

立法會
Legislative Council

LC Paper No. CB(1)808/20-21
(These minutes have been seen
by the Administration)

Ref : CB1/PL/EA

Panel on Environmental Affairs

Minutes of meeting
held on Monday, 22 February 2021, at 2:30 pm
in Conference Room 3 of the Legislative Council Complex

Members present : Hon Vincent CHENG Wing-shun, MH, JP (Chairman)
Hon Paul TSE Wai-chun, JP (Deputy Chairman)
Hon WONG Ting-kwong, GBS, JP
Hon CHAN Hak-kan, BBS, JP
Hon Steven HO Chun-yin, BBS
Hon Frankie YICK Chi-ming, SBS, JP
Hon KWOK Wai-keung, JP
Hon Elizabeth QUAT, BBS, JP
Ir Dr Hon LO Wai-kwok, SBS, MH, JP
Dr Hon Junius HO Kwan-yiu, JP
Hon SHIU Ka-fai, JP
Hon Kenneth LAU Ip-keung, BBS, MH, JP
Hon Tony TSE Wai-chuen, BBS, JP

Member attending : Hon Holden CHOW Ho-ding

Public Officers attending : **For item III**
Mr WONG Kam-sing, GBS, JP
Secretary for the Environment

Mrs Millie NG, JP
Deputy Director of Environmental Protection (2)
Environmental Protection Department

Mr Andy CHAN
Assistant Director (Environmental Infrastructure)
Environmental Protection Department

For item IV

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

Mr Terence TSANG
Assistant Director (Environmental Assessment)
Environmental Protection Department

Mr LEE Chee-kwan
Principal Environmental Protection Officer
(Assessment and Noise)
Environmental Protection Department

Mr Patrick NG
Deputy Project Manager/Major Works (2)
Highways Department

Mr Alex CHAN
Principal Project Coordinator/Environmental Projects
Highways Department

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

Staff in attendance : Mr Jason KONG
Senior Council Secretary (1)1

Miss Bowie LAM
Council Secretary (1)1

Miss Mandy POON
Legislative Assistant (1)1

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I. Information papers issued since last meeting

Members noted that the following paper had been issued since the last meeting:

(LC Paper No. CB(1)594/ 20-21(01) — Letter dated 3 February 2021 from Hon Elizabeth QUAT requesting the Panel to consider her proposed Members' Bill which seeks to amend the Organized and Serious Crimes Ordinance (Cap. 455) to strengthen the combat against illegal wildlife trade)

II. Items for discussion at the next meeting

(LC Paper No. CB(1)587/ 20-21(01) — List of follow-up actions

LC Paper No. CB(1)587/ 20-21(02) — List of outstanding items for discussion)

2. The Chairman advised that the next regular Panel meeting was scheduled for Monday, 22 March 2021, at 2:30 pm. The Administration proposed the following two items for discussion:

- (a) public consultation on a producer responsibility scheme on plastic beverage containers; and
- (b) North District, Lamma Island and Lantau sewerage, and the construction and rehabilitation of sewage rising mains in Yuen Long, Tai Po Kau and Yau Tong.

3. At the Chairman's invitation, Ms Elizabeth QUAT briefed members on her letter requesting the Panel to consider her proposed Members' Bill (LC Paper No. CB(1)594/20-21(01)). She said that although the Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 ("the Amendment Ordinance") had commenced operation in 2018, smuggling and illegal trading of endangered species via Hong Kong had remained active in the past two years. This indicated that the increased penalties under the Amendment Ordinance did not have sufficient deterrent effect against such wildlife crimes. She therefore proposed a Members' Bill seeking to add certain offences under the Protection of Endangered Species of Animals and Plants

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Ordinance (Cap. 586) ("PESAPO") to Schedule 1 to the Organized and Serious Crimes Ordinance (Cap. 455) ("OSCO"), to the effect that such offences would be subject to the provisions of OSCO that provided for additional powers of investigation, confiscation of proceeds of crime, etc.

4. The Chairman sought members' views on discussing the two items proposed by the Administration and Ms Elizabeth QUAT's proposal at the next regular meeting. Members did not raise objection. The Chairman advised that the next regular meeting would end at 5 pm to allow more time for discussion on three items in total.

5. As requested by Mr Steven HO, representatives from the Security Bureau and enforcement departments concerned in relation to illegal wildlife trade, OSCO and PESAPO would be invited to join the discussion on Ms Elizabeth QUAT's proposal.

III. Improvement and extension works of waste management facilities

(LC Paper No. CB(1)587/— Administration's paper on "Improvement
20-21(03) and Extension Works of Waste
Management Facilities")

Briefing by the Administration

6. The Secretary for the Environment ("SEN") briefed members on the background of the Administration's proposals of extending the West New Territories ("WENT") Landfill as well as refurbishment and upgrading of three refuse transfer stations ("RTSs"). As mentioned in the Waste Blueprint for Hong Kong 2035, the Administration would endeavour to develop more facilities to transform waste into resources or energy, with a view to achieving the goals of "waste reduction, resources circulation and zero landfill". Before sufficient waste-to-resources/energy facilities were made available, Hong Kong still needed to have adequate landfill capacities to meet the waste disposal need in the short to medium term. Regarding the WENT Landfill, which was expected to be exhausted in 2026, the design and investigation work of its extension project had been substantially completed. As the current operation contracts of West Kowloon, Island West and Island East transfer stations would expire in December 2022, the Administration also planned to take the opportunity to implement refurbishment and upgrading works at the three RTSs to enhance their operational efficiency and environmental performance.

7. With the aid of a PowerPoint presentation, the Assistant Director (Environmental Infrastructure) ("AD(EI)") briefed the Panel on the

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Administration's proposal of upgrading the following projects to Category A, and the objectives, justifications, proposed scopes, public consultation outcomes and environmental impacts of the projects:

- (a) part of 5165DR – WENT landfill extension;
- (b) 5184DR – Refurbishment and upgrading of West Kowloon transfer station; and
- (c) 5185DR – Refurbishment and upgrading of Island West and Island East transfer stations.

(Post-meeting note: The PowerPoint presentation materials were circulated to members on 22 February 2021, vide LC Paper No. CB(1)606/20-21(01).)

Discussion

8. The Chairman reminded members of the requirements under Rule 83A and Rule 84 of the Rules of Procedure.

9. Mr Kenneth LAU declared interest that he was an Indigenous Inhabitant Representative of Lung Kwu Tan in the Tuen Mun Rural Committee and owned land in the New Territories and Lung Kwu Tan.

Reducing reliance on landfills

10. Ir Dr LO Wai-kwok and Mr Kenneth LAU said that as the total treatment capacity of waste treatment and recycling facilities that were in operation or under development could not cope with all municipal solid waste ("MSW") generated in Hong Kong each day, members could only reluctantly support the proposed landfill extension project, despite that the use of landfills for waste disposal was known to be unsustainable. Ir Dr LO and Mr LAU expressed concern that Hong Kong lagged behind some Mainland and overseas cities in the development of waste-to-energy infrastructure and urged the Administration to expedite the development of such infrastructure. They sought elaboration on the Administration's plan in this regard, including whether there were plans to construct a modern waste incineration plant in the vicinity of the WENT Landfill.

11. Ms Elizabeth QUAT, Mr Holden CHOW and the Chairman shared the concern about the limited treatment capacity of existing waste-to-resources/energy infrastructure. They asked whether the Administration envisaged the need to further extend the three strategic landfills pending the

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completion of new waste-to-resources/energy facilities. Ms QUAT added that the development of waste-to-energy facilities might be able to bring economic benefits to Hong Kong in terms of reduced energy cost and/or new business opportunities.

12. Mr Tony TSE also emphasized the need to reduce Hong Kong's reliance on landfilling expeditiously.

13. SEN and the Deputy Director of Environmental Protection (2) ("DDEP(2)") responded that as explained in the Waste Blueprint for Hong Kong 2035, a key plank of the Administration's long-term strategies for waste management was to reduce reliance on landfilling through the development of waste-to-resources/energy infrastructure. The Integrated Waste Management Facilities (to be named as I•PARK) was under construction and expected to commence operation in 2025. The Administration would soon commence a study on the planning procedure for the development of new waste-to-resources/energy infrastructure. Assuming that waste-to-energy infrastructure with adequate treatment capacity would be in place, Hong Kong would no longer require landfills for direct disposal of MSW (save MSW that was non-combustible and could not be recycled or reused) by mid-2030s. The achievement of the "zero landfill" target would also depend on other factors, such as the degree of public participation in waste reduction and recycling initiatives and the development progress of other waste treatment or recycling facilities.

14. Mr Tony TSE expressed disappointment over the Administration's work on waste management and waste reduction in the past decade, as per-capita MSW disposal was on an increasing trend during the period, and there was no prospect of achieving the overall waste reduction target in the "Hong Kong: Blueprint for Sustainable Use of Resources 2013-2022". He and the Chairman opined that the Administration should review the effectiveness of waste management measures at least once every five years, so that necessary adjustments to the waste management strategies could be made in a timely manner for achieving the long-term targets in the Waste Blueprint for Hong Kong 2035 within the expected time frame.

15. DDEP(2) responded that the Administration planned to review and update its strategies and targets in respect of waste management roughly every five years to keep the Administration on the right track towards the vision in the Waste Blueprint for Hong Kong 2035.

16. Mr Tony TSE requested the Administration to provide in writing the details of the mechanism for periodic reviews and updates of the waste management strategies and targets.

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(*Post-meeting note:* The Administration's written response was circulated to members on 19 March 2021, vide LC Paper No. CB(1)702/20-21(02).)

17. Dr Junius HO expressed dissatisfaction that Hong Kong would continue to use more land for landfilling, instead of resorting to other options such as the use of gasification technologies for MSW treatment in place of landfilling or incineration. He suggested that the Administration should consider allocating land for the development of a green industry cluster consisting of waste-to-energy and recycling plants.

18. SEN responded that the Administration would continue to explore the local application of advanced technologies for transforming waste into resources or energy, and would study the experiences of other places in this regard. To enhance the recycling of food waste and waste paper, which constituted more than half of all MSW generated in Hong Kong each day, the Administration would continue to develop organic resources recovery centres and optimize the use of sewage treatment works for carrying out food waste/sewage sludge anaerobic co-digestion; and would invite open tender in the first half of 2021 for the development of a modern pulping facility in EcoPark, Tuen Mun for waste paper treatment.

19. Dr Junius HO requested the Administration to provide supplementary information as follows: (a) key performance indicators (if any) of the operation of major waste-to-resources/energy facilities and quantifiable assessment of the effectiveness of these facilities in reducing waste disposal at landfills; and (b) report of the consultancy study for preparation of the WENT Landfill Extension project.

(*Post-meeting note:* The Administration's written response was circulated to members on 19 March 2021, vide LC Paper No. CB(1)702/20-21(02).)

Environmental nuisances arising from waste vehicles

20. Mr Kenneth LAU pointed out that residents near the WENT Landfill, who were affected by the environmental nuisances arising from the landfill's operation and waste vehicles passing by residential areas, had raised strong views against the proposed landfill extension project.

21. Mr Holden CHOW called on the Administration to transport waste by sea as far as practicable, so as to minimize the environmental nuisances to local residents caused by waste vehicles. Ir Dr LO Wai-ki also urged the

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Administration to make its best efforts to reduce or divert the traffic of waste vehicles in general.

22. Ms Elizabeth QUAT and Mr Tony TSE opined that the Administration should proactively address residents' demands by improving the transport networks connecting the waste management facilities under discussion and enhancing the control of pollution from waste vehicles (especially those operated by private waste collectors) in parallel with the implementation of the proposed projects.

23. SEN and DDEP(2) explained that the Administration endeavoured to transport waste to waste management facilities by sea as much as practicable in order to reduce the number of waste vehicle trips required. As far as the WENT Landfill was concerned, the measures below had been/would be implemented to mitigate the environmental nuisances caused by waste vehicles:

- (a) the proportion of waste transported by sea to the WENT Landfill had reached about 90%, which was higher than the Administration's previous pledge of no less than 80%. The Administration would continue to explore the feasibility of increasing the proportion of waste transported by sea;
- (b) waste transported by road to the WENT Landfill was mainly odourless construction waste, wooden waste, waste tyres and others collected in the vicinity of Butterfly Beach and Tuen Mun. The Administration had made arrangements such that livestock waste collection vehicles and large-scale government waste collection trucks no longer used Lung Kwu Tan Road. The number of waste vehicles passing through Lung Kwu Tan had been reduced by 100 vehicles per day to an average of about 180 vehicles per day;
- (c) cleaning of the road section between Lung Kwu Tan Village and the WENT Landfill had been stepped up, and deep cleansing at the roadsides of Lung Kwu Tan Road was conducted from time to time. The Administration would continue to strengthen inspection of the environmental hygiene conditions of the road sections concerned and enforcement against non-compliance; and
- (d) regarding enhancement of transport infrastructure in the vicinity of the WENT Landfill, the feasibility study for the upgrading of Deep Bay Road, Nim Wan Road (North) and Nim Wan Road (South) to a standard single two-lane carriageway had been completed, and the project would be carried out in phases.

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24. Mr Tony TSE considered that the Environment Bureau ("ENB")/Environmental Protection Department ("EPD") should work closely with the relevant government bureaux/departments in examining the options for improving the local transport network under the planning and engineering study for Lung Kwu Tan reclamation and re-planning of Tuen Mun West area (i.e. the River Trade Terminal and its coastal areas) ("the P&E study"), with a view to diverting waste vehicles away from Lung Kwu Tan Road to address residents' concerns about the environmental nuisances arising from waste vehicles passing by Lung Kwu Tan Village. SEN took note of Mr TSE's view.

25. In response to Mr Kenneth LAU's further views and questions on alleviating traffic congestion in Tuen Mun, DDEP(2) advised that the Civil Engineering and Development Department would comprehensively review the traffic conditions in Tuen Mun and explore options to improve the transport network under the P&E study. The suggestion of constructing a new road to connect north-western Tuen Mun and Lam Tei would also be considered. Meanwhile, the Transport Department and the Highways Department ("HyD") planned to carry out enhancement works at Lung Fu Road, Wong Chu Road, etc. in Tuen Mun. Other road projects under planning, such as Route 11 and Tuen Mun Bypass, would also help improve the traffic conditions in Tuen Mun, if implemented.

26. Ms Elizabeth QUAT and Mr Holden CHOW said that since the introduction of the requirement under the Waste Disposal (Designated Waste Disposal Facility) Regulation (Cap. 354L) that all compaction type refuse collection vehicles ("RCVs") entering landfills and RTSs should be equipped with metal tailgate covers and wastewater sump tanks, pollution caused by such RCVs had been significantly reduced. Nevertheless, environmental nuisances (especially odour) arising from RCV traffic remained a major concern of residents in the vicinity of waste management facilities. Mr CHOW asked about the Administration's measures to ensure RCVs' compliance with relevant environmental regulations.

27. AD(EI) responded that the Administration strictly enforced the above requirement concerning RCVs' equipment. Since the introduction of the requirement in 2015, the Administration had issued 39 warning letters to RCV operators requesting them to rectify non-compliances. Rectification had been made following issuance of the warning letters, and no further enforcement action was required for those cases. Since 2013, EPD had conducted, with the Food and Environmental Hygiene Department and the Hong Kong Police Force, over 130 ambush operations at Lung Kwu Tan Road and Nim Wan Road to combat road safety and hygiene issues including overloaded vehicles, insecure load, wastewater dripping, etc. Prosecutions had been made against some of the non-compliance cases. The Administration would continue to strengthen

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monitoring of RCVs' operations.

Refuse transfer station refurbishment and upgrading projects

28. Mr Frankie YICK relayed the trades' concerns about the overloading of the grease trap waste collection and treatment facility in the West Kowloon transfer station ("WKTS") and frequent long vehicle queues on the access roads to the three RTSs in question. He enquired how the Administration would address the issues.

29. SEN and DDEP(2) advised that WKTS received grease trap waste from restaurants and food processing establishments free of charge. Such waste was processed by a grease trap waste collection and treatment facility in WKTS, which extracted highly concentrated grease for delivery to suitable recyclers for biodiesel production. The facility would be relocated and optimized under the WKTS refurbishment and upgrading project to enhance its treatment efficiency. Vehicle queues on the access roads to various RTSs generally occurred during the peak hours in the morning. RTS users were encouraged to transport waste in non-peak hours as far as practicable, and RTS contractors might face penalties if their operations did not meet the contractual or statutory requirements. To improve the operational efficiency of the three RTSs in question, the machinery and mobile plants therein would be replaced under the proposed refurbishment and upgrading projects.

30. The Chairman asked whether the proposed projects were expected to improve odour control at the three RTSs, and how the performance of odour management measures was monitored.

31. DDEP(2) and AD(EI) advised that the scopes of the projects included, among other things, replacement and upgrading of odour control systems (including ventilation and air-scrubbing units), replacement and upgrading of aged waste container vessels, replacement of aged containers and associated transport vehicles, and provision of covers at appropriate locations. It was expected that such enhancements could better prevent leakage of odour from the RTSs and associated vessels and containers. Routine odour patrols (for which a five-level standard was adopted) by qualified personnel (who were odour-sensitive enough to meet the requirements of the European Union standard method) were carried out inside and outside RTSs each day, and weekly odour audits were performed by independent consultants. In 2020, a total of 884 odour patrols were conducted at WKTS. No odour was detected in 94% of the patrols while only a slight intensity of odour was detected in the remaining cases. The Administration would continue to monitor the performance of odour management measures at the three RTSs using the same standard method after completion of the proposed projects.

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Conclusion

32. The Chairman invited members to indicate whether they supported the Administration's submission of the proposals to the Public Works Subcommittee ("PWSC") for consideration.

33. Dr Junius HO said that he had reservations about the proposals, and there might be a need for the Panel to discuss the proposals further at a future meeting.

34. SEN said that there was limited meeting time available for the Panel to discuss outstanding items in the remaining of the legislative session. He appealed for the Panel's timely endorsement of the proposals in question.

35. Mr Tony TSE suggested that members might consider the supplementary information to be provided by the Administration (as mentioned in paragraphs 16 and 19 above) first. After that, if any member saw the need to discuss the proposals further at the Panel, he/she could make the request later. In addition, Mr TSE opined that the Administration should provide details on the cost breakdowns of the proposed projects and explain the expected improvement in the handling capacities of the three RTSs after completion of the refurbishment and upgrading projects, in the relevant paper(s) to be submitted to PWSC.

36. As there were no further comments from members, the Chairman concluded that the Panel supported in principle the Administration's submission of the proposals to PWSC for consideration. He requested the Administration to provide the supplementary information to the Panel as early as possible and before PWSC considered the relevant financial proposal(s).

IV. Retrofitting of noise barriers

(LC Paper No. CB(1)587/ — Administration's paper on "766TH –
20-21(04) Retrofitting of Noise Barriers on Po Lam
Road North and 817TH – Retrofitting of
Noise Barriers on Po Ning Road"

(LC Paper No. CB(1)597/ — Submission from WWF-Hong Kong on
20-21(01) retrofitting of noise barriers)

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Briefing by the Administration

37. With the aid of a PowerPoint presentation, the Principal Project Coordinator/Environmental Projects, Highways Department briefed the Panel on the Administration's proposal of upgrading the projects below to Category A:

- (a) 766TH – Retrofitting of Noise Barriers on Po Lam Road North, at an estimated cost of \$376 million in money-of-the-day ("MOD") prices for retrofitting noise barriers on the section of Po Lam Road North between Tseung Kwan O Village and King Lam Estate; and
- (b) 817TH – Retrofitting of Noise Barriers on Po Ning Road, at an estimated cost of \$241.7 million in MOD prices for retrofitting noise barriers on the section of Po Ning Road between Hau Tak Estate and Yu Ming Estate.

(*Post-meeting note:* The PowerPoint presentation materials were circulated to members on 22 February 2021, vide LC Paper No. CB(1)606/20-21(02).)

Discussion

Expected benefits of the proposed projects

38. Mr Tony TSE sought elaboration on the expected benefits in terms of human perception of noise reduction that could be brought by the proposed projects.

39. The Under Secretary for the Environment ("USEN") responded that traffic noise reduction brought by the proposed projects would be significant. Taking 766TH as an example, currently, some 675 dwellings near the section of Po Lam Road North concerned were affected by traffic noise at levels exceeding 70 dB(A). After the implementation of 766TH, traffic noise at about 643 dwellings (95.3% of all affected dwellings) would be reduced to levels at 70 dB(A) or below, while traffic noise levels at the remaining dwellings would only marginally exceed 70 dB(A). As an increase of 3 dB (decibel) in the noise measurement would mean doubling of the noise level, a reduction from 76 dB(A) to 70 dB(A) would mean a reduction of three quarters of noise level.

Cost-effectiveness of the proposed projects

40. Mr Tony TSE, Dr Junius HO and the Chairman considered that the capital costs of the two proposed projects (around \$557,000 per affected dwelling for 766TH, and around \$387,000 per affected dwelling for 817TH)

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were on the high side. Mr TSE urged the Administration to adopt a people-oriented mindset and take traffic noise impact into account when implementing development projects. The relevant government bureaux/departments (e.g. ENB, the Development Bureau and the Transport and Housing Bureau) should enhance coordination in this regard to avoid the need to retrofit noise barriers on roads in future, so as to ensure prudent use of public resources.

41. USEN responded that the Administration adhered to the people-oriented principle when implementing public works projects. Traffic noise impact was tackled primarily through the land use planning procedure. Environmental impact assessment studies should be conducted for road projects, under which measures to ensure the projects' compliance with the planning standards (e.g. the traffic noise standard of 70 dB(A) for residential premises) were considered. In some cases, the construction of noise barriers for traffic noise mitigation was incorporated in road projects during the planning process. As regards excessive traffic noise generated from existing roads, the Administration's policy was to explore the implementation of direct noise mitigation measures, such as retrofitting of noise barriers, where practicable and subject to availability of resources.

42. Dr Junius HO sought comparison between the capital costs of the two proposed projects and those of noise barrier retrofitting projects carried out on Tuen Mun Road in recent years.

43. USEN responded that in recent years, the Administration implemented two noise barrier retrofitting projects on Tuen Mun Road at its Town Centre section (810TH) and Fu Tei section (814TH). Their capital costs per linear metre were about \$1.1 million and \$1.07 million respectively. Using the same unit of measurement, the capital costs of 766TH and 817TH under discussion were only \$540,000 and \$450,000 per linear metre respectively. The higher capital costs per linear metre of 810TH and 814TH could be attributed to the higher proportions of noise enclosures/semi-enclosures in their project designs, compared with those of 766TH and 817TH.

44. Ms Elizabeth QUAT pointed out that traffic noise problems in the Tseung Kwan O area were becoming severer and severer due to the growing local population. Residents had frequent complaints about traffic noise caused by heavy vehicles passing through certain roads, such as Po Lam Road North and Po Ning Road. The Democratic Alliance for the Betterment and Progress of Hong Kong had requested the Administration to implement appropriate noise mitigation measures in the Tseung Kwan O area expeditiously to address residents' demands. She agreed that the noise barrier retrofitting projects proposed by the Administration could effectively tackle the problem. Nevertheless, she shared the view that the capital costs of the projects were on

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the high side.

45. Mr Tony TSE, Dr Junius HO, the Chairman and Ms Elizabeth QUAT asked whether the Administration had explored the application of alternative or innovative noise mitigation measures that were more cost-effective for the road sections concerned, and whether it was feasible to implement other measures for further reduction of the traffic noise impact on the affected dwellings. In addition, the Chairman sought explanation on the factors considered by the Administration in deciding the noise mitigation measure(s) for a road section.

46. USEN responded that:

- (a) major considerations for road noise mitigation measures included technical feasibility and cost-effectiveness of the measures;
- (b) regarding the areas covered by the two proposed projects, it was necessary to retrofit noise barriers or semi-enclosures on certain road sections in order to bring the traffic noise levels at the majority of affected dwellings down to 70 dB(A) or below;
- (c) compared with noise barriers, noise enclosures/semi-enclosures cost more to construct and had a better noise reduction performance. In order to minimize the capital costs of the proposed projects, only certain sections would be retrofitted with noise barriers/semi-enclosures, and noise barriers instead of semi-enclosures were chosen as far as practicable based on the actual needs;
- (d) resurfacing roads with low noise materials was more economical than retrofitting of noise barriers, but there were limitations in the application of low noise materials. In the past, such materials were susceptible to wear and tear on low speed urban roads with frequent vehicle acceleration and braking. In recent years, the Administration had been conducting trial applications of a thin surfacing material, which was more durable than conventional low noise materials, for noise mitigation on some local roads. The thin surfacing material would be used on some road sections in the proposed projects to enhance the projects' cost-effectiveness; and
- (e) it was expected that the large-scale application of the thin surfacing material (if found to be feasible under the trials) could help pare down the scales of noise barriers/enclosures required in future traffic noise mitigation projects, thereby reducing the capital costs.

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47. The Deputy Project Manager/Major Works (2), Highways Department ("DPM/MW(2), HyD") advised that HyD adopted pragmatic designs for noise barrier retrofitting projects. The capital costs per linear metre of the proposed projects were similar to that of 832TH – Retrofitting of Noise Barriers on Long Tin Road being implemented. USEN supplemented that the Administration exercised control on public spending through its resource allocation mechanism. Public works proposals that were less cost-effective were less likely to obtain internal approval.

48. Mr Tony TSE and Dr Junius HO suggested that installation of acoustic windows and air conditioners at the affected dwellings and subsidizing the electricity charges for air conditioning might be more time and cost effective compared to retrofitting of noise barriers/enclosures. They asked about the Administration's position on this suggestion.

49. USEN responded that the installation of additional equipment in existing building and upkeep of the equipment involved complex legal and liability issues. If an existing road generated excessive traffic noise, the Administration's priority was to consider implementation of direct noise mitigation measures on the road to reduce the noise at source. Such measures usually included retrofitting of noise barriers/enclosures on roads, and road resurfacing with low noise materials. Although road resurfacing cost less than retrofitting of noise barriers/enclosures, its performance in noise reduction was weaker. Therefore, retrofitting of noise barriers/enclosures was necessary under the proposed projects for mitigating the traffic noise impact on some dwellings.

50. Ms Elizabeth QUAT considered that the Administration should keep abreast of technological developments in traffic noise mitigation. In this connection, she noted that an innovative technology developed in Hong Kong had been applied in the Mainland to enhance the efficiency of road surfacing works. However, the technology could not be applied in Hong Kong due to vehicle licensing issues.

51. USEN responded that HyD would continue to explore the use of new materials, construction methods, etc. for enhancing the quality and cost-effectiveness of traffic noise mitigation projects. Ms Elizabeth QUAT advised that she could provide to the Administration more information on the innovative technology she mentioned after the meeting.

52. Mr Tony TSE requested the Administration to provide supplementary information on enhancements (if any) made over the years to the designs, materials and maintenance procedure of noise barriers; and how such enhancements had improved the noise reduction effectiveness and/or reduced the construction or maintenance cost of noise barriers.

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(*Post-meeting note:* The Administration's written response was circulated to members on 15 March 2021, vide LC Paper No. CB(1)678/20-21(02).)

Environmental impacts

53. Ms Elizabeth QUAT noted that an important tree would be affected by the implementation of 766TH. She asked about the details of the important tree and the treatment and compensatory proposals.

54. DPM/MW(2), HyD explained that the important tree was a *Eucalyptus citriodora* with fair amenity value and fair health condition. The tree's location, on the median of the section of Po Lam Road North near King Lam Estate, was in conflict with the proposed works. As the survival rate of the tree after transplanting was low, removal was recommended. Under the planting proposals to be incorporated into the two proposed projects, the numbers of tree to be planted would equal the number removed.

55. Ms Elizabeth QUAT enquired about the control of noise from construction activities during the implementation of the proposed projects.

56. DPM/MW(2), HyD responded that to minimize short-term noise impact during construction, the Administration would require the contractors to implement mitigation measures such as using quieter construction equipment or methods. The contractors would also need to apply for Construction Noise Permits for the carrying out of certain works under the projects.

57. Mr Tony TSE asked about the measures implemented by the Administration to prevent bird collisions with transparent or translucent noise barriers, and whether any study had been conducted to evaluate the effectiveness of such measures.

58. DPM/MW(2), HyD explained that a pattern of thin opaque stripes was superimposed on the transparent panels of noise barriers, and this method had been proven to be effective in preventing bird collision. The Administration planned to incorporate the same requirement in the tender documents for the two proposed projects.

Routine cleaning of noise barriers

59. Dr Junius HO urged the Administration to strengthen the routine cleaning of noise barriers, as he observed that some noise barriers in Tuen Mun were dusty. DPM/MW(2), HyD advised that routine cleaning of noise barriers

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was carried out by HyD's maintenance contractors. He would relay Dr HO's comment to HyD's maintenance team.

Conclusion

60. The Chairman concluded that the Panel supported the Administration's submission of the proposals to PWSC, but some members remained concerned about the cost-effectiveness of the projects. He requested the Administration to elaborate on the feasibility of reducing the capital costs of the projects at the relevant PWSC meeting(s).

V. Any other business

61. There being no other business, the meeting ended at 4:32 pm.

Council Business Division 1
Legislative Council Secretariat
22 April 2021