



香港特別行政區政府

The Government of the Hong Kong Special Administrative Region

渠務署

**Drainage Services Department**

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29 September 2009

Clerk to Panel on Environmental Affairs  
 Legislative Council Secretariat  
 Legislative Council  
 3<sup>rd</sup> Floor, Citibank Tower, 3 Garden Road  
 Hong Kong  
 (Attn : Miss Becky YU)

Dear Miss YU,

**Legislative Council**  
**Panel on Environmental Affairs**  
**Supplementary Information on**  
**Odour management in sewage treatment works of Hong Kong**

I refer to the outstanding actions arising from the meeting of the Panel on Environmental Affairs of the Legislative Council held on 22 June 2009 and wish to provide Members with supplementary information on the followings :

- (a) the need for covers for the exposed sewage inlets in sewage treatment works (STWs) of Hong Kong;
- (b) details of the odour management measures to be adopted at Siu Ho Wan STW; and
- (c) odour-related improvement works at Shatin STW and the schedule for completion of the works.

**Covers for exposed sewage inlets in STWs**

Experience from other places (such as Singapore) has concluded that odour emission is often strong at STW inlets due to agitation by fast sewage flow. Covering the exposed sewage inlets is therefore a cost-effective measure that can limit the spread of odour.

The Drainage Services Department (DSD) has been carrying out a series of relevant improvement works in this regard. To date, the sewage inlets at 50 out of 67 STWs managed by DSD have been fully covered. Similar improvement works at two other STWs in Chai Wan and Kwun Tong are scheduled for completion within the next few months. Having reviewed the situation and taking into account Member's views, DSD is planning to carry out improvement works with a view to covering the inlets at all STWs in 2010/11.

### **Odour management measures to be adopted at Siu Ho Wan STW**

DSD has been monitoring the odour situation at Siu Ho Wan STW and implemented a series of mitigation measures since 2007. These include dosing ferric chloride (instead of alum) to improve the efficiency of deodourisation in the sedimentation tanks and enhancing the sludge treatment process. The following improvement works for odour management purposes are in progress –

- (a) installation of additional deodourising facilities (comprising two chemical scrubbers and one activated carbon deodourising unit) in the sludge treatment system to enhance its deodourising capability;
- (b) provision of covers with biotrickling filters for the inlet and outlet of all sedimentation tanks to minimise odour emission; and
- (c) provision of covers for channels and chambers of the ultra-violet disinfection facilities in the STW.

We are also arranging installation of a monitoring system to record the wind direction and the level of hydrogen sulphide within the plant. The round-the-clock data gathered will be used for monitoring the odour situation at the STW, and assist our work in refining the odour management measures as appropriate.

### **List of odour-related improvement works at Shatin STW**

A list of recent odour-related improvement works at Shatin STW is at Annex.

( TAI Tak-him )

*for* Director of Drainage Services

c.c.	SFST	(Attn.: Miss Sandra Lam)	(Fax.: 2147 5240)
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	SDEV	(Attn: Mr K C LAM)	(Fax.: 2537 1961)

**Odour-related improvement works at the Shatin STW**

<b>Description of the improvement works</b>	<b>Scheduled completion dates</b>
Provision of two biotrickling filters at the sludge transfer pumping station	(Completed in September 2007)
Provision of two biotrickling filters and one chemical scrubber at inlets of the STW	(Completed in August 2008)
Provision of six biotrickling filters at the influent and effluent channels of 22 primary sedimentation tanks	December 2009
Provision of six biotrickling filters within the sludge treatment system	May 2010
Provision of eight activated carbon absorbers at five mixed liquor channels	July 2010