

**立法會**  
**Legislative Council**

LC Paper No. CB(1)1369/16-17  
(These minutes have been seen  
by the Administration)

Ref : CB1/PL/EA

**Panel on Environmental Affairs**

**Minutes of meeting**  
**held on Monday, 22 May 2017, at 2:30 pm**  
**in Conference Room 3 of the Legislative Council Complex**

**Members present** : Hon Tanya CHAN (Chairman)  
Dr Hon Junius HO Kwan-yiu, JP (Deputy Chairman)  
Hon LEUNG Yiu-chung  
Hon Tommy CHEUNG Yu-yan, GBS, JP  
Hon Jeffrey LAM Kin-fung, GBS, JP  
Hon WONG Ting-kwong, SBS, JP  
Hon CHAN Hak-kan, BBS, JP  
Dr Hon Priscilla LEUNG Mei-fun, SBS, JP  
Hon Paul TSE Wai-chun, JP  
Hon LEUNG Kwok-hung  
Hon Steven HO Chun-yin, BBS  
Hon Frankie YICK Chi-ming, JP  
Hon WU Chi-wai, MH  
Hon MA Fung-kwok, SBS, JP  
Hon Charles Peter MOK, JP  
Hon CHAN Chi-chuen  
Hon Kenneth LEUNG  
Hon KWOK Wai-keung  
Hon Dennis KWOK Wing-hang  
Dr Hon Fernando CHEUNG Chiu-hung  
Hon Martin LIAO Cheung-kong, SBS, JP  
Ir Dr Hon LO Wai-kwok, SBS, MH, JP  
Hon Andrew WAN Siu-kin  
Hon CHU Hoi-dick  
Hon HO Kai-ming  
Hon SHIU Ka-fai

Hon HUI Chi-fung  
Hon Kenneth LAU Ip-keung, MH, JP  
Hon KWONG Chun-yu  
Hon Nathan LAW Kwun-chung  
Dr Hon YIU Chung-yim

**Members absent** : Hon LEUNG Che-cheung, BBS, MH, JP  
Dr Hon Elizabeth QUAT, JP

[According to the Judgment of the Court of First Instance of the High Court on 14 July 2017, LEUNG Kwok-hung, Nathan LAW Kwun-chung, YIU Chung-yim and LAU Siu-lai have been disqualified from assuming the office of a member of the Legislative Council, and have vacated the same since 12 October 2016, and are not entitled to act as a member of the Legislative Council.]

**Public Officers attending** : **For item IV**

Ms Christine LOH, JP  
Under Secretary for the Environment

Mr MOK Wai-chuen, JP  
Acting Deputy Director of Environmental Protection (3)  
Environmental Protection Department

Mr Dave HO  
Principal Environmental Protection Officer (Mobile Source)  
Environmental Protection Department

**For item V**

Ms Christine LOH, JP  
Under Secretary for the Environment

Ms Daisy LO  
Assistant Director (Water Policy)  
Environmental Protection Department

Ms Greta TAM  
Senior Environmental Protection Officer (Water Policy & Science)  
Environmental Protection Department

Mr CHEUK Fan-lun  
Assistant Director/Planning & Services  
Marine Department

Mr FORK Ping-lam  
Assistant Director (Operations)3  
Food and Environmental Hygiene Department

Mrs Doris FOK  
Assistant Director (Leisure Services)1  
Leisure and Cultural Services Department

Mr Patrick LAI  
Assistant Director (Country & Marine Parks)  
Agriculture, Fisheries and Conservation Department

Mr CHOI Chun-ming  
Chief Engineer/Mainland South  
Drainage Services Department

**Clerk in attendance** : Ms Angel SHEK  
Chief Council Secretary (1)1

**Staff in attendance** : Ms Anki NG  
Senior Council Secretary (1)1

Miss Mandy POON  
Legislative Assistant (1)1

---

Action

**I. Confirmation of minutes**

(LC Paper No. CB(1)882/16-17 — Minutes of the special meeting  
held on 24 February 2017)

The minutes of the special meeting held on 24 February 2017 were confirmed.

Action

**II. Information papers issued since last meeting**

2. Members noted that the following papers had been issued since the last regular meeting:

(LC Paper No. CB(1)876/16-17(01) — Letter dated 24 April 2017 from Hon HUI Chi-fung on the new Scheme of Control Agreements between the Government and the two power companies (Chinese version only)

LC Paper No. CB(1)890/16-17(01) — Administration's response to the letter from Hon HUI Chi-fung on the new Scheme of Control Agreements between the Government and the two power companies (Chinese version only))

**III. Items for discussion at the next meeting**

(LC Paper No. CB(1)949/16-17(01) — List of follow-up actions

LC Paper No. CB(1)949/16-17(02) — List of outstanding items for discussion)

3. Members agreed to discuss the following items at the next regular meeting scheduled for Monday, 26 June 2017, at 2:30 pm:

(a) Hong Kong's Climate Action Plan 2030+; and

(b) review of the Air Quality Objectives ("AQOs").

**IV. Improvement of roadside air quality**

(LC Paper No. CB(1)949/16-17(03) — Administration's paper on "Improvement of roadside

Action

air quality"

LC Paper No. CB(1)949/16-17(04) — Background brief on "Measures to improve roadside air quality" prepared by the Legislative Council Secretariat)

4. Members noted that one submission was tabled at the meeting.

*(Post-meeting note: The submission was issued to members vide LC Paper No. CB(1)989/16-17(01) on 22 May 2017.)*

Briefing by the Administration

5. The Under Secretary for the Environment ("USEN") said that the Administration had been implementing various measures to tackle roadside air pollution, including progressively phasing out about 82 000 pre-Euro IV diesel commercial vehicles ("DCVs") since 2014. As at the end of April 2017, about 64% of the eligible vehicles had been scrapped. The Government also implemented a programme to replace the worn-out catalytic converters and oxygen sensors of liquefied petroleum gas ("LPG") and petrol taxis and light buses, and launched in September 2014 a strengthened emission control programme using portable roadside remote sensing equipment to screen out gross emitters in the petrol and LPG vehicle fleet. Moreover, the Government also subsidized franchised bus companies ("FBCs") to retrofit Euro II and III franchised buses with selective catalytic reduction devices to upgrade their emission performance to Euro IV or above level. The Administration also implemented measures to reduce marine emissions.

Discussion

Assessment of air quality

6. Dr YIU Chung-yim expressed concern about the limited data collected from the few roadside air quality monitoring stations ("AQMSs") for measuring the levels of roadside air pollution, which might hinder a more comprehensive analysis on district-based air pollution and effective monitoring of the problem. Dr YIU and Mr LEUNG Kwok-hung enquired whether the Administration would make public the statistics collected from roadside AQMSs and install devices such as micro-sensors for enhancing measurement of air pollutants.

Action

7. Referring to Annex B of the Administration's paper (LC Paper No. CB(1)949/16-17(03)) which recorded concentrations of different key pollutants measured by roadside AQMSs from 2012 to 2016, Mr KWOK Wai-keung opined that a breakdown of the pollutants' concentrations at different times of a year should be included in the table. Mr CHU Hoi-dick enquired whether the Administration would make reference to the presentation adopted by the Hong Kong University of Science and Technology ("HKUST") to show the breakdown by percentage contribution of the major air pollutants to the Air Quality Health Index ("AQHI") when reporting the index.

Admin 8. The Acting Deputy Director of Environmental Protection (3) ("Atg DDEP(3)") responded that AQMSs collected data at fixed locations for long-term analysis of air pollutants, and their stability was higher than micro-sensors. The Administration also cooperated with tertiary institutions for collection of data obtained through micro-sensors. Diffusion tubes were installed at certain locations for ambient air quality monitoring. Atg DDEP(3) supplemented that the Administration had discussed with the professors of HKUST and adopted the current presentation of the AQHI data with a view to facilitating simple and easy understanding of the data by the public. At the request of Dr YIU Chung-yim, the Administration agreed to provide information on the use of micro-sensors in Hong Kong, the data collected by such sensors and how the statistics were used for assessment of roadside air quality.

9. Noting that the AQHI recorded at six AQMSs was over 10 (i.e. health risk of "Serious") on 10 May 2017, Mr CHAN Hak-kan queried whether the roadside air quality had been improved. Mr KWONG Chun-yu expressed concern about the accumulation of pollutants in Pearl River Delta ("PRD") region which were carried by wind to Hong Kong and trapped among buildings.

10. USEN said that the Environment Bureau ("ENB") had been stepping up efforts to reduce roadside emissions but the air quality of Hong Kong was also affected by regional air quality and other factors. Atg DDEP(3) advised that the roadside air quality of Hong Kong was affected by three factors, namely, local emissions, weather conditions and regional air quality. The high AQHI levels recorded in early May 2017 were mainly due to the light wind conditions in the PRD region, which had caused air pollutants to accumulate in the region. Air pollution became serious on days with north-westerly winds carrying ozone accumulated in PRD to Hong Kong, and ozone could promote the conversion of nitrogen oxides emitted from vehicles to nitrogen dioxide, resulting in high roadside concentrations of nitrogen dioxide. In addition, a high concentration of ambient ozone would accelerate

Action

the formation of fine suspended particulates. The Administration would continue to enhance regional cooperation in reducing the emission of different pollutants.

11. Mr Dennis KWOK urged the Administration to consider how to further reduce roadside air pollution to protect public health when conducting the review on AQOs. USEN said that under the current legislation, the Secretary for the Environment was required to review AQOs at least once in every five years, and representatives from the Development Bureau ("DEVB") and the Transport and Housing Bureau ("THB") also took part in the review. The Administration would brief the Panel on the review of AQOs at the next regular meeting scheduled for 26 June 2017.

Emissions from commercial vehicles

12. Mr CHAN Hak-kan enquired about the Administration's timetable for phasing out commercial vehicles which had higher levels of emissions, including buses, taxis and public light buses. Mr HUI Chi-fung urged the Administration to step up efforts in replacing conventional franchised buses with electric or hybrid ones. Mr CHAN Chi-chuen enquired about the length of the trial period for electric buses, and the selection and assessment criteria for electric bus models.

13. Atg DDEP(3) advised that suitable green transport technologies for commercial vehicles had yet to be identified. Taking electric taxis as an example, the key constraints for their wider adoption were the long charging time and low energy density of their batteries. For hybrid vehicles, the actual fuel economy depended on the dominant driving mode. If a route was dominated by highway driving, a hybrid vehicle could hardly outperform its conventional counterpart in terms of fuel economy. In general, hybrid buses on highway routes with less start-stop operations tended to use more fuel, and fuel consumption in summer was higher than in cooler months. The poor fuel economy performance of the hybrid buses under trial was mainly due to the high air-conditioning loading in the hot and humid summers of Hong Kong, which could account for up to 40% of the fuel consumption. The Administration would continue to work with the bus manufacturer to improve the fuel economy of the hybrid buses and closely monitor the development of other green bus technologies. The Administration also encouraged different sectors to test out green innovative transport technologies under the Pilot Green Transport Fund.

14. Atg DDEP(3) further advised that the Administration had been conducting the trial on electric franchised buses for about a year. The bus models were selected through tendering arrangements based on functional

Action

specifications. The trial period for the electric buses was two years in order to assess the stability and reliability of their services. A Task Force comprising representatives from the relevant FBCs, Transport Department and three experts from the local academia had been set up to monitor and assess the trial performance. Atg DDEP(3) said that, compared with public buses in other cities, the franchised buses in Hong Kong generally operated with a high operation frequency, long service hours, high peak passenger loadings, on hilly terrains, and in hot and humid summers. These stringent operational conditions had put electric buses to a very severe test. The Administration would continue to monitor the performance of the electric buses under trial and update the Panel on the progress in due course. Depending on the trial results, the Administration would consider whether electric buses would be suitable for use in Hong Kong and if so, the appropriate bus routes for those buses.

15. Referring to the statutory cap of 15 years on the service life of DCVs registered on or after 1 February 2014, Mr HO Kai-ming enquired about the measures to assist DCV owners, in particular single vehicle owners. Atg DDEP(3) responded that the service life cap applied to all DCVs registered on or after the said date irrespective of the scope of business of the DCVs, and that the DCV operators could decide on the operational mode of business taking into account the service life cap.

*Promoting the use of electric private cars*

16. Mr HUI Chi-fung enquired about the possibility of phasing out conventional private cars by electric ones. Mr HO Kai-ming enquired about the measures to promote the use of electric vehicles ("EVs"), including whether the Administration would increase the charging facilities for EVs. Atg DDEP(3) said that the Administration would take into account technological advancement and market prices in respect of electric private cars when reviewing the First Registration Tax concessions for these cars in future. The Administration was aware of the difficulties encountered by EV owners in finding charging facilities outside their own parking spaces. The Administration had worked together with the commercial sector to install about 1 500 charging stations for use by EV owners. There were also companies providing packaged EV charging services in the market.

17. Mr LEUNG Kwok-hung enquired about the measures to deal with vehicle emissions from imported second-hand private cars. Atg DDEP(3) responded that imported second-hand private cars were required to meet the relevant vehicle emission standards as those of other private cars newly registered in Hong Kong.



Action

Promotion of cycling activity

18. Mr KWOK Wai-keung, Mr WU Chi-wai, Mr Dennis KWOK, Dr YIU Chung-yim, Mr LEUNG Kwok-hung and Mr HO Kai-ming enquired about the Administration's measures, if any, to promote cycling as a mode of green transport in order to reduce roadside emissions. Mr Dennis KWOK enquired whether the Administration would set up a joint-departmental group to review the cycling policies, and consider the feasibility of constructing cycle tracks and priority roads for bicycles in urban areas. Dr YIU Chung-yim said that he was preparing a proposal with some professionals on the construction of a cycling track on Hong Kong Island, on the basis that other road-users should not be affected by the cycling activities. Mr LEUNG Kwok-hung opined that ENB should explain to THB from the environmental protection perspective the importance of promoting cycling as a mode of transport and conduct the relevant trials. Mr WU Chi-wai enquired about the Administration's assessment of the reduction in carbon emissions brought about by promotion of cycling as a transport mode.

19. USEN responded that ENB endeavoured to foster a green community by promoting walking and cycling among other initiatives. The Administration would continue to improve existing cycle tracks and bicycle parking facilities, and build a "bicycle-friendly environment" when planning for new development areas. However, it would be difficult to assess the reduction in carbon emissions due to the promotion of cycling. Taking into account the limited road space, heavy traffic, road safety and other considerations, a balance on fair road use had to be struck between motorists and cyclists in urban areas. Meanwhile, DEVB and THB had been promoting cycling as a leisure activity in the New Territories. USEN further said that Panel members might relay related issues to the new term of Government in July 2017 for further consideration.

Marine emissions

20. Mr CHAN Hak-kan expressed concern about marine emission which was another major air pollution source. Atg DDEP(3) advised that since the Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulation ("the Regulation") requiring ocean-going vessels ("OGVs") to switch to low sulphur fuel at berth came into effect in July 2015, the average concentration of sulphur dioxide recorded at the Kwai Chung AQMS in the vicinity of the Kwai Chung container terminals was about 50% lower when it was downwind of the container terminals. This indicated an improvement of the air quality at areas affected by emissions from OGVs at berth subsequent to the implementation of the Regulation. In addition, the Administration had been collaborating with the Guangdong maritime authorities to take forward

Action

the implementation of Domestic Emission Control Areas requiring vessels plying within PRD to run on fuel with reduced sulphur content.

Other issues

*Dynamometer-based emission test*

21. Mr Frankie YICK expressed support for the Administration's work in improving roadside air quality. Regarding the Administration's decision of not incorporating the dynamometer-based emission test into the roadworthiness examination of petrol and LPG vehicles, Mr YICK expressed concern that some designated car testing centre operators had already incurred cost for reserving space at leased premises for installation of chassis dynamometers. He enquired whether the Administration would compensate those operators. Atg DDEP(3) responded that the Administration had discussed the matter with the designated car testing centre operators and noted that the operators did not request for compensation in relation to the costs in question. Mr YICK called upon the Administration to further discuss the issue with the operators at a meeting to be arranged by him. The Administration took note of the suggestion. At the request of Mr Dennis KWOK, the Administration also agreed to provide written responses to the list of questions raised by him on emissions from petrol and LPG vehicles, roadside remote sensors and dynamometer-based emission test.

Admin

*Solar air-conditioning system for coach*

22. Mr CHU Hoi-dick and the Chairman enquired about the timetable for determining the use of solar air-conditioning system for coach, which was under trial with funding support from the Pilot Green Transport Fund. Atg DDEP(3) said that the feedback on the solar air-conditioning system was positive in general and the Administration would step up promotion on wider use of the system. At the Chairman's request, the Administration agreed to provide information on the costs of the solar air-conditioning system in question and the estimated recovery period of the costs.

Admin

*Light pollution*

23. Mr KWOK Wai-keung enquired about the Administration's latest approach and measures to control excessive external lighting (which would also reduce emissions from power plants), including the implementation of the Charter Scheme and any plan to introduce legislation to regulate external lighting. The Administration agreed to provide the relevant information for members' reference.

Admin

Action

**V. Tackling marine refuse**

(LC Paper No. CB(1)949/16-17(05) — Administration's paper on "Tackling marine refuse"

LC Paper No. CB(1)949/16-17(06) — Background brief on "Tackling of marine refuse" prepared by the Legislative Council Secretariat)

Briefing by the Administration

24. USEN said that the Administration had been stepping up inter-departmental efforts for tackling marine refuse. Further to the large amount of marine refuse found in Hong Kong in summer in 2016, the Administration had further strengthened its measures to enhance the efficiency of tackling marine refuse. The Administration had also stepped up the co-operation with Guangdong on various regional marine environmental matters through the Hong Kong-Guangdong Marine Environmental Management Special Panel under the framework of the Hong Kong-Guangdong Joint Working Group on Sustainable Development and Environmental Protection.

25. With the aid of a power-point presentation, the Assistant Director (Water Policy)/Environmental Protection Department ("AD(WP)/EPD") briefed members on the progress of the Government's efforts in tackling marine refuse over the past two years and the way forward. She highlighted that in 2013-2014, the Environmental Protection Department ("EPD") conducted a Marine Refuse Study ("the Study") to investigate the sources, distribution and movement of marine refuse, and suggest measures to further improve the cleanliness of Hong Kong waters and shorelines. A three-pronged strategy (including reducing waste generation at source, reducing the amount of refuse entering the marine environment, and removing refuse from the marine environment) had been adopted. Relevant measures implemented included providing support facilities to reduce the amount of refuse entering the sea, enhancing efforts to remove marine refuse, launching publicity and educational campaigns, and conducting enforcement actions.

*(Post-meeting note: A set of the power-point presentation materials was circulated to members vide LC Paper No. CB(1)991/16-17(01) on 22 May 2017.)*

Action

Discussion

*Seabed refuse*

26. Noting from a complaint case about the dwindling presence of green turtles laying eggs near Sham Wan possibly due to abandoned fishing nets found thereat, Mr CHU Hoi-dick enquired about the measures taken by the Administration for removing seabed refuse and the service pledge, if any.

27. AD(WP)/EPD responded that cleaning up of seabed refuse could not be conducted too frequently as this might affect the marine habitats. Currently, cleaning up of seabed refuse was carried out on a need basis. The Marine Department ("MD") removed objects found to be affecting navigational safety in fairways and typhoon shelters. The Agriculture, Fisheries and Conservation Department ("AFCD") cleaned up seabed refuse affecting marine parks and marine reserve, as well as other key coral sites under the annual Hong Kong Reef Check. The Civil Engineering and Development Department removed sediments together with seabed refuse during maintenance dredging to ensure navigational safety. Marine works project proponents might also be required to carry out seabed dredging including the removal of seabed refuse affecting their marine works on a need basis.

28. The Assistant Director (Country & Marine Parks)/AFCD ("AD(C&MP)/AFCD") supplemented that during the annual survey of key coral sites in Hong Kong waters under the Hong Kong Reef Check, the locations of abandoned fishing nets would be recorded and AFCD would arrange its contractor to clean up the nets. In addition, AFCD and the Hong Kong Underwater Association jointly organized underwater clean-up events. AD(C&MP)/AFCD advised that for abandoned fishing nets found near coral sites or the green turtle nesting site at Sham Wan, AFCD would arrange for their removal as soon as practicable depending on manpower resources and urgency.

Admin 29. At the request of Ir Dr LO Wai-kwok and the Chairman, the Administration agreed to provide information on the existing mechanisms and systems for cleaning up seabed refuse, and whether any heritage impact assessments were carried out in or before conducting the cleaning up of seabed refuse.

*(Post-meeting note: The Administration's response was circulated to members vide LC Paper No. CB(1)1239/16-17(02) on 3 July 2017.)*

Action

*Shoreline refuse*

30. Dr Junius HO noted that large quantities of marine refuse had been washed up onto a number of local beaches, including Lung Kwu Tan and Butterfly Beach in Tuen Mun, in particular during typhoon seasons and the cleaning up work was not satisfactory. He enquired whether the Administration would consider strengthening its cooperation with the community, such as setting up a concern group with representatives from non-governmental organizations ("NGOs"), District Councils ("DCs"), schools, the Leisure and Cultural Services Department ("LCSD") and AFCD for organizing beach cleanup activities and competitions, etc. He also suggested the Administration employ other support facilities (e.g. sand sieves) to clean up refuse on beaches.

31. AD(WP)/EPD responded that different organizations had been organizing cleanup operations at shorelines or beaches on Saturdays and Sundays, particularly in the summer seasons, and EPD staff had participated in such operations to promote beach cleaning and educate the public on waste separation at source. EPD would consider further strengthening inter-departmental efforts and cooperation with NGOs and DCs on removal of marine refuse. The Administration would also take into account members' views and suggestions.

*Floating refuse*

32. Mr Steven HO drew the Panel's attention to the incident happened in August 2016 about illegal dumping by Mainland vessels in the waters of Wanshan Qundao of Zhuhai ("the Incident"), about 40 kilometres away from Lantau. After the dumping activity, some of the Hong Kong fishermen netted large quantity of refuse when they carried out trawling activities in the Pearl River Estuary region. Having received complaints from some Hong Kong fishermen, Mr HO said that he had relayed the case to the relevant Mainland authorities including the Department of Ocean and Fisheries of Guangdong Province. He understood that the Mainland law enforcement agencies had commenced operations both at sea and on land to proactively track down the illegal dumping activities. Vessels and personnel suspected of illegal activities had been detained and illegal marine dumping had been curbed.

33. Mr Steven HO pointed out that after the Incident, there was no immediate assistance provided by the Administration on removal of the large quantity of refuse netted by the Hong Kong fishermen. He criticized that the relevant government departments had passed the buck among themselves

Action

when dealing with incidents of marine pollution, and called upon the Administration to establish a mechanism to respond to similar emergency situations in future.

34. AD(WP)/EPD responded that since 2016, EPD had developed a notification and alert system on marine refuse based on rainfall data in the region. The information allowed relevant departments to prepare for the likely surge of marine refuse due to heavy rain by deploying staff and taking follow-up actions for cleaning up marine refuse more promptly. The notification and alert system had been put on trial in early May when heavy rain was recorded in Guangdong province. Relevant departments were notified to strengthen patrol and get prepared for mobilization of staff to carry out clean-up operations in areas likely to have massive quantity of marine refuse drifted by wind and currents.

Admin

35. The Assistant Director (Planning & Services)/MD advised that in response to the Incident, a special arrangement was made such that the fishermen might call MD's hotline to arrange for special collection by large-scale refuse collection vessels if the refuse netted by the fishermen was too bulky for collection by MD's contractor. At the request of the Chairman, the Administration agreed to provide written response on its follow-up work relating to the Incident and measures to handle emergency situations which required special collection of massive quantity of marine refuse by large-scale refuse collection vessels.

*(Post-meeting note: The Administration's response was circulated to members vide LC Paper No. CB(1)1239/16-17(02) on 3 July 2017.)*

36. Dr YIU Chung-yim enquired about the feasibility of providing floating refuse collection bins as suggested by some Southern District Council members. He suggested the Administration make reference to overseas experience on the provision and use of such bins. The Administration took note of the suggestion for future consideration.

37. Noting that four different Government Departments (MD, LCSD, AFCD and the Food and Environmental Hygiene Department) were each responsible for removal of marine refuse under their respective purviews, Mr CHAN Chi-chuen enquired about how to deal with cases when it was unclear as to which department was responsible for removal of the marine refuse concerned.

38. The Senior Environmental Protection Officer (Water Policy & Science)5/EPD responded that EPD had set up a dedicated team to refer complaints or reports of marine refuse pollution to the relevant department

Action

for speedy clean-up and help identify the department responsible when there was uncertainty in division of labour.

*(To allow sufficient time for discussion, the Chairman extended the meeting for 10 minutes beyond the appointed ending time.)*

*Marine Refuse Study*

39. Mr Martin LIAO noted from the Study findings that more than 80% of the marine refuse originated from land-based sources, and the marine refuse problem was aggravated by heavy rain as water courses and storm water drains carried refuse from land into the sea. On the other hand, he noted that according to the Administration, minimal debris had been collected by the floating booms installed at the outfalls of several large-scale drainage channels on Hong Kong Island and in Kowloon. Mr LIAO queried whether the major source of marine refuse was indeed land-based.

40. AD(WP)/EPD responded that water courses and storm water drains were one of the channels where land refuse entered the sea. Refuse left on beaches, for example, could be carried by tides into nearby waters. If land refuse was collected at the upper stream, less refuse would be collected by the floating booms installed at the drainage channels. The Chief Engineer/Mainland South/Drainage Services Department supplemented that the Drainage Services Department ("DSD") would continue to identify appropriate large-scale drainage channels for trial installation of floating booms to test their effectiveness in intercepting refuse subject to the needs of individual districts. DSD would also clear the sand or blockages found in drainage channels during regular checks before rainy seasons every year. At the request of Mr Martin LIAO, the Administration agreed to provide information on how the locations for trial installation of floating booms were selected.

Admin

*(Post-meeting note: The Administration's response was circulated to members vide LC Paper No. CB(1)1239/16-17(02) on 3 July 2017.)*

41. Mr CHAN Chi-chuen enquired whether a further study would be conducted for determining the source of marine refuse. USEN responded that in the light of the Incident and enhancement of the regional cooperation with Guangdong, the Administration might consider conducting a further study at a suitable juncture to review the effectiveness of the enhancement measures implemented for tackling marine refuse.

Action

**VI. Any other business**

42. There being no other business, the meeting ended at 4:38 pm.

Council Business Division 1  
Legislative Council Secretariat  
9 August 2017