

立法會
Legislative Council

LC Paper No. CB(1)1331/12-13
(These minutes have been seen
by the Administration)

Ref : CB1/PL/EA/1

Panel on Environmental Affairs

Minutes of meeting
held on Monday, 25 March 2013, at 2:30 pm
in Conference Room 1 of the Legislative Council Complex

Members present : Hon Cyd HO Sau-lan (Chairman)
Hon Christopher CHUNG Shu-kun,
BBS, MH, JP (Deputy Chairman)
Hon Vincent FANG Kang, SBS, JP
Hon CHAN Hak-kan, JP
Hon CHAN Kin-por, BBS, JP
Hon Albert CHAN Wai-yip
Hon Claudia MO
Hon Steven HO Chun-yin
Hon WU Chi-wai, MH
Hon Gary FAN Kwok-wai
Hon Charles Peter MOK
Hon CHAN Han-pan
Dr Hon Kenneth CHAN Ka-lok
Hon KWOK Wai-keung
Hon Dennis KWOK
Hon SIN Chung-kai, SBS, JP
Dr Hon Helena WONG Pik-wan
Dr Hon Elizabeth QUAT, JP
Ir Dr Hon LO Wai-kwok, BBS, MH, JP
Hon CHUNG Kwok-pan
Hon Tony TSE Wai-chuen

Members attending : Hon James TO Kun-sun
Hon Frankie YICK Chi-ming

Public Officers attending : **For item IV**

Ms Christine LOH
Under Secretary for the Environment

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

Mr CHENG Hung-leung
Assistant Director/Projects & Development
Drainage Services Department

Mr Gabriel WOO
Chief Engineer/Consultants Management
Drainage Services Department

For Item V

Ms Christine LOH
Under Secretary for the Environment

Mr MOK Wai-chuen, JP
Assistant Director (Air Policy)
Environmental Protection Department

Mr Tony LEE
Senior Environmental Protection Officer (Air Policy)
Environmental Protection Department

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

Staff in attendance : Mrs Mary TANG
Senior Council Secretary (1)1

Miss Mandy POON
Legislative Assistant (1)1

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I. Confirmation of minutes

(LC Paper No. CB(1)732/12-13 — Minutes of the meeting held on 28 January 2013)

The minutes of the meeting held on 28 January 2013 were confirmed.

II. Information paper issued since last meeting

2. Members noted that no information paper had been issued since last meeting.

III. Items for discussion at the next meeting

(LC Paper No. CB(1)736/12-13(01) — List of outstanding items for discussion)

3. Members agreed to discuss the following items at the next regular meeting scheduled for Monday, 22 April 2013, at 2:30 pm -

(a) 355DS – Outlying Islands sewerage, stage 2 – Lamma village sewerage phase 2; and

(b) Public Consultation on a new Producer Responsibility Scheme on glass beverage bottles (invitation of views).

IV. Provision of sewerage in Tolo Harbour and North District

(LC Paper No. CB(1)736/12-13(02) — Administration's paper on "125DS – Tolo Harbour sewerage of unsewered areas, stage 2 and 339DS – North District sewerage, stage 1 phase 2C and stage 2 phase 1")

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4. The Under Secretary for the Environment ("USEN") briefly introduced the two sewerage projects, namely, 125DS – Tolo Harbour sewerage of unsewered areas, stage 2, and 339DS – North District sewerage, stage 1 phase 2C and stage 2 phase 1. The Assistant Director of Drainage Services/Projects & Development ("ADDS/P&D") gave a power-point presentation on the sewerage projects.

(Post-meeting note: A set of the power-point presentation materials was circulated vide LC Paper No. CB(1)774 /12-13(01) on 26 March 2013.)

5. Ms Claudia MO enquired about the mitigation measures to be taken to address the environmental impacts of the proposed sewerage works. ADDS/P&D said that to reduce environmental impacts during construction, efforts would be made to control noise, dust and site run-off to levels within established standards and guidelines through implementation of environmental mitigation measures, such as the use of silenced construction equipment and noise barriers to reduce noise generation, water-spraying to reduce emission of fugitive dust, and proper treatment of site run-off before discharge.

6. On Ms Claudia MO's further enquiry on the impact of land resumption on affected owners of agricultural land, ADDS/P&D advised that the objections received on land resumption following the gazettal of the proposed works had since been resolved and the objectors had withdrawn their objections. The Chief Engineer/Consultants Management, Drainage Services Department ("CE/CM") added that as the projects would only involve the laying of sewer pipes to unsewered villages, only small areas of land would be affected. The resumption of private land would be avoided as far as possible. The sewer pipes would be laid under existing roads to reduce the scale of land resumption. The proposed works would unlikely affect agricultural activities in the area. The objections received on land resumption and sewer alignment were withdrawn unconditionally following the gazettal of amendment schemes which were prepared in response to the concerns raised.

7. Mr WU Chi-wai asked about the measures to ensure that owners of village houses would make the necessary sewer connections to the communal sewerage network. Sharing similar concerns, the Chairman enquired about the average length of sewer that was required to connect to the communal sewerage network. ADDS/P&D said that the connection points would be located as close as possible to the village houses to facilitate connection, and prior consultation would be held with owners concerned on the said location. He added that a small number of village houses could not be connected to the communal sewerage network due to various site constraints and they would have to rely on septic tanks and soakaway systems. The Chairman said that the sewerage improvement works would be futile if villagers failed to make the necessary

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125DS – Tolo Harbour sewerage of unsewered areas, stage 2

8. Ms Claudia MO sought elaboration on the heritage implications of 125DS as she noted with concern that the proposed sewerage works in Ha Wun Yiu fell within the Wun Yiu Site of Archaeological Interest. ADDS/P&D said that rescue excavation would be conducted by experts before commencement of the proposed sewerage works while an archaeological watching brief would be prepared in the course of the proposed sewerage works in Ha Wun Yiu. In consultation with the Antiquities and Monuments Office ("AMO"), necessary precautionary and protective measures would be implemented during the works to ensure the protection of relics.

9. Dr Kenneth CHAN agreed on the need for rescue excavation to be conducted in association with AMO for the protection of the Wun Yiu Site of Archaeological Interest before commencement of the proposed sewerage works. He enquired whether the funding for implementing the precautionary measures had been included in the estimated costs of the project. CE/CM responded that the proposed works in Ha Wun Yiu would be performed at a site which was in the vicinity of the Wun Yiu Site of Archaeological Interest. As the locations of monuments at the heritage site were already known, the works to be performed would not affect the monuments at the site. Archaeological experts would be engaged to oversee the rescue excavation works and to prepare an archaeological watching brief. In the event that relics were unearthed during rescue excavation, contractors would be required to suspend their works pending evaluation by AMO.

10. Noting that the proposed works in Tin Liu would be in close vicinity to some graded buildings at Pai Tau (adjacent to Tin Liu), Dr Kenneth CHAN enquired about the precautionary and protective measures to be implemented during the course of works. CE/CM replied that as there were some heritage buildings graded at level two or three at Pai Tau, the contractors for the sewerage works were required under the terms of contract to implement necessary precautionary and protective measures during the works if there was any anticipated impact on the graded buildings or any other building structures nearby. As the project would involve excavation works within a depth of one to two metres, the works would unlikely have any impact on the structural safety of buildings in the vicinity.

11. Mr WU Chi-wai said that AMO would be in a better position to carry out the rescue excavation works on account of its experience. He enquired if the funding for the excavation works could be awarded to AMO rather than

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outside contractors who might have difficulties in finding the appropriate expertise to carry out such works. The Chairman added that the problem of role conflict might arise if the contractor was to engage his own archaeological experts for the purpose.

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12. CE/CM responded that archaeological experts would be engaged for supervising the rescue excavation works and close liaison would be maintained with AMO in the course of these works. USEN stated that the Wun Yiu Site of Archaeological Interest was not very rich in relics and the proposed works would only be performed in the vicinity of the site. The scale of works was relatively minor and necessary precautionary and protective measures would be implemented during the course of works. Moreover, the contractors would be required under the terms of contract to engage archaeological experts to oversee the rescue excavation works. AMO would be requested to provide more information on the protection of the Wun Yiu Site of Archaeological Interest to allay members' concerns about the heritage implications of the proposed sewerage works. The Chairman added that AMO should render the needed assistance to the contractors concerned in the engagement of archaeological experts.

13. Mr CHAN Hak-kan said that the two sewerage projects were long awaited by the District Councils concerned and the Heung Yee Kuk. He acknowledged the concerns about the need for protection of the Wun Yiu Site of Archaeological Interest in the course of the proposed sewerage works and supported that more should be done to protect the site with or without the proposed works.

14. Dr Elizabeth QUAT sought elaboration on the coverage of the proposed sewerage works and asked whether they would cover all village houses within the project area. She also enquired whether there would still be unsewered areas in Sha Tin where untreated sewage would be discharged directly to Shing Mun River. The Assistant Director of Environmental Protection (Water Policy) ("ADEP(WP)") replied that there were about 30 unsewered villages in Sha Tin which had not been included in the catchment of the communal sewerage network for various reasons and a separate study was being made on the feasibility of connection to those villages. USEN explained that owners were required to make their own sewer connection to the communal sewerage network.

15. Dr Elizabeth QUAT further enquired about the improvements that could be made to the water quality of Shing Mun River as a result of the implementation of the proposed sewerage works. She said that while the Administration had been advocating the good water quality of Shing Mun River, she still received complaints from the neighboring community about the odour of the River. She was therefore concerned that the water quality standard set by

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the Administration might be too low. ADEP(WP) responded that following the implementation of water pollution control measures over the years, the water quality of Shing Mun River had improved a lot and was able to meet various water quality standards. However, given the many neighboring developments along Shing Mun River and in the light of changing weather conditions, there might be occasions where odour could be perceived. Upon receipt of complaints, the Environmental Protection Department would try to identify the nature of the problem. The proposed sewerage works would provide public sewerage for some of the unsewered areas in Sha Tin and Tai Po and would further improve the situation.

16. Dr Elizabeth QUAT pointed out that most of the complaints about odour from Shing Mun River were lodged by residents of Man Lai Court which was situated near the bend of the River where sludge and illegal sewage discharge would tend to accumulate. She considered it necessary that more should be done to resolve the odour problem, particularly at the location near Man Lai Court. The Chairman said that the Administration should provide more information on the measures to resolve the odour problem of Shing Mun River. USEN suggested and members agreed that the information to be provided by the Administration before submission of the funding proposal to the Public Works Subcommittee should focus on the improvements that could be made to the water quality of Shing Mun River as a result of the implementation of the proposed sewerage works. Meanwhile, the odour problem of Shing Mun River as well as its water quality could be separately followed up by the Panel.

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339DS – North District sewerage, stage 1 phase 2C and stage 2 phase 1

17. Mr CHAN Hak-kan expressed concern about the traffic impact of the proposed works, particularly at the densely populated villages at Wai Tau Tsuen and Nam Wa Po, as the associated road excavation works might give rise to traffic congestion in those areas. He also enquired about the location of the pumping station and whether public consultation had been held on its location as the pumping station might be a source of environmental nuisance to the neighboring community. CE/CM responded that consultation had been held with the Tai Po Rural Committee ("TPRC") and Tai Po District Council ("TPDC") on the choice of site for the pumping station. Mitigating measures would be implemented to reduce the noise and odour nuisances associated with the operation of the pumping station, which would be located as far as possible from residential developments. At Mr CHAN's request, the Administration would provide a map showing the location of the pumping station at Nam Wa Po and its distance from the nearest residential development.

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18. Noting that TPRC and the Environment, Housing and Works Committee under TPDC were consulted on the proposed project on 11 May 2007 and 14 September 2007 respectively, the Chairman enquired when the latest

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consultation with the relevant committees were held, given that many changes might have occurred over the years with the increase in population at Nam Wa Po. CE/CM replied that the Administration had all along maintained close liaison with TPRC and TPDC, and they both were supportive of the sewerage project which had taken account of the projected sewerage demand of the expanding community. At the Chairman's request, the Administration would provide the outcome of the latest consultation with TPRC and TPDC for members' reference.

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19. The Chairman concluded that members supported the submission of the proposals to the Public Works Subcommittee.

V. Upgrading the diesel standard for local vessels

(LC Paper No. CB(1)736/12-13(05) — Administration's paper on "Upgrading the diesel standard for local vessels"

LC Paper No. CB(1)736/12-13(06) — Background brief on "Upgrading the quality of local marine light diesel" prepared by the Legislative Council Secretariat

LC Paper No. CB(1)673/12-13(01) — Submission from a member of public (English version only))

20. USEN briefly explained the proposal to upgrade the quality of local marine light diesel with a view to reducing emissions from local vessels.

Cost and environmental implications

21. Mr CHAN Kin-por said that he was supportive of the proposal to upgrade the quality of local marine light diesel. He sought the Administration's response to vessel operators' requests for the need to regulate the diesel price upon the introduction of the proposed low sulphur diesel ("LSD") with a sulphur limit of 0.05%; to open the fuel supply market to promote greater competition; and to provide adequate subsidies for the trades. He was concerned about the possible increase in fuel prices if LSD was the only kind of vessel fuel that could be used in Hong Kong. He was also concerned about the pollution associated with the use of lower grade vessel diesel by river-trade vessels plying between Pearl River Delta ("PRD") and Hong Kong ports. The Assistant Director of Environmental Protection (Air Policy) ("ADEP(AP)") responded that the oil companies had confirmed the availability of LSD which was a standard and common grade of diesel supplied in Singapore and hence there would be no

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issue of monopolization. Many local crafts and river-trade vessels opted to refill their vessel fuels in Hong Kong as they were of a better quality and less costly than that supplied in the Mainland.

22. Mr Frankie YICK declared interest as the director of Star Ferry Company Limited. He said that while the Administration had indicated that there would only be a small increase in specific fuel consumption for vessels using LSD and that the fuel cost differential should not be more than HK\$0.07/litre, the trades had estimated that the fuel cost differential would be around HK\$1/litre. He pointed out that although the ferry operators were supportive of upgrading the quality of marine light diesel, they were concerned about the increased operating cost brought about by the proposal and the impact on their operation which was already facing immense difficulties. He said that the Transport and Housing Bureau should consider providing subsidies for ferry operators when implementing the proposal lest the increase in operating cost would be transferred to passengers. He also shared the view on the need for maintenance in order to ensure the emission performance of vessels. However, some parts of vessel engines were beyond repair and had to be replaced. In view of the continuing need for tightening diesel standards, he enquired whether the Administration would consider providing subsidies for the replacement of vessel engines, similar to the replacement of aged diesel vehicles. He also said that ferry operators had been testing the use of scrubbers for reducing pollutant emissions from vessels as such would be more cost-effective than the replacement of engines.

23. In response to Mr YICK's remarks on providing subsidies for operators to replace vessel engines, USEN explained that the Administration had no plans to subsidize the marine trade for introducing the proposal because of the insignificant price increase and suggested that the trades put forward their views to the Administration. The Chairman said that the trades should provide more information on the impact of the proposal on their operation. Mr YICK responded that he would consult the trades on the proposal and would see if they had any suggestions to make.

24. Mr WU Chi-wai enquired if owners of vessels were eligible for the loan schemes for small and medium enterprises as this would be more preferable than the provision of subsidies for upgrading marine diesel quality. Mr Christopher CHUNG, however, pointed out that the fishing trades might not be regarded as small and medium enterprises. USEN responded that she would welcome views from the trades regarding the proposal.

25. Mr Christopher CHUNG stated that he was aware that there were additives which could be applied to reduce smoke emissions from vessels and enquired if the use of additives could obviate the need to upgrade the quality of local marine light diesel. He said that as incentives were offered to ocean going

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vessels ("OGVs") to switch to cleaner fuels while at berth in Hong Kong waters, incentives should likewise be provided for local marine vessels to switch to LSD. He also supported that legislation be introduced to mandate fuel switch at berth by OGVs and to introduce LSD.

26. ADEP(AP) explained that sulphur could not be removed through the use of additives. Reducing the sulphur content of fuel was very effective in reducing sulphur dioxide ("SO₂") emissions. It was also simpler than scrubbers though scrubbers could reduce pollutant emissions other than SO₂. USEN said that the incentives provided for OGVs to switch fuel at berth were in the form of reduced port facilities and light dues and as for the proposal, the impact on fuel prices was not significant.

Technical feasibility study

27. Noting that local crafts and river-trade vessels plying between Hong Kong and PRD ports contributed about 21%, 32% and 57% of the total emissions of SO₂, respirable suspended particulates ("RSP") and nitrogen oxides ("NO_x") from the marine sector, Mr Steven HO enquired about the respective emissions from local and Mainland vessels. He considered that to tackle the regional air pollution problem, there was a need to ensure that cleaner fuels were used by local crafts and river-trade vessels plying between Hong Kong and PRD ports. As the technical feasibility study comparing the use of high sulphur diesel ("HSD") with a sulphur limit of 0.5% and LSD was only conducted on two models, namely Gardner engine and Cummins engine, he was concerned about the compatibility of LSD with two other engine models which were used by about 10% of the fishing trades and which had not been tested. He was aware that some of the trades had indicated that the use of LSD had reduced the performance efficiency of their vessels by 5%. He would support that more feasibility studies be conducted on fuel efficiency as well as on other engine models.

28. In response, ADEP(AP) said that the emissions from local crafts and river-trade vessels were comparable. The upgrading of the quality of local marine light diesel would help reduce marine emissions from both local crafts and river-trade vessels, as the latter would be refilled with LSD supplied in Hong Kong as well.

29. ADEP(AP) further said that the choice of engines for use in the technical feasibility study had been agreed by the Working Group on Upgrading the Quality of Marine Light Diesel ("WG") which had representatives from the fishing trades. The WG agreed that testing on these two engine models, namely Gardner engine and Cummins engine, could serve the purpose. Under the proposal, the LSD which was sold or supplied to marine vessels in Hong Kong would be required to have a sulphur content not over 0.05% by weight and, for

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other fuel parameters, to meet requirements in accordance with international practices, viz. either the specifications of ISO 8217 or the gasoil specifications of Platts. As regards fuel efficiency, the findings of the technical feasibility study had indicated that the change in specific fuel consumption for load variation during operation between HSD and LSD was small, about +1.4% for Gardner engine and +1.3% for Cummins engine on average.

Control on marine emissions

30. Dr Kenneth CHAN noted that the Administration had proposed to set the offence and penalty regime by making reference to similar provisions and arrangements under the Air Pollution Control (Motor Vehicle Fuel) Regulation (Cap. 311L) for cases of non-compliance. On the other hand, he also learnt from the earlier studies of Civic Exchange regarding the making of regulations on the specification of fuels under section 43(1)(p) of the Air Pollution Control Ordinance (Cap. 311). He sought explanation on the relationship between the different pieces of legislation on the specification of fuel and the offence and penalty regime for non-compliance, as well as the means to control marine emissions.

31. USEN explained that marine emission would be controlled through requiring OGVs to switch fuel while at berth, upgrading the quality of local marine light diesel and the reduction in speed of vessels upon entering the harbour. It was worthy to note that most vessels would reduce their speed upon entering the harbour on account of its narrow channel and busy traffic. There was also a need for collaboration with the Mainland in controlling marine emissions, particularly on OGVs switching to cleaner fuels while at berth. On the legislation to be introduced, ADEP(AP) said that while section 43(1)(p) of the Air Pollution Control Ordinance (Cap. 311) provided for making regulations for the specification of fuels, reference would be made to the arrangements for the sale and supply of fuels under the Air Pollution Control (Motor Vehicle Fuel) Regulation (Cap. 311L) in drawing up the regulatory framework of the proposal.

32. Mr WU Chi-wai sought clarification as to whether the present proposal to upgrade the quality of local marine light diesel targeted local vessels and not OGVs, as OGV emissions would be controlled by fuel switch at berth. He also enquired about the means to monitor the smoke emission of vessels using LSD and whether the engines would have to be upgraded in order to achieve the desired improvements in emission performance. ADEP(AP) responded that the proposal to introduce LSD was meant to reduce pollutant emissions, thereby improving air quality. By lowering the sulphur content of local marine light diesel from 0.5% to 0.05%, SO₂ and RSP emissions from local vessels would be effectively reduced, irrespective of the type of engines used. Meanwhile, the Administration was consulting the shipping industry on the proposal to mandate OGVs to switch fuel while at berth. He explained that the emission of black

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smoke from vessels was an indication of inadequate maintenance and might not be related to the choice of fuel. Therefore, even with the introduction of LSD, black smoke could still be emitted from vessels which were not properly maintained.

33. Mr Tony TSE indicated support for the proposal to upgrade the quality of local marine light diesel. Noting that the Mainland would adopt a standard with sulphur limit of 0.035% for diesel supplied to local vessels in July 2013, he questioned why Hong Kong would adopt a higher sulphur limit of 0.05%. He also enquired if emission reduction targets would be set for marine emissions and if so, the timeframe for meeting the targets.

34. USEN stressed that the Administration intended to introduce legislation for introducing LSD and mandating fuel switch at berth. Consultation would be held on the setting of emission reduction targets and their timeframes upon the introduction of relevant legislation. When setting the sulphur limit of marine light diesel, the Administration must make sure that the fuel was readily available from Hong Kong's normal fuel sources. As LSD was a standard and common grade of diesel supplied in Singapore, the supply would be stable and reliable. Moreover, the emission performance of using marine light diesel with 0.035% and 0.05% sulphur content was comparable.

35. Noting that a tertiary institution was developing scrubbers to reduce SO₂ emission from ferries, and that local ferry operators could seek funding from the Pilot Green Transport Fund to test such devices on their ferries, Mr KWOK-Wai-keung enquired about the effectiveness of the scrubbers in reducing SO₂ emission from ferries. ADEP(AP) replied that apart from reducing SO₂ emission from vessels, scrubbers could reduce other pollutants such as NO_x but the availability of space for installing scrubbers could be a constraint in existing ferries. Ferry operators who would like to try out the use of scrubbers could seek funding from the Pilot Green Transport Fund for the purpose.

Use of biodiesel

36. Mr KWOK-Wai-keung enquired whether biodiesel could be used by vessels and how it compared with ULSD in terms of cost and performance. Mr Christopher CHUNG also enquired about the emission performance of biodiesel. ADEP(AP) advised that biodiesel was a renewable fuel. Its overall emission performance was comparable to Euro V diesel. It could reduce RSP emissions but might slightly increase NO_x emissions. The use of biodiesel in vessels would be limited by its incompatibility with some of the engines. Most vessel engines might at most accommodate the use of diesel with 5% of biodiesel. As the price of biodiesel was higher than marine diesel, ferry operators were not keen on the use of biodiesel. The Chairman reminded members that there would be a debate at the Council meeting on 27 March 2013

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on "Urging the Government to eradicate 'gutter oil' and take the lead in supporting biodiesel".

37. Mr WU Chi-wai said that as there were two companies in Hong Kong which were manufacturing biodiesel on a larger scale, he enquired if efforts would be made, as part of the current proposal, to promote the use of biodiesel. ADEP(AP) responded that the promotion of biodiesel should be taken forward as a separate exercise rather than as part of the current proposal, given that biodiesel could be used by vehicles and in industrial processes and was not confined as a vessel fuel. Besides, promoting biodiesel alongside the introduction of LSD might complicate the matter as there could be fuel cost implications.

Invitation of public views

38. The Chairman sought members' views on the need for the Panel on Environmental Affairs to conduct public consultation on the proposal to upgrade the quality of local marine light diesel prior to the introduction of the new regulation, which was expected to be tabled in the Legislative Council in late 2013, for implementation in 2014. Dr Kenneth CHAN said that it might be useful to solicit views from the trades and affected parties at an early stage to facilitate better understanding of the proposal and to enable the Administration to address to the concerns raised. Mr WU Chi-wai agreed on the need for the Panel to invite views from the affected trades as soon as possible. The Chairman concluded that arrangements would be made to invite views from the public.

39. USEN sought members' confirmation on their support of the proposal so that the legislative process could be proceeded with. The Chairman said that while members were supportive of the general principles of the proposal which was meant to protect the environment, they might have different views on the details of implementation. She hoped that the Administration would take account of the views of members and the public in drafting the legislative proposal.

VI. Any other business

40. There being no other business, the meeting ended at 4:23 pm.