

20<sup>th</sup> November 2004

Environment, Transport and Works Bureau  
10/F., Citibank Tower  
3 Garden Road, Central  
Hong Kong SAR

By post and email to <[hats@etwb.gov.hk](mailto:hats@etwb.gov.hk)>

Dear Sir,

**Re: Harbour Area Treatment Scheme (HATS) Stage 2 Consultation  
Comments from the Business Environment Council**

The Business Environment Council (BEC) has reviewed the above consultation document and also received a briefing on the same from the Environmental Protection Department (Dr. David Wong) at its Board Meeting on 28<sup>th</sup> October 2004.

BEC strongly supports the need to improve water quality in Victoria Harbour as a matter of urgency and considers biological treatment a prerequisite to attaining the high standards that are commensurate with our aspirations for Hong Kong. However we have two key concerns:

1. There is no apparent evaluation of whether Hong Kong's broader and longer-term sustainable development needs are best served by locating the centralized treatment at Stonecutters, or whether the site would be better used for the intended development purpose of container usage, for which it is currently zoned. The latter use would require the centralised treatment facility to be located elsewhere. We seek assurance that sustainability assessments to compare the impacts (social, environmental and economic) of such alternative uses have been undertaken.
2. We consider the timeframes for biological treatment and disinfection as unacceptable and would impress a stronger sense of urgency from all parties to move more quickly. Hong Kong cannot wait 10 years whilst water quality declines in the meantime. Whilst we appreciate the need for due process, ways and means need to be found for the necessary investigations and works, including those mentioned above, to go ahead.

Aside from HATS, we also encourage more work to abate pollution from other sources such as domestic, industrial and agricultural discharges in the Pearl River Delta region and sewage from ships in Hong Kong waters that otherwise will have increasing negative impacts on the quality of Hong Kong's waters. In the latter case many vessels (up to 14,000 a day, equivalent to a population nearing 100,000) have no or inadequate sewage plants nor (as required by IMO MARPOL ANNEX IV *Regulations for the Prevention of Pollution by Sewage from Ships*, to which the HKSAR is a signatory) sufficient access to facilities for discharge collection.

Further specific comments have also been provided by one BEC member as follows:

### Considerations Regarding the Proposed Deep Tunnels

Careful consideration must be given to the construction of further deep tunnels for HATS Stage II, which may fail to relieve future sewage loadings of the existing Stage I tunnels where population growth will mainly occur. In addition the risks to high-rise buildings in the Central and Western parts of Hong Kong Island, on largely reclaimed land and landslide zones, from the Stage II tunnels must be thoroughly assessed

To cope with relatively small quantities of sewage in isolated areas, decentralized treatment plants are recommended. If these facilities are to be erected, construction of the deep and long tunnels may become unnecessary. Consideration should also be given to adopt Deep Shaft Sewage Treatment Systems on Hong Kong Island if decentralized sewage plants are used (some existing deep shafts may be converted to provide Deep Shaft Treatment). Deep Shaft Biological technology has been well proven in Canada, Japan and the United States and recently used in China in the interest of space saving.

### Utilisation of Grey Water

Treatment infrastructure alone is not enough to tackle all the ills of harbour pollution. Other measures should be adopted as soon as possible to reduce pollution in our harbour and ensure HATS meets its objectives. In particular the use of grey water (i.e. discharges from floor drains, washing machines, bathtubs, hand-wash basins, but excluding kitchen dish-wash water) should be encouraged for toilet flushing and landscape irrigation (after basic treatment such as Ultra-filtration and some disinfection). Again this is adopted in China, USA and many major cities around the world. The use of grey water instead of seawater for flushing will reduce salinity in the foul sewage and relieve the workload of biological treatment. Separate drainpipes for foul sewage and cleansing water will also help reduce the risks of the spread of pathogenic diseases through dry pipes. Net volumes of raw sewage reaching the sewage treatment works will be much reduced. In short, grey water usage will enhance the effectiveness of water utilization and foul sewage treatment, and will improve public health conditions. Other benefits include reduced capital costs for seawater pipe works that deliver flushing water to buildings and reduced hidden costs (from the corrosion of pipes and fittings by seawater) for repair and maintenance that are borne by businesses and households.

We trust that these comments are helpful and thank you for your attention,

Yours sincerely,  
Business Environment Council

Mr. Kevin Edmunds  
Deputy Director

cc: Mr. David Wong, Principal EPO, Environmental Protection Department