

**立法會**  
*Legislative Council*

LC Paper No. CB(1)452/14-15  
(These minutes have been seen  
by the Administration)

Ref : CB1/PL/EA/1

**Panel on Environmental Affairs**

**Minutes of meeting**  
**held on Monday, 24 November 2014, at 2:00 pm**  
**in Conference Room 3 of the Legislative Council Complex**

**Members present** : Hon CHAN Hak-kan, JP (Chairman)  
Dr Hon Kenneth CHAN Ka-lok (Deputy Chairman)  
Hon James TO Kun-sun  
Hon Vincent FANG Kang, SBS, JP  
Hon WONG Ting-kwong, SBS, JP  
Hon Cyd HO Sau-lan, JP  
Hon CHAN Kin-por, BBS, JP  
Dr Hon Priscilla LEUNG Mei-fun, SBS, JP  
Hon Albert CHAN Wai-yip  
Hon Michael TIEN Puk-sun, BBS, JP  
Hon Steven HO Chun-yin  
Hon Frankie YICK Chi-ming  
Hon WU Chi-wai, MH  
Hon Gary FAN Kwok-wai  
Hon Charles Peter MOK, JP  
Hon Kenneth LEUNG  
Hon KWOK Wai-keung  
Hon Dennis KWOK  
Dr Hon Elizabeth QUAT, JP  
Ir Dr Hon LO Wai-kwok, BBS, MH, JP  
Hon Christopher CHUNG Shu-kun, BBS, MH, JP  
Hon Tony TSE Wai-chuen, BBS

**Members absent** : Hon TAM Yiu-chung, GBS, JP  
Hon Paul TSE Wai-chun, JP  
Hon CHAN Han-pan, JP

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

Mr TSE Chin-wan, JP  
Deputy Director of Environmental Protection (1)

Mr TANG Kin-fai, JP  
Assistant Director (Environmental Assessment)  
Environmental Protection Department

Mr Louis CHAN  
Principal Environmental Protection Officer  
(Regional Assessment)  
Environmental Protection Department

**For item V**

Ms Christine LOH, JP  
Under Secretary for the Environment

Miss Amy YUEN  
Assistant Director (Water Policy)  
Environmental Protection Department

Mr Terence TSOI  
Acting Principal Environmental Protection Officer  
(Sewerage Infrastructure)  
Environmental Protection Department

**For item VI**

Ms Christine LOH, JP  
Under Secretary for the Environment

Miss Amy YUEN  
Assistant Director (Water Policy)  
Environmental Protection Department

Ms Betty CHEUNG  
Principle Environmental Protection Officer (Regional West)  
Environmental Protection Department

Mr MAK Ka-wai, JP  
Deputy Director of Drainage Services  
Drainage Services Department

Mr Henry CHAU  
Assistant Director/Sewage Services  
Drainage Services Department

Mr Norman SIU  
Assistant Director/Electrical & Mechanical  
Drainage Services Department

Mr Anthony TSANG  
Chief Engineer/Harbour Area Treatment Scheme  
Drainage Services Department

Mr CHUI Wai-sing  
Chief Engineer/Sewage Treatment 2  
Drainage Services Department

**Clerk in attendance :** Ms Miranda HON  
Chief Council Secretary (1)1

**Staff in attendance :** Ms Shirley CHAN  
Senior Council Secretary (4)1

Miss Lilian MOK  
Senior Council Secretary (1)1

Ms Mandy LI  
Council Secretary (1)1

Miss Mandy POON  
Legislative Assistant (1)1

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**I. Confirmation of minutes**

(LC Paper No. CB(1)243/14-15 — Minutes of the meeting held on 27 October 2014

The minutes of the meeting held on 27 October 2014 were confirmed.

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

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

(LC Paper No. CB(1)176/14-15(01) — Referral memorandum from the Public Complaints Office of the Legislative Council Secretariat regarding the protection of Incense Trees in Hong Kong (Chinese version only) (Restricted to Members)

LC Paper No. CB(1)190/14-15(01) — Letter dated 3 November 2014 from Dr Hon Elizabeth QUAT to the Chairman regarding the issues related to the illegal ivory trade in Hong Kong (English version only)

LC Paper No. CB(1)225/14-15(01) — Letter dated 12 November 2014 from Dr Hon Kenneth CHAN Ka-lok to the Chairman regarding the designation of low emissions zones at busy corridor (Chinese version only)

LC Paper No. CB(1)244/14-15(01) — Submission from the Clean Air Network regarding the designation of low emission zones at busy corridors (Chinese version only))

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

(LC Paper No. CB(1)245/14-15(01) — List of follow-up actions

LC Paper No. CB(1)245/14-15(02) — List of outstanding items for discussion)

3. The Chairman informed members that he and the Deputy Chairman had met with the Secretary for the Environment on 5 November 2014 to discuss the work plan of the Panel in the 2014-2015 session. The work plan of the Panel was reflected in the "List of outstanding items for discussion" as set out in LC Paper No. CB(1)245/14-15(02). Members were welcome to put forth any item for discussion by the Panel in the 2014-2015 session.

4. Members agreed to discuss the subject of "PWP Item No. 5233DS – Sludge Treatment Facilities" at the next regular meeting scheduled for Monday, 15 December 2014, at 8:30 am.

*(Post-meeting note: With the concurrence of the Chairman, an item on "Implementation of the extension of the Plastic Shopping Bag Charging to all retail outlets" was added to the agenda for the meeting on 15 December 2014.)*

**IV. Environmental Impact Assessment for the Three-Runway System Project**

(LC Paper No. CB(1)207/14-15(01) — Letter dated 7 November 2014 from Dr Hon Kenneth CHAN Ka-lok (Chinese version only)

LC Paper No. CB(1)245/14-15(03) — Administration's paper on "Environmental Impact Assessment for the Three-Runway System Project"

LC Paper No. CB(1)245/14-15(04) — Background brief on "Environmental Impact Assessment for the Three-Runway System Project" prepared by the Legislative Council Secretariat)

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5. The Chairman referred members to the Deputy Chairman's letter dated 7 November 2014 requesting the Panel to discuss the bases and justifications for granting an Environmental Permit ("EP") for the Three-Runway System ("3RS") project (LC Paper No. CB(1)207/14-15(01)). As the 3RS project was a topical issue of public concern, he acceded to the Deputy Chairman's request to include the subject in the agenda of this meeting.

6. At the invitation of the Chairman, the Deputy Director of Environmental Protection (1) ("DDEP(1)") briefed members on the Environmental Impact Assessment ("EIA") process of the 3RS project under the Environmental Impact Assessment Ordinance (Cap. 499) ("the EIAO").

Establishment of the proposed marine park

7. The Deputy Chairman considered it regretful that the Environmental Protection Department ("EPD") had approved the EIA report of the 3RS project and granted the EP before adequate measures were implemented to minimize, mitigate and compensate the ecological impacts arising from the project. He opined that the Airport Authority Hong Kong ("AAHK") should implement the 18 proposed mitigation measures and four recommendations put forth by the Advisory Council on the Environment ("ACE") to enhance the protection of ecology before commencing the 3RS project. He further drew members' attention that the Panel had passed a motion on 23 April 2012 urging AAHK to conduct environmental studies on the 3RS project, including Strategic Environmental Assessment ("SEA"), Social Return on Investment and Carbon Audit, in order to protect the environment of Hong Kong and the areas in its vicinity.

8. DDEP(1) advised that the EIA process was an open and transparent statutory process. Under the EIA mechanism, the proponent of a designated project was required to prepare an EIA report in accordance with the Study Brief and the Technical Memorandum issued under the EIAO ("the TM-EIAO"). The TM-EIAO set out in detail the principles, procedures, guidelines, requirements and criteria for deciding whether the designated project was environmentally acceptable.

9. As regards the 3RS project, DDEP(1) explained that AAHK had completed the statutory EIA process for the project and submitted the EIA report to EPD for approval. The EIA report contained the results of a comprehensive assessment of the environmental impacts due to the 3RS project and recommended the adoption of different mitigation measures to address the environmental concerns. EPD had examined the EIA report with relevant

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Government departments and authorities, including the Agriculture, Fisheries and Conservation Department ("AFCD"), the Civil Aviation Department ("CAD"), the Planning Department and the Transport Department. After taking their advice, EPD had approved the EIA report of the 3RS project and granted an EP with conditions to AAHK. The 18 mitigation measures proposed by ACE would be imposed as conditions of the EP, together with the four recommendations. The designation of a new marine park of about 2 400 hectares to provide a habitat for Chinese White Dolphins ("CWD") was one of the proposed mitigation measures to protect marine ecology. As required in the EP, AAHK had to submit the marine park proposal including the proposed size and management plan of the park to ACE for comment before the commencement of reclamation works of the 3RS project.

10. The Deputy Chairman remained unconvinced and strongly urged the Administration to adopt a "Conservation before Construction" principle in implementing the 3RS project. Since the establishment of marine parks under the Marine Parks Ordinance (Cap. 476) was meant to protect and manage ecologically important marine environment, the Administration should establish the proposed new marine park before implementing the 3RS project in order to minimize the potential impacts on CWD. The Administration should also report to the Panel regularly on the progress of the establishment of the marine park.

11. Mr Dennis KWOK echoed the Deputy Chairman's views. He commented that the TM-EIAO was old-fashioned and outdated as it had not been reviewed since it was promulgated in 1997. The TM-EIAO did not provide sufficient information and guidelines for project proponents to conduct a comprehensive marine ecological assessment on their designated projects.

12. DDEP(1) advised that when reviewing the EIA report of the 3RS project, EPD had considered the suggestion of advancing the establishment of the proposed new marine park. Since the proposed marine park would connect the waters surrounding the expanded Hong Kong International Airport ("HKIA") Approach Area where reclamation works would be carried out and construction vessels would be passing through, it might not be technically feasible to establish the marine park before construction of the 3RS project. The proposed new marine park could be set up only after the works of the 3RS project were completed, because performing construction works within would defeat the purpose of setting up a marine park. To mitigate the environmental impacts during the construction period, in the EIA report, AAHK had committed the use of non-dredge deep cement mixing method for land formation, the avoidance of underwater percussive piling and the imposition of a speed limit of the Skypier and construction vessels within the works area to minimize chances of collision and disturbance to CWD. DDEP(1) stressed that as the 3RS project involved

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Admin reclamation of about 650 hectares of land, the establishment of the proposed new marine park was necessary to compensate for the long-term loss in marine habitat. Mr Dennis KWOK requested the Administration to provide further information on the proposed marine park, including the detailed plan, work schedule and estimated expenditure involved.

13. Mr Gary FAN doubted the bases and justifications for EPD to grant the EP for the 3RS project and urged for withdrawal of the EP issued to AAHK. He pointed out that some green groups had queried that the supplementary information provided by AAHK to the EIA Subcommittee of ACE had not adequately addressed the concerns about marine ecology. These green groups also considered that the two marine parks to be designated at Southwest Lantau and Soko Islands could not benefit the well-being of CWD during the construction period of the 3RS project as they were located far from the affected waters.

14. In response, DDEP(1) reiterated that the EIA process was a statutory process. Consideration of application for an EP was strictly in accordance with the requirements stipulated under the EIAO and the relevant TM-EIAO. In the EIA report of the 3RS project, AAHK had proposed the adoption of green technologies and a series of mitigation measures to alleviate the environmental impacts brought by the project. He also clarified that the designation of Southwest Lantau and Soko Islands as marine parks was not for seeking ACE's support for the EIA report of the 3RS project. In fact, the Administration had planned to designate Southwest Lantau and Soko Islands as marine parks for the conservation of marine life long ago for the long-term conservation of CWD.

15. Mr WU Chi-wai said that the discussion of the designation of Southwest Lantau and Soko Islands as marine parks had dragged on for years. He doubted the Administration's determination to establish the said marine parks for the protection of marine ecology. He also enquired whether the EIA report of the 3RS project tied in with the Convention on Biological Diversity ("the Convention"), to which Hong Kong had become a party in 2011.

16. DDEP(1) responded that as stipulated in the EP granted for the 3RS project, AAHK should advance the preparatory work for the designation of the proposed new marine park to facilitate the designation of the marine park by the Government before the full operation of the 3RS project. The proposed new marine park would connect with the existing Sha Chau and Lung Kwu Chau Marine Park to its north and the planned marine park at the Brothers Island to the east. AAHK should also submit the marine park proposal to ACE for comment before the commencement of any reclamation works. For the two marine parks to be designated at Southwest Lantau and Soko Islands, AFCD



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planned to launch public consultation in early 2015 and sought to complete the required procedures for the designation by 2017. It was anticipated that these two marine parks would be established before the commissioning of the 3RS. DDEP(1) further assured members that the EIA report of the 3RS project tied in with the objectives of the Convention. The Administration had embarked on an exercise in 2013 to develop a city-level Biodiversity Strategy and Action Plan based on the principles of the Convention.

Admin 17. As requested by Mr Albert CHAN, the Administration undertook to provide information on the effectiveness of the establishment of a Chinese White Dolphin Sanctuary at the Sha Chau and Lung Kwu Chau Marine Park which was established on the recommendation of the EIA study for the construction of an aviation facility for HKIA in the 1990s.

Impacts on the fisheries industry

Admin 18. Mr Steven HO expressed concern about the adverse impacts of the 3RS project on the fisheries industry. He requested the Administration to provide the estimated number of fishermen who would be affected by the 3RS project and the establishment of the proposed marine park.

19. DDEP(1) responded that as assessed by AAHK in the EIA report, the impacts of the construction works on the fisheries operations in the area were low to moderate. The Principal Environmental Protection Officer (Regional Assessment), EPD ("PEPO(RA)/EPD"), supplemented that the proposed new marine park would be linked with the existing Sha Chau and Lung Kwu Chau Marine Park and the planned Brothers Island Marine Park to form a large marine protected area to restore fisheries resources.

20. Mr Steven HO further commented that fishing in marine parks was controlled through a licence system under which the transfer or inheritance of licences among fishermen was prohibited. This had affected the livelihood of fishermen and would significantly undermine the sustainable development of the fisheries industry in the medium and long terms. PEPO(RA)/EPD explained that fishing in marine parks was not totally banned. According to AFCD, fishing permits were issued to local residents and bona fide fishermen for carrying out fishing activities in marine parks.

Cumulative impacts of different works projects in Tung Chung

21. Mr Albert CHAN enquired whether EPD would provide a written reply to his earlier submission to ACE regarding the EIA report of the 3RS project. DDEP(1) advised that under the EIAO, comments from the public and ACE

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would be taken into account by the Director of Environmental Protection ("DEP") in making decision on the approval of an EIA report. Since a substantial number of views on the EIA report of the 3RS project had been received from the public, it was difficult for the Administration to reply to every single piece of view received. Although the EIAO did not require DEP to reply to the views received during public inspection, the relevant documents concerning the EIA report of the 3RS project, including the minutes of meetings of ACE, could be accessed through the EIA website. At Mr CHAN's request, DDEP(1) agreed to provide a written response to his earlier submission.

22. Mr Albert CHAN further expressed concern that in addition to the 3RS project, the proposed major infrastructural projects in Tung Chung, including the Hong Kong-Zhuhai-Macao Bridge and the Tung Chung New Town Development Extension, would seriously aggravate the air and noise pollution problems in Tung Chung, hence affecting the health of Tung Chung residents. In view of the fact that EIA reports were project-specific which did not reflect the cumulative environmental impacts arising from other concurrent projects in the adjoining areas, Mr CHAN requested the Legislative Council Secretariat to conduct a related study to facilitate members' understanding of cumulative environmental impacts caused by various infrastructural projects.

*(Post-meeting note: The Research Office noted the Panel's request and prepared an information note on "Strategic Environmental Assessment". With the concurrence of the Chairman, the information note was circulated to members vide LC Paper No. IN02/14-15 on 5 January 2015.)*

23. Mr WU Chi-wai said that as various large-scale infrastructure projects had commenced one after another on Lantau Island, he shared Mr Albert CHAN's views that the Administration should carefully assess the cumulative environmental impacts of different infrastructure projects in Tung Chung. DDEP(1) advised that the cumulative environmental impacts of a proposed project and other on-going/planned projects in the adjoining areas would be carefully examined in the relevant EIA study so that environmentally acceptable schemes/designs and associated mitigation measures could be drawn up when taking forward the project. The development of Tung Chung would be subject to separate EIA studies under the EIAO to address its potential environmental impacts.

Aircraft noise

24. Mr Michael TIEN expressed concern that the night-time aircraft noise (from 11 pm to 7 am the next day) often caused nuisance to Ma Wan residents. He enquired about the role of CAD in regulating aircraft noise.

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25. DDEP(1) advised that aircraft noise was governed by the Civil Aviation (Aircraft Noise) Ordinance (Cap. 312). The noise impact arising from aircraft operation was represented by the Noise Exposure Forecast ("NEF") contours which were aircraft noise-related standard in land planning and were used to define areas where certain noise sensitive land uses should not be located. NEF contours took into account the duration of flyover, the peak noise level, the tonal characteristics and the number of aircraft movements in both the daytime and night-time period. For HKIA, the Hong Kong Planning Standards and Guidelines stipulated a stringent criterion of NEF 25 contour for land use planning. The criterion was in line with the international standards adopted by the developed countries. Aircraft were also required to adhere to the designated flight paths and flight procedures promulgated by CAD for the purpose of noise mitigation.

26. Mr Albert CHAN criticized that there was a lack of effective policy to control aircraft noise in Hong Kong. He considered that the EIA conducted by AAHK for HKIA in the 1990s had under-estimated the level of aircraft noise and therefore many residents in the vicinity of HKIA were subject to aircraft noise beyond acceptable level.

27. Mr Michael TIEN asked if EPD would consider setting a specific noise emission standard to measure and monitor aircraft noise to minimize aircraft noise impact on the communities living near the flight path. DDEP(1) responded that it was difficult to set local standards as aircraft noise emission was a highly technical and complex issue subject to international requirements. Nevertheless, CAD would continue to closely monitor the implementation of different aircraft noise mitigation measures with reference to the requirements and guidelines set out by the International Civil Aviation Organization to reduce disturbance caused by aircraft noise.

Conduct of public hearing

28. Having regard that the 3RS project was a highly controversial issue of wide public concern, Mr Albert CHAN suggested that the Panel should hold a public hearing to receive public views on the environmental impacts associated with the project. Mr WU Chi-wai and Mr Gary FAN supported Mr CHAN's suggestion. Mr Kenneth LEUNG proposed that the public hearing should focus on the environmental impacts of the 3RS project with respect to air quality, noise pollution and marine biodiversity.

29. The Chairman advised that this Panel and the Panel on Economic Development had jointly held two special meetings on 30 September and

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7 October 2014 to receive public views on the 3RS project and the related EIA report. He considered it not desirable to convene a public hearing on the same subject matter again within months.

30. Mr Tony TSE said that he did not object to convening a public hearing on the 3RS project again. Since the 3RS project straddled across different areas including not only environmental issues, relevant stakeholders should be invited to express their views on the project. Ir Dr LO Wai-kwok shared Mr TSE's views and opined that while a public hearing on the 3RS project could be conducted, it was more important for the Administration to closely monitor the implementation of the mitigation measures and recommendations put forth by ACE.

31. Taking into consideration members' views, the Chairman concluded that a public hearing would be conducted to receive public views on the 3RS project and its related impacts on the environment. Detailed arrangements for the public hearing would be confirmed at a later stage.

Clerk

*(Post-meeting note: With the concurrence of the Chairman, a special meeting has been scheduled for Tuesday, 6 January 2015, at 9:00 am to receive public views on "Expansion of Hong Kong International Airport into a Three-Runway System and its related impacts on the environment". Members were informed of the meeting arrangements vide LC Paper No. CB(1)328/14-15 on 8 December 2014.)*

**V. 5054DP — Further enhancing quality of coastal waters of Victoria Harbour**

(LC Paper No. CB(1)245/14-15(05) — Administration's paper on "5054DP — Further enhancing quality of coastal waters of Victoria Harbour"

LC Paper No. CB(1)245/14-15(06) — Background brief on "Improving the water quality of Victoria Harbour" prepared by the Legislative Council Secretariat)

32. With the aid of a power-point presentation, the Assistant Director of Environmental Protection (Water Policy) ("ADEP(WP)") briefed members on the Administration's proposal to upgrade 5054DP to Category A at an estimated cost of \$89.6 million in money-of-the-day prices to carry out a study on further

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enhancing quality of coastal waters of Victoria Harbour ("the Study").

*(Post-meeting note: A set of the power-point presentation materials was circulated to members vide LC Paper No. CB(1)274/14-15(01) on 28 November 2014.)*

Co-ordination on water quality matters

33. Dr Priscilla LEUNG expressed support for the Study. To urge the Administration to formulate long-term proposals for improving the water quality of Victoria Harbour, she had moved a motion at the Legislative Council meeting of 16 November 2011 on "Comprehensively improving the water quality of the Victoria Harbour". Since water quality matters cut across different Bureaux/Departments ("B/Ds"), Dr LEUNG expressed concern about the coordination of work between different B/Ds in enhancing the water quality of Victoria Harbour.

34. The Under Secretary for the Environment ("USEN") advised that the Administration was committed to improving the water quality of Victoria Harbour and EPD had been playing a co-ordination role for improvement works. In order to identify the specific causes of near shore pollution in Victoria Harbour and work out practical measures to prevent pollution at source, the Administration planned to carry out the Study which would involve field surveys, evidence-based reviews and various analyses. The Administration would also consider inviting relevant experts to engage in further collaboration in water management.

Enforcement actions against near shore pollution

35. Noting that there were residual pollution discharges from various activities in densely populated urban areas into the coastal waters of Victoria Harbour, Mr WU Chi-wai expressed concern about the enforcement actions taken by the Administration against near shore pollution. USEN advised that relevant B/Ds had been taking enforcement actions to deal with near shore pollution problems, such as effluents discharged by food establishments, household sewage and wastewater from mis-connections, to prevent pollution of Victoria Harbour. However, there were diverse sources of pollution discharge into the shore and enforcement actions were unable to comprehensively prevent the various daily activities from polluting the coastal waters. Under these circumstances, the Administration needed to carry out the Study to identify pollution sources affecting regional coastal waters and formulate site specific solutions.

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36. Mr WU Chi-wai opined that the Administration should proactively conduct inspections and enforcement actions against mis-connections of drains and malpractices of illegal discharge, particularly in densely populated areas with many old private buildings, to reduce near shore pollution, thereby improving the environment of both sides of Victoria Harbour. Mr Kenneth LEUNG shared Mr WU's views that there should be strict enforcement of laws against near shore pollution. He requested the Administration to provide the number of prosecution cases involving malpractices of illegal discharge of polluted flow into the coastal waters of Victoria Harbour.

37. ADEP(WP) assured members that the Administration had adopted a multi-pronged approach to deal with near shore pollution. Upon receipt of complaints, relevant B/Ds would carry out appropriate enforcement actions against different near shore pollution problems, such as illegal discharge from buildings to storm drains or mis-connections between foul sewers and storm drains. Under the Water Pollution Control Ordinance (Cap. 358) ("the WPCO"), EPD would conduct enforcement activities including making inspections and surveys of premises, handling complaints and instituting prosecutions against illegal discharge from buildings to storm drains. However, the Administration had limited data on near shore pollution. To work out a comprehensive programme to improve the environment of waterfront areas, field surveys were required. As such, the Administration proposed to carry out the Study which comprised evidence-based reviews and environmental investigation of individual areas to identify pollution sources and explore practicable measures to prevent pollution at source.

38. While expressing support for the Study, Mr Tony TSE pointed out that malpractices of illegal discharges from old private buildings/business establishments and mis-connections of sewers were major causes of water pollution in Victoria Harbour. The Administration should strictly enforce the WPCO and implement the necessary short-term measures in parallel to the Study. USEN assured members that relevant B/Ds had been taking enforcement actions against the problems. Based on the data collected by the Study, the Administration could establish the overall conditions of near shore pollution levels in Victoria Harbour, thereby formulating practicable measures to prevent pollution at source and instill behavioural changes at the individual and household level to reduce illegal discharges.

39. Ms Cyd HO acknowledged the difficulties encountered by the Administration in tackling near shore pollution, given the diverse sources of pollution. Noting that the problem of mis-connections of drains and malpractices of illegal discharge in old private buildings would hardly be tackled

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through enforcement alone, she enquired whether the Administration would consider engaging owners' corporations in conducting expedient connection surveys in their buildings. Assistance from the District Councils ("DCs") might also be sought in conducting the surveys if the buildings under investigation had no owners' corporation.

40. ADEP(WP) responded that in some densely populated areas with many old private buildings, assistance from the Home Affairs Department ("HAD") and respective District Offices would be sought to help rectify expedient connections in public drains/sewers and domestic buildings through owners' corporations. Ms Cyd HO requested the Administration to provide information on cases where mis-connections in the sewerage and drainage systems in old buildings had been rectified through the concerted effort of EPD, HAD and DCs.

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41. Dr Priscilla LEUNG urged the Administration to further strengthen law enforcement actions against near shore pollution and review the WPCO to enhance its deterrent effect against any malpractice of illegal discharge or mis-connection of sewers. Publicity and public education should also be stepped up to raise the public awareness. In the meantime, considerable efforts should be made to prevent marine pollution caused by oil leakage or spillage from commercial fleets in Hong Kong waters. Mr Tony TSE shared Dr LEUNG's views that the Administration should strengthen its efforts in preventing marine pollution.

Implementation of the Study

42. Mr Kenneth LEUNG enquired if there were any specific water quality standards of Victoria Harbour that the Administration targeted to achieve after the completion of the Study. ADEP(WP) responded that with the development of new waterfront promenades on both sides, Victoria Harbour had become increasingly accessible to the public. However, illegal discharges from various pollution sources had caused odor problems along the coastal areas of the harbour. To enhance the leisure and amenity value of Victoria Harbour and tie in with the development of the coastal areas, the Administration considered it necessary to carry out the Study to restore the water quality of the harbour.

43. Mr WU Chi-wai expressed concern that the estimated budget of \$89.6 million might not be sufficient for the Administration to conduct the Study which comprised field surveys, environmental monitoring and investigations in various densely populated districts (e.g. Wan Chai and Causeway Bay) to trace water pollution sources and explore practicable measures to prevent pollution at source. As requested by Mr WU, the Administration agreed to provide a flow chart (with estimated time required) to

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illustrate the steps and procedures for conducting field surveys, environmental monitoring and investigations under the Study on further enhancing the quality of coastal waters of Victoria Harbour. Mr Kenneth LEUNG further requested the Administration to provide the total number of man-hours required for conducting field surveys, environmental monitoring and investigations under the Study.

44. ADEP(WP) responded that the Administration considered the estimated budget of the Study reasonable having regard to the study area which was mapped based on Drainage Services Department's drainage catchment areas (including the coastal waters of Victoria Harbour alongside demarcated drainage catchment areas). Under the Study, West Kowloon, Kowloon East, the New Central Harbourfront and Wan Chai/Causeway Bay would be selected as priority areas for improvement.

45. In response to Mr KWOK Wai-keung's enquiry about whether the Administration could expedite the Study, ADEP(WP) explained that unlike small-scale expedient connection surveys, the Study comprised not only field surveys but also data analysis and formulation of recommendations and programmes to reduce near shore pollution. After the initial baseline survey which would help establish the overall conditions of near shore pollution levels in Victoria Harbour, evidence-based reviews would be carried out to identify pollution sources and regional environmental investigation. According to preliminary estimates, over 20 000 manholes would fall within the study area and the overall length of the storm water drains was more than 600 kilometers. As such, considerable time and manpower would be required for the successful completion of the Study. ADEP(WP) assured members that the Administration would continue to take enforcement action in parallel to the Study and consider the application of new technology in future water pollution studies.

46. Mr Christopher CHUNG doubted whether the Study could identify the specific causes of near shore pollution comprehensively. In reply, ADEP(WP) reiterated that under the Study, evidence-based reviews and environmental investigation of individual areas could provide important data for the Administration to come up with site specific solutions and practicable improvement measures. While the Harbour Area Treatment Scheme ("HATS") Stage 2A was underway to collect sewage for treatment at the Stonecutters Island Sewage Treatment Works, there were residual pollution discharges from various daily activities in densely populated urban areas into the coastal waters. These discharges originated from various pollution sources, including overland polluted storm water flow and wastewater from mis-connections, causing odour and visual problems along the coastal areas of Victoria Harbour.



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47. The Acting Principal Environmental Protection Officer (Sewerage Infrastructure), EPD ("APEPO(SI)/EPD") supplemented that the scope of the Study comprised not only field surveys and environmental monitoring and investigations but also data analysis and review of best practices and current arrangements in order to tackle near shore pollution from a holistic perspective.

48. In reply to Mr WU Chi-wai's enquiries about drainage system, APEPO(SI)/EPD explained that there were two types of sewers, namely foul sewers and storm water drains. Domestic buildings were required to collect sewage effluents and storm water separately. Should any mis-connection of foul sewers to storm water drains be identified in domestic buildings or roadside shops, building owners/business operators would be required to rectify the problems as soon as possible.

Concluding remarks

49. The Chairman concluded that members were supportive of the Administration's proposal to upgrade 5054DP to Category A at an estimated cost of \$89.6 million in money-of-the-day prices to carry out the Study.

**VI. Emergency sewage bypass incident at Pillar Point Sewage Treatment Works on 25 August 2014**

(LC Paper No. CB(1)245/14-15(07) — Administration's paper on "Emergency sewage bypass incident at Pillar Point Sewage Treatment Works on 25 August 2014 — Follow-up actions after the site visit on 8 September 2014"

LC Paper No. CB(1)245/14-15(08) — Background brief on "Emergency sewage discharge incident at the Pillar Point Sewage Treatment Works" prepared by the Legislative Council Secretariat)

50. With the aid of a power-point presentation, the Chief Engineer/HATS, DSD ("CE/HATS/DSD") briefed members on the findings of the investigation into the emergency sewage bypass incident ("the Incident") of the Pillar Point

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Sewage Treatment Works ("PPSTW") on 25 August 2014 and the follow-up actions taken by the Administration in respect of the incident.

*(Post-meeting note: A set of the power-point presentation materials was circulated to members vide LC Paper No. CB(1)274/14-15(02) on 28 November 2014.)*

51. Mr Michael TIEN said that it was important for the Administration to learn a lesson from the Incident and to adopt necessary improvement measures to enhance the operation reliability and safety of PPSTW which was operated by a contractor under a Design-Build-Operate ("DBO") contract. Noting that DSD was aware that PPSTW might shut down if the protection level setting of the electronic overload protection mechanism installed at each fine screen was adjusted to a level higher than the normal setting, causing the slackening and falling apart of the guiding chains installed at the two sides of each fine screen, Mr TIEN criticized the Administration for not putting in place a mechanism to safeguard against improper adjustment to the protection level setting of the electronic overload protection mechanism to prevent sewage bypass due to fine screen failure.

52. The Deputy Director of Drainage Services ("DDDS") responded that the electronic overload protection mechanism was commonly adopted by sewage treatment facilities to protect the fine screens and their components from being damaged due to overloading caused by adherence of stubborn particles onto the screens. In general, the protection level setting of the electronic overload protection mechanism would be maintained at a normal level and would not be unduly set well above its normal setting. The control of the electronic overload protection mechanism was securely housed in a cabinet inside the control room, which would be locked and located at some distance away from the fine screens, to safeguard it from casual tampering.

53. In response to Mr Michael TIEN's further enquiry about whether the consultant played a contributory role in the Incident, DDDS admitted that the consultant was not proactive and vigilant enough in respect of supervising the contractor to operate the plant properly and detecting irregularities during operation. The Assistant Director/Sewage Services, DSD supplemented that under the consultancy agreement, the resident site staff of the consultant were responsible for supervising and monitoring the performance of the contractor.

54. Mr Michael TIEN did not accept the Administration's explanation and criticized it for being lack of adequate awareness of risks. He urged the Administration to put in place more stringent requirements in DBO arrangement for operating wastewater treatment facilities. DDDS explained that the

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Administration had been pursuing public-private sector partnership in the procurement of wastewater treatment facilities for Hong Kong. Through the DBO contract model, the Administration had attracted advanced proprietary technologies and expertise, both from the local and overseas, in the provision of municipal services in a cost-effective manner. Nevertheless, he took note of Mr TIEN's views and would study whether it would be technically feasible to introduce a system whereby the protection level setting of the electronic overload protection mechanism could be more securely controlled against improper adjustment.

55. Mr Tony TSE expressed concern on whether the improvement measures implemented by DSD in response to the Incident would be applied in other DSD facilities as well so as to prevent recurrence of similar bypass incidents in future. DDDS responded that subsequent to the incident, DSD had immediately carried out thorough inspection of its facilities which used the same type of fine screens. The inspection had revealed that the fine screens of these facilities were all working satisfactorily. DSD had also strengthened communication between the management of its sewage treatment plants and front-line operation staff to ensure that operation staff would not unduly set the protection level setting of the electronic overload protection mechanism above the normal level.

56. DDDS further advised that an experienced overseas operation and maintenance ("O&M") expert had been engaged to conduct an overall review of the operation organization structure, training needs, emergency response plans etc. of the operation team of the contractor. Besides, a "Joint Operation Review Committee" comprising representatives of DSD, the consultant and the contractor had been set up to conduct joint meetings for reviewing the plant operation with reference to the O&M manual, and sharing DSD's plant operation experiences so that timely follow-up actions could be taken to address problems encountered.

57. In response to Mr Tony TSE's further enquiry about the implementation of the improvement measures, CE/HATS/DSD advised that DSD had temporarily removed one of the fine screens to allow free passage of sewage flow downstream for subsequent treatment processes in the unlikely event of failure of all the fine screens. In addition, one fine screen that could be removed quickly would be provided as a medium term measure for allowing incoming flow to bypass the fine screens and enter the grit removal chambers directly while emergency repair work for the fine screens had to be conducted. In the long run, DSD would investigate and consider constructing an additional bypass channel for improving the handling of flow under emergency situations as necessary.

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58. DDDS further supplemented that enhanced training would be provided for front-line operation staff in order to equip them with adequate knowledge and technical skills on the proper operation of the plant. Furthermore, DSD had urged the consultant to enhance the training for their resident site staff in order to improve their vigilance and responsiveness to emergency situations so as to improve the quality of their supervision of the operation of PPSTW. He assured members that DSD would work closely with the contractor and the consultant to implement the improvement measures proposed by the O&M expert to enhance PPSTW's reliability.

Concluding remarks

59. In conclusion, the Chairman urged the Administration to learn from the experience gained from the Incident and put in place necessary remedial measures to avoid recurrence of similar incidents in future.

**VII. Any other business**

60. There being no other business, the meeting ended at 4:20 pm.

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