

Client

Resorts World Berhad

Consulting Engineers

(Civil, Structural and Geotechnical Engineering)

Arup Jururunding Sdn Bhd

(Mechanical and Electrical Engineering)

Arup Jururunding Sdn Bhd

Specialist Contractor

QT Environmental (M) Sdn Bhd

Project Cost

RM 18 million

Completion Date

2001

60,000 P.E. Sewage Treatment Plant Genting Highlands



A 60,000 p.e. (population equivalent) sewage treatment plant at Genting Highlands was built to cater for the world's biggest hotel of more than 6,200 rooms. The plant comprises of two modules of which only one is required to cater for the entire sewage discharge from the hotel.

Land is valuable and scarce at the highlands. As such, the plant is housed within a multi-level concrete structure and was built into the steep slopes, thus requiring only a 2-acre site for the complete facility.

The plant is located on a former landfill site for construction and incinerator wastes. Due to the physical constraints, hand-dug caissons of 1.2m dia. were adopted for the foundation.

The treatment plant system utilizes oxidation ditches and incorporates chlorination for the disinfection of the effluent. The plant was designed for a maximum influent B.O.D. concentration of 400 mg/l and the expected effluent quality is of Standard 'A', which is 20 mg/l for B.O.D. and 50 mg/l for S.S.

Due to the nature of a resort facility, the plant design also includes for a large balancing tank to cater for "super" peak flows. The whole system was designed based on gravitational flow with very limited pumping required. A SCADA system with PLC is employed for process control.

