

**Confirmed Minutes of the 113th Meeting of
the Advisory Council on the Environment
held on 9 February 2004 at 2:30 p.m.**

Present:

Prof. LAM Kin-che, J.P. (Chairman)
Prof. HO Kin-chung
Mr. Peter Y. C. LEE
Prof. LUNG Ping-yee, David, S.B.S., J.P.
Dr. NG Cho-nam
Mrs. Mei NG, B.B.S
Prof. POON Chi-sun
Ms. Iris TAM, J.P.
Prof. WONG Tze-wai
Prof. WONG Yuk-shan, J.P.
Ms. Jessie WONG (Secretary)

Absent with Apologies:

Prof. Peter HILLS
Mr. LIN Chaan-ming
Mr. Otto L. T. POON, B.B.S.
Mr. Michael J. D. RUSHWORTH
Mr. Markus SHAW

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
Ms. Doris CHEUNG	Deputy Secretary for the Environment, Transport and Works (Environment and Transport)(E)1
Mr. Rob LAW, JP	Director of Environmental Protection
Mr. J K CHAN	Acting Assistant Director (Conservation) Agriculture, Fisheries and Conservation Department
Mr. Jimmy LEUNG	Assistant Director/Technical Services 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	Chief Executive Officer (E), ETWB
Mr. Eddie CHENG	Executive Officer (E), ETWB

In Attendance for Agenda Item 4 :

Mr. C W Tse briefed Members on the progress in managing the air quality in Hong Kong.

5. In response to a Member's query, Mr. C W Tse said that given the improvement in roadside air quality and the reduction of industrial activities in Hong Kong in recent years, regional air pollution was the main reason for the deterioration of general air quality in the territory. To tackle the problem, the Hong Kong Government and the Guangdong Provincial Government had reached a consensus in April 2002 to jointly improve regional air quality. Both sides were currently working hard on the control measures required to achieve the agreed levels of reduction in different pollutants. Some control measures were expected to materialize in 2004-05 but substantial improvement in air quality would be seen upon the full implementation of the agreed measures. In response to another Member's enquiry, Mr. Tse agreed to provide information on the Joint Air Quality Study of the Pearl River Delta Region to Members for reference after the meeting as some of the Members were not yet in the Council when the Administration briefed the Council about the study in April 2002.

ETWB

6. In reply to a Member's enquiry, Mr. C W Tse confirmed that exceedances of the Air Quality Objectives had been mainly in ozone, although there had also been exceedances in nitrogen oxides and particulates. In response to the Chairman's comment that the existing measures were not aimed at reducing ozone, Mr. Tse explained that ozone was not emitted by any particular sources but was formed by chemical reaction between nitrogen oxides and volatile organic compounds under sunlight. Therefore, reducing the amount of nitrogen oxides and other air pollutants would also lower the ozone level.

7. In reply to a Member's question, Mr. C W Tse said that in 2003, the API exceeded 100 in 1438 hours at roadside air quality monitoring stations. The figure was a summation of the number of hours recorded at all roadside air quality monitoring stations. The Member asked whether there were ways to further improve the air quality before the regional air pollution problem could be tackled more effectively. In response, Mr. Rob Law said that due to the high intensity of vehicle usage in Hong Kong, it would be very difficult to eliminate air pollution even though the existing fuel standards in Hong Kong were already very high. To resolve the problem, the Government was improving the railway system to get more people off the roads. The Chairman pointed out that the same problem existed in other cities in the Pearl River Delta.

8. A Member pointed out that a major chemical industrial development might be set up near Daya Bay, which might have significant implications on the regional air quality. Mr. C W Tse said that the Guangdong Provincial Government was mindful of the need to achieve the

agreed emission reduction targets. They would assess the possible air quality impact of major development projects during the planning stage so as to ensure that the emission reduction targets could be achieved.

9. A Member pointed out that the API was not a good indicator of health impact, and suggested tracking the level of individual pollutants instead. In reply, Mr. C W Tse said that the API was used to show the trend of changes in air quality rather than to measure the health impact. The API was very similar to the Pollutant Standard Index being used widely in Asia. He added that the levels of individual pollutants were also measured and the figures were available in paragraph 11 of the ACE paper.

10. A Member said that some roadside air quality monitoring stations such as the one at Mongkok had been relocated and, as a result, the air quality readings had improved. In addition, the sensors of other stations such as the Central station were placed higher than the pedestrian level and that might affect the accuracy of the readings. In response, Mr. C W Tse clarified that the air sample inlets of the Central station were placed at 3 metres above ground to avoid vandalism. That should not make any substantial difference compared with placing the air sample inlets at a level where most pedestrians breathed. As regards the Mongkok station, the overall readings had in fact become worse after the relocation of the station.

11. A Member considered that the improvement of the air quality in Causeway Bay might be partly due to the traffic management measures implemented there such as pedestrianisation. Mr. C W Tse agreed that traffic management measures would help improve the air quality measured at a particular location. However, it would take a longer time to demonstrate that the air quality improvement at a specific location was due to a specific improvement measure. However, judging from past records and the results in other stations, the roadside air quality was improving in that area. Another Member said that experts from universities could help to assess the various factors mentioned.

12. In view of the effectiveness of pedestrianization in improving air quality, a Member asked whether there were plans to extend the scheme to other areas. In reply, Mr. C W Tse explained that pedestrianization was not mentioned in the paper as it focused on emission reduction measures. The Transport Department was taking the lead in implementing and promoting various traffic management measures including pedestrianization schemes in various districts.

13. In response to a Member's question on the Air Quality Objectives (AQOs) review conducted in 1999 and whether more stringent standards would be introduced, Mr. C W Tse said that the need and justifications for more stringent air quality standards were being reviewed in Europe, the USA and Australia. A set of new standards for fine suspended particulates (PM2.5) had earlier been adopted in the USA but due to the

result of a lawsuit, the Environmental Protection Agency in USA was also reviewing the subject. The Bureau was keeping a close watch on the latest development of various reviews in overseas countries. In the meantime, more control measures would be implemented to tackle air pollution problem. The Member said that AQOs were important benchmarks for assessing the health impact, and hoped that more stringent standards could be adopted.

14. In response to a Member's enquiry, Mr. C W Tse said that there were no electric public light buses (PLB) at present, and about 700 out of the existing 4100 diesel PLBs had been replaced by liquefied petroleum gas (LPG) ones. The incentive scheme would last until the end of 2005 and it was expected that more diesel PLBs would be replaced later. Prof. Ho commended the Bureau's efforts in promoting LPG PLBs and suggested that more promotional efforts should be made to encourage early replacement.

15. In response to a Member's question on whether the Government had power to reduce emissions from power stations, Mr. C W Tse said that under the Air Pollution Control Ordinance, all power stations had to operate under a licence. By imposing conditions into the licences, the Government could require power stations to reduce emissions. However, in view of the possible implications on the tariff, such requirements would have to be imposed in a careful and reasonable manner. ETWB and the other bureaux concerned were working together in discussing with power companies with a view to drawing up a practical solution to reduce emissions from power stations.

16. In response to a Member's enquiry on the capping of the emission level of power plants for emission trading purpose, Mr. C W Tse said that the Hong Kong Government and the Guangdong Provincial Government had reached a consensus to reduce the regional emissions of major air pollutants. Based on the amount of reductions achieved by controlling vehicle emissions, the emission reduction targets for power plants could be deduced. Discussions with power companies on emission reduction measures and emissions trading had already started.

17. In view of the large number of vehicles in Hong Kong and the impact of vehicle emissions on air quality, a Member asked whether EPD was involved in the formulation of transport policies and also the Hong Kong 2030 Study. In response, Mr. C W Tse said that EPD worked closely with the Transport Department and provided inputs for the formulation of major transport policies as and when required. He also pointed out that sustainable development and reducing air pollution were among the goals of the Hong Kong 2030 Study. The Chairman said that the recent development proposals involving Northern Lantau had aroused concerns about the air quality in that area. In addition, the number of vehicles in Guangdong Province would increase substantially in the near future. As the measures taken by the Guangdong Provincial Government focused mainly

on stationary emission sources, he considered that a more sustainable transport infrastructure would be essential for meeting the emission reduction targets on the Guangdong side.

18. A Member pointed out that the air pollution problem was difficult to resolve in view of the high intensity of vehicle usage and poor ventilation at the street level, both of which were the by-products of economic development in Hong Kong. He cautioned that measures such as pedestrianization and restricting the number of vehicles might have implications on future economic development.

19. In response to a Member's question on airline and marine traffic emissions, Mr. C W Tse said that reducing the emissions from the two sources had to be done through international conventions. As those two sources contributed only a small portion of the total emissions and were not within the control of the territory, the Government's current efforts mainly focused on the other emissions sources. The Member asked whether there were figures showing the changes in air quality in that area when airport activities dropped significantly during the episode of the Severe and Acute Respiratory Syndrome. In response, Mr. C W Tse said that EPD could provide a simple analysis to Members after the meeting. However, he pointed out that after the airport had been relocated from Kai Tak to Chek Lap Kok, the air quality recorded near Kai Tak did not show any significant improvement.

EPD

20. The Chairman thanked the presentation team. He said that better transport strategy and continued cooperation with the Guangdong side were keys to improving the air quality in the territory, and he looked forward to further reports on the subject in future.

Agenda Item 5 : West Island Line and South Island Line
(ACE Paper 6/2004)

21. The Chairman welcomed the presentation team to the meeting. Dr. Glenn Frommer briefed Members on the latest development of the planning of the South Island Line and the West Island Line (SIL/WIL). Members in general welcomed the project in view of their environmental benefits.

22. In response to the Chairman's questions, Mr. Clement Ngai said that the total length of SIL/WIL was about 16 km, and around 300,000 passengers would use the lines each day while the rail for the Disney theme park would be 3.5 km in length with an estimated daily passenger flow of about 400,000. Dr. Glenn Frommer also confirmed that SIL/WIL would not be financially viable on their own and hence would not be implemented without government subsidies. However, he pointed out that the project could bring about much benefit to the environment and society, and would postpone the need for the more expensive Route 7.

23. A Member informed the meeting that the University of Hong Kong was negotiating with MTRC for a station near the future university campus extension. As the University would open up some of the facilities to the public, the construction of the railway should be beneficial to the society as a whole.

24. A Member asked whether the SIL/WIL would be financed by property developments (e.g. use of the industrial areas in Wong Chuk Hang for residential developments) rather than by direct subsidies from the Government. In response, Dr. Glenn Frommer said that the MTRC was considering re-developing the depot in Wong Chuk Hang as a residential development in order to finance the new railway but it was not yet decided.

25. A Member, after declaring interest that his parents were living in Happy Valley, said that the area was currently not covered by any railway network. He asked whether the SIL/WIL would serve that area and whether it would be financially viable to do so. In response, Dr. Glenn Frommer said that they had not yet calculated the cost of the alternative route that would serve Happy Valley. However, the costing would be included in their proposal to be submitted to the Government in March. The data would also be uploaded onto the MTRC website for public information. He agreed that Happy Valley was currently underprovided with mass transit service, and MTRC would try to provide service to that area. However, the final decision would rest with the Government.

26. In response to a Member's question on the major civil engineering problems and environmental impacts arising from the project, Dr. Glenn Frommer confirmed that the SIL/WIL could be built without major problems. However, he pointed out that a large section of the rail from Sheung Wan to Sai Ying Pun would be on soft ground, and hence it would be difficult to build a tunnel there. The major anticipated environmental problem would be in South Horizon where the station would be situated in the middle of a residential area. The noise impact had to be assessed carefully. The bridge connecting Ap Lei Chau and Hong Kong Island might also have problem, and it would be built in concrete to reduce noise impact.

27. In response to a Member's question on whether rubber wheels would be used for the trains concerned, Dr. Glenn Frommer said that they had not yet decided but since the rail would run through certain sections with steep gradient, rubber wheels would be more suitable. The Member pointed out that trains with rubber wheels would be quieter but as certain parts of the rail would run in open areas, they had to be able to withstand different weather conditions. Dr. Frommer said that MTRC would look for rubber wheels that were suitable for use in Hong Kong.

28. In view of the moratorium on further reclamation in the

Harbour, a Member asked whether the passenger demand projection for areas near the planned reclamation area of Kennedy Town would need to be adjusted. In reply, Mr. Clement Ngai informed the meeting that the population projection was provided by the Government. Furthermore, the reclamation on the western side of Hong Kong island had not been taken into account in projecting the passenger demand.

29. A Member queried the selection of the already congested Admiralty Station as the interchange station, and asked whether there would be any facilities to improve the passenger flow. In response, Dr. Glenn Frommer agreed that the Admiralty Station was already rather congested. They would consider whether the option was feasible and, if not, the Wan Chai Station might be chosen in addition. However, according to the passenger survey, a large percentage of passengers using the proposed railways would cross the Harbour, and it would be more convenient to use the Admiralty Station as the main interchange station.

30. In reply to a Member's suggestion to link up Wan Chai MTR Station with the Hong Kong Convention and Exhibition Centre (HKCEC), Dr. Glenn Frommer agreed that feeder service should be provided to move people from Wan Chai Station to the HKCEC area. In that regard, they were waiting for the design of KCRC's Shatin-Central Link that might serve the area, and would consider providing suitable feeder service. He also noted Mrs. Ng's suggestion concerning park-and-ride nodes near the stations.

31. A Member pointed out that a new MTR station would change the traffic pattern of an area, and could lead to traffic congestion. He hoped that the EIA study of the project would take that factor into account. In reply, Dr. Glenn Frommer said that the SIL/WIL project would adopt the "continuous public involvement" approach in the manner as the Cable Car Project. The local community would be involved actively to identify problems at an early stage.

32. The Chairman thanked the presentation team. He said that the Council supported the project from the environmental angle, and hoped that the Government would consider the benefits of the project to the environment and the society when considering the funding issue. Members also commended MTRC for consulting them at the early planning stage and encouraging public participation.

Agenda Item 6 : Concrete lining of a stream at Sha Kok Mei, Sai Kung
(ACE Paper 7/2004)

33. The Chairman welcomed the presentation team to the meeting. Mr. K M Mo and Mr. Shiu Wing-yu briefed Members on the recent incident involving the concrete lining of part of a stream at Sha Kok Mei, Sai Kung.

34. In response to the Chairman's question on whether concrete

lining had been applied to 300m of the stream in 1997, Mr. Shiu Wing-yu explained that there was serious flooding in the area in 1996 and, as a result, concrete lining was applied to a section of the stream to repair the collapsed stream bank. However, no works were conducted for the riverbed. In response to a Member's query on why the concrete lining work was done by a private developer when government land was involved, Mr. K M Mo explained that although the site formation works involved government land, the buildings under development were on private land.

35. In response to the Chairman's enquiry on whether EPD and AFCD had been consulted on the site formation plan, Mr. K M Mo informed the meeting that the plan had only been circulated to Drainage Services Department for comments. Nonetheless, it had been recently agreed that AFCD would be consulted on all applications that would affect natural streams.

36. A Member pointed out that, apart from ecological value, the landscape value of a stream should also be taken into account. He asked whether the Planning Department would be consulted on works affecting streams and suggested drawing up comprehensive in-house guidelines to address the environmental and landscape aspects of planning proposals. Two Members considered that the way the Geotechnical Engineering Office handled improvement works to dangerous slopes recently served as a good example on how landscape and environmental considerations could be incorporated into such construction/maintenance works. Mr. K M Mo confirmed that the Planning Department was consulted on the plan for the site formation works, but he reckoned that the plan was considered from a town planning perspective only. In addition, under the Buildings Ordinance, the landscape factor was not a ground on which applications for approval of building works plans could be refused. Any comments on that aspect would, however, be reflected to the developer for consideration. Mr. Shiu Wing-yu informed the meeting that the internal good practice guides of the Drainage Services Department had stressed the need to take into account environmental and landscape factors. More measures to protect natural streams would be included in the good practice guides in future.

37. In response to the Chairman's remarks that some developers might not seriously consider comments referred to them, Mr. K M Mo said that many developers would take follow-up actions on Government's suggestions even though they were not bound to do so. He reiterated that under the Buildings Ordinance, the authorities concerned could not refuse approval of a plan of building works on grounds not listed in the Ordinance. As regards the Chairman's question on whether the Buildings Ordinance would be reviewed to address the issue, Mr. Mo said that, before a review was considered, the responsible bureau had to assess whether the proposal would be accepted by the professions and the industry concerned, and whether the Building Ordinance was the appropriate ordinance to effect the changes.

38. A Member asked whether there was a department responsible for streams. He noticed that Sha Kok Mei Stream was not included in the list of ecologically sensitive rivers set out in the technical circular attached to the ACE paper. He asked whether there was any mechanism to protect that kind of streams. In response, Mr. Thomas Chow said that at present there was no single ordinance on stream protection. Yet, most streams were on government land, and were hence protected by the Land (Miscellaneous Provisions) Ordinance (Cap 28). In addition, some streams were within protected areas, viz Country Parks or conservation zoning, including Sites of Special Scientific Interest and Conservation Area, and were protected by the respective ordinances. AFCD was conducting an ecological survey which would be completed by the end of 2005. Streams of high ecological value that were not within protected areas at present would then be proposed for suitable zoning for better protection. In reply to the Member's question regarding streams on private land, Mr. Chow said that if ecological sensitive areas under private ownership were identified during the survey, they could also be put under conservation zonings, and any development thereon had to be approved by the relevant authorities. Another Member said that some streams had low ecological value but high landscape value. He hoped that those streams could also be protected.

39. A Member said that the issue reflected the lack of communication among departments and between frontline staff and the management. A single department to coordinate protection of rivers and streams was needed, and works departments could take the lead. He hoped that AFCD could provide information on ecologically sensitive areas to other departments. AFCD and EPD could also arrange capacity building training programmes for departments to enhance their knowledge on protection of rivers and ecologically sensitive areas.

40. In response to a Member's suggestion to review applications in hand to see if there were similar problems, Mr. Shiu Wing-yu informed the meeting that they had contacted the relevant District Lands Offices to identify applications that had recommended concrete lining of natural streams so as to suggest revision of the work plans as soon as possible.

41. In reply to a Member's enquiry on the progress of the Tung Chung Stream incident, Mr. Thomas Chow said that the Lands Department and the Police were carrying out investigation and would pass the evidence collected to the Department of Justice for consideration of prosecution. At the same time, a specialist group comprising the relevant departments, representatives of green groups and several Council Members had been formed to discuss the restoration works. The group had produced a list of requirements for the restoration of the stream from the ecological angle and passed it to the Rural Committee for incorporation into the restoration plan. The Rural Committee had to reply within a few days whether they would accept the requirements proposed and, if so, the restoration works could start

within the month. The restoration works would be overseen by an inter-departmental task force and some members of the specialist group had agreed to help in the monitoring work.

42. A Member drew other Members' attention to the landfilling activities in an agricultural lot in Lam Tsuen. In response, Mr. Thomas Chow said that the Housing, Planning and Lands Bureau (HPLB) was considering the way to handle the matter but since the site concerned was not on government land, it might be difficult to take prosecution action. Another Member said that the matter had to be handled seriously, otherwise there might be more cases of that nature and the landfill charging scheme would not work. He said that it was a clear example of improper use of agricultural land and suggested treating it as a test case for prosecution. In response to Members' enquiry, Mr. Shiu Wing-yu said that there might be drainage and flooding problems during wet weather. Mr. Jimmy Leung said that HPLB was studying the case but there would be technical difficulties in initiating enforcement actions against the land owners as land filling activity did not constitute an unauthorised development in the agriculture zone. The Chairman requested ETWB to keep in view of the progress of the case and report later. He and Members also agreed that the Council should write to HPLB to express their concerns on the issue. A Member suggested discussing environmental black spots and eyesores in the New Territories at a future Council meeting.

ETWB &
Secretariat

43. The Chairman thanked the presentation team for the briefing. He hoped that the affected section of the stream could be restored, and the relevant departments could improve communication and step up measures to protect streams.

Agenda Item 7 : Any Other Business

Visit to the Ecological Compensation Area in Lok Ma Chau and the tunneling site on 5 February 2004

44. The Chairman informed the meeting that the visit to the Ecological Compensation Area at Lok Ma Chau and the tunneling site originally scheduled for 5 February 2004 had been postponed having regard to the recent concern about the spread of bird flu in the neighbouring Asian region. The Secretariat would liaise with KCRC to fix another date for the visit in due course.

Tentative items for discussion at the next meeting

45. The Chairman informed the meeting that two discussion items were tentatively scheduled for the next meeting, namely the proposed extension of the Convention on Biological Diversity and the Cartagena Protocol on Biosafety to Hong Kong and the environmental management of government project sites.

Agenda Item 8 : Date of Next Meeting

46. The next meeting would be held on 8 March 2004.

**ACE Secretariat
February 2004**