

Sewage Treatment Strategy and Infrastructure

The Sewage Services Charging Scheme

Based on the polluter pays principle, the sewage services charging scheme was introduced in Hong Kong on 1 April 1995. Dischargers are required to pay the cost of the sewage services according to the pollution level and quantity of their discharge. To maintain a modest charging level, the scheme aims at recovering only the operating and maintenance cost of public sewage facilities. The construction cost of these facilities remains to be funded by the Government.

Sewage services charges have two components: the Sewage Charge (SC) and the Trade Effluent Surcharge (TES). The sewage services charges are calculated based on water consumption readings provided by the Water Authority excluding water supplied specifically for flushing purposes. Only consumers whose premises are connected to the public sewer system are liable to pay sewage services charges.

The SC aims at recovering the cost of collecting and treating wastewater at or below domestic strength. To reduce government subsidy, the SC rate was revised from the original \$1.20 to \$1.31 per cubic metre of water supplied on 1-4-2008 and then to 1.43 on 1-4-2009. The rate will be incrementally increased by 9.3% per annum until \$2.92 per cubic metre of water supplied on 1-4-2017 and onwards.

As for the TES, it is levied on trades and industries which produce effluents with sewage strengths higher than that of domestic sewage to reflect the additional cost required to treat the effluent at higher pollution level. The Government has completed the trade effluent survey for the TES chargeable trades in end 2007. The generic Chemical Oxygen Demand values of the effluent from these trades were reviewed. According to the survey result and the cost recovery principle, the respective TES rates were adjusted with effect from 1 August 2008. The TES rates for the trades and industries are specified in the Sewage Services (TES) Regulation. At present, there are 27 trades which are required to pay the TES.

Fresh water is a scarce resource. Reducing water consumption through rational utilization of water resources would reduce efforts in sewage treatment and impacts on the environment.

For more information on sewerage strategy, sewage treatment facilities, Harbour Area Treatment Scheme, and the sewage services charging scheme, please visit DSD's website: www.dsd.gov.hk

At present, 93 per cent of the population is served by the public sewerage system which collects about 2.6 million m³ of sewage every day. This system includes a network of sewers over 1,500 kilometres in length and around 275 sewage collection and treatment facilities providing preliminary treatment (screening) to tertiary treatment to sewage generated from residential, commercial and industrial premises in the territory prior to disposal to the sea.

To enable the sustainable development of Hong Kong, the Government has a strategy in place to improve our sewage services in a cost-effective and environmentally responsible manner. We will ensure the sewerage facilities are efficiently operated, properly maintained, and duly upgraded to sustain developments in the territory and to meet the latest environmental standards.

Sewage Treatment Levels in Hong Kong

There are five sewage treatment levels in Hong Kong:

Preliminary Treatment (Screening) - removal of grit and solids larger than 6 mm in size from sewage prior to discharge to sea via submarine outfall.

Primary Treatment - removal of settleable suspended solids in screened sewage by physical sedimentation prior to discharge to sea.

Chemically Enhanced Primary Treatment - chemicals are added during the sedimentation process to enhance the removal of suspended solids and the biochemical oxygen demand.

Secondary Treatment - the organic matter in settled sewage is decomposed by micro-organisms in the biological treatment process, achieving about 85% removal of both the total suspended solids and the biochemical oxygen demand.

Tertiary Treatment - residual contaminants after secondary treatment are further removed.

Our Vision

To provide world-class wastewater and stormwater drainage services enabling the sustainable development of Hong Kong.

