## 立法會 Legislative Council

LC Paper No. CB(1)1155/18-19 (These minutes have been seen by the Administration)

Ref: CB1/PL/EA

#### **Panel on Environmental Affairs**

Minutes of meeting held on Monday, 25 March 2019, at 2:30 pm in Conference Room 3 of the Legislative Council Complex

**Members present**: Dr Hon Junius HO Kwan-yiu, JP (Chairman)

Hon HUI Chi-fung (Deputy Chairman)

Hon CHAN Hak-kan, BBS, JP

Dr Hon Priscilla LEUNG Mei-fun, SBS, JP Hon Frankie YICK Chi-ming, SBS, JP

Hon WU Chi-wai, MH Hon CHAN Chi-chuen Hon Kenneth LEUNG

Hon KWOK Wai-keung, JP

Dr Hon Elizabeth QUAT, BBS, JP

Hon Martin LIAO Cheung-kong, SBS, JP Ir Dr Hon LO Wai-kwok, SBS, MH, JP

Hon CHU Hoi-dick Hon SHIU Ka-fai Hon YUNG Hoi-yan Hon Tanya CHAN

Hon Kenneth LAU Ip-keung, BBS, MH, JP

Hon Tony TSE Wai-chuen, BBS

**Members absent** : Hon Steven HO Chun-yin, BBS

Hon Dennis KWOK Wing-hang

Hon CHUNG Kwok-pan

# **Public Officers** attending

## : For item IV

Mr TSE Chin-wan, BBS, JP Under Secretary for the Environment

Mrs Alice CHEUNG, JP Deputy Director of Environmental Protection (3) Environmental Protection Department

Mr Dave HO Assistant Director (Air Policy) Environmental Protection Department

Mr Brian LAU
Principal Environmental Protection Officer (Air Policy)
Environmental Protection Department

Dr Kenneth LEUNG
Principal Environmental Protection Officer (Air Science)
Environmental Protection Department

#### For item V

Mr TSE Chin-wan, BBS, JP Under Secretary for the Environment

Mr CHEN Che-kong Assistant Director (Water Policy) Environmental Protection Department

Mr Anthony FOK
Principal Environmental Protection Officer
(Sewerage Infrastructure)
Environmental Protection Department

Mr WONG Sui-kan Assistant Director (Projects and Development) Drainage Services Department Mr CHOI Chun-ming Chief Engineer (Consultants Management) Drainage Services Department

Mr Jimmy POON Chief Engineer (Project Management) Drainage Services Department

**Clerk in attendance:** Ms Angel SHEK

Chief Council Secretary (1)1

**Staff in attendance** : Mr Cliff IP

Assistant Legal Adviser 8

Mr Jason KONG

Senior Council Secretary (1)1

Miss Bowie LAM Council Secretary (1)1

Miss Mandy POON

Legislative Assistant (1)1

#### Action

#### I. Confirmation of minutes

(LC Paper No. CB(1)720/18-19 — Minutes of the meeting held on 19 December 2018)

The minutes of the meeting held on 19 December 2018 were confirmed.

## II. Information papers issued since last meeting

2. <u>Members</u> noted that the following paper had been issued since the last meeting:

(LC Paper No. CB(1)752/18-19(01) — Letter dated 19 March 2019 from Hon Steven HO Chunyin on the ineffectiveness of

environmental impact assessments in reflecting the cumulative environmental impacts of marine works projects and works related to new development areas on the agriculture and fisheries industries (Chinese version only))

## III. Items for discussion at the next meeting

(LC Paper No. CB(1)723/18-19(01) — List of follow-up actions

LC Paper No. CB(1)723/18-19(02) — List of outstanding items for discussion)

- 3. <u>Members</u> agreed to discuss the following items at the next regular meeting scheduled for Monday, 29 April 2019, at 2:30 pm:
  - (a) mid-term review of the Recycling Fund; and
  - (b) construction of San Shek Wan sewage treatment works ("STW") at South Lantau, provision of sewerage networks in South Lantau and Tolo Harbour, and rehabilitation of underground sewers in Kowloon.

## IV. Review of Air Quality Objectives

(LC Paper No. CB(1)723/18-19(03) — Administration's paper on "Review of Air Quality Objectives"

LC Paper No. CB(1)723/18-19(04) — Updated background brief on "Review of Air Quality Objectives" prepared by the Legislative Council Secretariat

LC Paper No. CB(1)753/18-19(01) — Joint letter dated
18 March 2019 from
Hon Kenneth LEUNG,

Hon Dennis KWOK Winghang and Hon Tanya CHAN (Chinese version only)

LC Paper No. CB(1)770/18-19(01) — Administration's response to the joint letter dated 18 March 2019 from Hon Kenneth LEUNG, Hon Dennis KWOK Winghang and Hon Tanya CHAN

LC Paper No. CB(1)753/18-19(02) — Submission from AQO Review Coalition

LC Paper No. CB(1)753/18-19(03) — Submission from Blue Skies China (English version only))

(*Post-meeting note*: A joint submission from two members of the public tabled at the meeting was issued to members on 25 March 2019 vide LC Paper No. CB(1)768/18-19(01).)

## Briefing by the Administration

- 4. With the aid of a power-point presentation, the <u>Under Secretary for the Environment</u> ("USEN") briefed the Panel on the findings of the review of the Air Quality Objectives ("AQOs"), which had been endorsed by the AQOs Review Working Group ("Working Group"). He advised that, in accordance with the review findings and as supported by the Advisory Council on the Environment ("ACE"), the Administration proposed that the AQOs for sulphur dioxide ("SO<sub>2</sub>") and fine suspended particulates ("PM2.5") be tightened as follows:
  - (a) the 24-hour AQO for SO<sub>2</sub> be tightened from Interim Target-1 ("IT-1") level to Interim Target-2 ("IT-2") level, i.e. from 125 micrograms per cu m ("μg/m³") to 50 μg/m³ with the current number of allowable exceedances in a year (i.e. three) remained unchanged; and
  - (b) the annual AQO for PM2.5 be tightened from IT-1 level  $(35 \,\mu\text{g/m}^3)$  to IT-2 level  $(25 \,\mu\text{g/m}^3)$ ; and the 24-hour AQO for PM2.5 be tightened from IT-1 level  $(75 \,\mu\text{g/m}^3)$  to IT-2 level  $(50 \,\mu\text{g/m}^3)$  with the number of allowable exceedances in a year increased from the current nine to 35;

in which the interim targets referred to those promulgated by the World Health Organization ("WHO")'s "Air Quality Guidelines Global Update 2005" ("the WHO Guidelines"). <u>USEN</u> also advised that there was no scope to tighten the AQOs for respirable suspended particulates ("PM10") and ozone (" $O_3$ ") to the next higher standards under the WHO Guidelines, as the projected concentrations of the two pollutants in 2025 would not be able to meet the higher standards according to air quality assessment results.

(*Post-meeting note*: A set of the power-point presentation materials was circulated to members on 25 March 2019 vide LC Paper No. CB(1)767/18-19(01).)

#### Discussion

Purpose of setting Air Quality Objectives

- 5. Quoting paragraph 18 of the digest of the Working Group's fourth meeting (Appendix K to Annex A to LC Paper No. CB(1)723/18-19(03)), Ms Tanya CHAN questioned whether the purpose of setting AQOs was to protect public health or merely provide a benchmark for consideration of designated projects under the environmental impact assessment ("EIA") process. She voiced concern that if AQOs mainly served the latter purpose, then the Administration might deliberately adopt less stringent standards with a view to ensuring that designated projects could comply with AQOs. The Deputy Chairman and Mr CHAN Chi-chuen expressed similar concerns.
- 6. <u>Mr Kenneth LEUNG</u> opined that protection of public health should take priority over other considerations when conducting a review of AQOs.

## 7. <u>USEN</u> pointed out that:

- (a) the air quality management policy of Hong Kong was to achieve the highest standards of the WHO Air Quality Guidelines ("the WHO AQGs") in the long run to protect public health, through implementation of a range of measures to reduce emissions from various sources;
- (b) AQOs served as interim goals for progressively achieving the WHO AQGs as the ultimate goal. Short-term air quality improvement plans were developed to help achieve the interim goals; and

(c) apart from serving as a benchmark for consideration of designated projects under the EIA process, AQOs could also facilitate the assessment of the progress in air quality improvement. The tightening of AQOs could help ensure that the levels of air pollution control on future designated projects would be strengthened correspondingly.

Proposed changes to Air Quality Objectives for fine suspended particulates

- 8. The <u>Deputy Chairman</u> queried whether the proposed 24-hour AQO for PM2.5 at IT-2 level with 35 allowable exceedances in a year would indeed be a more stringent standard than the current AQO at IT-1 level with nine allowable exceedances. He expressed concern that the proposed increase in the number of allowable exceedances would counteract the tightening of concentration limit.
- 9. <u>Ms YUNG Hoi-yan</u> also sought explanation on the proposed increase in the number of allowable exceedances for the 24-hour AQO for PM2.5.
- 10. <u>Mr KWOK Wai-keung</u> asked whether the air quality in Hong Kong would need to be further improved in order to meet the proposed new objective for PM2.5.

## 11. USEN explained that:

- (a) the proposed allowable exceedances were to cater for non-compliance during pollution episodes caused by locally uncontrollable circumstances such as regional air pollution or extreme weather. The approach was in line with the WHO Guidelines and had been adopted in other places such as the European Union, where the number of allowable exceedances for the 24-hour PM10 standard was also set at 35 times per year; and
- (b) as demonstrated by the example of Tung Chung's air quality in 2012 (pages 8 and 9 of the power-point presentation materials (LC Paper No. CB(1)767/18-19(01))), the proposed new AQO was more stringent than the existing AQO. In 2012, there were nine days where the 24-hour PM2.5 concentration in Tung Chung exceeded IT-1 level, and 58 days where the concentration exceeded IT-2 level. This meant that the existing 24-hour AQO for PM2.5 was just met in Tung Chung, but significant improvement to the air quality was needed in order to comply

with the proposed new AQO at IT-2 level with 35 allowable exceedances.

12. The <u>Deputy Chairman</u> considered that the Administration should provide the definition of "extreme weather" and explain the major sources of regional air pollution affecting Hong Hong's air quality, which were mentioned in USEN's response.

(*Post-meeting note*: The Deputy Chairman issued a letter dated 26 March 2019 requesting the Administration to provide a written response to the issues related to "extreme weather". The letter was circulated to members on 27 March 2019, vide LC Paper No. CB(1)796/18-19(01).)

- 13. In response to Mr KWOK Wai-keung's enquiry, <u>USEN</u> advised that as the local air quality was affected by certain external factors such as meteorological conditions and regional air pollution influence, the concentrations of air pollutants could vary significantly. It was therefore theoretically possible that the air quality in a year could meet the proposed new objective for PM2.5 but failed to meet the prevailing one (i.e. 24-hour PM2.5 concentration exceeding IT-1 level with more than nine days of exceedance while complying with IT-2 level with less than 35 days of exceedance), but the chance would be very slim.
- 14. <u>Mr CHU Hoi-dick</u> pointed out that according to the data compiled by a green group, the proposed new AQO for PM2.5 had already been met in the whole territory of Hong Kong in 2018. He therefore called on the Administration to adopt a more ambitious target for PM2.5.
- 15. The <u>Assistant Director (Air Policy)</u> and the <u>Principal Environmental Protection Officer (Air Science)</u> responded that the proposal for tightening the 24-hour AQO for PM2.5 was formulated having regard to the 2025 air quality assessment results, which were based on the territory-wide air quality modelling outcome. According to the modelling outcome, the highest number of exceedances against IT-2 level for PM2.5 would be 33. The Administration therefore proposed setting the number of allowable exceedances at 35 to give some buffer.

## Health and economic impact assessment

16. <u>Mr Kenneth LEUNG</u> considered that the Administration should, with reference to the comment of a member of the Working Group, conduct a health and economic impact assessment ("HEIA") based on a scenario where all AQOs were set at the WHO AQG levels. He enquired whether such an

assessment was practicable, and if so, why the HEIA of the AQOs review did not include the scenario.

17. <u>USEN</u> responded that, while an HEIA based on the scenario suggested by Mr Kenneth LEUNG was practicable, there was no merit in including the scenario in the current AQOs review, whose purpose was to ascertain the practicability of tightening AQOs based on the projected air quality in 2025. He emphasized that the AQOs review was not a one-off exercise. In line with the statutory requirement to conduct a review every five years, AQOs would be tightened progressively towards the ultimate goal of meeting the WHO AQGs.

## Nitrogen dioxide and ozone pollution problems

- 18. Mr Kenneth LAU commended the Administration for its successful efforts in improving the overall air quality in Hong Kong for protection of public health. However, he expressed concerns about the high nitrogen dioxide (" $NO_2$ ") concentration and the rising trend in  $O_3$  concentration. He asked about the reasons for the above and new measures (if any) to be implemented to reduce the concentrations of the two pollutants.
- 19. <u>Ms YUNG Hoi-yan</u> expressed concern about the high roadside NO<sub>2</sub> concentration and asked how the Administration would tackle the problem.
- 20. Mr CHAN Chi-chuen enquired about the causes of the high levels of O<sub>3</sub> in Tung Chung and Tap Mun; whether cross-boundary vehicular traffic and construction works in the Guangdong-Hong Kong-Macao Greater Bay Area were major emission sources of O<sub>3</sub> affecting Tung Chung; and why the Administration decided not to tighten the AQO for O<sub>3</sub> in the current review exercise.

## 21. <u>USEN</u> explained that:

(a) the major source of NO<sub>2</sub> at the roadside was tailpipe emissions from commercial vehicles. The Administration had implemented/would implement various measures to reduce such emissions, including (i) tightening vehicle emission standards to Euro VI in phases, (ii) tightening the standard for motor vehicle diesel, (iii) phasing out old diesel commercial vehicles through an incentive-cum-regulatory approach, and (iv) setting up low emission zones and requiring franchised bus companies to deploy only low-emission buses in the zones, etc. Over the past five years, the roadside NO<sub>2</sub> concentration had been reduced by about 30%;

- (b) O<sub>3</sub> was not directly emitted from air pollution sources but was formed by photochemical reactions of nitrogen oxides and volatile organic compounds ("VOCs") in the atmosphere, which were emitted from many different pollution sources in the region, and hence the problem of O<sub>3</sub> pollution had to be tackled on a regional basis in collaboration with the Mainland authorities;
- (c) O<sub>3</sub> could be removed through reacting with nitric oxide ("NO"), which was a key roadside air pollutant. Because of this, O<sub>3</sub> concentrations were generally higher at the periphery of Hong Kong with lower levels of local emissions, such as Tung Chung, Tap Mun and Yuen Long;
- (d) while vehicle emission control measures would help reduce the concentrations of NO<sub>2</sub> and NO and improve roadside air quality, the removal of O<sub>3</sub> would also be reduced due to less NO to react with O<sub>3</sub> at the same time. It was therefore projected that there would be a slight increase in the O<sub>3</sub> concentration in the coming years, especially in areas with heavier traffic flows. A similar trend could also be observed in some overseas cities. Nevertheless, it was expected that with the continuous improvement in the overall air quality in the Pearl River Delta ("PRD") region, the overall O<sub>3</sub> concentration could be reduced in the long run; and
- (e) to ascertain whether it was practicable to tighten the AQO(s) for a specific pollutant, the Administration had examined whether the concentration of that pollutant could possibly meet the next higher standard (if any) under the WHO Guidelines by 2025. Due to the projected slight increase in the O<sub>3</sub> concentration, the Administration considered it impracticable to tighten the AQO for O<sub>3</sub> under the current review exercise.

Air Quality Objectives currently at the most stringent levels

22. Mr KWOK Wai-keung asked why it was possible for Hong Kong to adopt the most stringent WHO AQG levels for the AQOs for NO<sub>2</sub> (both one-hour and annual), carbon monoxide ("CO") (both one-hour and eight-hour) and lead (annual), as well as the 10-minute AQO for SO<sub>2</sub>. <u>USEN</u> explained that no interim target had been promulgated for NO<sub>2</sub>, CO and lead. The major sources of SO<sub>2</sub>, CO and lead in Hong Kong were vehicular emissions. As the Administration had banned the use of leaded petrol and

adopted stringent emission standards for private cars, the WHO AQGs for CO and lead could broadly be attained.

Regional cooperation on improving air quality

- 23. <u>Mr Tony TSE</u> expressed support for the progressive tightening of AQOs. He sought information on regional cooperation on improving air quality.
- 24. <u>Mr Kenneth LAU</u> asked whether the Administration had plans to deepen regional cooperation on improving air quality following the announcement of the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area ("the Outline Development Plan").
- 25. The <u>Deputy Chairman</u> asked whether the Administration had, through the existing regional cooperation mechanism, requested the Mainland authorities to tighten the emission limit for PM2.5 in Guangdong in tandem with the review of Hong Kong's AQOs.
- 26. USEN responded that in 2002, Hong Kong and Guangdong reached a consensus to reduce regional emissions of major air pollutants by 2010. The Pearl River Delta Regional Air Quality Management Plan ("the Management Plan") was subsequently drawn up for, among other things, implementation of air pollution control measures, and was reviewed and updated from time to time. With the implementation of the Management Plan, there had been continuous improvement in the air quality in the PRD region. For instance, the regional photochemical smog problem had been greatly alleviated, and PRD was the first region in the Mainland with annual average PM2.5 level meeting the target of 35 µg/m<sup>3</sup>. Looking forward, the Administration would strengthen cooperation with cities in the Guangdong-Hong Kong-Macao Greater Bay Area on improving air quality under the Major initiatives in this regard included Outline Development Plan. strengthening joint preventive and control measures against O<sub>3</sub>. To this end, the Administration would conduct a joint study with the mainland authorities to identity the key sources of VOCs contributing to the formation of  $O_3$ , with a view to facilitating the formulation of suitable control measures.

(*Post-meeting note*: In his letter dated 26 March 2019 (LC Paper No. CB(1)796/18-19(01)), the Deputy Chairman requested the Administration to provide in writing more information on the air quality targets in the PRD region.)

#### Other issues

- 27. In response to Ms Tanya CHAN and Mr CHU Hoi-dick's enquiries, <u>USEN</u> advised that the complete report of the AQOs review was in Annex A to the Administration's paper (LC Paper No. CB(1)723/18-19(03)). Findings from the consultant commissioned by the Administration to assist in the AQOs review had been incorporated in the review report submitted to the Panel. There was no separate review report prepared by the consultant at this stage.
- 28. Mr Tony TSE suggested that the Administration should provide real-time local air quality information to the public so that people with respiratory and cardiovascular diseases could take precautions in a timely manner. USEN advised that the Administration informed the public of short-term health risk of air pollution in Hong Kong through the Air Quality Health Index which was reported hourly at each general and roadside air quality monitoring station.
- 29. <u>Dr Priscilla LEUNG</u> considered that the Environment Bureau ("ENB")/Environmental Protection Department ("EPD") should strengthen coordination with other bureaux/departments, including the Marine Department, in tackling air pollution nuisances caused by marine incidents such as oil spillages and leakages of chemical substances. <u>USEN</u> took note of Dr LEUNG's view and advised that ENB/EPD would discuss the issue with the Marine Department.

## **Motion**

30. The <u>Chairman</u> referred members to the following motion moved by Mr Kenneth LEUNG:

"鑒於過去 5 年香港的空氣質素長期高於世衛標準,嚴重影響市民健康,共有 10 800 人因空氣污染提前死亡,本委員會要求政府以保障市民健康為修改空氣質素指標的首要目標,取消放寬微細懸浮粒子(PM2.5) 24 小時平均濃度的超標次數至 35 次的建議,並同時收緊可吸入懸浮粒子(PM10)及臭氧的空氣質素指標,以顯示政府重視市民健康的決心,體現《空氣污染管制條例》"消減、禁止與管制大氣污染"的原意。同時,本委員會要求政府承諾,空氣質素指標必須盡快與世衛最嚴格的水平看齊,確保公眾健康。"

## (Translation)

"Given that in the past five years, the air quality in Hong Kong has persistently exceeded WHO's standards, seriously affecting public health, and there were a total of 10 800 premature deaths caused by air pollution, this Panel requests the Government to make protecting public health the primary objective of revising AQOs, withdraw the proposal of relaxing the allowable exceedances for 24-hour average concentration of PM2.5 to 35 times, and tighten the AQOs for PM10 and O<sub>3</sub> at the same time, in order to demonstrate the Government's commitment to attaching importance to public health and reflect the original purpose of the Air Pollution Control Ordinance, which is to "abate, prohibit and control pollution of the atmosphere". Meanwhile, this Panel requests the Administration to undertake that AQOs must be aligned expeditiously with the most stringent WHO standards so as to ensure public health."

31. The <u>Chairman</u> put the motion to vote. Seven members voted for and none voted against the motion, and one member abstained. The <u>Chairman</u> declared that the motion was carried.

(*Post-meeting note*: The wording of the motion passed was issued to members on 26 March 2019, vide LC Paper No. CB(1)775/18-19(01).)

#### Conclusion

- 32. The <u>Chairman</u> advised that the Administration would conduct a three-month public consultation on the above proposal. It would then consult ACE and the Panel on the way forward. If AQOs were to be tightened, the Administration would submit an amendment bill to the Legislative Council with a view to implementing the new AQOs as soon as possible.
- V. Upgrading of Cheung Chau sewage treatment and disposal facilities, provision of public sewerage systems for villages in Sai Kung, and upgrading of West Kowloon and Tsuen Wan sewerage

(LC Paper No. CB(1)723/18-19(05) — Administration's paper on "Upgrading of Cheung Chau Sewage Treatment and Disposal Facilities, Provision of Village Sewerage in Sai Kung, and

Upgrading of West Kowloon and Tsuen Wan Sewerage")

## Briefing by the Administration

- 33. <u>USEN</u> advised that the Administration proposed upgrading six sewerage items to Category A for (a) upgrading the sewage treatment and disposal facilities in Cheung Chau, (b) providing village sewerage to unsewered areas in Tseung Kwan O and Port Shelter within Sai Kung, and (c) upgrading the existing sewerage in West Kowloon and Tsuen Wan. The estimated total cost in money-of-the-day prices was \$6.5 billion.
- 34. With the aid of a power-point presentation, the <u>Assistant Director</u> (Projects and <u>Development</u>), <u>Drainage Services Department</u> ("AD(P&D)/DSD") briefed members on the six sewerage items as follows:
  - (a) part of 4354DS Outlying Islands sewerage, stage 2 upgrading of Cheung Chau and Tai O sewage collection, treatment and disposal facilities;
  - (b) 4214DS Tseung Kwan O sewerage for villages;
  - (c) part of 4272DS Port Shelter sewerage, stage 2;
  - (d) part of 4273DS Port Shelter sewerage, stage 3;
  - (e) 4389DS Upgrading of West Kowloon and Tsuen Wan sewerage phase 2; and
  - (f) part of 4391DS West Kowloon and Tsuen Wan village sewerage.

(*Post-meeting note*: A set of the power-point presentation materials was circulated to members on 25 March 2019 vide LC Paper No. CB(1)767/18-19(02).)

## **Discussion**

Implementation timetables of the proposed projects and other sewerage projects

35. <u>Mr CHU Hoi-dick</u> pointed out that the public consultation exercises for the Port Shelter sewerage, sewerage for villages in Tseung Kwan O, and

upgrading of the Cheung Chau STW commenced in 2001, 2009 and 2011 respectively. He asked about the reasons why it had taken so many years for the Administration to finalize the works proposals, and the implementation timetables of the remaining sewerage projects under planning.

36. <u>USEN</u> responded that the implementation timetable of a project could be influenced by various factors, including the complexity of project design, public consultation process, and its relative priority among other projects. As shown in the Panel's list of outstanding items for discussion (LC Paper No. CB(1)723/18-19(02)), the Administration planned to consult the Panel on several other sewerage projects in the coming months. As regards the remaining sewerage projects under planning, their implementation timetables would be subject to, among other things, the availability of resources in future financial years.

Environmental impact of upgrading the Cheung Chau sewage treatment works

37. <u>Ms Tanya CHAN</u> asked whether the upgrading of the Cheung Chau STW would involve felling of trees. <u>AD(P&D)/DSD</u> advised that there were 14 trees within the project boundary and none of them was important tree. The tree felling and compensatory proposals would be provided in the paper to be submitted to the Public Works Subcommittee.

Improving coastal water quality

38. <u>Dr Priscilla LEUNG</u> and the <u>Chairman</u> expressed support for the Administration's proposal. <u>Dr LEUNG</u> welcomed the construction of dry weather flow interceptors ("DWFIs") (which intercepted and diverted polluted dry weather flow from a stormwater drain/channel into the sewerage system during non-rainy days for treatment) in more districts to improve the water quality in coastal areas and alleviate the associated odour problems. Nevertheless, as the benefits of DWFIs were limited, she considered that the Administration should formulate a comprehensive strategy for improving the water quality of Victoria Harbour, which should cover short, medium and long-term measures. In this connection, she enquired about the progress of a relevant consultancy study commissioned by EPD, and whether the Administration would consider the application of biological treatment in tackling near shore water pollution. The <u>Chairman</u> also asked about the measures for improving water quality in coastal areas.

## 39. <u>USEN</u> responded that:

- (a) with the implementation of the Harbour Area Treatment Scheme Stages 1 and 2A, there had been significant improvement to the water quality of Victoria Harbour. However, there were still residual pollution discharges to some coastal waters of Victoria Harbour, resulting in odour problems in some areas. These discharges arose from various pollution sources, such as misconnection of foul water pipes from buildings and public sewers to the stormwater drain systems, seepage from ageing sewers, and polluted urban run-off;
- (b) for the purposes of identifying the specific causes of near shore water pollution and formulating targeted solutions, EPD had commissioned a consultancy study on Further Enhancing Quality of Coastal Waters of Victoria Harbour. Subject to the outcome of the consultancy study, which was expected to be completed in 2019, the Administration would explore the use of new technologies and methods to combat near shore water pollution. These might include the interception of polluted water at the upstream, implementation of management plans at black spots, repairs of damaged sewers, etc.;
- (c) in parallel to the consultancy study, the Administration had been taking immediate measures to tackle pollution problems identified, instead of waiting for the completion of the study. The proposals of constructing DWFIs at critical locations were cases in point; and
- (d) based on the preliminary findings of the consultancy study, the Administration expected that chemical treatment would be more suitable than biological treatment in tackling near shore water pollution, as biological treatment generally took longer time to achieve the desired results and its effectiveness might be affected by seawater circulation.

Anaerobic co-digestion of food waste and sewage sludge

40. <u>Ms Tanya CHAN</u> enquired whether the Administration had plans to incorporate the "food waste/sewage sludge anaerobic co-digestion" technology into STWs to be constructed/upgraded, with a view to facilitating the recycling of food waste from areas serviced by those STWs.

41. <u>USEN</u> advised that the Administration would seek to apply the said technology to existing and planned STWs as far as practicable. However, the technology could only be applied to secondary STWs with sufficiently large sludge treatment tanks, and could not be implemented in small-scale STWs in the rural areas.

*Water pollution caused by brownfield operations* 

- 42. <u>Mr CHU Hoi-dick</u> enquired how the Administration would tackle water pollution caused by brownfield operations in unsewered areas, and whether residential areas were given priority over non-residential areas when planning for the provision of new sewerage facilities.
- 43. <u>USEN</u> responded that the Administration prioritized village sewerage projects based on the degree of water pollution impacts on water bodies (such as rivers and coastal waters) nearby, and therefore areas with larger sizes of residential population would be accorded priority for earlier implementation. If it was found that certain brownfield operations had caused water pollution, the Administration would take enforcement actions and request the operators to rectify the problems.

#### Conclusion

44. The <u>Chairman</u> concluded that members did not object to the Administration's submission of the relevant funding proposals to the Public Works Subcommittee.

## VI. Any other business

45. There being no other business, the meeting ended at 4:19 pm.

Council Business Division 1
<u>Legislative Council Secretariat</u>
6 June 2019