

Technical Visit to the Pantai 2 Sewage Treatment Plant Project Site

WATER RESOURCES TECHNICAL DIVISION

reported by



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On 23 February, 2016, the Water Resources Technical Division (WRTD) organised a technical visit for 68 IEM members and non-members, to Pantai 2 Sewage Treatment Plant Project Site in Kuala Lumpur with the following objectives:

- To visit the construction site of the Pantai 2 Sewage Treatment Plant Project, which is one of the biggest regional sewage treatment plants in Malaysia.
- To gain knowledge and understanding on the latest technology and project planning approach for sewerage facilities in Malaysia.
- To understand the components, process flow and operational aspects of the completed facilities.

The visit was arranged in collaboration with Jabatan Perkhidmatan Pembetungan (JPP), the implementation agency under the Ministry of Energy, Green Technology & Water Malaysia (KeTTHA) for the project. The participants were welcomed by En. Mohd Daneal bin Halim, Penolong Pengarah Sektor Konsultansi & Khidmat Teknikal, JPP.

The visit started with a briefing session by Ir. Izzami Zuddin bin Abdul Rani representing Kumpulan Ikhtisas Projek (M)

Sdn. Bhd., the Project Management Consultant (PMC) appointed by JPP. Then participants were brought to the sewage treatment plant to see the actual construction, components and operations of the treatment plant.

PROJECT OVERVIEW

Pantai 2 Sewage Treatment Plant (Pantai 2 STP) is a part of the Pantai Regional Sewage Treatment Plant (Pantai STP) which provides sewage treatment services for the Pantai catchment area covering 6,700 hectares, comprising Bandar Baru Sentul, Sentul Raya, Bangsar, recreational area of Bukit Kiara and part of commercial areas in Kuala Lumpur, Old Klang Road and Petaling Jaya.

Pantai 2 STP is a project under the 10th Malaysian Plan and is implemented by KeTTHA through JPP. The aim of the project is to upgrade the existing aerated lagoon system which has a capacity of 550,00 population equivalent (123,750m³/day) into a mechanised system of 1.42million population equivalent (320,000m³/day) to increase the overall capacity of Pantai STP to 1.80million population equivalent (405,000 m³/day).



Figure 1: Illustration of Pantai 2 STP Construction

Source: Jabatan Perkhidmatan Pembetungan / KI-MECIP JV



Figure 2: Actual Construction Pantai 2 STP

Pantai 2 STP consists of an underground facility of sewage treatment system with the above-ground area of 12 hectares being turned into a leisure park as shown in Figures 1 and 2. The underground facility consists of pre-treatment and secondary treatment, while the leisure park provides recreational area, a community hall and sports facilities.

The Pantai 2 STP adopts the new Advanced A2O innovation for its treatment process technology. The system is designed to provide effluent quality in compliance with Standard A of the Environmental Quality (Sewage) Regulations 2009, including nitrogen and phosphorus removal. There are elements of green technology being included in the project components, comprising solar PV, effluent reuse, biogas and rainwater harvesting. Already in operation, the Pantai 2 STP has been receiving sewage flow since the end of 2015. ■

IEM DIARY OF EVENTS

Title: Talk on "Strategic" Leadership

26 April 2017

Organised by : Education Engineering Technical Division
 Time : 5.30 p.m. - 7.30 p.m.
 CPD/PDP : 2

Kindly note that the scheduled events below are subject to change. Please visit the IEM website at www.myiem.org.my for more information on the upcoming events.