

**Confirmed Minutes of the 116<sup>th</sup> Meeting of  
the Advisory Council on the Environment  
held on 7 June 2004 at 2:30 p.m.**

**Present:**

Prof. LAM Kin-che, J.P. (Chairman)  
Prof. Peter HILLS  
Prof. HO Kin-chung  
Mr. Peter Y. C. LEE  
Dr. NG Cho-nam  
Prof. POON Chi-sun  
Mr. Michael J. D. RUSHWORTH  
Mr. Markus SHAW  
Ms. Iris TAM, J.P.  
Prof. WONG Tze-wai  
Prof. WONG Yuk-shan, J.P.  
Ms. Jessie WONG (Secretary)

**Absent with Apologies:**

Prof. LUNG Ping-yee, David, S.B.S., J.P.  
Mrs. Mei NG, B.B.S  
Mr. Otto L. T. POON, B.B.S.

**In Attendance:**

Mr. Thomas CHOW	Acting Permanent Secretary for the Environment, Transport and Works (Environment and Transport) (Environment)/Deputy Secretary for the Environment, Transport and Works (Environment and Transport)(E)2
Mr. Mike STOKOE, JP Mr. C C LAY	Acting Director of Environmental Protection Assistant Director (Conservation) Agriculture, Fisheries and Conservation Department
Mr. P Y TAM	Assistant Director/New Territories Planning Department
Mr. Matthew LEUNG	Secretariat Press Officer, Environment, Transport and Works Bureau (ETWB)
Ms. Polly LEUNG	Principal Information Officer Environmental Protection Department (EPD)
Miss Petula POON Mr. Eddie CHENG	Chief Executive Officer (E), ETWB Executive Officer (E), ETWB

**In Attendance for Agenda Item 4 :**

Mr. W C MOK Chief Assistant Secretary (Environment), ETWB  
Mr. HA Kong Senior Environmental Protection Officer  
(Environment)2, ETWB

**In Attendance for Agenda Item 5 :**

Mr. C C LAY Assistant Director (Conservation)  
Agriculture, Fisheries and Conservation Department  
Mr. Edmond LAM Senior Wetland Park Officer, AFCD

**In Attendance for Agenda Item 6 :**

Mr. C C LAY Assistant Director (Conservation)  
Agriculture, Fisheries and Conservation Department  
Mr. CHAN Jee-keung Senior Wetland and Fauna Conservation Officer,  
AFCD  
Dr. Winnie KWOK Wetland and Fauna Conservation Officer, AFCD  
Mr. Andrew TAYLOR Black & Veatch HK Ltd.  
Mr. Ben RIDELY BMT Asia Pacific Ltd.

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Action

**Agenda Item 1 : Confirmation of Minutes of the 115<sup>th</sup> Meeting held on 13 April 2004**

The draft minutes were confirmed without amendment.

**Agenda Item 2 : Matters Arising**

Para. 12 Height limit of land filling for agriculture use

Para. 16 Definition of “agriculture use”

2. The Chairman informed Members that the information provided by the Planning Department arising from paragraphs 12 and 16 of the minutes of the last meeting was tabled. Mr. P Y Tam said that since the definition of “agriculture use” included both agricultural activities which might or might not require the construction of structures, there appeared to be a grey area concerning the site formation for the agricultural activities. Follow-up action with relevant departments would be required and legal advice would be sought, if necessary. The definition of “agriculture use” had also to be considered carefully to remove the loophole. In response to the Chairman’s enquiry, Mr. C C Lay said that while AFCD was not in a

Plan D

position to comment whether the land filling activity in She Shan Tsuen constituted a change in land use, the Department had provided its advice on the definition of “agriculture use” and the height limits of land filling for different agricultural activities. Agricultural experts in AFCD were prepared to give evidence in Court in that respect, if necessary.

3. Mr. Mike Stokoe pointed out that according to the tabled document, land filling was not an agricultural activity itself but it might be carried out for the purpose of other agricultural activities. A Member concurred with Mr. Stokoe that land filling was an activity rather than a land use. As regards the height limits of land filling for agricultural purpose, he considered that they would depend on different circumstances and hence it would be very difficult to control such activities by changing the definition of “agriculture use”.

4. In reply to a Member’s question, Mr. Thomas Chow confirmed that ETWB would consider making land filling exceeding a certain size a designated project under the EIA Ordinance. The tentative plan was to put land filling involving more than 2 ha in size and 1.2 m in height under the control of the EIA Ordinance. The limit in size was set with reference to the requirement for public fills stipulated in the EIA Ordinance while the height limit was set in accordance with the advice of the Civil Engineering Department as set out in the tabled document. He said that the proposal would not prevent land filling activities like the one in She Shan Tsuen but would strengthen control over the problem. Members would be consulted on the proposal once the details were available. In reply to the Chairman’s enquiry, Mr. Chow said that as far as he knew, the land filling activity in She Shan Tsuen involved an area of around 3.5 ha.

5. The Chairman said that the proposed amendment to the Schedule to the EIA Ordinance would only be a stopgap measure as the issue was essentially a land use problem. In response, Mr. P Y Tam said that for landfills which did not comply with the requirements of the EIA Ordinance, enforcement actions under the Town Planning Ordinance would still be required. In response to the Chairman’s question, Mr. Tam said that they had no plan to introduce amendments to the Town Planning Ordinance to deal with the problem in the current legislative session, as a legislative proposal to improve the effectiveness of the Town Planning Ordinance was already being scrutinized by the Legislative Council Bills Committee. They could only consider further amendments at a later stage. Any revision to the definition of “agriculture use” or the notes of the concerned zonings had to be considered carefully, taking into account the implications on landowners’ rights, and manpower and other resources.

6. On the She Shan Tsuen case, a Member asked whether it would be possible to collect records of payments to the landowner for dumping the construction wastes and use them as evidence of a change in land use. In response, Mr. Mike Stokoe said that while it might be possible to charge the landowner if such evidence could be collected, the transactions were in general informal and collection of evidence would be difficult. Furthermore, it was alleged that the landowner had paid for the materials dumped.

7. In response to a Member's remarks that the landfills in Tseung Kwan O were zoned as open space, Mr. P Y Tam explained that under the existing planning system, land filling was a process leading to a future development rather than a development itself. As regards the landfill in Tseung Kwan O, it would form the site for a park to be built there. Another Member said that land filling could be part of the process of an activity or a change in land use, and the issue had to be tackled from both angles. Although he appreciated the difficulty in taking enforcement actions under the Town Planning Ordinance in the New Territories, he pointed out that another Member would soon make a proposal to the Town Planning Board to address the issue.

8. The Chairman said that the Council was very concerned about illegal land filling activities. He hoped that the proposed amendment to the Schedule to the EIA Ordinance would help control such activities. However, he stressed that cooperation among all relevant bureaux and departments would be required to tackle the problem, since it involved also a land use problem.

**Agenda Item 3 : Report on the 85th Meeting of the Environmental Impact Assessment Subcommittee**  
*(ACE Paper 15/2004)*

9. As the Chairman of the EIA Subcommittee could not attend the meeting, the Deputy Chairman, presented the report of the EIA Subcommittee. A Member welcomed the adoption of the "green roof" concept to mitigate the visual impact of the pumping station and commended the project proponent for the initiative. The Chairman expressed appreciation of EPD's efforts in implementing the concept of Continuous Public Involvement in the EIA process. He concluded that Members endorsed the EIA report on Yuen Long and Kam Tin Sewerage and Sewage Disposal Stage 2 without condition.

**Agenda Item 4 : Retrofitting pre-Euro diesel heavy vehicles with emission reduction devices and tightening the specification for unleaded**

**petrol**

*(ACE Paper 16/2004)*

10. The Chairman welcomed the presentation team to the meeting. Mr. W C Mok briefed Members on the proposal.

11. In response to the Chairman's enquiry, Mr. W C Mok confirmed that under the proposed scheme, the Government would provide funding for the emission reduction devices and the installation cost. In reply to a Member's question on future replacement, Mr. Mok said that according to the tender specification, the mechanical part of the device would have a warranty period of five years. Upon the completion of the installation programme, installation of such device would be mandatory, and vehicle owners would have to make subsequent replacement by themselves.

12. A Member pointed out that vehicles designed for low sulphur diesel might have problems in using the Mainland diesel. In reply to another Member's question on compatibility, Mr. W C Mok said that the sulphur content of the diesel used in the Mainland had been lowered significantly from 5000 ppm to 2000 ppm. The emission reduction devices that were being installed in pre-Euro cross-boundary heavy diesel vehicles in Government's installation programme were compatible with the Mainland diesel.

13. A Member asked whether the emission reduction device would affect the efficiency of the engine. In response, Mr. W C Mok explained that a condition would be included in the tender specification to require the device to comply with stringent requirements for the back pressure of the engine which in turn would ensure that the efficiency and the power of the engine would not be affected.

14. A Member pointed out that since the scheme was rather expensive, he was concerned about the effectiveness of the emission reduction devices and the maintenance required. In response, Mr. W C Mok explained that the use of the catalyst to reduce emission by oxidation was a proven technology that had been adopted in the USA and European countries. To ensure the effectiveness of the devices, EPD would draw up stringent tender specification, and the potential suppliers had to provide test data conducted in laboratory to prove compliance. The devices would be maintenance free. Another Member said that sometimes a device would perform better under laboratory conditions, and he asked whether a road test would be conducted locally. In reply, Mr. Mok said that the tenderers had to conduct very stringent durability tests which must be done in laboratory. The vehicles under testing would run for about six weeks under constant

monitoring. In addition, the successful tenderer had to sample in-used devices for performance testing during the contract period.

15. In response to a Member's question on the air quality impact of adopting Euro IV requirements for petrol, Mr. W C Mok said that the proposal would reduce the sulphur and aromatics in petrol. The main benefit of reducing the sulphur content from 150ppm to 50ppm was not to reduce sulphur dioxide emissions because the original sulphur content was already very low. It was to improve the performance and the durability of the 3-way catalytic converters which cleaned up the tailpipe emissions of petrol vehicles. The reduction in aromatics limit would reduce the emission of hydrocarbons and nitrogen oxides of petrol vehicles.

16. In reply to a Member's enquiry, Mr. W C Mok said that the installation of emission reduction device would be made mandatory by including additional vehicle classes under the Schedule to the Air Pollution (Emission Reduction Device for Vehicles) Regulation. At present, a two-pronged approach was being adopted to enforce the regulation. Firstly, all commercial vehicles were required by the Transport Department to conduct an annual roadworthiness inspection. The inspection would include, among other things, whether the device had been installed and whether it was in good working conditions. Secondly, EPD and the Police would conduct joint on-road operations twice per week. One of the purposes of the operations was to check whether pre-Euro vehicles had installed workable emission reduction devices approved under the regulation.

17. In reply to a Member's question, Mr. W C Mok said that the machines used in roadside construction works (e.g. the power generators) were not vehicles and hence not covered by the scheme. At present, the Administration would focus on reducing vehicle emissions, as they were the major source of roadside air pollutants.

18. Referring to the oil companies' assertion that the proposed upgrading of the specification for unleaded petrol might increase the product cost, a Member remarked that local oil companies had long been criticized by the public of being quick in price increase but slow in price reduction. He suggested that ETWB should raise the issue with the bureau that was responsible for energy supply. The Chairman also suggested alerting the Consumer Council. Another Member informed the meeting that the unleaded petrol currently available at petrol filling stations in Hong Kong could nearly meet the Euro IV standard and hence the proposal should not arouse any problems.

19. The Chairman thanked the presentation team and concluded

that the Council supported the proposal.

**Agenda Item 5 : Hong Kong Wetland Park Project**  
*(ACE Paper 17/2004)*

20. The Chairman welcomed the presentation team to the meeting. Mr. C C Lay introduced the project and Mr. Edmond Lam briefed Members on the details. Members commended AFCD for implementing the project which had great educational value and eco-tourism potential.

21. A Member said that the construction and the operation of the Wetland Park required substantial capital and recurrent cost. In order to maintain the sustainability of the Park, he suggested setting up a foundation or a trust to draw in resources from other sectors of the society and attract talents and volunteers to participate in the management of the Park. Another Member concurred and said that given the large number of visitors, it would not be easy to find an organization capable of managing the Wetland Park. He considered that in the long run, a strategic management approach should be adopted to manage all eco-tourism facilities. In response, Mr. C C Lay informed the meeting that funding had already been earmarked for the management of the Wetland Park. In reply to a Member's question, Mr. Lay said that the total management cost was estimated to be around \$30 million per year. Whilst it was not intended to recover the full cost from the admission fees, the Government was going to outsource the management of the Park. However, AFCD would still be responsible for the overall management, including supervision of the service provider(s). A committee would also be set up under the Country and Marine Parks Board to monitor and provide advice on the management of the Wetland Park.

22. A Member declared interest as being the Executive Director of the World Wide Fund For Nature (Hong Kong) which was responsible for managing the Mai Po Nature Reserve. He said that the Mai Po Nature Reserve was partly funded by visitors' entrance fees. Its financial viability might be affected if the number of visitors dropped due to competition from the Wetland Park. Another Member pointed out that at present there were a number of environmental education facilities run by non-governmental organizations (NGOs) in Hong Kong. There were also some conservation related private projects such as the proposed development at Fung Lok Wai. Some kinds of coordination would be required to avoid competition. In response, Mr. C C Lay said that the Wetland Park would increase the general awareness of wetland conservation, and there were plenty of opportunities for NGO participation, particularly in education programmes. In his view, the target group of the Wetland Park would be the general public while those of the Mai Po Nature Reserve were specialists and bird watchers. He added

that the Wetland Advisory Committee with representatives from the key green groups had been consulted on the project. Representatives of green groups would also be invited to join the future management committee of the Wetland Park. As regards other private projects, he considered that market conditions would determine whether similar facilities or activities should be provided in the area.

23. A Member said that the project would facilitate environmental education, promote tourism and economic development, and improve the image of Hong Kong. The admission fee should be set at a reasonable level to encourage patronage by the general public. Mr. C C Lay informed the meeting that the level of the admission fee had not yet been decided. However, in the light of the ecological mitigation functions and the educational value of the Wetland Park and its remote location, the admission fee would not be too high. Another Member considered that \$30 per adult would be a reasonable level. In addition, if the project was successful, it might attract private donations.

24. A Member considered that the objective statement of the Wetland Park should make reference to its background, i.e. it was the ecological mitigation area for the loss of wetlands due to developments in the Tin Shui Wai North Area. Noting that the Wetland Park would be designated as a Special Area under the Country Parks Ordinance, another Member expressed concern about its effectiveness in protecting the area and asked whether the designation would continue if there were a change in the management contractor. In response, Mr. C C Lay said that once the Wetland Park was designated as a Special Area, it would be under the management of AFCD in accordance with the Ordinance, and the change of the service contractor would not affect its status.

25. The Chairman thanked the presentation team and concluded that the project was highly worthwhile for its tremendous educational value and eco-tourism potential. The Council supported the project and endorsed the proposal to designate the Wetland Park as a Special Area under the Country Parks Ordinance.

**Agenda Item 6 : Study on Wetland Compensation**  
***(ACE Paper 18/2004)***

26. The Chairman welcomed the presentation team to the meeting. Mr. C C Lay outlined the background of the study, and Mr. Andrew Taylor briefed Members on its findings.

27. In response to a Member's enquiry, Mr. C C Lay explained

that the study and the Nature Conservation Policy Review were two separate but related exercises. The former was more technical in nature and focused on wetlands while the latter was mainly concerned about the policy and involved all types of habitats in Hong Kong. Ms. Jessie Wong supplemented that the study was commissioned by AFCD long before the Nature Conservation Policy Review started. The two exercises were related since wetland was a land of major habitats in Hong Kong and hence they made reference to each other's findings and recommendations. The Member noted that some of the recommendations of the study were similar to those of the Nature Conservation Policy Review. Mr. Lay said that the consultant was aware of the Nature Conservation Policy Review and had taken it into account when making recommendations.

28. In reply to a Member's question, Mr. Andrew Taylor confirmed that they had classified the wetlands into the five categories described in the paper. Mr. J K Chan supplemented on the number and the area of wetland sites identified under the five categories as set out below-

	<u>No of sites</u>	<u>Area</u>
Category A	27	560 ha
Category B	1	64 ha
Category C &D	30	2,300 ha
Category E	16	418 ha

29. In response to a Member's enquiry, Mr. Andrew Taylor said that the data included in Table 1 of the paper was compiled in 1998. They had made use of the Aerial Photographic Interpretation technology to identify the distribution of the wetlands, followed by a historical analysis by comparing photographs taken in 1988 and 1935. Upon the Member's request, Mr. Taylor undertook to provide information on wetland loss for Members' information.

AFCD

(Post-meeting note : The analysis of the 1988 aerial photos by means of Aerial Photographic Interpretation technology and ground surveys conducted in 1999 indicated that the main wetland losses occurred in the Northern New Territories falling under the wetland categories of aquaculture ponds and wet agriculture land/marshes. In terms of area, aquaculture ponds in the area declined from some 2,800 ha to some 1,790 ha and wet agriculture land/marshes from some 7,100 ha to some 4,900 ha during the above period.)

30. A Member considered that the decline of wetlands was partly a natural process and partly due to economic development. It might not be beneficial, if at all possible, to reverse the situation. Mr. C C Lay said that they were aware of the ecological succession of wetlands. All wetlands,

irrespective of whether they were natural or artificial, were important habitats for maintaining biodiversity. AFCD was exploring ways to enhance wetland conservation. The findings of the study would help them to plan the way forward.

31. In response to a Member's concern about the management of Potential Mitigation Areas (PMA), Mr. C C Lay explained that the concept would mainly be applicable to public projects, and each project would be considered on its own merits. The Chairman asked whether private projects could adopt the PMA approach. In reply, Mr. Andrew Taylor stated that in line with the "Technical Memorandum on EIA Process", private projects could adopt off-site mitigation if on-site mitigation was not possible. However, the PMA would be government land under non-development land use zonings, and it was considered not appropriate for private projects to have access to government land for mitigation purpose.

32. Referring to paragraph 12 of the paper that the control mechanisms under the EIA Ordinance and the Town Planning Ordinance provided adequate tools to protect wetlands and compensate for wetland loss, a Member said that there were cases that showed the opposite. For instance, the abandonment or the excessive use of fishponds under private ownership would reduce the ecological value of the fishponds but the two Ordinances could not stop such activities. Mr. C C Lay agreed that those activities might affect the ecological value of the wetlands. The issue of how to enhance conservation of ecologically important land and wetlands under private ownership would be dealt with under the Nature Conservation Policy Review.

33. Noting that the like-for-like principle for ecological compensation was followed in the study, a Member asked whether the no-net-loss principle had also been adopted. In response, Mr. Andrew Taylor said the study considered that compensation could be implemented in terms of no net loss in function or no net loss in area. Currently, the no-net-loss principle was adopted in the Town Planning Board's guidelines for developments within Wetland Conservation Areas in the Deep Bay Area.

34. A Member asked whether there was any plan to apply zoning control to unzoned areas such as Sham Chung which was ecologically important. In response, Mr. C C Lay said that the zoning of Sham Chung would be considered in the context of the Nature Conservation Policy Review. The current study classified ecologically important wetlands into five categories. Wetlands in Category E would be put under constant monitoring to see if enhanced conservation was required. Mr. Andrew Taylor added that the idea was to identify the wetlands, find out the potential

problems and suggest appropriate actions. The Member cautioned that detailed information about individual wetlands should not be released, otherwise the owners might destroy the sites.

35. Mr. P Y Tam said that there were limitations in relying on the Town Planning Ordinance to protect wetland sites. He was also of the view that the private-public partnership approach might not be compatible with the clean record system proposed by some green groups in other forums.

36. In reply to the Chairman's question, Mr. Andrew Taylor said that they were working on the guidelines for ecological compensation of wetlands and the guidelines for the preparation of wetland mitigation/compensation and management plans. They would consult the EIA Subcommittee on the guidelines once ready.

37. The Chairman thanked the presentation team and said that the Council welcomed the proposed PMA approach. He looked forward to more discussion on the guidelines by the EIA Subcommittee.

#### **Agenda Item 7 : Any Other Business**

##### Tentative items for discussion at the next meeting

38. The Chairman informed the meeting that the Way Forward for the Harbour Area Treatment Scheme Stage 2 was tentatively scheduled for discussion at the next meeting.

#### **Agenda Item 8 : Date of Next Meeting**

39. The next meeting would be held on 12 July 2004.

**ACE Secretariat  
June 2004**