

**Task Force on Water-land Interface**  
**Fourteenth Meeting**

Date : 24 October 2016 (Monday)  
Time : 3:00 p.m.  
Venue : 15/F Conference Room, North Point Government Offices,  
333 Java Road, North Point

Minutes of Fourteenth Meeting

Present

Mr LEUNG Kong-yui                      Chairman

Organization Members

Mrs Margaret BROOKE	Representing Business Environment Council
Dr NG Cho-nam	Representing Conservancy Association
Mrs Karen BARRETTO	Representing Friends of the Earth
Mr Anthony CHEUNG	Representing Hong Kong Institute of Architects
Mr TAM Po-yiu	Representing Hong Kong Institute of Urban Design
Ir Prof CHOY Kin-kuen	Representing Hong Kong Institution of Engineers
Mr Shuki LEUNG	Representing Real Estate Developers Association of Hong Kong

Individual Member

Mr NGAN Man-yu	Individual Member
Mr Karl KWOK Chi-leung	Co-opted Member
Mr WONG Yiu-kan	Co-opted Member

Official Members

Miss Christine AU	Principal Assistant Secretary (Harbour), DEVB
Mr Edward LEUNG	Senior Manager (Tourism)2, Tourism Commission (TC)
Mr LEE Man-ho	Chief Transport Officer/Housing Project, Transport Department (TD)
Ms YING Fun-fong	Head (Kai Tak Office), Civil Engineering and Development Department (CEDD)
Mr CHEUNG Koon-lam	Chief Leisure Manager (Management), Leisure and Cultural Services Department (LCSD)

Mr Michael CHAU	General Manager/Planning, Development & Port Security, Marine Department (MD)
Mr Mann CHOW	Senior Town Planner/Studies and Research 3, Planning Department (PlanD)
Miss Emily SOM	Secretary

In attendance

Mr Nicholas BROOKE	HC Chair
Mr Larry CHU	Assistant Secretary (Harbour)1, DEVB

Absent with Apologies

Mr KAN Chak-fan	Individual Member
Mr Hans Joachim ISLER	Individual Member
Mr Vincent NG	Individual Member
Captain CHEUNG Tai-kee	Co-opted Member
Mr Bondy WEN	Co-opted Member
Mr Evans IU	Representing Hong Kong Institute of Landscape Architects
Prof TANG Bo-sin	Representing Hong Kong Institute of Planners
Sr Lesly LAM	Representing Hong Kong Institute of Surveyors
Mr Paul ZIMMERMAN	Representing Society for Protection of the Harbour

For Agenda Item 3

Mr Anthony KL TSANG	Chief Engineer/Harbour Area Treatment Scheme (HATS), Drainage Services Department (DSD)
Mr Zorro TY YUEN	Senior Engineer 1 (HATS), DSD
Miss Priscilla PS SUM	Engineer / 7 (HATS), DSD

**Action**

**The Chair** welcomed all attending the meeting. He announced that **Mr Edmond POON Chi-man** (in absentia) had taken over from Ms Stella LEE as Principal Transport Officer/Urban of Transport Department (TD) with effect from 19 September 2016. He thanked Ms LEE for her contribution to the Task Force.

He informed Members that **Miss Christine AU**, Principal Assistant Secretary (Harbour), attended on behalf of Mr Thomas CHAN. **Mr CHEUNG Koon-lam**, Chief Leisure Manager (Management) of LCSD attended on behalf of Ms Rebecca LOU. **Mr Edward LEUNG**, Senior Manager (Tourism) 2 of Tourism Commission (TC) attended on behalf of Ms Emily MO. **Mr Michael CHAU**, General Manger/Planning, Development & Port Security of Marine Department (MD), attended on behalf of Mr CHEUK Fan-lun. **Mr LEE Man-ho**, Chief Transport Officer/Housing Project of Transport Department (TD) attended on behalf of Mr Edmond POON. **Mr Mann CHOW**, Senior Town Planner/ Studies and Research of Planning Department attended on behalf of Ms Amy CHEUNG.

He welcomed **Mr NGAN Man-yu**, individual member, for joining the Task Force.

**Mr Nicholas BROOKE** shared with Members that two participants had lost their lives in the cross-harbour race held on 16 October 2016. The Task Force expressed sympathy and condolences to their families. He suggested the Task Force to review and learn from the experience of arranging water sports activities within the harbour and make recommendations in relation to water sports safety to the Government and organizer of the cross-harbour race in future meetings.

**The Chair** thanked Mr BROOKE for bringing up the issue. He said that it was a mishap and agreed that the Task Force could look into the water-land interface issues and improvement of safety measures for water sports activities.

## **Item 1 Confirmation of the Minutes of the Last Meeting**

1.1 The draft minutes of the 13<sup>th</sup> Task Force on Water-land

Interface (TFWL) meeting were circulated to Members for comments on 19 September 2016. The revised draft minutes with Members' comments incorporated were circulated again on 20 October 2016.

1.2 There being no further comments received from Members, the draft minutes were confirmed.

## **Item 2 Matters Arising**

2.1 **The Chair** asked Members whether there were follow-up issues arising from the last meeting. Members raised no follow-up issues.

## **Item 3 Harbour Area Treatment Scheme Stage 2A (Paper No. TFWL/03/2016)**

3.1 **The Chair** informed Members that the Secretariat had invited the Drainage Services Department (DSD) to introduce the Harbour Area Treatment Scheme (HATS) Stage 2A to Members. He welcomed **Mr Anthony TSANG**, **Mr Zorro YUEN** and **Miss Priscilla SUM** from DSD to the meeting.

3.2 **Mr Anthony TSANG** thanked the Task Force for the invitation. He presented the paper with the aid of a PowerPoint.

3.3 **Mr Nicholas BROOKE** credited the project team for their efforts and achievement in water quality improvement within Victoria Harbour. He raised the following questions:

- (a) the vulnerability of having only one single discharge point off Tsing Yi Island serving the entire population in Hong Kong;
- (b) the frequency of delivering dewatered sludge to the Western New Territories (WENT) landfill; and
- (c) what had been the actions taken so far for the preparation of the design and construction of the underground biological treatment plants under Stage 2B of HATS and its

implementation timeframe.

*(Post-meeting notes: For 3.3(a), the project team clarified that the single discharge point off Tsing Yi Island served 70% population in Hong Kong.)*

3.4 **Mr TAM Po-yiu** commented that underground infrastructures and facilities would not impose any visual impacts to the harbourfront area. He was delighted to see the results of the water quality improvement measures put forward by DSD and the Environment Protection Department (EPD). Noting that greening and beautification measures were carried out for preliminary treatment works (PTWs) as a means to minimize visual impacts as well as enhancing the living environment in the adjacent neighborhood, he enquired whether these facilities could come with community functions, with reference to the example of T-Park in Nim Wan, Tuen Mun.

3.5 **Mr WONG Yiu-kan** queried whether the project team was aware of the anchorage zone to the south west of the Stonecutters Island Sewage Treatment Works (SCISTW).

3.6 **Mrs Margaret BROOKE** gave DSD credits for the successful implementation of HATS. In addition to the cross-harbour race, she hoped that more parts of the harbour could be used for water sports activities in the near future.

3.7 **Mr Anthony TSANG** thanked Members for their compliments and responded as follows:

- (a) in terms of risk management, DSD had built-in measures and contingency plans to ensure the smooth operation of the sewage treatment works. He explained to Members that the choice of location for SCISTW, a large-scale chemically enhanced primary sewage treatment plant, went through a detailed study back in the 1990s. Since carrying out proper treatment would require an extensive amount of land, it was not feasible to locate one large sewage treatment plant or many local small scale treatment plants along the two sides of the Victoria Harbour. Stonecutters Island was identified as a suitable location for centralized

treatment and deep tunnels were constructed to transfer the sewage collected from different areas at the two sides of the Harbour. It was essential to ensure that a robust system was in place to minimize system failure;

- (b) one of the team's major concerns was power failure. In order to prevent power failure, a dual power supply system with different power sources was installed at SCISTW to ensure continuous power supply. Also, extra sewage pumps and sludge dewatering facilities were installed and served as back-up facilities. In the unlikely event when the SCISTW has to stop its operation despite contingency plans in place, preliminarily treated sewage would have to be discharged through submarine outfalls at individual PTWs for a short period of time to allow time for temporary repair. This scenario was studied under HATS' environmental impact assessment (EIA), which concluded that should emergency discharge of preliminarily treated sewage take place, the water quality at Victoria Harbour would be able to recover in a day or two after switching back to SCISTW;
- (c) under HATS Stage 2A, two dedicated marine vessels were built to transport sludge. There were only two journeys a day with each lasting for 3 hours. One vessel would deliver sludge from Stonecutters Island to Tuen Mun, whilst the other vessel would carry empty containers from Tuen Mun back to Stonecutters Island. Should one vessel need to be taken off duty for maintenance, the other vessel would be able to do the round trip in a day. In the unlikely event that both vessels failed to operate, the dewatered sludge could be delivered to Tuen Mun by temporary barges or through road-based transport;
- (d) in response to Members' question on whether SCISTW could go underground, DSD was considering the long-term direction of moving sewage treatment facilities underground. For instance, the Sha Tin Sewage Treatment Works would be relocated to caverns and there were also other projects in the pipeline. However, he opined that relocating SCISTW underground and reconnecting tunnel network to the new site would require huge investment.

Any of such proposal should be carefully planned and considered;

- (e) he clarified that many DSD facilities along the harbourfront area were already underground. There were only 7 PTWs in Kowloon and 8 PTWs on the Hong Kong Island and they were all above ground structures. Noting that PTWs were not popular facilities, DSD endeavored to further enhance greening and beautification measures to better blend PTWs with the adjacent environment. The project team would take Mr TAM's comments into consideration; and
- (f) he clarified that sewage discharge took place at deep seabed level at the southwestern part of SCISTW, which would not affect the anchorage zone at the sea surface; and
- (g) DSD and EPD took a prudent approach in improving water quality within Victoria Harbour. He reported that HATS Stage 1 reduced the *E.coli* level in the Harbour by 50% and it was further reduced by 75% following the implementation of HATS Stage 2A. While he noted that water quality was only one of the many considerations in hosting recreational and leisure activities, in view of the substantial improvement of water quality and reduction in *E.coli* level, he believed that more activities could be held in the Harbour.

3.8 **Mr TAM Po-yiu** recalled that the design of the sewage pumping station at To Kwa Wan was discussed at a different occasion of the Commission. He would like DSD to also brief Members on other sewage treatment facilities situated along the harbourfront area in future. Besides improving on the aesthetics of PTWs such as their design, landscaping and beautification, he would also like DSD to ensure that these sewage treatment facilities would be compatible with the adjacent land use.

3.9 **Mr Shuki LEUNG** invited the project team to elaborate on the functions and purposes of HATS Stage 2B, in particular its component of the underground biological treatment plant. He also enquired whether an increase in population in Hong Kong would cause any implications to HATS.

3.10 **The Chair** said that, after the commissioning of HATS Stage 1 to Stage 2A, it was evident that water quality in Victoria Harbour had substantially improved and cross-harbour race could be held. However, water quality at some parts of the Harbour, for example, the Kai Tak Approach Channel, was not satisfactory. He was aware that illegal discharge of polluted flow into the rainwater system would significantly affect the water quality in the harbour. He enquired about the mechanism employed by DSD in handling such issues and asked whether more focus should be placed on rectifying misconnections and interception of polluted discharge.

3.11 **Mr Anthony TSANG** gave the following responses to Members' further enquiries:

- (a) DSD agreed that greening and beautification measures must be implemented for sewage treatment facilities along both sides of the Harbour. He said that other project teams from DSD could be invited to share their experience in relation to the enhancement of appearance of sewage treatment facilities with the Task Force in future meetings;
- (b) regarding the details of the HATS Stage 2B, while EPD and DSD were monitoring the water quality improvements upon the commissioning of HATS Stage 2A, the implementation of HATS Stage 2B would be kept under review having regard to the water quality and the latest technological development in biological treatment. Under HATS Stage 2B, an underground biological treatment facility would be constructed near to the chemically enhanced primary sewage treatment plant on Stonecutters Island in providing secondary sewage treatment. He supplemented that the HATS Stage 2B targeted to remove biochemical oxygen demand (BOD) from 70% to 90% and suspended solids from 80% to 90%. He pointed out that HATS was a major investment with the implementation cost of Stage 1 and 2A to be about 25.8 billion dollars and that of Stage 2B would be a lot more. Hence, the Government must carefully review before determining the implementation of Stage 2B;
- (c) the design of the sewage treatment works was based on



Planning Department's population and development projection figures. The design horizon for HATS was up until 2041. He assured Members that the capacity of HATS could cater for future growth to about 5.7 million people; and

- (d) he shared the Chair's view that there were different sources of pollution affecting the water quality within the Harbour. For instance, illegal and improper connections were commonly found in historical or aged built-up districts. DSD had been working closely with EPD to address and eradicate such issues.

3.12 **Mrs Karen BARRETTO** enquired about the quantity of grits and solids being transported to the landfill.

3.13 **Mr Anthony TSANG** replied that about one to two trucks of grits were being transported to the landfill on a daily basis. He could supplement the exact figures after the meeting.

*(Post-meeting notes: The volume of grits to be transported from the HATS PTWs to landfill is on average about 0.7 m<sup>3</sup>/day for each PTW.)*

3.14 **The Chair** thanked the project team for the presentation and their responses.

3.15 **Mr Anthony TSANG** thanked the Task Force for giving DSD an opportunity to introduce HATS and improvement to water quality it brought about. The project team would take Members' comments into consideration in further developing the scheme.

3.16 **Mr Anthony CHEUNG** asked whether the PowerPoint slides presented by DSD could be shared with Members.

3.17 **Miss Christine AU** replied that, following the general practice, the Secretariat would upload the PowerPoint slides prepared by project teams onto the website of Harbourfront Commission shortly after the meeting.

#### **Item 4      Any Other Business**

4.1            **The Chair** invited Members to give views and suggestions on specific water-land interface issues for discussion at the next meeting.

4.2            **Mr Nicholas BROOKE** suggested inviting major stakeholders on water-land interface issues, such as the Leisure and Cultural Services Department and Marine Department to future meeting. The Task Force shall explore further on how the Commission could work in partnership with relevant departments. **The Chair** agreed.

#### Date of Next Meeting

4.3            **The Chair** informed Members that the next meeting would be scheduled in co-ordination with meetings of the Harbourfront Commission and other Task Forces. The Secretariat would inform Members of the meeting date in due course.

4.4            There being no other business, the meeting was adjourned at 4:00 p.m.

**Secretariat**

**Task Force on Water-land Interface**

**November 2016**