Confirmed Minutes of the 169th Meeting of the Advisory Council on the Environment held on 19 April 2010 at 2:30 pm

Present:

Prof Paul LAM, JP (Chairman)
Prof CHAU Kwai-cheong (Deputy Chairman)
Ms Teresa AU
Dr Dorothy CHAN, BBS
Prof FUNG Tung
Mr Edwin LAU, MH
Prof Joseph LEE
Dr MAN Chi-sum, JP
Dr Alfred TAM
Mr TSANG Kam-lam
Prof WONG Ming-hung
Dr Ray YEP
Prof Ignatius YU
Mr Carlson K S CHAN (Secretary)

Absent with Apologies:

Mr Oscar CHOW
Ms Betty HO
Mr Michael JEBSEN, BBS
Mr Michael LEE
Ir Dr LO Wai-kwok, BBS, MH, JP
Mr Simon WONG, JP
Dr YAU Wing-kwong

In Attendance:

Ms Anissa WONG, JP	Permanent Secretary for the Environment
Mr C C LAY	Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department (AFCD)
Mr C T LING	Assistant Director/Technical Services, Planning Department
Ms Esther LI	Acting Principal Information Officer, Environmental Protection Department (EPD)
Ms Josephine CHEUNG	Chief Executive Officer (CBD), EPD
Mr Steve TSOI	Executive Officer (CBD), EPD
Miss Kim KWAN	Executive Manager (CBD), EPD

In Attendance for Agenda Item 3:

Mr W C MOK	Assistant Director (Air Policy), EPD
Mr Edmond HO	Principal Environmental Protection Officer (Mobile Source), EPD

In Attendance for Agenda Item 4:

Mr C W TSE	Assistant Director (Environmental Assessment), EPD

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Action

Agenda Item 1 : Confirmation of the draft minutes of the 168th meeting held on 8 February 2010

The draft minutes were confirmed without amendments.

Agenda Item 2 : Matters arising from the minutes of the 168th meeting held on 8 February 2010

2. There were no matters arising from the minutes of the last meeting.

Agenda Item 3 : Early replacement of old diesel commercial vehicles
(ACE Paper 6/2010)

3. Mr W C Mok briefed Members on the progress of the one-off grant scheme to encourage early replacement of pre-Euro and Euro I diesel commercial vehicles, the proposal to provide one-off grant to eligible vehicle owners to replace their Euro II diesel commercial vehicles with new ones as well as the suggestion of raising the licence fees for aged commercial vehicles to deter their continued usage.

4. On the one-off grant scheme to encourage early replacement of pre-Euro and Euro I diesel commercial vehicles, a Member enquired about the improvement in air quality after implementation of the scheme. Mr W C Mok explained that a number of initiatives had been implemented since 1999 to reduce vehicular emissions and it would be difficult to account the level of improvement

in air quality by individual initiative. Since 1999, the data on roadside air quality showed that the level of sulphur dioxide had been reduced by nearly 40% and that of respirable suspended particulates (RSP) and nitrogen oxides by more than 30%. The data also showed that the gap between RSP concentration measured at Roadside Air Quality Monitoring Stations and that at General Air Quality Monitoring Stations had significantly reduced by about 75%.

5. A Member noted that the take-up rate of the one-off grant was only 22%. She enquired about possible reasons for the relatively low take-up rate. Mr W C Mok updated Members that the take-up rate of the scheme increased to about 27% by late March 2010 and it would be about 30% after taking into account applications received under the special arrangement. The special arrangement allowed vehicle owners who had placed orders for new replacement vehicles that could not arrive on time or could not complete preparation works, such as vehicle body-building works, for applying the grant by 31 March 2010 to retain their eligibility for the grant up to end March 2011. He understood from the transport trades that the major reason for the relatively low take-up was that some vehicle owners considered running old vehicles more economical than buying new ones with the grant. It was observed that relying on incentive schemes was not as effective as one would like to see and thus disincentives were proposed to provide additional impetus to expedite replacement of old vehicles.

6. On the proposal of providing one-off grant to eligible vehicle owners to replace their Euro II diesel commercial vehicles, a Member suggested dividing the 36-month application period into three stages with a sliding scale of grant, such as a grant equivalent to about 20% of the cost of a new vehicle in the first year, 18% in the second year and 16% in the last year, so as to motivate vehicle owners to take up the grant at the early stage. Mr W C Mok explained that the suggested arrangement had been considered but was not adopted because some heavy-duty vehicles and coaches required a long lead time for delivery and preparation works. It was anticipated that dividing the application period would not help much in motivating vehicle owners to speed up their applications.

7. A Member asked whether the special arrangement under the scheme for pre-Euro and Euro I diesel commercial vehicles could be incorporated into the scheme for Euro II vehicles. Mr W C Mok explained that the arrangement would not be considered under the scheme for Euro II vehicles at this stage, lest vehicle

owners would try to submit the applications at the last minute thereby defeating the objective of the scheme which was to encourage early replacement of the vehicles.

8. A Member agreed that the special arrangement would only delay rather than encourage early applications. She considered the 36-month application period reasonable. As financial consideration was the primary concern of vehicle owners, it was normal for vehicle owners to take up the grant when the existing vehicle licence nearly expired. More flexibility should be allowed for vehicle owners to consider the timing of submitting applications rather than pressing them to make decisions.

9. On the proposal of raising the licence fees of aged commercial vehicles to deter usage of aged and polluting vehicles, a Member considered that information on the fleet size of different vehicle age groups would be useful to justify the adoption of vehicle age of 15 years as the threshold for increasing the licence fees. In case the fleet size of commercial vehicles aged 15 years or above was relatively small, consideration had to be given to adjust the threshold having regard to the distribution of fleet size and operational characteristics of the transport trades. Another Member enquired about the estimated number of vehicle owners being affected. Mr W C Mok said that about 20% of the commercial vehicles, amounting to about 24,000 vehicles in terms of number, were aged 15 or above.

10. A Member considered that information on the technical details, in terms of pattern of deterioration and costs for maintenance, would be useful to facilitate consideration on the level of threshold. Mr W C Mok explained that information on pattern of deterioration and costs for maintenance would not help much in justifying the trigger level for the higher licence fees for aged commercial vehicles as the emission performance of different vehicles would vary greatly due to difference in maintenance practices and conditions of engine wear-and-tear. The major factor contributing to poor emission performance was the design of the engines and thus vehicle age was proposed as the reference.

11. A Member considered that vehicle age might not reflect the condition of the vehicle in view of different maintenance efforts. It would be useful to have a set of standardized procedures for evaluation of emissions from

aged vehicles. Mr W C Mok explained that for diesel commercial vehicles, there were existing tests, such as Road Worthiness Examination and Smoky Vehicle Control Scheme, administered by the Transport Department and Environmental Protection Department (EPD) respectively. The current standard adopted was 50 HSU in terms of smoke emission. If the vehicle could not pass the Road Worthiness Examination, the vehicle licence would not be renewed. Under the Smoky Vehicle Control Scheme, vehicles identified for excessive smoke would be required to carry out remedial measures. Failure to fix the problem might lead to cancellation of the vehicle licence. Emission of smoke as the indicator was adopted as a universal approach in assessing performance of vehicles in terms of emission. While poor maintenance was one of the reasons for excessive emissions, old engine design was the key contributing factor for aged vehicles to be more polluting.

12. A Member considered that the disincentives should be linked with vehicle emission level, rather than vehicle age, as different types of vehicles, even with the same age, might have different emission levels. This mechanism was considered fairer and in line with the polluter-pays principle. Another Member asked whether pre-Euro and Euro I diesel commercial vehicles could be adopted as the threshold for charging higher licence fees instead of adopting vehicle age as the reference. Mr W C Mok explained that vehicle age, rather than emission level, was a more practical reference for determining the level of increase in licence fees. The proposed threshold of vehicle age of 15 years would apply to all types of commercial vehicle models. Even for a Euro III or Euro IV commercial vehicle reaching the service life of 15 years, its emission performance would deteriorate and its emissions would be worse than those of new vehicles at that time because of technological advancement.

13. A Member enquired about the possibility of adopting other options, such as imposing more stringent requirements on emission standards, to encourage early replacement of old diesel commercial vehicles. Mr W C Mok explained that while reviews were being conducted to explore the scope of further tightening the emission standards for in-use vehicles, the standards adopted had to be reasonable and achievable by these vehicles under normal maintenance practices. Relying solely on imposing tighter emission standards on in-use vehicles could not solve the roadside air pollution problem as older engines inevitably generated more air pollutants and should be replaced by newer models.

14. A Member considered that as a matter of principle, the rationale of charging higher licence fees for more polluting sources might have to apply to other types of pollution. For example, the licence fees for fish farms adopting more polluting feeding methods should be higher than those using state-of-art feeding methods. Mr W C Mok explained that he was not aware of examples of imposing higher licence fees for more polluting sources under other types of pollution areas. Nonetheless, emission from aged commercial vehicles was recognized as a major source of roadside air pollution in modern cities. Cites around the world were making efforts to retire old commercial vehicles early. For example, Japan imposed an economic disincentive of road tax for commercial vehicles aged 10 years or more. The key consideration was the acceptability of the community to impose economic disincentive to retire aged commercial vehicles for improvement of roadside air quality.

15. The Chairman asked whether a higher degree of increase in vehicle licence fees would be proposed for older commercial vehicles in a progressive manner. Mr W C Mok explained that details of the proposal had yet to be worked out and views from stakeholders would be taken into account in formulating more concrete proposals. The initial idea was to propose a higher degree of increase in the vehicle licence fees for older commercial vehicles, which tended to be more polluting.

16. A Member enquired about the proposed percentage of increase in the licence fees. He considered that the extent of increase should be high enough to achieve the deterrent effect. Mr W C Mok explained that the main objective of the current consultation was to seek views on the direction of imposing disincentives and related guiding principles. The extent of proposed increase would be worked out having regard to views collected and consultation with the transport trades. One of the proposed guiding principles was that the extent of increase should be of sufficient deterrence in order to make the disincentive effective.

17. Ms Anissa Wong said that the proposal of raising vehicle licence fees of aged commercial vehicles was put forth to the Panel on Environmental Affairs of the Legislative Council (LegCo) in 2008 as one of the possible deterrent measures for early replacement of more polluting vehicles. However, the proposal was not supported. In reviewing the effectiveness of the one-off grant

scheme to pre-Euro and Euro I diesel commercial vehicles and introducing the proposal to provide one-off grant to encourage the early replacement of Euro II diesel commercial vehicles, it was considered timely to revisit the proposal of introducing deterrent measures as a carrot and stick approach. In view of the sensitivity of the proposal of raising licence fees, it was considered desirable to seek the community's views on the general direction before developing more concrete recommendations. Subject to views collected, details on the proposal would be developed, such as the level of increase for vehicles of different ages. Moreover, other deterrent measures would also be considered to achieve the objective of early replacement of old commercial vehicles.

18. A Member enquired about the major concern of the Panel for not supporting the proposal of raising the licence fees. Mr W C Mok explained that the major concern of the Panel Members was the poor economic outlook when the proposal was put forth in 2008. At a recent meeting of the Panel in March 2010 to revisit the proposal, some Members raised concerns over the impacts of the proposal on the transport trades.

19. A Member noted that one of the guiding principles was that higher vehicle licence fees should apply to all aged commercial vehicles irrespective of their fuel types. He asked whether higher licence fees would be proposed for diesel commercial vehicles as compared with those for petrol or liquefied petroleum gas (LPG) ones. Another Member considered that a vehicle which used environment-friendly fuel should be less polluting than one using diesel, even both were of the same age. The proposed arrangement seemed inconsistent with the policy of encouraging the use of environment-friendly fuels.

20. Mr W C Mok explained that the initial idea was to impose higher vehicle licence fees to all aged commercial vehicles, including diesel, petrol or LPG vehicles. Same as diesel vehicles, petrol or LPG vehicles would emit more pollutants in the course of ageing because of engine wear-and-tear. The continuing operation of these aged vehicles should also be deterred. Nonetheless, details had yet to be worked out and views were welcomed. Consideration might be given to impose a lower level of increase to aged environment-friendly vehicles.

21. A Member asked whether private cars running on diesel would be affected. Mr W C Mok explained that private cars were allowed to use diesel on the condition that their emission performance was comparable to those of petrol private cars. Due to the stringent emission requirements, there was no registration record of private vehicles running on diesel before late 2009. With the introduction of a new model of diesel private vehicle which could meet the tight emission requirements, there were a small number of private vehicles running on diesel being newly registered. These private cars would not be affected by the proposal as they did not fall into the proposed definition of commercial vehicles.

22. A Member supported the proposal of imposing higher licence fees for commercial vehicles based on vehicle age. However, he considered that it was not appropriate to put forth the proposal in the context of encouraging early replacement of diesel commercial vehicles. It might be perceived by the public as Government making use of the opportunity to increase the licence fees. He doubted the effectiveness of raising the licence fees to discourage the usage of aged commercial vehicles, given the fact that the level of licence fees was relatively low as compared with the cost of a new vehicle. He suggested that the proposal be put forth as part of a package of measures, including other administrative measures such as setting up of low emission zones, to deter the continued usage of aged vehicles.

23. A Member was concerned about the effectiveness of increasing licence fees as a disincentive as a dramatic level of increase would be required to bring about the desired effect. He agreed that a package of incentives and disincentives should be put forth which would stand a better chance of being supported.

24. Mr W C Mok explained that relying solely on incentive schemes to expedite replacement of aged commercial vehicles had proven to be not as effective as one would like to see and thus disincentives had to be considered. The one-off grant scheme was introduced as an incentive while raising of licence fees as a disincentive. The Administration was open-minded in examining other possible alternatives.

25. A Member supported in principle the approach of introducing both incentives and disincentives to expedite the phasing out of aged commercial vehicles. Nonetheless, he was concerned about the effectiveness of the one-off grant scheme and increasing licence fees as driving forces for vehicle owners to replace their aged vehicles. From the perspective of the vehicle owners, financial consideration was their key concern. Assuming that the average service life of a commercial vehicle was 15 years, the estimated value for a year was about 7% of the vehicle cost. If the vehicle was replaced three years earlier, about 21% of its residual value would be forgone. This was probably the reason why the one-off grant of an amount equivalent to about 12% to 18% of the average vehicle taxable values was not as attractive as expected. He suggested that financial considerations of vehicle owners had to be taken into account when formulating the incentives and disincentives.

26. Mr W C Mok explained that financial considerations of vehicle owners had been factored in when considering the proposals. The service life of commercial vehicles varied. For example, the average service life of coaches was about 12 to 15 years while that of goods vehicles was about 15 years and a small number of models could reach 20 years. The grant which was pitched at 18% of the average vehicle taxable values for Euro II vehicles was considered reasonable to compensate the residual value of a vehicle as many of them would reach the age of 12 years when the scheme was rolled out. Other factors, such as lower performance reliability and higher maintenance costs for aged vehicles, had also been taken into account. Under the scheme, the number of coaches taking up the grant was larger than that of goods vehicles by about 25%. The main reason was that coaches were required to undergo major vehicle inspection at the age of 12 which would incur substantial costs for coach operators.

27. A Member enquired about the possibility of imposing requirements for goods vehicles to undergo major vehicle inspection or emission test, say at the age of 15, to serve as a disincentive for the use of aged goods vehicles. Mr W C Mok explained that a number of disincentives had been considered, including requiring vehicles to undergo more frequent emission tests, increasing licence fees and mandatory retirement of old vehicles. On balance, increasing licence fees was considered a more feasible disincentive at this stage, while other options would continue to be explored.

28. A Member considered that a package of disincentives, rather than one proposal, would stand a better chance of buying-in. The package of measures could include increasing licence fees, more frequent vehicle inspections, setting up of low emission zones by not allowing vehicles of Euro II or below to enter the areas during peak hours and imposing mandatory retirement of old commercial vehicles. Two other Members agreed that a package of incentives and disincentives should be put forward to tackle the problem.

29. Ms Anissa Wong noted Members' support in principle to explore disincentive proposals, on top of incentives, based on the polluter-pays principle. She explained that in view of the large size of commercial vehicles, the measure had to be practicable and easy to administer and would minimize disputes with vehicle owners. Thus, vehicle age rather than emission level was proposed as the reference for increasing licence fees. In view of the urgency to improve roadside air quality problem, it was necessary to put forth proposals which could be implemented more readily. Other disincentive measures would continue to be explored with a view to discouraging the use of aged commercial vehicles. The Council would be consulted when the details of the proposal to raise licence fees for aged commercial vehicles and other suggested measures were formulated.

30. The Chairman summarized Members' views as follows –

(a) the Council noted the progress of the one-off grant scheme to encourage early replacement of pre-Euro and Euro I diesel commercial vehicles;

(b) the Council supported the proposal to provide one-off grant to eligible vehicle owners to replace their Euro II diesel commercial vehicles with new ones as an incentive;

(c) the Council supported the suggestion of raising the licence fees of aged commercial vehicles as one of the disincentives to deter their continued usage;

(d) the Council considered that the extent of the proposed increase in vehicle licence fees should be of sufficient deterrence against the continuing use of aged commercial vehicles; and

(e) the Council considered that it was necessary to put forward a package of incentives and disincentives in line with the polluter-pays principle to tackle the problem of roadside air pollution generated by aged commercial vehicles in a holistic and effective manner.

Agenda Item 4 : Report of the 112th Environmental Impact Assessment Subcommittee meeting
(ACE Paper 7/2010)

31. The Chairman informed Members that the paper reported on the recommendations of the Environmental Impact Assessment (EIA) Subcommittee on the EIA report on "Development of a 100 MW Offshore Wind Farm in Hong Kong" submitted by the Hong Kong Electric Company Limited and the EIA report on "Black Point Gas Supply Project" submitted by the Castle Peak Power Company Limited.

32. The Chairman informed Members that the public inspection period of the EIA report on "Development of a 100 MW Offshore Wind Farm in Hong Kong" was from 8 February to 9 March 2010. All public comments received by the EPD were circulated to Subcommittee Members for reference before the Subcommittee meeting. Separately, a submission addressed to the Director of Environmental Protection (DEP) and copied to the Council as well as the written response of the project proponent to some Members' questions were circulated to Subcommittee Members for information before the Subcommittee meeting. The submission was also circulated to all Council members before the full Council meeting. For the EIA report on "Black Point Gas Supply Project", the public inspection period was from 12 February to 13 March 2010. No public comment was received by the EPD during the inspection period. The written response of the project proponent to some Members' questions was circulated to Subcommittee Members for information before the Subcommittee meeting.

33. The Chairman of EIA Subcommittee reported on the recommendations of the Subcommittee on the two EIA reports.

34. Regarding the EIA report on "Black Point Gas Supply Project", a Member enquired about the types and degree of toxicity of contaminated marine sediment generated by the project. Mr C W Tse advised that the EIA report showed that the project (Phase I) would generate an estimated amount of 0.253 Mm^3 of marine sediment. The sediment was classified based on their contaminant levels. According to the EIA report, the majority of the sediment was under the Category M_{pass}. The rest was Category L and Category M_{fail} sediment. According to the established government procedures, the M_{fail} sediment would need to be disposed of at confined marine disposal sites assigned by the Marine Fill Committee (MFC) of the Civil Engineering and Development Department. MFC noted the findings of the EIA report and had no objection in-principle to allocating disposal space for the M_{fail} sediment, subject to the availability of disposal space at the time of application and proposed programme for disposal. Prior to commencement of the dredging activities, the project proponent would conduct detailed sediment sampling, testing and analysis, and submit the Sediment Quality Report for the Government's approval. Against this background, the EIA Subcommittee recommended to include a condition to require the project proponent to seek the agreement of relevant authorities on the waste disposal plan for contaminated marine sediment generated by the project and submit the waste disposal plan to the DEP before commencing the construction of the project.

35. Regarding the EIA report on "Development of a 100 MW Offshore Wind Farm in Hong Kong", Mr C T Ling referred to paragraph 25 of Annex B to the paper and made a clarification that it was not the requirement of the Planning Department to regard wind farm structures as industrial infrastructures under the worst-case scenario for assessing landscape and visual impacts. Nonetheless, the Planning Department had reviewed the landscape and visual impact assessment of the project and had no comments on the findings. The Chairman of EIA Subcommittee said that the EIA report included a detailed assessment of the landscape and visual impact of the project. The EIA Subcommittee did not consider it necessary to impose condition on this aspect.

(Post-meeting note: The project proponent explained that in overseas countries, wind farms were often regarded as a beneficial introduction to the visual environment due to increases in visitors to an area. For the subject EIA, however, a worst-case approach was adopted, i.e. the wind farm was considered as an industrial infrastructure which would bring an adverse change to the visual environment. Although this approach was considered to be conservative, the conclusion of the assessment was that visual impacts were acceptable with mitigation.)

36. The meeting agreed with the recommendations of the EIA Subcommittee on the two EIA reports. The Chairman concluded that the Council endorsed the EIA reports with the conditions and recommendation set out in paragraphs 13, 14 and 22 of the paper.

Agenda Item 5 : Any other business

EIA report of non-selected projects

37. The Chairman informed Members that as an agreed practice in the revised Modus Operandi of the EIA Subcommittee, the Chairman of the EIA Subcommittee would report to the full Council about the submission of Executive Summaries of EIA reports not selected for discussion since the last meeting for the information of all Council Members.

38. The Chairman of EIA Subcommittee reported that since the last Council meeting, the EIA Subcommittee had received the Executive Summary of the EIA report on "Improvement of Fresh Water Supply to Cheung Chau" submitted by the Water Supplies Department. This project was not selected by the EIA Subcommittee for discussion. The Executive Summary of the EIA report had been circulated to EIA Subcommittee Members and relevant hyperlinks had been sent to non-EIA Subcommittee Members. The public inspection period of the EIA report was from 30 March to 28 April 2010. Members who had comments on the EIA report could pass them to DEP direct within the prescribed public inspection period and copy the comments to the EIA Subcommittee Chairman for information, if necessary.

Motor Vehicle Idling (Fixed Penalty) Bill

39. Mr Carlson Chan informed Members that a LegCo brief was issued to the LegCo on 16 April 2010 proposing to introduce the Motor Vehicle Idling (Fixed Penalty) Bill. The First Reading and commencement of Second Reading

was scheduled for 28 April 2010. Compared with the proposal submitted to the Council for consideration, the major proposed change was the provision of a grace period of three-minute-in-sixty minutes to drivers of all motor vehicles. The proposed arrangement addressed the technical requirement of certain turbocharged diesel commercial vehicles, the drivers of which had to follow the vehicle manufacturers' recommendation to idle the internal combustion engines for a few minutes after the vehicles had become stationary to prevent unwarranted wear-and-tear of the engine components. It also addressed the request of the transport trades and private vehicle drivers to allow some flexibility for them to continue to switch on the engine for a couple of minutes when their vehicles come to a standstill. The LegCo brief would be circulated to Members for information.

(Post-meeting note: The LegCo brief was circulated to Members after the meeting.)

Tentative items for discussion at the next meeting

40. The agenda was being compiled. Members would be informed in due course.

Agenda Item 6 : Date of next meeting

41. The next meeting was scheduled for 17 May 2010.

ACE Secretariat
April 2010