

**Confirmed Minutes of the 133<sup>rd</sup> Meeting of  
the Advisory Council on the Environment  
held on 10 April 2006 at 2:30 pm**

**Present:**

Prof LAM Kin-che, J.P. (Chairman)  
Mr James GRAHAM  
Prof HO Kin-chung, B.B.S.  
Prof Paul LAM  
Ms Goretti LAU  
Mr Peter Y C LEE  
Dr NG Cho-nam, B.B.S.  
Prof POON Chi-sun  
Mr Markus SHAW  
Ms Iris TAM, J.P.  
Mr TSANG Kam-lam  
Mr Esmond LEE (Secretary)

**Absent with Apologies:**

Prof Howard HUANG  
Mrs Mei NG, B.B.S.  
Prof WONG Tze-wai  
Prof WONG Yuk-shan, B.B.S., J.P.

**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 Raymond FAN	Deputy Director of Environmental Protection (2), EPD
Mr TANG Kin-fai	Assistant Director (Waste Management Policy), EPD

Mr TE Chi-wang

Senior Administrative Officer (Waste Management Policy Division), EPD

**In Attendance for Agenda Item 4 :**

Mr Raymond FAN

Deputy Director of Environmental Protection (2), EPD

Mr TANG Kin-fai

Assistant Director (Waste Management Policy), EPD

Dr Ellen CHAN

Assistant Director (Environmental Infrastructure), EPD

Mr S C YIP

Head of Civil Engineering Office, Civil Engineering and Development Department (CEDD)

Mr K H IP

Chief Engineer/Fill Management, CEDD

**In Attendance for Agenda Item 5 :**

Mrs Shirley LEE

Principal Environmental Protection Officer (Metro Assessment), EPD

Mr Raymond LEUNG

Principal Environmental Protection Officer (Air Science), EPD

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Action

**Agenda Item 1 : Confirmation of the Draft Minutes of the 132<sup>nd</sup> Meeting held on 13 March 2006**

The draft minutes were confirmed without amendment.

**Agenda Item 2 : Matters Arising from the Minutes of the 132<sup>nd</sup> Meeting held on 13 March 2006**

Para. 78 Policy address – environmental protection scrutiny

2. The Chairman informed Members that the Administration was preparing a paper on the details of the environmental protection scrutiny mentioned in the 2005-06 Policy Address.

Para. 79 Tung Chung to Ngong Ping Cable Car Project

3. The Chairman informed Members that the Environmental Protection Department (EPD) was working closely with the project proponent and other government departments in investigating the reported problems on

the environmental management of the Tung Chung to Ngong Ping Cable Car Project. The department was also asked to brief the Legislative Council Panel on Environmental Affairs on 24 April 2006. The Council would be kept informed of the details.

(Post-meeting note: An information note reporting the latest development of the issue had been sent to Members.)

**Agenda Item 3 : Proposed Legislation for Implementation of Producer Responsibility Schemes**  
***(ACE Paper 6/2006)***

4. Mr Tang Kin-fai briefed Members on the proposed legislation for implementing producer responsibility schemes (PRs) in Hong Kong. He highlighted that PRs were a key policy tool for waste reduction, recovery and recycling in the “Policy Framework for the Management of Municipal Solid Waste (2005-2014)” (Policy Framework), and their implementation could take the forms of product take-back, deposit-refund system, advanced recycling fee, and product tax or levy. It was proposed that an umbrella legislative approach should be adopted, where the Administration would introduce the enabling legislation first and individual PRs in the form of subsidiary legislation subsequently.

5. The Chairman of the Waste Management Subcommittee informed Members that the Waste Management Subcommittee deliberated details of the proposal on 6 April 2006. All Members supported the proposed legislation which aimed to reduce and recycle municipal solid waste (MSW). In particular, Members supported the umbrella legislative approach because individual PRs were similar in nature, the legislative timeframe would be shorter and the approach would enable the public to better perceive the concept and their responsibility. The Subcommittee also urged the Administration to introduce the legislation and implement the schemes as soon as possible. He highlighted the following major observations of the Subcommittee –

- (a) Paragraph 4(d) of the paper should cover all packaging materials instead of just expanded polystyrene packaging materials; and
- (b) Part of the revenue generated from the imposition of a fee, tax or levy on specific products under paragraph 6(c) of the paper should be used to fund public education programmes to enhance environmental awareness.

6. A Member suggested that beverage containers should be included as one of the items for the imposition of a fee, tax or levy mentioned in paragraph 6(c) of the paper. The relevant producers should shoulder a higher level of responsibility as beverage containers constituted quite a large proportion of MSW. Mr Raymond Fan explained that the list of products shown in paragraph 6 was examples for illustration purposes. By adopting the umbrella legislative approach, the enabling legislation would allow us to introduce detailed regulatory requirements for individual PRSs. He assured Members that the proposed regulatory requirements for individual PRSs would be submitted to the Waste Management Subcommittee and the Council for consideration. The planned timing for introducing the PRS for beverage containers was 2008. The Member's suggestion would be taken into account when introducing the relevant PRS. The Member worried that the idea might get lost later on when the details were being worked out and suggested adding beverage containers to paragraph 6(c) at this stage. He considered that beverage containers was a major source of MSW in terms of volume and the imposition of a deposit and refund system mentioned in paragraph 6(b) was inadequate to achieve the target of waste reduction.

7. Mr K K Kwok said that the Administration would introduce a piece of legislation which would empower the Chief Executive in Council to introduce regulations for individual PRSs. It was not necessary to list out the products to be covered by the regulatory requirements in the main body of the legislation at this stage. In devising a particular PRS, the Administration would incorporate the most appropriate regulatory requirements, a single one or a combination of them. He assured the Member that his suggestion would be taken into account when drawing up the details of the PRS for beverage containers.

8. A Member considered that the embracing nature of the proposed legislation was very important to ensure that different producers and products would be regulated on a fair and equal basis. As there was an element of selection in the implementation, it would be important to exercise care in selecting products. It was crucial to ensure that sufficient flexibility would be built in the legislation to allow changes to the list of producers and products under control to cope with changes over time. From a market perspective, the legislation should apply to all equally. For example, the regulatory requirements on plastic shopping bags should apply to both supermarket chains as well as individual vendors and wet markets. If there was any exemption, it should be granted very carefully to avoid an imbalanced market situation.

9. A Member considered it important to kick-start the PRSs and implement the schemes in a progressive manner. In the case of plastic shopping bags, focusing on the large supermarket chains would enable the scheme to start as early as possible and it would be too political and complicated to involve individual vendors and wet markets at the initial stage.

Another Member considered that it was essential to maintain a level playing field in the business community. There were many other sources of plastic shopping bags, other than the large supermarket chains. He urged the Government to engage the stakeholders, including individual vendors and wet markets, at an early stage.

10. A Member said that people might use paper shopping bags as substitutes when they were discouraged to use plastic shopping bags. This would lead to increased destruction of trees which would also cause serious environmental problems. Another Member considered that the issue of using plastic or paper shopping bags should be viewed from the perspective of their life cycles. Should thermal treatment be introduced in Hong Kong enabling the treatment of plastic bags, it would be necessary to review the cost of life cycle including the life span, manufacturing and environmental cost of plastic bags against that of paper bags. The Chairman of the Waste Management Subcommittee considered that the prime objective of PRSs was to reduce waste and it would be more important to encourage the public to bring their own bags. In this regard, the Waste Management Subcommittee had urged the Government to allocate funding for public education programmes.

11. A Member welcomed the proposed legislation and hoped that it would be implemented as early as possible. He considered that the primary objective of PRSs was to induce lifestyle and behavioural changes. More financial resources should be allocated to in-depth public education programmes to ensure that PRSs could be implemented smoothly. Another Member shared her views that more resources and efforts should be put in public education.

12. A Member commented that the definition of “producer” set out in paragraph 2 of the paper covered a very wide spectrum of stakeholders. He considered it necessary to have a clearer definition in the subsidiary legislation for individual PRSs to focus on more specific groups of producers to ensure that the objective of reducing waste could be achieved effectively. He also highlighted the importance of on-going monitoring and reviewing of PRSs after implementation. There should be auditing on the effectiveness of individual schemes in reducing waste and regular reviews on the lists of producers and products under control. He considered that the Government should set up a special task force to monitor the future development and ensure successful implementation of PRSs.

13. The Chairman enquired about the progress on the restriction on free distribution of plastic shopping bags. Mr Raymond Fan said the Government was introducing a series of voluntary and promotional programmes to engage stakeholders and the public before the implementation of the mandatory PRS on plastic shopping bags. They were actively engaging the stakeholders, such as supermarket chains, retail chains and convenience stores, to enter into voluntary agreements on reducing the

distribution of plastic shopping bags. By late March, three supermarket chains including Wellcome, PARKnSHOP and China Resources Vanguard (Hong Kong) Co. Ltd. had signed the voluntary agreements. The three supermarket chains pledged to reduce plastic bag distribution by 15%, or about 90 million plastic shopping bags in total in a year.

14. Mr Raymond Fan said that the Government was working towards the target of introducing the Product Eco-responsibility Bill into the Legislative Council this year and implementing various PRSs in accordance with the timetable laid down in the Policy Framework. The planned timing for introducing the PRS for plastic shopping bags was 2007.

15. The Chairman summarized Members' comments as follows –

- (a) the Council fully supported the proposed legislation for implementing mandatory PRSs and agreed that PRSs were a key policy tool for waste reduction, recovery and recycling. The Council hoped that PRSs could be implemented as soon as possible as Hong Kong was lagging behind in this aspect;
- (b) the Council was supportive of adopting the umbrella legislative approach for introducing the proposed legislation as all PRSs had the same objectives and shared common core elements. The enabling legislation would cover the basic spirit and principles of PRSs while detailed regulatory requirements for a particular PRS could be introduced through subsidiary legislation;
- (c) the Council highlighted the importance of reviewing the PRSs with regard to the lists of producers and products to be put under control by the proposed legislation;
- (d) the Council considered that the Government should engage the stakeholders at an early stage so as to gain their support and encourage them to change their operations and facilitate customers' behavioural changes; and
- (e) the Council urged the Government to step up environmental education given that the primary objective of the proposed legislation was to induce behavioural changes and achieve waste reduction.

**Agenda Item 4 : Progress Report on the Management of Construction and Demolition Materials**  
***(ACE Paper 7/2006)***

16. The Chairman informed Members that the Council discussed the subject of management of construction and demolition (C&D) materials in 2001 and supported the strategy proposed to tackle the problem. The progress of implementing the measures was last reported to the Council in 2003.

17. Mr S C Yip briefed Members on the latest progress of measures taken to manage C&D materials. He highlighted that the State Oceanic Administration in the Mainland designated a trial reclamation site in Guang Hoi Wan of Taishan to receive public fill from Hong Kong. A tendering exercise was being arranged for implementing the delivery scheme.

18. Dr Ellen Chan informed Members that the Construction Waste Disposal Charging Scheme came into operation on 1 December 2005 and the levy of the charges started on 20 January 2006. Though there was some resistance from waste haulers just before the Lunar New Year after imposing the charges, the problem was resolved after a meeting between the Government and representatives of the haulers. A consensus was reached on how to fine-tune some operational arrangements of the charging scheme. The time of queuing for the transactions was reduced and no major complaints had been received since then. The haulers had been getting used to the new system. Continuous dialogue with representatives of the haulers association was going on.

19. The Chairman said that he was pleased to note the positive progress of the measures taken to handle C&D materials. However, he noted that the generation of public fill had exceeded demand in recent years and the capacity of the temporary fill banks was very limited. Mr S C Yip said that the remaining capacity of the two temporary fill banks at Tseung Kwan O and Tuen Mun was expected to be exhausted by late 2007. With the implementation of the charging scheme and delivery scheme for reusing surplus public fill in the Mainland, the pressure would be much alleviated and the problem was being resolved.

20. Mr K K Kwok said that the long-term plan was to run down the stockpiled materials in the temporary fill banks and release the land for other possible uses. Upon implementation of the delivery scheme, all surplus public fill delivered to the fill banks or barging points would be directly loaded onto barges for delivery to the reclamation sites.

21. In reply to a Member's enquiry about the volume of C&D materials stockpiled and timelines involved, Mr S C Yip said that the amount of C&D materials stockpiled was about 8 million cubic metres in terms of

volume and 16 million tonnes in terms of weight. It was anticipated that the temporary fill banks would be cleared by 2009. As to more long-term planning, two permanent C&D materials handling facilities (each comprising a public fill barging point, a construction waste sorting facility and an inert hard C&D materials recycling facility) would be developed at Tseung Kwan O and Tuen Mun. The second phase of the delivery scheme would be arranged before the saturation of the temporary fill banks by end 2007.

22. In response to a Member's enquiry about the amount of reduced construction waste upon implementation of the charging scheme, Dr Ellen Chan said that the amount of construction waste disposed of at the landfills had been reduced by about 30% and the overall reduction was about 10% when public fill banks and sorting facilities were taken into account. Since the charges had been introduced for only about two months including the Lunar New Year holiday, more time and data would be required to assess the effectiveness of the charging scheme.

23. The Chairman enquired about the impact of the charging scheme on fly-tipping of C&D materials. A Member said that there had been recent reported cases of illegal dumping near the Kam Tin wetland which might be due to the implementation of the charging scheme. Dr Ellen Chan said that the number of complaints had slightly increased and most of them were small-scale dumping along the roadside and the department was closely monitoring the situation. Mr Raymond Fan agreed with Dr Chan that it would be too early to assess the effectiveness of the charging scheme. He said that the Administration had undertaken to review on the charging scheme six months after its implementation. The initial positive results would be an encouraging sign for implementing the MSW charging scheme.

24. A Member learnt from the Town Planning Board that there was an increasing number of applications for landfilling activities. He considered that it was necessary to let the Board members be aware of the environmental implications of approving landfilling activities, such as encouraging dumping of construction waste on agricultural sites and fish ponds. Another Member agreed and considered that a more official channel would be required to convey the message clearly and emphasize the close relationship between planning control and impact of the charging scheme.

25. Mr P Y Tam said that the statutory planning system was mainly geared towards the control of land use development instead of fly-tipping activities. In general, landfilling for site formation purposes was considered as ancillary to a development if the development was permitted in terms of the Outline Zoning Plan or had obtained planning permission where required. Nevertheless, in certain areas such as environmentally sensitive and flood-prone areas, landfilling per se required planning permission. To apply for planning permission for landfilling, amongst other considerations, normally the applicant had to convince the Town Planning Board with



environmental and/or drainage impact assessments and Planning Department would consult concerned departments such as EPD, Agriculture, Fisheries and Conservation Department and Drainage Services Department for their expert comments. Upon granting of approval, conditions might be attached to require the applicant to undertake certain mitigation measures as appropriate to mitigate the possible environmental and drainage impacts. Haphazard dumpings were usually difficult to control due to practical difficulties in obtaining sufficient evidence on the suspected offenders and the lack of resources to patrol the vast rural areas full time. The most effective means of control of illegal dumping and landfilling should be through control at source.

26. A Member enquired about the level of penalty for fly-tipping and the number of prosecution cases since the implementation of the charging scheme. Dr Ellen Chan said that the level of penalty remained at a fine of \$200,000 and six months' imprisonment for the first offence. Since January 2006, about 800 inspection visits including those to black spots had been conducted and two prosecution cases initiated. The Member considered it necessary to communicate with the Judiciary so that they understood more about the seriousness of fly-tipping offences as they were linked to macro environmental issues of landfill and waste management policies. Imposing heavy penalties in convicted cases could send a clear message to the community on the seriousness of the offences. Dr Chan said that the department had held briefing sessions for the Judiciary from time to time on various pollution matters including the charging scheme. They had also offered to arrange site visits to the landfills before implementing the charging scheme. They would continue to liaise with the Judiciary closely on the subject and related prosecution cases.

27. A Member agreed with Mr P Y Tam that control at source was the most effective means of waste reduction. She suggested the Administration liaise with developers of new residential blocks to provide new home buyers with options for fittings, such as colour, style and price range for fittings in bathrooms and kitchens, so that the buyers need not throw away the new fittings which did not suit their tastes or needs.

28. A Member said that cases of throwing away the new fittings had dramatically been reduced since the economy became worse. Moreover, many large developers had introduced a shell type scheme for new apartments with choices of fittings for buyers. Nonetheless, the range of choices could not be too wide based on economic considerations and thus could not entertain the needs of all buyers. While there had been some improvement in the phenomenon in the past few years, it was necessary to watch out closely as the economy started to pick up gradually. Another Member considered that the charging scheme could, to a certain extent, help reduce such kind of wasteful actions.

29. A Member asked about the estimated revenue generated from the

charging scheme and the future plan on adjusting the level of charges. Dr Ellen Chan explained that it would be difficult to estimate the amount of revenue at this stage as over 80% of the applications submitted during the past period were exemption accounts. In reviewing the charging scheme, a more realistic estimation would be worked out. Mr K K Kwok further explained that construction work contracts awarded or tenders of which closed before 1 December 2005, including both government and private sector projects, were eligible for exemption from charges. The number of projects subject to the charges would gradually increase when the number of exemption accounts ran down. The levels of charges were set and would be reviewed in line with the Government's principle of full cost recovery.

30. In reply to a Member's enquiry about the details of the delivery scheme of transporting surplus public fill to the Mainland, Mr S C Yip said that if the cost of transporting the public fill to the Mainland was lower than the existing level of charge of \$27 per tonne under the charging scheme, the Government need not subsidize the transportation cost. The delivery scheme would be a complementary arrangement for both parties as the surplus public fill in Hong Kong could be gainfully deployed in the Mainland and the land now used as temporary fill banks could be released for other uses. To ensure a fair tendering exercise, bids were not limited to local contractors. Private companies wishing to transport C&D materials to the Mainland or other areas required permits under relevant ordinances. On the possibility of including MSW such as glass and plastic as public fill for reclamation, Mr Yip explained that public fill was sorted from C&D materials and MSW was not used as a source of public fill for reclamation purposes. While residential development projects might have slowed down in recent years, the amount of public fill generated was still at a constant level due to C&D materials generated from civil engineering works such as road and tunnel works. The Member suggested more barging points be developed to cater for the increasing demand of public fill in the Mainland especially in the western Pearl River Delta area. Mr Yip said that a permanent barging point would be developed at Chai Wan.

31. A Member enquired whether there was liaison with the Macau Government for reusing the surplus public fill from Hong Kong as Macau was planning a number of reclamation projects. Mr S C Yip said that the Government had liaised with the Macau Government a few years ago and no agreement had been reached. As the economy of Macau was picking up with an increasing demand for reclamation materials, it would be another good opportunity for the Government to revisit the issue.

32. The Chairman noted that recycled aggregates produced from the pilot C&D recycling plant had been used in government projects. He enquired whether there would be further scope to promote and even mandate the use of recycled aggregates in government projects. Mr S C Yip said that the Government had taken the lead to promulgate a set of specification for using recycled aggregates. In contracts of government projects, contractors

were asked to use recycled aggregates wherever possible. As the recycled rock fills were provided to the contractors of government projects free of charge, the Administration had also to pay attention to the market situation of rock fills produced by quarry operators.

33. A Member said that most of the pedestrian surface was paved with paving blocks which were not so durable and required a large amount of energy during the production process. He asked why natural rock pieces which were much more durable were not used for paving. Mr S C Yip explained that most of the paving blocks were made of aggregates which were considered more environmental friendly while the use of natural rocks would have serious environmental impacts in the course of mining and related activities.

34. A Member said that he was pleased to note the decline in C&D waste disposed of at the landfills. To extend the lifespan of the landfills, he suggested that a landfill ban on untreated materials should be introduced by making reference to the German example. Otherwise, the efforts made to reduce MSW would be offset by an increasing amount of C&D waste disposed of at the landfills.

35. The Chairman summarized Members' comments as follows –

- (a) the management of C&D materials was an issue that the Council had been very concerned with over the years as the amount of C&D materials had nearly doubled over the past decade and the anticipated lifespan of the landfills was very short;
- (b) the Council was pleased to note the initial results of reduced C&D materials disposed of upon the introduction of the Construction Waste Disposal Charging Scheme in December 2005 with charges started to be levied in January 2006;
- (c) the Council was encouraged to note that a trial reclamation site in the Mainland was identified to receive public fill from Hong Kong. The Council considered this a win-win situation for both parties and hoped that the scheme could be implemented as early as possible and new outlets and opportunities for reusing surplus public fill could be further explored;
- (d) the Council considered that there was a need to step up efforts in avoiding and minimizing C&D materials at source as well as in recycling C&D materials. The scheme of requiring government contractors to prepare and implement waste management plans should be vigorously enforced and the Government should take the lead to use more recycled C&D materials, in particular recycled aggregates; and

- (e) as a medium to long term objective, the Council hoped that only treated materials could be accepted for disposal at landfills to ensure that the landfills were the final repository of unavoidable wastes.

### **Agenda Item 5 : Any Other Business**

#### Visit to the Netherlands and Germany

36. The Chairman informed Members that the delegation's visit to the Netherlands and Germany in March had been very fruitful and rewarding. Apart from visiting waste treatment plants and facilities (including incineration, gasification, biological treatment and recycling plants), the delegation had the opportunity of exchanging views with high level officials of relevant Ministries in the Netherlands and Germany and representatives of the Federation of the German Waste Management Industry. The report of the visit was being prepared and the Waste Management Subcommittee would take necessary follow-up actions and propose the way forward.

#### The Environmental Impact Assessment Report on Central Reclamation III

37. The Chairman said that a Member had sent an email to all Members before the meeting suggesting the Council consider revisiting the Environmental Impact Assessment (EIA) report on Central Reclamation III (CRIII) on the basis that the modelling did not seem to take many real-world simulations like the "street canyon effect" into consideration in its assessment of air quality impact and suggested the Council invite experts in this field to comment on the EIA.

38. The Chairman pointed out that the proposal of an office type development on the Tamar site was not a designated project under the EIA Ordinance. The EIA report on CRIII had taken into account the existing and planned developments including the Central Government Complex on the Tamar site. Putting aside the procedural issue, he considered that the crux of the matter was whether there would be a "street canyon effect" at CRIII, including the proposed Tamar development, and whether the air quality assessment model in the EIA was an appropriate assessment methodology.

39. The Member clarified that his concern was not so much on the Tamar site. During his involvement in the CRIII issue, he came across three experts in the field who criticized the model on air quality assessment used in the EIA on CRIII. One of the criticisms was that the model assumed that the entire site would be flat instead of having building developments. He

wondered whether it would be useful for the Council to invite these experts for advice and comments. He considered that the endorsement of the EIA report by the Council was used by the Government to justify that the air quality impact would not be significant. If the new information showed that the air quality impact would be much worse than the anticipated level in the EIA report, there would be a ground for the Council to review the case.

40. A Member said that the “street canyon effect” would only exist when there was a street canyon formed by panels of buildings like screens on two sides of the road, such as those along Nathan Road and Hennessy Road. The phenomenon was formed by a topography which trapped pollutants from being dispersed from pollution sources such as vehicular emissions. He did not agree that the reclamation area of CRIII including the Tamar site would create the “street canyon effect”. First, the proposed Central and Wanchai By-pass would be a tunnel road. Second, the site was next to the seafront with large open space. There would not be major developments on the reclamation area and buildings around the Tamar site were individual blocks not close to each other. The People’s Liberation Army Central Barracks and Admiralty Centre were standalone buildings not very close to the Tamar site and there was the Harcourt Garden on the other side of the site. A potential street canyon could not be formed under such conditions. Moreover, a potential “street canyon effect”, if any, could be mitigated by building design such as by providing an open space at the lower level of the buildings to improve air ventilation and minimize air quality impact.

41. The Member considered that no canyon would be perfect and there would be gaps between individual buildings. Tall buildings would to a certain extent create a canyon effect. A Member disagreed and pointed out that individual buildings might not trap the pollutants. Instead, depending on the topography, buildings might create turbulence which would help disperse the pollutants. He stressed that he did not think the “street canyon effect” would be created at CRIII and there was no ground for the Council to revisit the EIA report.

42. Mr Raymond Leung agreed with the other Member that the “street canyon effect” was formed by long lines of uniform buildings, unbroken or with narrow space in between, on both sides of a road. They did not expect such an effect at CRIII. As for the Tamar site, the proposed development would consist of a few low-rise blocks and the only high-rise building would be the Central Government Office. Based on the building disposition and layout, a street canyon would not be formed.

43. In reply to the Member’s enquiry, Mr Raymond Leung confirmed that the study area was assumed as flat for the purpose of air quality

modelling. This was a very conservative assumption under which the pollutants would affect the sensitive receivers directly without going through any obstruction. If buildings were assumed on the study area, they would help create turbulence and facilitate the dispersion of pollutants. He stressed that the CALINE 4 model (California Line Source Dispersion Model Version 4) used in the EIA adopted a very conservative approach for modelling the air quality impact. In fact, the model could assess the “street canyon effect” with some adjustments. The approach adopted in the EIA was even more conservative than assuming a street canyon.

44. A Member considered that it would be premature to consider revisiting the EIA report as the role of the Council was to provide its advice to the Director of Environmental Protection (DEP) and the decision rested with DEP. The Chairman shared his views and considered that procedural considerations would be involved if the EIA report were to be revisited.

45. The Member clarified that he was not proposing that the Council formally or procedurally review its endorsement on the EIA report at this stage. However, he would like to have a discussion among the relevant experts and EPD officials in order to understand the bottom of the matter as it was a very important issue in view of the very poor air quality in Central. Another Member considered that while the proposed exchange of views would be educational, it would be hard for the Council to make a judgement on which model would be more reliable. Different models adopted different assumptions which would lead to different interpretations. The Member disagreed and considered that the Council should listen to both sides of the arguments and make judgement.

46. A Member considered that it would be important to note that the model used in the EIA had taken into account the worst-case scenario. The Chairman shared his views and considered that it was essential that the model had adopted conservative assumptions to ensure a prudent approach.

47. In reply to the Chairman’s question, Mrs Shirley Lee said that the use of CALINE 4 model was not specifically stipulated in the relevant Annexes of the Technical Memorandum under the EIA Ordinance. However, it was one of the assessment methodologies promulgated in the “Guidelines on Choice of Models and Model Parameters” for air quality assessment available at the EPD website. She also pointed out that the model had been adopted for assessing air quality impact in nearly all projects affected by road traffic emissions and were approved under the EIA Ordinance since its implementation. Mr Raymond Leung added that the model was widely used locally and internationally as a prudent approach for planning purposes. It was a standard screening model built in with highly conservative parameters

for planning assessment. This methodology tended to overestimate the possible air quality impact for identifying all possible unfavourable scenarios which, if impacts were exceeding acceptable standards, would then be subject to checking by more refined techniques in order to verify whether the unfavourable scenarios would probably exist.

48. A Member queried whether it would be appropriate for the Council to revisit the EIA report as it had gone through the statutory public inspection and approval process. The experts should have raised their questions at that time. Mrs Shirley Lee informed Members that during the public inspection period of the EIA report on CRIII, no public comment on air quality was received by the department. The Member agreed that the Council should in general avoid revisiting endorsed EIA reports. However, as the air quality in Hong Kong was much poorer than a few years ago when the EIA report was endorsed and there was serious public concern on the issue, he considered it worthwhile to examine different sides of the arguments.

49. A Member wondered whether the issue was more concerned with air ventilation of new development projects rather than air pollution. If this was the case, she pointed out that the Planning Department was pursuing the second stage of a study for the establishment of an air ventilation assessment system and would try to establish benchmarks for air ventilation assessment. At this stage, there was no recognized standard for assessing air ventilation.

50. Based on Members' discussion, the Chairman concluded that –

- (a) there was not a sufficient ground for revisiting the EIA report on CRIII;
- (b) there was no sufficient justification to say that the project would create a “street canyon effect”;
- (c) the Council's role was to provide its advice on the EIA report to DEP and the decision rested with DEP. There was no procedural means for the Council to revisit the issue; and
- (d) the CALINE 4 model used in the EIA was a commonly and consistently used model locally and internationally for predicting vehicular emission impact. It was in line with other conservative models by building in conservative parameters and assumptions and taking into account the worst-case scenario.

51. The Member said that he would, outside the context of the Council, set up an informal meeting with relevant experts with a view to gaining a better understanding of different air quality assessment models.

Possible Development of a Refinery and Petrochemical Plant in Guangdong Province

52. A Member noted from the media the possible development of a new refinery and petrochemical plant in the Guangdong Province with Panyu as one of the potential sites. Members considered that such development would have a significant impact on the regional air quality and would like to receive more information about the proposed development.

Secretariat

Tentative Items for Discussion at the Next Meeting

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

**Agenda Item 6 : Date of Next Meeting**

54. The next meeting was scheduled for 15 May 2006.

ACE Secretariat  
April 2006