

**Confirmed Minutes of the 127th Meeting of
the Advisory Council on the Environment
held on 11 July 2005 at 2:30 pm**

Present:

Prof LAM Kin-che, J.P. (Chairman)
Mr James GRAHAM
Prof HO Kin-chung, B.B.S.
Prof Howard HUANG
Prof Paul LAM
Ms Goretti LAU
Mr Peter Y C LEE
Dr NG Cho-nam, B.B.S.
Mrs Mei NG, B.B.S.
Prof POON Chi-sun
Mr Markus SHAW
Ms Iris TAM, J.P.
Prof WONG Tze-wai
Prof WONG Yuk-shan, B.B.S., J.P.
Mr Esmond LEE (Secretary)

Absent with Apologies:

Mr TSANG Kam-lam

In Attendance:

Mr K K KWOK, J.P.	Permanent Secretary for the Environment, Transport and Works (Environment)
Mr Roy TANG	Deputy Director of Environmental Protection (3), Environmental Protection Department (EPD) (For Agenda Item 3)
Mr C C LAY	Assistant Director (Conservation) Agriculture, Fisheries and Conservation Department
Mr Jimmy LEUNG	Assistant Director/Technical Services Planning Department
Ms Monica KO	Principal Information Officer, EPD
Ms Josephine CHEUNG	Chief Executive Officer (CBD), EPD
Miss Sarah NG	Executive Officer (CBD), EPD

In Attendance for Agenda Item 3 :

Mr W C MOK	Principal Environmental Protection Officer (Mobile Source Control), Air Policy Division, EPD
Mr Matthew TSANG	Environmental Protection Officer (Mobile Source Control)21, Air Policy Division, EPD

In Attendance for Agenda Item 4 :

Mr John LINDSAY	Executive Director, External Relations, Hongkong International Theme Parks Limited (HKITP)
Ms Winnie HO	Director, Government & Environmental Affairs – Public Affairs, HKITP
Ms Tina CHOW	Development Manager, Entitlements, HKITP
Mr Roger HEARTSNER	Project Director, Creative Entertainment, HKITP
Mr Kraig BLYTHE	Producer – Firework & Parkwide System, HKITP
Ms Esther WONG	Manager, Public Affairs, HKITP
Mr Andrew JACKSON	Managing Director, Environmental Resources Management (ERM)
Mr Freeman CHEUNG	Executive Director, ERM
Ms Michelle LEE	Senior Consultant, ERM
Miss Winky SO	Assistant Commissioner for Tourism, Tourism Commission, Economic Development and Labour Bureau
Mr Elvis AU	Assistant Director (Environmental Assessment), EPD
Mr Simon HUI	Principal Environmental Protection Officer (Regional Assessment), Environmental Assessment Division, EPD

Action

Agenda Item 1 : Confirmation of the draft minutes of the 126th meeting held on 13 June 2005

The draft minutes were confirmed without amendment.

Agenda Item 2 : Matters arising from the minutes of the 126th meeting held on 13 June 2005

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

Agenda Item 3 : A Proposal to Retrofit Pre-Euro Heavy Diesel Vehicles with Emission Reduction Devices
(ACE Paper 14/2005)

3. Mr W C Mok briefed Members on the proposal. He said that the installation of emission reduction devices had been made mandatory for all pre-Euro light diesel vehicles since December 2003. The Administration proposed to extend such a requirement to pre-Euro heavy diesel vehicles (except long idling vehicles) with effect from 1 April 2006.

4. Upon the Chairman's enquiry, Mr W C Mok confirmed that no pre-Euro vehicle had been first-registered since April 1995. There were about 30,000 pre-Euro heavy diesel vehicles in Hong Kong and about 930 vehicles did not participate in the voluntary installation programme. Upon a Member's enquiry, Mr Mok said that the projected annual retiring rate of the fleet would be about 7 to 8%.

5. The Chairman enquired about the efficiency of the emission reduction devices in reducing particulate emissions. Mr W C Mok said that about 30% of the particulate emissions was expected to be removed. Upon a Member's enquiry, Mr Mok confirmed that the 30% particulate reduction rate referred to respirable suspended particulates on a gravimetric basis. The Member expressed concern that while the overall weight of particles was reduced by the use of emission reduction devices, very fine particles might increase. The smaller the particles, the more toxic they would be. Mr Mok explained that when reducing particulate emissions, diesel oxidation catalysts could also oxidize toxic matters adhered onto the particulates into less harmful substances. The oxidation could reduce the risk of diesel particulates to public health. As for the increase in the number of ultra fine particulates, he added that the Hong Kong Polytechnic University had found that diesel oxidation catalysts would not increase the number of ultra fine particles.

6. A Member enquired whether the efficiency of the devices would be reduced with more use. Mr W C Mok said that the anticipated particulate reduction rate would be about 25% after the vehicles had run for about 250,000 km, which showed a high level of performance. In a 16-month trial exercise that had been conducted with the assistance of the transport trade, two of the devices had been sampled for a laboratory analysis. The result showed that they could still reduce about 30% of the particulate emissions of the test engines.

7. A Member enquired about the reasons for vehicles not to join the voluntary installation programme and whether the cost of long-term maintenance would be one of the major reasons. Mr W C Mok said that one possible reason might be that the vehicles were about to retire. He did not consider the cost of maintenance a major reason as the device was maintenance free and the warranty period of the particulate removal devices

was about 60 months. The Member enquired whether it would be more cost-effective to encourage early retirement of the vehicles rather than asking the vehicle owners to install the devices. Mr Mok said that the cost of a new vehicle would be much higher than that of installing an emission reduction device and vehicle owners would be reluctant to retire their vehicles which could still work.

8. A Member enquired about the cost of installing a particulate removal device. Mr W C Mok said that the cost would depend on the engine size of the vehicle in question. It would range from about \$5,000 for a small engine vehicle to about \$19,000 for a big truck over 15,000 c.c. whereas the cost of a new truck would be about \$600,000.

9. A Member suggested sending reminders to the vehicle owners who still had not joined the installation scheme. Mr W C Mok said that letters had been sent to eligible vehicle owners who had not joined the scheme from time to time to encourage them to join the scheme during the voluntary installation stage. Letters would also be issued informing them of the details before the statutory requirement came into force.

10. Two Members enquired about the progress and evaluation results of the mandatory scheme on the pre-Euro light diesel vehicles. Mr W C Mok said that all pre-Euro light diesel vehicles should have installed approved emission reduction devices since the installation became mandatory in December 2003. It would be difficult to identify the effect of an individual scheme on the overall air quality. As a whole, with the introduction of various programmes including liquefied petroleum gas (LPG) taxis, LPG light buses and Euro III vehicles as well as the implementation of this mandatory scheme in the past few years, EPD's air quality monitoring data showed a significant improvement in the roadside air quality. Moreover, there had been a 46% reduction in the concentration of elemental carbon, which was related to diesel combustion.

11. A Member enquired about the effect on pollution reduction in terms of total emission load in Hong Kong upon the full implementation of the proposal. Mr W C Mok said that the emissions of pre-Euro heavy diesel vehicles accounted for about 30% of the vehicular particulate emissions in urban areas. It was anticipated that the particulate emissions from vehicle sources could be reduced by about 10% with the full implementation of the scheme.

12. Upon a Member's enquiry, Mr W C Mok confirmed that the proposal would be implemented by existing staff and there would be no additional financial implications. Regarding enforcement of the statutory requirement, Mr Mok said that the vehicle licences would be cancelled if the vehicles were not installed with the particulate removal devices at the time of licence renewal. Checks would also be conducted on the road by EPD staff

in their joint operations against smoky vehicles with the Police.

13. The Chairman concluded that the Council supported the proposal on the grounds that –

- (a) there was a need to improve the roadside air quality;
- (b) the new emission reduction devices were technically feasible and available; and
- (c) a voluntary programme had been launched and most of the eligible vehicles had participated in the installation programme.

Agenda Item 4 : Hong Kong Disneyland Fireworks Trial Test Results
(ACE Paper 15/2005)

14. The Chairman briefed Members on the background. When endorsing the Environmental Impact Assessment (EIA) report on the Construction of an International Theme Park in Penny's Bay of North Lantau and its Essential Associated Infrastructure in 2000, the Council asked (among other things) that trial firework displays and associated air quality and noise monitoring should be carried out before the opening of the International Theme Park and the results of the trial tests and associated air quality data should be provided to the Council for consultation. This was required in the relevant Environmental Permit (EP). The purpose of the trial tests was to validate the EIA report conclusions and the Orlando trial test findings in 2000, both of which indicated that the fireworks show would not cause any significant impacts to the surrounding environment. The paper submitted by the project proponent, the Hongkong International Theme Parks Limited, aimed to brief Members on the results.

15. The Chairman suggested and Members agreed to focus the discussion mainly on the monitoring programme, the conditions for establishing the maximum scenario in terms of the environmental permit requirement for any subsequent show refinement, the environmental criteria adopted as yardsticks for comparison and the Council's views on the findings.

16. A Member declared interest that the Hong Kong Disneyland (HKDL) and the Disneyland had donated a relatively substantial amount to Green Power (of which he was the President) for the Hong Kong Trial Walk this year. The Chairman suggested and Members agreed that the Member could stay at the meeting without participating in the discussion.

17. Mr John Lindsay briefed Members on the background and objectives of the trial fireworks displays and Mr Andrew Jackson briefed Members on the results of these trial fireworks displays conducted on May 6 and 7.

18. A Member enquired about the rationale behind the choice of the off-site locations for air quality monitoring as she observed that the locations were different from those selected for noise monitoring. Moreover, the sites selected such as the one on Peng Chau were not the most populated areas. Mr Freeman Cheung explained that there were technical constraints in the selection of sampling locations, such as the requirement for permanent electricity supply and a sufficient area to support air sampling equipment. As for noise monitoring, the choice would be more flexible with the use of hand-held sound level meters. Thus, the façade noise measurement was carried out at locations with a direct line of sight to the Theme Park. Ms Michelle Lee added that a number of site visits were conducted before identifying the sampling locations. On Peng Chau, they could not identify residential buildings that had an unobstructed line of sight to the Theme Park for measurement of the highest possible noise level. Moreover, the more populated the area, the higher the chance of having more extraneous noise. Hence, they had selected a relatively remote area on Peng Chau for noise monitoring. For Discovery Bay, most of the residential sites were low-rise buildings. They had chosen the rooftop of a high-rise building at Cherish Court with a view to minimizing extraneous noise interference and it was also the closest site to sensitive receivers with a direct line of sight to the Theme Park.

19. A Member enquired why locations were not chosen to avoid interference of extraneous noise as in the case of May 7. Ms Michelle Lee explained that every effort had been made to minimize the impact of extraneous noise. In conducting the noise monitoring, standard procedures as presented in the Noise Monitoring Plan and the Technical Memorandum under the Noise Control Ordinance were followed accordingly. It was stated in the standard procedures that adjustment could be made if the measurement was affected by other sources of noise. In view that there was a set of valid noise data representing a worst-case scenario on May 6 and the influence of the extraneous noise was significant during the noise monitoring on May 7, the measurement results for May 7 were deemed to be invalid after discussion and agreement with EPD. They had taken serious consideration when deciding to invalidate the data. Mr John Lindsay said that the objective of the noise monitoring was to measure sites near the sensitive receivers. The difficulty was the interference from people cheering and shouting near the measurement location. With regards to noise from the Theme Park, Ms Lee added that the crowd noise in the Theme Park was shielded by a berm of nine metres high which had been erected around the site as agreed in the planning stage of the EIA which explained why the music background could not be captured by the off-site locations during the trial fireworks displays. Mr Andrew Jackson commented that attention had been drawn to a set of invalid data but Members should not lose sight of the fact that a set of valid data existed representing a worst-case scenario measured at the same locations and in full compliance with the criteria.

20. A Member pointed out that to verify the data interfered by extraneous noise, the non-firework noise level could be superimposed or decoupled from the combined noise level for reference. Ms Michelle Lee said that they had actually done so and the adjusted firework noise level on May 7 was even lower than the level of 54.6 db(A) measured on May 6.

21. Regarding a Member's enquiry about the loss of data for air quality monitoring due to the data memory error of the TEOM at one of the on-site sampling locations on May 6, Mr Andrew Jackson explained that there was one valid set of on-site data, which in fact was measured on May 7, and the two nights were for contingency. The Member further enquired the reason for using the Respirable Suspended Particulates (RSP) concentrations measured at the EPD air quality monitoring station at Tung Chung as reference of background RSP concentration. She considered Tung Chung was a relatively more polluted area which was not an appropriate benchmark. Mr Jackson explained that the valid yardstick adopted for comparison should be the air quality objective (AQO) in Hong Kong. The measured concentration was 65% below the daily AQO criterion for RSP.

22. The Chairman enquired whether it was appropriate to use the AQO of RSP concentration for 24-hour to compare the RSP concentration of a 15-minute fireworks display. Mr Andrew Jackson explained that the 24-hour AQO criterion was used due to the absence of any other statutory criteria for a shorter duration in Hong Kong. They had tried to adopt the occupational exposure limit (OEL) of RSP for comparison of the measured one-hour RSP levels.

23. Regarding the quality assurance and control (QA/QC) in the monitoring programme, a Member pointed out that the concentration level reported, such as those in the first table of Annex F to the Monitoring Report, should not be less than the method detection limit (MDL) as absolute figures less than the MDL would give an impression that the concentration level was very low.

24. Upon a Member's enquiry about the validation of data by independent checkers, Ms Tina Chow said that they had been working very closely with the local control authorities. For the QA/QC, Dr Frank Lee of the Hong Kong Polytechnic University was the independent QA coordinator of the project who had reviewed the results and provided an assessment of the overall data quality.

25. A Member pointed out that the wind direction on May 6 was from the north while that on May 7 was from the southeast. As such, only the Central Maintenance Facility (AIR3) captured the dust plume on May 7. To measure the maximum scenario or the worst-case scenario, it would be more desirable to have the plume blowing to Discovery Bay. Mr Freeman Cheung explained that the three on-site locations selected for air quality

monitoring were selected for collecting samples to characterize the firework emissions. As southeasterly to easterly wind would usually prevail in May, the Central Maintenance Facility (AIR3) was chosen as the downwind location for measuring firework emissions. The northerly wind prevailing on May 6 was not expected but that helped measure emissions towards sensitive receivers and explained the marginal increase measured at the Hollywood Hotel (AIR1). On May 7, the locations did capture the plume and thus explained the sharp elevation of RSP concentration which further confirmed the correct choice of monitoring locations.

26. The Chairman enquired whether the worst-case scenario had been covered given that the prevailing wind in Hong Kong usually came from the east or the northeast. The Crestmont Villa Management Office (AIR5) in Discovery Bay would instead be on the downwind location under such wind condition. Mr Freeman Cheung explained that the wind speed on the two trial nights was not high and the stability class was E to F. The test did capture one of the worst-cases in terms of metrological condition by measuring the emissions at a very close distance from the source. A Member recalled that the worst-case scenario according to the EIA study was not under the stability class of E and F because the emission source was in the mid air level rather than the ground level. The worst-case scenario should instead be strong unstable wind condition which would help disperse the emissions to the sampling sites. Mr Cheung explained that as the fireworks were shown at the night time, the atmospheric condition was usually classified as D to F in terms of stability. Mr Andrew Jackson pointed out that air modeling work under all different metrological conditions, including stability classes, wind speeds and directions, throughout the year had been undertaken in the EIA study in 2000. The purpose of the on-site monitoring was to capture the plume characteristics while the off-site locations were to demonstrate that the trial fireworks displays would not adversely affect the air quality at the air sensitive receivers during the operational phase. The results of off-site monitoring confirmed the EIA predictions and Orlando trial tests findings.

27. A Member expressed concern about the impact of the fireworks displays on the human settlements in Discovery Bay and Peng Chau as well as the marine life along the shore as northeasterly wind would usually prevail in most part of the year. Ms Michelle Lee explained that the sound energy from fireworks devices would not penetrate down into the water due to the boundary difference between air and water and would not cause health or noise impact to the marine life.

28. Upon the Chairman's enquiry on the fireworks shows in actual operation, Mr John Lindsay said that under the Environmental Permit, the maximum duration of a fireworks show allowed was up to 12 minutes. There might be minor refinements to the fireworks show during the final dress

rehearsal to be launched in August and the same fireworks show would then be repeated every night. Mr Kraig Blythe said that while the trial fireworks displays lasted about seven and a half minutes, the number of fireworks devices to be used in the operational phase would not be more than that used in the trial fireworks displays and it was only a matter of sequencing and spacing in the actual show. A Member enquired why a trial test of 12 minutes was not conducted. Mr Blythe explained that the time duration was not an important factor but rather the number of devices would affect the results. The Chairman pointed out that the emission concentration and noise level would be even higher for a shorter duration given the same number of fireworks devices.

29. A Member enquired about the comparison in terms of scale between the fireworks displays in the Theme Park with those at Victoria Harbour. Mr Kraig Blythe said that the number of aerial shots and devices in the Disneyland shows would be much less and the scale would be about 10% to 12 % of that of the Victoria Harbour fireworks shows.

30. A Member enquired about the rationale for using the OEL as the reference for comparing the measured RSP levels as OEL referred to voluntary exposure which was used for control of air impurities in the workplace. Mr Andrew Jackson explained that the emissions concentration was measured over a one-hour period. OEL was adopted due to the absence of other statutory criteria in Hong Kong for assessing air quality impacts over a shorter duration. It was stated in the relevant EPD guidelines that in the absence of a relevant AQO, project proponents could refer to other standards or guidelines published by other relevant authorities. An example was the acute reference exposure level referred to in Table 2.7 of the Monitoring Report which was a common reference based on published international standards. The approach adopted was consistent with the EPD guidelines and with that adopted in the EIA study conducted in 2000 as well as in other EIA studies undertaken in Hong Kong. They considered the OEL a conservative basis for comparison as it was based on the assumption that the worker was exposed to the emissions eight hours a day for about 220 days a year in a normal working life. Mr Elvis Au confirmed that there were no hourly AQO criteria for hourly RSP available in Hong Kong. For modeling of vehicular air pollution, the 24-hour AQO for RSP was adopted.

31. Upon a Member's enquiry on the cumulative long-term health impact, Mr Andrew Jackson explained that the issue had been addressed in the EIA report. According to the report, the predicted long-term effect of the emissions to sensitive receivers was considerably below the assessment criteria. Mr Kraig Blythe added that details of the fireworks composition used would have to be submitted to the authorities concerned to ensure that prohibited substances would not be used. On the overall programme for quality control of substances used, Mr John Lindsay said that a mechanism was in place to ensure very stringent control on the manufacturing as well as

the regulatory processes such as by examining the breakdown of the formulas of substances used.

32. Upon the Chairman's enquiry on the comparison between the measured results and the simulation modeling results conducted in 2000, Ms Michelle Lee said that they did perform the comparison. For the 24-hour RSP concentration on site, the measured levels were about 90% compared with the predictions and thus were about 10% below the predicted levels. Mr Andrew Jackson highlighted that the EIA predictions were quite conservative and the on-site measurements were even lower than the predictions. The on-site measurements also confirmed the results of the Orlando trial test in 2000.

33. The Chairman enquired about the emission loading of the air pollutants caused by the fireworks displays in terms of the total emissions in Hong Kong. Mr Andrew Jackson said that the actual effect of the emissions from fireworks displays would be extremely low in terms of quantity as compared with the overall emissions in Hong Kong.

34. A Member enquired whether source categorization of emissions had been performed in view of the experience of fireworks displays in other Disney Theme Parks. Mr Andrew Jackson said that there was an estimate on the quantity of RSP discharged made in the EIA study. The composition of the RSP, i.e. the levels of the source materials, was assumed at that stage and the assumption was followed through in the Orlando trial test and on-site trial tests which aimed to characterize the emissions. Based on an extensive review of relevant literature, the current programme in Hong Kong was considered probably the most comprehensive one undertaken to date. In respect of source supply of firework devices, Mr Kraig Blythe said that the source was from four top manufacturers with a longstanding history in the fireworks industry.

35. A Member enquired whether the Environmental Monitoring and Audit (EM&A) plan would continue in the operational phase having regard to the relatively marginal compliance of some data such as noise level measured. Mr Elvis Au said that the EIA report had set out the basic requirements of monitoring. The noise level would be monitored about once every week for the first month and the frequency would be reduced afterwards. On-going operational monitoring on both air quality and noise was recommended in the EIA report.

36. Upon a Member's enquiry about the contingency plan, Mr Kraig Blythe said that there was a comprehensive plan for considering the launching of fireworks shows under different scenarios and weather conditions. Relevant authorities would be involved in establishing the criteria concerned. In handling situations of exceedance recorded, event action plans under the EM&A program would be in place.

37. A Member enquired whether EPD had received any complaint from the residents on May 6 and 7, after the trial show or during the trial show. Mr Elvis Au said that according to his memory, EPD had not received complaints during those two days. However, EPD had somehow a complaint about odour from a very faraway place over the mountain, but could not establish that complaint. He concluded that there was no actionable complaint received on those two days.

38. A Member expressed her reservation to endorse the Monitoring Report due to the incomplete data and considered that control trials should have been conducted. Mr John Lindsay pointed out that the control process was a five-year process which started with an EIA study and the whole process was conducted in a very controlled environment.

(The presentation team left the meeting at this juncture.)

39. A Member said that the air quality in Hong Kong was by a long way the public's highest environmental concern. His past experience of fireworks displays at Chinese New Year and other festivities in the Harbour was of huge clouds of smoke being created – sometimes obscuring even the display itself. In these circumstances, it would be of major concern to the community to discover that a fireworks display of approximately 10% to 12% of the explosive power of the Chinese New Year display would occur at Disneyland on a nightly basis. The Member supported the scientific approach adopted by the Council in examining the results of the trial fireworks displays. However, from the perspective of the general public, he believed that their concerns were mainly on the adverse impact on air quality based on their observations of the clouds of smoke left behind after the shows. He wondered whether the general public would understand the complicated scientific principles. He also shared another Member's concern about the cumulative impact of the fireworks displays to be launched on a daily basis. Given the frequency of the fireworks displays, the public would have great concern on the cumulative impact on the air quality.

40. Being one of the EIA Subcommittee Members in 2000, a Member pointed out that the potential environmental impacts had been thoroughly examined during the lengthy discussion before the Council endorsed the EIA report in 2000 with a long list of conditions. The project proponent had also provided air quality monitoring results of the Orlando trial test upon the request of the Council. The Orlando trial test results supported the predictions of the EIA report. The objective of recommending the on-site trial tests was to validate the EIA predictions on top of the Orlando trial test. He considered one valid trial was sufficient to satisfy the condition and it would be unfair for the discussion to digress from the results of the trial

fireworks displays to the need for the fireworks displays. With regard to the potential cumulative impacts, he knew that some of the materials used in Disneyland fireworks elsewhere would be banned in the HKDL fireworks displays.

41. A Member expressed disappointment that he was not a member of the Council in 2000 when the original item was discussed, as he would then have raised strenuous objection to the whole idea of a daily fireworks display. However, be that as it might, the strict wording of Condition 3.1 of the EP required the project proponent only to carry out trial fireworks displays and associated air quality and noise monitoring. The results should be submitted to the Director of Environmental Protection (DEP) for agreement prior to the operation and the results should be provided to the Council for “consultation”, as directed by the Director. The project proponent had satisfied the requirements of the Condition and it was not open to the Council to re-open the issue; it could only comment and offer advice to the Director for his further consideration. Furthermore, it was incumbent on the Council to adopt a science-based approach in its deliberations and the results of the tests were well within the parameters agreed beforehand with the EPD.

42. Mr K K Kwok pointed out that the project proponent’s monitoring report was submitted to the Council in accordance with one of the conditions in the EP (which permitted fireworks displays) granted after the endorsement of the EIA report a few years ago. He was very impressed by the level of expertise of the Council in scrutinizing the results of the trial fireworks displays. In the light of the results and explanations given by the project proponent, the Council should advise the Administration on whether the trial fireworks displays had been carried out properly and whether the results were acceptable.

43. A Member considered that it would be unrealistic for HKDL not to have fireworks displays given all other Disneylands around the world had fireworks shows. She agreed that the project proponent had gone through the EIA process and fulfilled the condition set out in the EP. Another Member considered that Hong Kong was different from the other cities with Disneyland in that the air quality of Hong Kong was much worse. A Member said that fireworks were 19th Century products. We were in the 21st Century now and we could combine information technology or audio visual for the firework shows.

44. A Member opined that scientific backing instead of layman perception was very important as the general public would expect the Council to give professional views on the subject. Based on the findings in the monitoring report and trusting the control measures imposed by EPD, she personally accepted the results of trial tests. However, she was a bit uncomfortable about the approach in site selection of monitoring locations. For long-term monitoring, the project proponent should set up monitoring

stations in residential areas and conduct control measures for comparison purposes in order to obtain better measurements for the residents.

45. While agreeing that the test results on air quality complied with the prevailing statutory standards in Hong Kong, a Member considered that the current AQO criteria for 24 hours was too general a benchmark under certain circumstances. Due to the absence of hourly AQO criteria for hourly RSP, there was difficulty in comparing the hourly RSP concentration of the emissions. He suggested the Administration review and update the AQO as necessary. Secretariat

46. A Member proposed that the Council should reject the results of the trial fireworks displays and request the project proponent to conduct another trial due to the inadequacy and incomprehensiveness of the data. It was necessary to protect the credibility of the Council.

47. A Member pointed out that a study could at best be as good as what was specified in the study brief. If the requirement had not stipulated the need for more than one trial, it would not be fair to ask the project proponent to conduct another one. Besides, he considered the Council's judgement should be based on objective and scientific facts while acknowledging limitations. It should be the role of the Government rather than the Council to make a political decision.

48. The Chairman considered that the crux of the matter was that there were some data gaps in the monitoring programme due to equipment failure or invalidation of data while there were one set of data available. Given the gaps and the explanation that the measured results were about 90% in agreement with the modeling results, he suggested Members to consider whether the gaps would overturn the overall major findings and whether Members were confident enough to accept the set of data available as a true reflection of what would happen.

49. A Member said that he had reservations on the validity of the trials and considered the results not scientific enough to judge whether the fireworks would cause significant environmental impacts to the residents of Peng Chau or Discovery Bay, in particular with regard to the marginal compliance of noise level. If it was decided that the project be allowed to go ahead, there should be a vigorous EM&A programme in a more long-term and detailed manner to closely monitor the operation. Another Member agreed that an EM&A programme was crucial to ensuring the compliance of various environmental standards.

50. A Member did not agree that the trial tests were not scientific. However, he considered that there were missing data and the data were imperfect. Based on the measurements, the test results on air quality met the statutory criteria. The Chairman noted that the concentration of metals were

well below the standards.

51. A Member reiterated that the on-site trial test conducted in HKDL validated the EIA predictions and met the condition of the EP. Although there were some imperfections in the trial, there was a full set of valid data each for air quality and noise monitoring. Another Member reiterated that the results were not scientific enough for the Council to make a decision.

52. The Chairman noted that some Members were not totally comfortable with the results of the trial tests. He would like to explore the possibility of further monitoring on RSP and noise level during the rehearsals. A Member said that rehearsals were different from trials in that trials were more intensified and complicated.

53. A Member drew Members' attention to the fact that the Council was only obliged to give its advice and feedback on the results of the trial fireworks displays to the Government in accordance with Condition 3.1 in the EP. The Council did not have any statutory power to impose any requirement on the project proponent nor to approve or reject the report. He also urged DEP to take into account Members' views before giving his final agreement on the results.

54. Mr K K Kwok noted the sentiments of the Council and Members' concerns. He would convey them to the project proponent and revert to Members on the project proponent's response so as to reassure Members.

55. The Chairman summarized the Council's views as follows –

- (a) there were some gaps in the data presented in the report, particularly with regard to RSP and the noise level;
- (b) the project proponent should conduct EM&A monitoring for at least one year and report to the Council the actual air quality and noise data two months after the opening of the project; and
- (c) the Council's views would be reflected to DEP, who would take into account these views before giving his final agreement.

56. A Member reiterated her reservation to accept the report and requested the project proponent to conduct another trial. The Chairman and some Members considered that given Condition 3.1 of the EP, it sufficed to draw the data gaps to the attention of DEP, who had the authority to decide how to address the data gaps. Whether this should be addressed by asking the project proponent to conduct another trial or more than one trials or as part of the fireworks display rehearsals would be a matter for him to decide.

Agenda Item 5 : Report of the Environmental Impact Assessment Subcommittee
(ACE Paper 16/2005)

57. Chairman of the EIA Subcommittee briefed Members on the Subcommittee's recommendation on the EIA report on New Contaminated Mud Marine Disposal Facility at Airport East/East Sha Chau Area. The Subcommittee endorsed by circulation the report without condition.

58. A Member noted that some public comments had been received after the scheduled meeting and enquired how these concerns could be addressed. Chairman of the EIA Subcommittee explained that the public comments were addressed to DEP and referred to the Council for reference. DEP would examine the comments before approving the project. Nevertheless, the Subcommittee Members could take into account comments received before the meeting. The Chairman said that the public consultation process of the EIA mechanism involved collecting views from the general public during the public inspection period and consultation with the Council in parallel. DEP would take into account views from both parties before making a decision.

59. A Member considered that the public would regard the Council as a watchdog on EIA matters. There might be expert or valid points raised by the public which were not addressed by the Subcommittee and thus voices of the public should be brought to the attention of the Subcommittee for consideration. He considered it difficult for DEP to make a decision where the Council endorsed the report without condition on the one hand and some members of the public raised objections on the other. Another Member shared his view.

60. Mr K K Kwok said that the entire EIA procedures were set out in the EIA Ordinance under which the public had an opportunity to comment on EIA reports whilst the Council was consulted. DEP would make a final decision, having regard to all these views. In terms of operational procedures, whether the EIA Subcommittee would like to take into account the views of the public in its deliberation would be a matter for Members to decide.

61. The Chairman pointed out that the usual practice was for public comments received before a Subcommittee meeting to be referred to the Subcommittee and Members might take into account the comments during their deliberation. However, it would be difficult for the Subcommittee to take into account comments received after the Subcommittee meeting. The existing mechanism allowed a parallel system in which DEP was obliged to consider the views of both the public and the Council. It would be a heavy load for the Subcommittee to consider all the public comments. In some

cases, the number of such comments might be huge. He noted that not all comments were objections; some could be in support of the projects in question.

62. A Member considered that public comments received after the Subcommittee meeting could either be for the Subcommittee to consider or be left for the authority to consider. The Chairman pointed out possible logistical problems given that the Subcommittee's recommendations had to be endorsed by the Council and there was a time constraint that the Council had to give its comments within 60 days of receiving a copy of the report. The Member considered that the Council should play an advisory role and he had no objection to endorsing the Subcommittee's recommendation in this case. DEP should examine the public comments separately.

63. A Member considered that the Subcommittee was expected to examine the EIA reports from a professional and scientific perspective. It should be DEP's role to take into account all the views, including whether the points raised by the public had been covered by the Subcommittee, before arriving at a decision. Another Member supported his views and considered that the Subcommittee's recommendation in this particular case could be endorsed.

64. A Member considered that the Subcommittee had thoroughly considered the EIA report before recommending it to the Council. The role of the Council should not be fact finding. It should be giving advice on the basis of Members' professional knowledge. The public comments should be examined by the Government.

65. A Member pointed out that under the EIA Ordinance, it was the views of the Council that were sought. In this particular case, it was not too late for the Council to take into account the comments received before making the decision. Nevertheless, a timeline had to be drawn for considering public comments in general as there would still be comments coming in after the Subcommittee meetings or even the Council meetings. Another Member considered that it would be better for the Council to consider the public comments in hand rather than asking the Subcommittee to reconvene a meeting.

66. A Member would like to register her reservation about endorsing the project while noting that the majority of the Subcommittee Members endorsed it. For future arrangements, she wished to receive all the public comments with information on when the public comments were received and when they were sent to Members. Mr K K Kwok said that the department would be happy to send all the public comments to Members before as well as after the Subcommittee meeting.

Secretariat

67. A Member enquired about the volume of contaminated mud to

be disposed of and types of area under consideration for dredging. The Chairman said that the Civil Engineering and Development Department (CEDD) predicted that a minimum of 8 million cubic metres of contaminated mud would require disposal from 2009 to 2015. Contaminated mud that required Type 2 disposal in accordance with the relevant circular would be disposed of in the proposed site. Chairman of the EIA Subcommittee said that one of the sources of contaminated mud would be the need for continuous maintenance dredging for river estuaries. A member added that works projects such as lining of cables and general maintenance of the harbour area would also generate contaminated mud.

68. A Member enquired about the basis of the predictions and alternatives for treatment of contaminated mud. Another Member raised her concern about the predictions of the timeline and considered that planning should be considered from the perspective of sustainable development. The Chairman recalled that there had been a two-stage study for contaminated mud disposal. The first stage involved a strategic assessment of the overall situation of contaminated mud disposal around 1999 and the Council was consulted. The second stage focused on a specific study on methods and site selection for disposal which resulted in the current EIA report.

69. Having regard to Members' views, the Chairman concluded that the Council endorsed the Subcommittee's recommendations and recommended that DEP closely examine the public comments received on the report. The Council would like to be briefed by CEDD (the project proponent) on the overall picture and latest developments of contaminated mud disposal, particularly the prediction on the volume of contaminated mud to be generated in the coming years.

Secretariat

Agenda Item 6 : Any Other Business

Proposed Overseas Visit

70. Mr Esmond Lee informed Members that the Secretariat was working out the details of an overseas visit for the Council. The visit was scheduled to take place in late September and would cover incineration plants, recycling centres, eco-towns and facilities in the Mainland and Japan. The Secretariat would consult Members when the details were available.

Secretariat

Tentative items for discussion at the next meeting

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

Agenda Item 7 : Date of Next Meeting

72. The next meeting was scheduled for 15 August 2005.