## **CIWEM HK**

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Clerk to Panel on Environmental Affairs

Legislative Council Secretariat 3<sup>rd</sup> Floor Citibank Tower 3 Garden Road Central, Hong Kong

## **Invitation for Written Submission**

Harbour Area Treatment Scheme Stage 2A – Upgrading of Stonecutters Island Sewage Treatment Works and Preliminary Treatment Works

With reference to the above captioned subject, the Chartered Institution of Water and Environmental Management (CIWEM) HK would like to submit the following comments and views related to the funding of this project.

## **Background**

The Harbour Area Treatment Scheme (HATS) involves the collection of sewage from different locations in HK to a sewage treatment work located at Stonecutters Island so that pollutants can be reduced down to an acceptable level prior to its discharge to Victoria Harbour. The project was formerly known as the Strategic Sewage Disposal Scheme (SSDS) and was first commissioned in the 1980s and Stage 1 of the project was completed in 2001. Stonecutters Island Sewage Treatment Works (SCISTW) is now collecting 1.4 million m³/d of sewage via deep tunnels and Stage 2 of the project will collect the remaining 450,000m³/d of sewage generated within the areas from North Point to Ap Lei Chau. It is envisioned that HATS Stage 2A will be commissioned by the end of 2014.

## **CIWEM HKs' views on Stage 2A of HATS**

- CIWEM HK supports that high priority should be given to intercepting the untreated sewage discharges on the Hong Kong Island side and conveying the sewage to SCISTW for effective treatment and disposal. It is imperative that Stage 2 follows to the timeframe that has already been committed to ensure that the project will not procrastinate and affect the overall environment as a result of the discharge of untreated sewage to the harbour.
- Since the commissioning of Stage 1 of HATS, the water quality around Victoria Harbour has

drastically improved. It is important to maintain this momentum and continue to improve the water quality in Victoria Harbour in order to maintain the water body in the harbour area a suitable environment for sustainable ecological development and minimize the potential health risks to human beings by collecting and treating the remaining sewage.

- The 450,000m<sup>3</sup> of sewage generated from the northern and south-western parts of HK Island are being discharged into the water body in the harbour area after simple preliminary treatment. This is hardly sufficient from a sustainable development perspective as pollutants such as organics and suspended solids discharged are detrimental to the environment, and must be supplemented by further treatment.
- Upgrading of the preliminary treatment works to CEPT and expansion of SCISTW to accommodate the additional sewage flow from the HK Island are an integrated part of HATS 2A. Those works are essential to achieving the overall objectives of HATS 2A. For instance, without those upgrading and expansion works, the bathing beaches in Tsuen Wan area cannot fully benefit from the advanced disinfection facilities about to be commissioned in Stonecutters Island and may not be fit to opening to public after the additional sewage flow from HK Island is discharged into the western harbour from SCISTW.
- Numerous investigations related to HATS 2A have been conducted since 2005 and construction of the sewage conveyance system and the advance preparation works for the expansion and upgrading of SCISTW have already commenced in July 2009. It is an integrated sewage collection and treatment systems, meaning that they would not function properly without the other components. It is therefore extremely important to commence construction work for the upgrading of SCISTW to meet the anticipated flow as soon as practicable to avoid future delays, and to ensure a smooth transition and coordination among different contracts within the HATS 2A scheme.
- In order to ensure that the upgraded CEPT at SCISTW will function properly, it is also imperative to upgrade the preliminary treatment works along the route of the conveyance system as soon as practicable as a mean to reduce the larger materials, grit, sand, etc in the sewage prior to their entrance to the sewage treatment works.
- Further studies must be conducted in order to evaluate the impact of pollutants such as nitrogen and phosphorus in Victoria Harbour. This must take into consideration the hydraulic regime and global pollution loading from various sources, including cross-boundary pollution contributions. HATS Stage 2B, the use of biological treatment to further improve the harbour's water quality, must also strictly follow the defined timeline and that relevant information shall be made to the public so that the progress of the project is transparent.

Yours sincerely,

Norman Cheng Chairman

CIWEM HK