

**Confirmed Minutes of the 134th Meeting of
the Advisory Council on the Environment
held on 15 May 2006 at 2:30 pm**

Present:

Prof LAM Kin-che, J.P. (Chairman)
Mr James GRAHAM
Prof Howard HUANG
Prof Paul LAM
Ms Goretti LAU
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.
Mr TSANG Kam-lam
Prof WONG Yuk-shan, B.B.S., J.P.
Mr Esmond LEE (Secretary)

Absent with Apologies:

Prof HO Kin-chung, B.B.S.
Mr Peter Y C LEE
Prof WONG Tze-wai

In Attendance:

Mr K K KWOK, J.P.	Permanent Secretary for the Environment, Transport and Works (Environment)
Mr C C LAY	Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department
Mr P Y TAM	Assistant Director/Technical Services, Planning Department
Ms Monica KO	Principal Information Officer, Environmental Protection Officer (EPD)
Ms Josephine CHEUNG	Chief Executive Officer (CBD), EPD
Miss Sarah NG	Executive Officer (CBD), EPD

In Attendance for Agenda Item 3 :

Mr Elvis AU	Assistant Director (Environmental Assessment), EPD
Mr Maurice YEUNG	Principal Environmental Protection Officer (Assessment and Noise), EPD

In Attendance for Agenda Item 4 :

Mr Raymond FAN

Deputy Director of Environmental Protection (2),
EPD

Action

Agenda Item 1 : Confirmation of the Draft Minutes of the 133rd Meeting held on 10 April 2006

The draft minutes were confirmed without amendment.

Agenda Item 2 : Matters Arising from the Minutes of the 133rd Meeting held on 10 April 2006

Para. 52 Possible Development of a Refinery and Petrochemical Plant in Guangdong Province

2. Mr Esmond Lee informed Members that the Administration had approached the Guangdong Provincial Government. Their advice was that the reported petrochemical complex project by the Kuwaiti Government had yet to be confirmed at this stage, so site selection and environmental issues were not involved. The Environmental Protection Department (EPD) would continue to liaise with the Guangdong authority on further development of the project and would impress upon them that environmental issues had to be taken into account very carefully in view of the possible impact on the nearby area. The Chairman agreed that it was necessary to do so as the proposed development would have a significant bearing on the regional air quality. He looked forward to receiving further information on the proposed development.

Agenda Item 3 : A Draft Comprehensive Plan to Tackle Road Traffic Noise in Hong Kong ***(ACE Paper 9/2006)***

3. Mr Elvis Au briefed Members on the draft comprehensive plan to tackle road traffic noise in Hong Kong. He highlighted that the Government had completed the first noise mapping covering the entire territory after conducting thorough research and studies over the past few years. It was found that although about 760,000 people had benefited from a range of measures to tackle road traffic noise problems, about 1.1 million people were still exposed to high levels of road traffic noise exceeding 70 dB(A)L₁₀(1 hour) due to continuous growth in the economy, population and transport demand as well as the scarcity of land. The situation was expected to get worse if development trends continued. Thus, a comprehensive action

plan adopting a balanced, integrated, proactive and transparent strategy was required to prevent the problems from worsening and to improve the noise environment.

4. A Member considered that the objective of the draft plan was laudable. He hoped that the Government would tackle the road traffic noise problems in a holistic manner. He considered that the key to reducing road traffic noise was to build fewer roads and move away from the road-based transport strategy. However, the transport plans for new developments, such as the Central Reclamation and Kai Tak sites, did not include any type of mass transit system but focused on road-based transport systems. The Chairman shared the Member's views.

5. A Member considered that noise and planning were closely related and there were a number of trade-offs in considering various factors for planning a good living environment. There was a trade-off between the noise level and convenience as more convenient residential buildings were usually located at crowded areas along major roads. There was a trade-off between the noise level and a good view from the flat as windows with a good sea view might also face major roads. There was a trade-off between the need to avoid viewing major roads and the problem of viewing other flats, given the high density of buildings. There was a trade-off between the pros and cons of podium structures as the structures could screen some noise but affect ventilation and pedestrian connectivity. She agreed with another Member that an environmental-friendly transport system such as railways could significantly help to solve these trade-off problems. With heavy reliance on roads, many potential residential sites had to be forgone in view of noise problems. She considered it strange that the Government would rather forgo potential residential sites, which would mean a loss in revenue, without considering investment in environmental-friendly transport systems.

6. With regard to the Highway Resurfacing Programme, a Member commented that the surface quality of new roads seemed to have deteriorated in recent years. The road surface seemed to be rougher and caused more traffic noise problems. An example was the road surface of Tseung Kwan O Tunnel and the part leading down to Tseung Kwan O. He enquired whether the traffic noise standard for new roads had been changed in recent years. Mr Elvis Au explained that the prevailing road traffic noise standard of 70 dB(A)L₁₀(1 hour) had been adopted since 1986. It was a standard similar to the USA and UK standards. Based on the measurements made, the noise level generated from major new roads was much lower than that from old roads especially after the Environmental Impact Assessment Ordinance came into effect. He pointed out that the Tseung Kwan O Road had been built for quite some time and was subject to wear and tear. The Highway Resurfacing Programme was a recurrent programme on existing deteriorating road sections.

Roads with a high usage rate would require regular resurfacing every three to five years. The Member said that he had in mind some cases which were related to the poor quality of road construction rather than wear and tear. He would provide details on his observations to Mr Au for reference after the meeting.

7. A Member said that due to the increase in traffic volume, more repair and maintenance work would be required. In order to minimize traffic noise generated by a heavily worn out road surface, such as the poor joint between two totally different road surface materials along Tseung Kwan O Road, the Government should ensure that sufficient maintenance works would be carried out.

8. Regarding a Member's enquiry about the benefits of the road resurfacing programme, Mr Elvis Au said that a number of noise measurements had been conducted before and after the resurfacing works to assess the noise benefits. For high speed roads with an allowed speed of more than 70 km per hour, the noise benefit was about 5 dB(A), which would drop to about 3 dB(A) in two to three years' time. For low speed roads with an allowed speed of less than 50 km per hour, the noise benefit was about 3 dB(A), which would drop to about 2 dB(A) in one to two years' time.

9. In response to a Member's suggestion of minimizing traffic volume to reduce noise pollution, Mr Elvis Au said that transport demand was an inevitable outcome of economic growth. The Government had looked into relevant issues including demand side management in the Strategic Environmental Assessment in the Third Comprehensive Transport Study in 1999. Traffic demand and management issues were rather complicated and sensitive particularly with regard to an Electronic Road Pricing system which would affect a large number of stakeholders. Moreover, the situation in Hong Kong was quite unique in view of the high rise and high density buildings.

10. A Member pointed out that new roads were predominately built by the private sector under short-term contracts and the roads would be handed over to the Government after one to two years' maintenance service. Instead of short-term contracts which mainly competed on price, the Government should consider using longer-term contracts by which contractors would build and maintain the roads on a life cycle basis by using more expensive and durable materials. He noted that the Government had awarded some long-term contracts for high-speed trunk road maintenance projects and hoped that this procurement option would be adopted for building new roads. Mr Elvis Au agreed to refer the Member's suggestion to the Highways Department.

11. A Member was pleased to learn that Hong Kong was taking the lead in completing the noise mapping of the territory. In response to her enquiry, Mr Elvis Au said that EPD had convened an inter-departmental

working group with the Transport Department, Hong Kong Police Force and Transport Branch of the Environment, Transport and Works Bureau to tackle the noise problems generated by buses, such as acute braking noise and improper driving behaviour. EPD would prepare a code of practice and pamphlets to encourage bus companies to promote better driving practices among the drivers. In addition, the Government had included a new clause in the newly granted bus franchises requiring the franchisees to adopt commercially available technologies and products as specified by the Commissioner for Transport, with a view to reducing noise emission from both new and in-use buses.

12. Regarding a Member's enquiry about noise nuisance caused by vehicle intruder alarm systems, Mr Elvis Au confirmed that such noise problem was controlled under the Noise Control Ordinance. The Member expressed concern about the disturbance caused by loading and unloading activities. Mr Elvis Au said that loading and unloading activities during late nights and early mornings, especially in areas with mixed residential and commercial developments, had given rise to a lot of complaints from residents. The Government would explore whether it would be appropriate to impose time control to restrict these activities. Another Member said that the opportunity should be taken to explore whether loading and unloading activities could be made at different times of the day to help traffic management and reduce noise nuisance during sensitive hours as the noise generated by switching on and off vehicle engines would cause much more nuisance than a moving vehicle.

13. A Member suggested that the design of noise barriers should incorporate renewable energy such as for street lighting systems. Mr Elvis Au said that the enhanced measures included a proposal to explore an optimum barrier design for a wider application. They would commission a focus study to look into the design of barriers and take into account different factors such as noise reduction, aesthetic design, community acceptability and energy conservation.

14. A Member considered that the use of noise barriers should be minimized as barriers could only mitigate noise problems rather than avoiding or eliminating them. He urged the Government to be more imaginative in exploring all sorts of materials for road construction so as to avoid or absorb traffic noise. Mr Elvis Au agreed and said that one of the important messages to be put forth to the community through the draft plan was tackling the noise problems by avoidance and planning. In the hierarchy of approach in the Hong Kong Planning Standards and Guidelines, priority was accorded to the adoption of the best planning measures and land use design, such as suitable road alignments or tunnels to prevent noise problems in the first instance. They were working closely with the Highways Department to explore more durable low noise road surfacing materials to improve the noise reduction effect. Roadside barriers would be used only when preventive measures were

not feasible. There had been a misunderstanding that EPD was an advocate of roadside barriers.

15. A Member was pleased that the Government had drawn up a comprehensive plan to tackle the noise problems. He considered that a balance had to be struck between the need to mitigate noise problems and the visual impact of the barriers. The design of barriers had to be improved as some of them were too intrusive and colourful, such as those along the Tolo Highway.

16. A Member suggested that flexibility should be allowed in using roadside barriers for different kinds of developments. For example, barriers should not be required along the roadside of schools because such schools were normally provided with air conditioners.

17. A Member enquired whether there had been studies to determine the dominating source of high noise level. Mr Elvis Au said that surveys had been conducted to identify the major sources contributing to the exceedance of noise standard. By adopting an appropriate noise measurement methodology, the field staff would be able to distinguish different sources of noise. The noise that was not due to road traffic would be discounted, if necessary, to arrive at a more realistic and reliable measurement of the noise level.

18. A Member asked about the methodology in arriving at the estimation of 1.1 million people being exposed to high levels of road traffic noise. Mr Elvis Au said that it had taken about five years for the department to complete the data collection and analysis process. The noise mapping had been conducted by adopting a three-dimensional (3-D) noise modeling tool and calculating at four different building heights (4 m, 18 m, 40 m and 80 m) in a 10 m by 10 m grid. The noise mapping covered about 100,000 buildings in Hong Kong. The use of 3-D noise modeling for the mapping was one to two years ahead of the EU's directive. The 3-D noise mapping enabled the formulation of a draft plan to tackle the most problematic areas and monitoring of the effectiveness of the enhanced measures. Upon a Member's enquiry, Mr Au said that it would depend on the sensitivity of individuals to detect a drop in the noise level and the range was 1 to 3 dB(A).

19. A Member was pleased to note the comprehensive review on the noise problems. He considered that the minimization of the noise problems should be viewed from the receivers' end. The measurement taken at 1 m from the façade was not equivalent to the indoor noise level. He considered that building design and choice of building materials were important to minimizing noise at the receivers' end. Mr Elvis Au said that the issue of indoor noise level would be further looked into as part of the enhanced measure to explore the need for and feasibility of a night-time traffic noise standard. In some overseas countries, a very stringent indoor noise standard

of about 40 to 45 dB(A) was set for night time which would probably be difficult to be applied in Hong Kong. The issue of building design would be addressed and this was the reason for proposing a major revamp of the Professional Practice Note on Road Traffic Noise (ProPECC) to see what could be done at the receivers' end. The proposal of disclosing the noise performance of new residential developments would provide a strong incentive for developers to adopt the best possible building design, including building materials and types of windows.

20. A Member said that serious thoughts should be given to better building design to improve the noise problems. For example, balconies could mitigate some noise and thus some level of noise reduction should be allowed in the measurement. Another Member agreed that balconies were regarded as a green feature and should be incorporated into the building guidelines of the Buildings Department. Mr Elvis Au said that some studies on the effect of balconies had been conducted. The results showed that it would depend on the design of the balconies as some might help to reduce noise but others would increase noise.

21. The Chairman and two Members supported establishing a night-time traffic noise standard. The Chairman said that many overseas countries had two different standards for day and night respectively but Hong Kong had only one for the peak hour. A Member also suggested setting an indoor noise standard to encourage more innovative building design.

22. A Member said that caution should be exercised when setting a night-time traffic noise standard because many residential developments in Hong Kong were on slopes. The noise generated by vehicles going uphill would be inevitably at a high level.

23. Three Members supported the proposal of promoting the disclosure of noise information in sales brochures. Dr Ng considered that this would allow buyers to know more about the noise environment of the flats before making a decision. For example, people might not know that the low level flats might be quieter than the medium level flats as the podium could block some noise. It would also be more useful for the buyers if they could have information about the background noise level of the area.

24. The Chairman said that the disclosure of noise information would make the consumers more aware of ProPECC PN 1/97, which allowed some leeway for a certain proportion of new residential buildings to be exposed to excessive noise. It would allow the consumers to make sensible decisions and consider trade-offs. However, it would be necessary to ensure that technology would be available to make accurate noise assessment.

Moreover, he noted that the disclosure of noise information would not be mandatory. It would be important for Government departments, such as the Housing Department and Urban Renewal Authority, to take the lead. A Member considered that the idea of disclosing noise information was good but could lead to disputes and legal cases on the measurements of the noise level before and after the buyers moved in.

25. Mr Elvis Au said that the technology in noise measurement and calculation as well as the 3-D mapping was very well established. Since the promulgation of ProPECC PN 1/97 in 1997, the experience and results from actual noise assessments showed that the noise professionals were comfortable with the methodology. The margin of error was only ± 2 to 3 dB(A), which was much lower than those of other types of measurements. With the established standard methodology for measuring, calculating and verifying the noise level, accurate noise assessment could be made for the disclosure of noise information. To minimize disputes, the margin of error could also be disclosed similar to those released in other published reports.

26. A Member commented that the traffic noise assessment would depend very much on the accuracy of traffic forecast covering a long period of 15 years. Thus, it would be difficult to say that the measurement could be accurate. Mr Elvis Au explained that noise assessment was quite different from air quality assessment. It was based on a logarithm scale. If the traffic flow was reduced by half, the noise level would only be reduced by 3 dB(A). Thus, noise measurement was much more reliable and the margin of error was much narrower than those of other types of measurements.

27. A Member noted that under ProPECC PN 1/97, flats in new buildings which were exposed to excessive noise would be provided with air conditioning systems. He asked whether EPD would promote the use of alternative devices, such as ventilated windows or extraction fans, which could function as silencers and allow cross ventilation with closed windows.

28. The Chairman considered that given the seriousness of the problem, the proposal of controlling noise emission from in-use vehicles would be necessary on top of the control on newly registered vehicles.

29. Mr K K Kwok said that traffic noise problems had received a lot of public attention in recent years and there was pressure from various sectors to alleviate the problem, in particular requests for retrofitting roadside barriers. However, there were constraints in terms of resources and required standards. Priority had to be set according to the severity of the problems. Among the various proposed enhanced measures, some of them were part of the continuous improvement programme from the engineering point of view, such

as extending the trial of low noise road surfacing materials, improving joints at flyovers and exploring new designs for low noise road surfacing materials and barriers. However, some were new initiatives which could be potentially controversial and would attract public attention. On the proposal of controlling noise emission from in-use vehicles, it would be necessary to consult the stakeholders widely to ensure that the community would understand that the objective was to tackle the noise problems. Promoting the disclosure of noise information in sales brochures was a big step forward. It was necessary to discuss with the stakeholders and for the community to reach a consensus before moving forward. There would also be a lot of public interest in the issue of setting a night-time traffic noise standard. He assured Members that their views would be taken into account in conducting the studies and considering the way forward in implementing the enhanced measures.

30. The Chairman summarized Members' comments as follows –

- (a) the Council was aware of the seriousness of the road traffic noise problems as about 1.1 million people in Hong Kong were exposed to excessive road traffic noise;
- (b) the Council recognized the Government's efforts in tackling the problems in the past and considered that on top of the existing measures, more creative new initiatives were required to tackle the problems in a holistic manner;
- (c) the Council welcomed the draft comprehensive plan, particularly the analysis that had been made and studies to be conducted as sound policy had to be based on sound data and analysis;
- (d) the Council was supportive of the proposed enhanced measures in the paper, particularly the need to control noise emission from in-use vehicles, desirability of establishing a night-time traffic noise standard and promotion of disclosing noise information in sales brochures;
- (e) the Council considered that the Government should engage the stakeholders at an early stage and consult the public widely so as to gain community support; and
- (f) the Council considered that the joint efforts of relevant Government bureaux and departments would be necessary to address the problems at root from a strategic point of view, such as the formulation of a transport strategy to manage transport demand, which would greatly impact on road traffic noise.

Agenda Item 4 : Report of the ACE Study Visit to the Netherlands and Germany
(ACE Paper 10/2006 and 11/2006)

31. The Chairman said that the delegation had a very fruitful visit to the Netherlands and Germany in March. Apart from visiting waste treatment plants and facilities, the delegation had the opportunity of exchanging views with high level officials of relevant Ministries and representatives of the trade associations. Details of the visit were contained in the report of the study visit in ACE Paper 10/2006. Members endorsed the study report without amendment.

32. The Chairman said that the study visit had given the delegation insights on the development of waste management strategies and treatment facilities in Hong Kong. Based on the observations during the visit and subsequent discussions, the delegation put forth some key recommendations on the way forward in the implementation of initiatives under the Policy Framework for the Management of Municipal Solid Waste (2005-2014) (Policy Framework), which were summarized in ACE Paper 11/2006. He highlighted that the recommendations focused on the broad and strategic directions on the way forward rather than specifying details. The delegation hoped that the recommendations would reinforce and enhance the initiatives under the Policy Framework. With the endorsement of the full Council, the recommendations would be put forth to the Administration.

33. Upon a Member's enquiry, the Chairman highlighted the key new elements in the recommendations. The first was the significance of environmental education to induce behavioural changes. The delegation recommended the commitment of more resources and a dedicated ten-year plan on waste reduction education in tandem with the initiatives under the ten-year Policy Framework so that education efforts and themes could follow and target the initiatives along the road map. The second was the banning of the disposal of "untreated" municipal solid waste (MSW) at the landfills in order to fasttrack the various policy and legislative measures. The third was a review of the current waste collection system with a view to providing the necessary infrastructure for setting up a comprehensive and efficient waste separation and collection system. Mr Raymond Fan added that the recommendation regarding the composting of MSW from source-separated food waste was also a new idea.

34. In response to a Member's enquiry, the Chairman of the Waste Management Subcommittee said that "untreated" waste referred to raw mixed waste which had not gone through the process of sorting, recycling or treatment.

35. A Member said that the study report had faithfully reported what the delegation had seen and learnt during the visit and the recommendations

were rather comprehensive. Nonetheless, she was not comfortable with the words “necessary disposal capacities” and “supported” on the landfill extensions in paragraph 3(f) of the paper as it seemed to contradict paragraph 3(e) which stated that landfilling of MSW was not sustainable.

36. The Chairman of the Waste Management Subcommittee said that the recommended measures would complement what was laid down in the Policy Framework. Based on the experience of the Netherlands and Germany, the delegation recommended banning the disposal of “untreated” MSW at the landfills which would limit the use of landfills as a last resort for waste disposal. The delegation considered that the proposed landfill ban would fasttrack the introduction of various measures under the Policy Framework and pave the way for the implementation as hurdles were expected along the way. The introduction of a landfill ban did not mean that landfill extensions would have to be stopped as landfilling was still necessary for “treated” and unavoidable waste, such as residual waste from treatment facilities and sewage sludge. With the qualifying statement that “subject to meeting the waste reduction targets and adoption of the landfill ban” in paragraph 3(f), it would limit the use of landfills for providing the necessary disposal facilities for unavoidable waste. A Member agreed that landfills would still be needed even if a landfill ban were adopted, and there should be waste treatment facilities for the disposal of unavoidable waste.

37. A Member asked about the level of MSW that had been sorted in Hong Kong. Mr K K Kwok said that the recovery rate of MSW was 43% in 2005 as compared with 40% in 2004. The remaining waste had to go to the landfills. As he understood from the paper, the delegation recommended that the remaining waste would have to go through treating processes before disposal at the landfills. Moreover, efforts had to be made to achieve the waste reduction targets. It was on these conditions that landfill extensions would be supported.

38. A Member suggested that “introduced and implemented” in line five of paragraph 3(e) could be worded as “considered with a high priority” which would be less affirmative. He was doubtful whether it would be possible to achieve full sorting and treatment of MSW with the limited space in Hong Kong.

39. The Chairman said the delegation had a strong belief that the landfill ban implemented in Europe was necessary in Hong Kong which would not only fasttrack the various policy and legislative measures, but also put in place the necessary instruments and tools to achieve waste reduction and recycling.

40. A Member said that the major drive for introducing the landfill ban in Europe was for environmental reasons. The case in Hong Kong was much more urgent as the existing landfills would be exhausted in five to nine

years' time. There was urgency for Hong Kong to find other feasible alternative means to treat the waste, including the introduction of the proposed landfill ban and waste treatment technologies. Thus, the recommendation of landfill extensions under paragraph 3(f) would provide the Administration with flexibility to extend existing landfills to cope with the waste problem during the transitional period before other measures could be put in place.

41. A Member said that the purpose of the EU landfill ban was to ban the disposal of "untreated" biodegradable waste at the landfills. Landfills were still in operation in European countries for disposal of "treated" biodegradable and unavoidable waste. Treating included sorting by mechanical or biological devices or by thermal treatment technology to reduce the volume of waste. The proposed landfill ban was in line with other initiatives under the Policy Framework in the context of reducing the volume of waste and extending the life span of landfills. Regarding construction and demolition (C&D) materials, he suggested that a ban on disposal of unsorted C&D waste at the landfills should be considered; otherwise, the efforts made to reduce MSW would be offset by an increasing amount of C&D waste disposed of at the landfills.

42. Mr K K Kwok said that he would read the recommendations as a package and the proposed landfill ban as well as other measures as part and parcel of the package. The Chairman agreed that the proposed landfill ban could not be an isolated measure and it had to work with other initiatives under the Policy Framework to achieve the targets.

43. A Member supported the recommendations of injecting more resources into environmental education and reviewing the waste separation and collection system. As for the proposed landfill ban, he was in principle in favour of the recommendation but considered that a plan would be required to achieve the vision. Another Member shared the Member's views and considered that the necessary means would be required to achieve the goal. Moreover, consideration had to be given to the impacts of MSW charging in Hong Kong and Europe, having regard to the relatively high charging rate in Europe.

44. A Member said that the proposed landfill ban was not a new idea as the Policy Framework referred to landfill disposal bans on certain end-of-life products under the Product Responsibility Schemes. The landfill ban recommended by the delegation was a more generic ban on all "untreated" MSW which complemented the original proposal. The delegation observed that the landfill ban in Germany had been an important political decision made ten years ago without details. With the target set and commitment made, all relevant parties worked towards the target and it proved to be achievable. He drew an analogy to the emission reduction targets set by the Hong Kong and Guangdong authorities in 2002. By setting the 2010 targets, all parties were trying their best to achieve them. The Chairman agreed that commitment and

determination were crucial in introducing the landfill ban within a timeframe so that efforts could focus on achieving the target.

45. A Member said that during the study visit, she was very impressed by the effectiveness of the landfill ban and MSW charging as well as the mild resistance from local residents in view of their environmental awareness. She considered that the MSW charging scheme was a financial measure while the landfill ban was a legislative measure which sent a strong message to the community on the seriousness of the problem, triggering behavioural changes and indirectly enhancing the development of the recycling industry. It was time for the Administration to send out a strong message to the community. Another Member said that the proposed landfill ban would be a practicable means to reduce the volume of waste going to the landfills but whether it could induce behaviour changes had yet to be proven in the long run.

46. Mr Raymond Fan said that the Council had discussed and supported the initiatives under the Policy Framework before the study visit. One of the missions of the visit was to learn from overseas experience and technologies on MSW management and treatment and consider their application to Hong Kong. During the visit, the delegation was very impressed by the effectiveness of the EU landfill ban. As he understood from the delegates, they hoped that the proposed landfill ban would work as a catalyst to fasttrack the various policy and legislative measures in order to ensure that the targets could be achieved within the timeframe. It would be something to add onto the ten major initiatives under the Policy Framework.

47. The Chairman informed Members that some delegation members had met representatives of the green groups on May 13 for an informal dialogue to share their experience and exchange views on the study visit. It was a common understanding during the discussion that landfilling would be unavoidable and the key was to reduce the volume of waste going to the landfills. Regarding a Member's concern about the wording in paragraph 3(f), he suggested and Members agreed that the word "are supported" in the last line should be changed to "can be supported". Another Member said that landfill extensions would be for the disposal of "treated" MSW but not for coping with the demand of "untreated" MSW.

48. Mr Raymond Fan explained that the proposal of extending the three existing landfills was part of the Policy Framework and the scale of the extensions was being examined. Some of the extensions would be inevitable before the introduction of the landfill ban because the landfill space was running out, for example, the South-East New Territories Landfill would be exhausted in five years' time. Before the necessary treatment facilities could be put in place, the current proposal of landfill extensions would be needed for disposal of "untreated" waste. It would be important to clarify that Members did not oppose the current proposal of landfill extensions for extra space to

meet the demand.

49. A Member considered that this would involve two stages. As an interim measure before the adoption of the landfill ban on "untreated" MSW, landfill extensions would be necessary because the existing landfill capacity was running out. Once the landfill ban was adopted and the necessary treatment facilities in place, landfill extensions could be supported, subject to meeting the waste reduction targets and disposal of "treated" waste at the landfills, to provide the necessary disposal capacity for unavoidable waste.

50. A Member asked about the rationale behind the recommendation in paragraph 3(g) regarding the Mechanical Biological Treatment (MBT) method for waste treatment. The Chairman of the Waste Management Subcommittee said that the delegation observed that the MBT was used as a trade-off in Germany to fulfill the requirement of "treated" biodegradable waste and as a more socially acceptable means of treatment when compared with incineration. As the source of waste was unsorted mixed domestic waste, the performance of the plant was not very satisfactory and about 40% to 50% of the waste would still need to be disposed of at the landfills. MBT produced Refuse Derived Fuel (RDF) but the RDF still had to be incinerated and it could not survive without incinerators.

51. A Member said that the other reasons limiting the application of MBT to Hong Kong were the demand for large land space (about 25 hectares to handle 200,000 tonnes of MSW per year) and the relatively long time of dry fermentation (about six weeks) as illustrated by the MBT plant in Germany. Another Member added that they observed that MBT was regarded as the most economic method for treating the waste before they went to the landfills and there was a landfill site available near the MBT plant.

52. The Chairman concluded that the Council supported the recommendations of the delegation and had the following views –

- (a) the commitment of more resources for environmental education and capacity building as well as a dedicated road map on waste reduction education would be very important to complementing the initiatives under the Policy Framework;
- (b) the recommendation of banning the disposal of "untreated" MSW at the landfills should be introduced and implemented with a high priority as a catalyst to fasttrack the various policy and legislative measures on waste reduction and recycling contained in the Policy Framework; and
- (c) landfilling would still be unavoidable as the final repository of unavoidable and inert waste. As an interim measure before the adoption of the landfill ban on "untreated" MSW, landfill

extensions would be necessary because the existing landfill capacity was running out. Once the landfill ban was adopted and the necessary treatment facilities in place, landfill extensions could be supported, subject to meeting the waste reduction targets and disposal of "treated" waste at the landfills, to provide the necessary disposal capacity for unavoidable waste (such as residual waste from treatment facilities, sewage sludge and sorted C&D waste).

53. The Chairman informed Members that the delegation would hold a meet-the-media session after the meeting to share their experience learnt and knowledge acquired during the visit. Members who had not joined the visit were welcome to join the session.

Agenda Item 5 : Any Other Business

Tentative Items for Discussion at the Next Meeting

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

Agenda Item 6 : Date of Next Meeting

55. The next meeting was scheduled for 12 June 2006.

(Post-meeting note: The meeting scheduled for 12 June 2006 was cancelled.)

ACE Secretariat
May 2006