

Technical Talk on Greater KL/KV – The River of Life Project

PROJECT MANAGEMENT TECHNICAL DIVISION



by Ir. Dr Ahmad Anuar bin Othman

THIS technical talk was presented by Dr Hj. Md. Nasir bin Md. Noh, who is currently the Deputy Director of River Basin Management and Coastal Zone Division, Department of Irrigation and Drainage Malaysia (DID). The speaker obtained his Bachelor of Science Degree in Civil Engineering from Louisiana State University in 1985. He pursued his Masters in Engineering at Tottori University in 1999 and was subsequently awarded a PhD in River Engineering from the same university in 2002. The talk was conducted at Wisma IEM on 14 January 2012 and was attended by 92 participants comprising mostly IEM members.

Dr Hj. Md. Nasir started the talk with a brief background of the project. According to him, the Greater Kuala Lumpur/Klang Valley (KL/KV) project is part of the Economic Transformation Programme and represents a focused and sustainable initiative that will transform Malaysia into



a high-income nation by 2020. The vision for the River of Life (RoL) for Greater KL/KV is to revitalise the Klang River into an economic corridor, the heritage and cultural heart of *1Malaysia*, and serve as a catalyst to enhance liveability in the heart of Greater KL/KV.

The Klang River is currently being utilised as a waste dumping ground and for flood mitigation which give rise to heavy pollution. It is estimated that 170,000 tonnes of rubbish per year enter the Klang River of which only 25,000 tonnes are retrieved. Untreated sewage is also being discharged into the Klang River. The current water quality of the Klang River is Class III, which means that it is unsuitable for recreational use. Generally, some of the proposed solutions to revitalise the Klang River include riverbank beautification and greening, redevelopment of 10 strategic areas, reduction of pollution at source and stopping pollutants from entering the river upstream.

These integrated approaches are focused towards improving the water quality of the Klang River to Class IIb which will then be suitable for recreational use involving body contact. Under this project, rivers that run through Kuala Lumpur, including its tributaries, will be rehabilitated and restored. Among the rivers involved are the Keroh River, Jinjang River, Batu River, Gombak River, Bonus River, Klang River, Ampang River and Kerayong River.

According to Dr Hj. Md. Nasir, the pollution of the Klang River comes from several sources, including sediments from construction sites, waste from food courts, hawkers, restaurants, wet markets, industrial areas, illegal factories, livestock and abattoirs, sand mining, workshops and vehicle services, and sewerage.



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He explained that the RoL project is managed by one main committee known as the Joint Development Committee (JDC) under which there are three task forces, namely, the River Cleaning Task Force headed by the DID; as well as the Planning, Development and Beautification Task Force and the Marketing and Implementation Task Force headed by DBKL. Key activities under the River Cleaning Task Force are as follows:

- i. Upgrading existing sewerage facilities to reduce pollution in the Klang River;
- ii. Expansion of existing regional treatment plants to cater for future growth;
- iii. Installation of wastewater treatment plants at wet markets to reduce rubbish and pollutants;
- iv. Installation of additional gross pollutant traps to improve river aesthetics and water quality;
- v. Utilisation of retention ponds to remove pollutants from sewage and sullage water;
- vi. Relocation of squatters to reduce sewage, sullage and rubbish from entering the river;
- vii. Implementation of a Drainage and Stormwater Management masterplan to upgrade the drainage system;
- viii. Systematic hydrological study and river rehabilitation for flow control;
- ix. Promotion, enforcement and management of river cleanliness and health by reducing erosion arising from urban development;
- x. Promotion, enforcement and management of river cleanliness and health by reducing sewage from restaurants, workshops and commercial outlets;
- xi. Promotion, enforcement and management of river cleanliness and health by reducing sewage from industries that generate wastewater and effluent;
- xii. Promotion, enforcement and management of river cleanliness and health by improving general garbage disposal.

A number of existing as well as new technologies will be used to purify water in the RoL project. Among them are the use of gross pollutant traps, trash rakes, log booms, solar aerators, floating wetlands, river water treatment plants, aerated string contacted oxidation (ASCO), rubber dams, aquatic plants, and pool and riffle system. These purification techniques are based on experiences in Japan, Korea and Singapore.

To date, 14 tender packages have been awarded and are scheduled to be completed by 2013 while two more tenders will be called soon. All works are closely monitored using key performance indicators (KPIs) and the results will be reported to the Prime Minister. ■