the purpose, the case of Kuwait is depicted in details.

Profile of Dr. Abulbasher Shahalam

Dr. Abulbasher M. Shahalam as a professional has been involved in areas of water resources, wastewater treatment and reuse and environmental engineering since early 1960's. His current role at Kuwait Institute for Scientific Research (KISR), as a Senior Research Scientist in-charge of KISR Wastewater Research Plant, is to provide leadership and guidance for conducting research in areas of conventional and advanced treatment of wastewater and reuse of treated effluent.

Dr. Alam as an academician taught undergraduate and graduate courses and conducted research in areas of water resources for 25 years in the Univ. of Toledo, Ohio, USA, Beaver Comm. College, Pennsylvania, USA, Yarmouk University, Jordan, Jordan University of Science and Technology, Irbid, Jordan, American Univ. of Beirut, Lebanon, King Fahd Univ. of Petroleum & Minerals, Dharan, Saudi Arabia, Mongosuto University, Durban, South Africa, and was head of Department at Sultan Qaboos University, Muscat, Oman.

Before entering in academic profession, Dr. Alam worked about 10 years in professional engineering in WAPDA, Bangladesh (then East Pakistan), Green International Engineers, USA, Chester Engineers, USA, Schneider Engineers and Michael Baker Engineers, USA.

He visited 50 countries for conferences presenting research papers. He is the author of 112 research papers published in refereed journals and proceedings. He produced 55 published research reports. He authored book-parts in one professional book and an academic manual on water-analysis procedures. He is reviewer of manuscripts for six international journals.

Dr. Alam is a professional engineer in the State of Ohio, USA. He is a fellow of American Society of Civil Engineers and has appeared in the "WHO IS WHO in the World in Science and Engineering".

He received his B.Sc. (Civil Engineering) from Bangladesh Univ. of Eng. & Technology Dhaka, Bangladesh, M.S. in Civil Engineering from Carnegie-Mellon Univ., Pennsylvania, USA, M.S. in Water Resources from Univ. of Pittsburgh, Pennsylvania, USA, and Ph.D. in Environmental Engineering from Univ. of Toledo, Ohio, USA.