Sham Tseng Sewage Treatment Works

Sham Tseng Sewage Treatment Works (Sham Tseng STW) is a chemically enhanced primary treatment works, occupying 1.1 hectares of land. It provides sewage treatment services to a population of 39,000 in the areas from Approach Bay to Tsing Lung Tau along Castle Peak Road. Its current inflow is 5,600 m³ per day.

Sham Tseng STW was constructed under a Design & Build Contract. The STW commenced its operation in late 2004. It includes four primary sedimentation tanks, chemical dosing facilities, ultra-violet disinfection system and sludge treatment facilities. The design treatment capacity of the STW is 17,000 m³ per day.

We provide world-class wastewater and stormwater drainage services enabling the sustainable development of Hong Kong.
Sewage is pumped to the plant inlet from outlying sewage pumping stations. Sewage passes through coarse screen (25 mm) and fine screen (6 mm) by which gross solids are removed. After screening, sewage is directed to grit classifiers for grit removal.

### Chemical Dosing Facilities
The chemical dosing facilities include storage, batching and pumping of alum and polymer solution to the sedimentation tanks.

### Sedimentation Facilities for Chemically Enhanced Primary Treatment
Preliminarily treated sewage mixes with alum and then polymer at rapid mixing tanks (2 nos.) and flocculation tanks (4 nos.). Suspended solids are adhered to each other forming larger flocs to facilitate settling.

### Sedimentation
Sewage dosed with chemicals retains in the sedimentation tank for approximately 2 hours. Flocs are settled at the bottom of the tank as sludge. Together with scum at the surface, they are removed by the chain & flight scraper and pumped to a separate facility for dewatering.

The whole sewage treatment process is designed to remove 75% suspended solids and 59% Biochemical Oxygen Demand.