# Confirmed Minutes of the 94<sup>th</sup> Meeting of the Environmental Impact Assessment Subcommittee of the Advisory Council on the Environment held on 24 October 2005 at 5:15 pm

#### **Present:**

Dr NG Cho-nam, BBS (Chairman)
Prof HO Kin-chung, BBS (Deputy Chairman)
Prof LAM Kin-che, JP (Chairman, ACE & Non-EIASC Member)
Mr Peter Y C LEE
Prof POON Chi-sun
Mr TSANG Kam-lam
Ms Josephine CHEUNG (Secretary)

#### **Absent with Apology:**

Prof Paul LAM Mrs Mei NG, BBS

#### In Attendance:

Mr Elvis AU Assistant Director (Environmental Assessment),

Environmental Protection Department (EPD)

Miss Sarah NG Executive Officer (CBD), EPD

#### In Attendance for Agenda Item 4:

Mr Maurice YEUNG Acting Principal Environmental Protection Officer

(Assessment & Noise), EPD

Mr NG Ping-sum Senior Environmental Protection Officer

(Assessment & Noise)3, EPD

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# Agenda Item 1: Confirmation of Minutes of the 93<sup>rd</sup> Meeting held on 22 September 2005

The draft minutes were confirmed without amendment.

#### **Agenda Item 2: Matters Arising**

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

# Agenda Item 3: Environmental Impact Assessment Report on Drainage Improvement in Southern Lantau (ACE-EIA Paper 6/2005)

- 3. The Environmental Impact Assessment (EIA) report on Drainage Improvement in Southern Lantau had been circulated to Members before the meeting. The majority of Members agreed by circulation that the EIA report could be endorsed without condition and that a presentation by the project proponent was not necessary.
- 4. Having regard to the findings and the recommendations of the EIA report, the meeting endorsed Members' views and agreed to recommend the EIA report to the full Council for endorsement without condition. Members noted that no public comments on the EIA report were received up to the date of the Subcommittee meeting.

## Agenda Item 4: Guidance Note on Road Traffic Noise Impact Assessment

(*ACE-EIA Paper 7/2005*)

5. The Chairman briefed Members that the Environmental Protection Department (EPD) had issued more than ten guidance notes on various aspects to facilitate the work of stakeholders in the EIA process by consolidating the experience of the department and stakeholders and after consulting the EIA Subcommittee. These guidance notes were available on the web site of the Environmental Impact Assessment Ordinance (EIAO). The Guidance Note on Road Traffic Noise Impact Assessment aimed to facilitate the practitioners to prepare the road traffic impact assessment having regard to the circumstances and conditions in Hong Kong.

#### Presentation

6. <u>Mr Ng Ping-sum</u> briefed Members the purpose of the Guidance Note in the context of the Technical Memorandum under EIAO, the approach of traffic noise assessment, observations on traffic noise modeling and key points to note in the Guidance Note.

Traffic noise modeling

7. Upon Members' enquiry on the basis of methodology in noise assessment, Mr Maurice Yeung explained that the commonly accepted methodology for the assessment of road traffic noise in Hong Kong, as stated in the Technical Memorandum under EIAO, was based on the "Calculation of Road Traffic Noise (CRTN)" issued by the Department of Transport in the United Kingdom. Tests had been conducted to ensure the applicability of the methodologies to Hong Kong and some adjustments had been made to take into account the unique circumstances in Hong Kong, e.g. topographical characteristics and high-rise development of Hong Kong.

Characteristics of different materials for road surface and noise barriers

8. <u>A Member</u> asked whether the noise assessment would take into account characteristics of different materials for road surface and noise barriers. <u>Mr Ng Ping-sum</u> said that the corrections of predicted noise levels to account for different materials used for road surface and noise barriers had been taken into account in the CRTN and thus not included in the Guidance Note.

#### Noise barriers as mitigation measure

- 9. Upon two Member's enquiry on noise barriers, Mr Maurice Yeung explained that a guideline was jointly published by the EPD and the Highways Department to facilitate project proponents in considering noise barriers as noise mitigation measure and their visual impact. The guideline included information on the choice of barrier materials and construction with respect to various factors such as safety, fire and colour schemes. Under the EIAO, Planning Department would advise on the visual aspects of noise barriers. ACE Chairman suggested that project proponents should be required to spell out clearly in the EIA reports details of the proposed noise barriers such as design, configuration and colour scheme.
- 10. <u>ACE Chairman</u> noted in paragraph 4.7.10 of the Guidance Note that project proponents were required to differentiate sections of barriers proposed to protect existing noise sensitive receivers (NSRs) from those for protection of future NSRs. <u>Mr Maurice Yeung</u> explained that this was based on the guiding principles in implementing noise barriers set out by the Environment, Transport and Works Bureau in 2003. In conducting road traffic noise impact assessment, predictions of noise impact on future NSRs and assessment on the need for noise barriers were required. If the need for barriers was established, the project proponent had the flexibility to construct the foundation structure for future barriers first and then erect the

barriers when it was needed (usually before the occupation of the future NSRs). More detailed information of the barriers, such as timing and responsible party for constructing the barriers, had to be included in the "Implementation Schedule" of the EIA report.

#### Quality of traffic data

11. ACE Chairman was concerned about the quality and accuracy of the traffic data adopted for noise assessment. Mr Maurice Yeung explained that project proponents or their consultants were required to consult and demonstrate to the relevant authority, i.e. Transport Department (TD), on the accuracy of the traffic data for application to the noise assessment. Mr Elvis Au added that when irregularities were observed, EPD could require explanations and justifications directly from the project proponents or discuss with TD. Any major issues could be discussed or resolved in the meeting of the Environmental Study Management Group. In case of disagreement or unresolved issues between the two departments, the case would be drawn to the attention of the senior level for decision. To ensure accuracy of the traffic noise predictions, project proponents were required, as spelt out in the EIA study brief, to submit softcopies of their calculations and workings for verification and checking purposes. ACE Chairman suggested the authority conduct random checks on the traffic noise modeling data submitted by project proponents for quality assurance and project proponents should be required to spell out clearly in the EIA reports the assumptions in traffic data and modeling.

#### Presentation of data

- 12. <u>The Chairman</u> supported the rounding off of overall noise level results (in dB(A)) to whole numbers to avoid confusion and facilitate comparison and interpretation of data.
- 13. Upon ACE Chairman's enquiry, <u>Mr Maurice Yeung</u> said that project proponents were required to include sources of data quoted and relevant approving authorities in reporting noise assessment data in EIA reports.
- 14. Regarding paragraph 4.7.7 of the Guidance Note on cumulative noise impact, <u>a Member</u> suggested that it should be elaborated more clearly that the "overall noise level" referred to overall traffic noise level and the "cumulative noise impact" referred to additional overall traffic noise level on top of the existing traffic noise level before the road project commenced. He also suggested that the relationship between composition

of heavy vehicle, speed and noise impact in paragraph 6.2 should be elaborated more clearly.

15. <u>A Member</u> suggested that "landscape and visual impacts" should be added as one of the factors mentioned in paragraph 4.7.11 for consideration of mitigation measures.

#### Interpretation of data

- 16. Two Members were concerned about the interpretation of noise level results which only marginally exceeded the relevant noise criteria or standards and suggested factoring in a level of uncertainty. Mr Elvis Au explained that a margin error in prediction of about  $\pm 2$  d(B)A had been taken into account in deriving the traffic noise standards under the CRTN methodology. All project proponents were required to adopt the same methodologies under the CRTN and uncertainty factors were taken into account. Moreover, from the strategic point of view, a line had to be drawn for setting a standard as a trigger-off point for attention and action, and the practice of interpretation was in line with that adopted in the United Kingdom. A Member suggested the authority consider, for long-term planning, including more parameters on top of dB(A) in noise impact assessment especially in addressing the problem of boundary or marginal effect. The Chairman suggested the authority consider reviewing traffic noise standards in a broader perspective at the level of the full Council at a later stage.
- 17. The Chairman suggested the use of worst-case scenario in terms of traffic flow, including volume and composition, for prediction purpose similar to the approach adopted for air quality assessment. Mr Elvis Au said that project proponents were required to take into account the predicted maximum traffic flow within 15 years after completion of the modification which could be regarded as an approach similar to the worst-case scenario.
- 18. Upon ACE Chairman's enquiry, Mr Maurice Yeung said that the same set of traffic data was adopted as the basis for both road traffic noise impact assessment as well as air quality assessment. Both the assessment of noise and air quality impacts would take into account the predicted maximum traffic flow within 15 years after completion of the modification.

Identification of NSRs and assessment points

19. The Chairman worried that some project proponents might neglect the measurement at some assessment points by arguing that the sites were not occupied. Mr Maurice Yeung explained that EPD staff would conduct site inspections for identification and verification of NSRs and assessment points proposed by project proponents. Joint site inspections would be conducted when necessary.

Definition of designated projects and status of roads

20. <u>A Member</u> asked about the definition of the status of roads in the context of the EIA process. <u>Mr Ng Ping-sum</u> said that the scope of designated road projects or improvement works was specified in the schedules of EIAO and the change in status of roads would be publicly announced. For example, Schedule 1 of the EIAO specified "Expressway" to be an expressway within the meaning of section 122 of the Road Traffic Ordinance.

Future development of noise impact assessment

- 21. <u>ACE Chairman</u> noted the recent development of Harmonoise in Europe. <u>Mr Maurice Yeung</u> said that EPD was closely monitoring the development of Harmonoise, which was a standardized noise assessment methodology being developed in Europe. The department noted that a special working group had been set up by the European Union for developing Harmonoise for noise assessment for mapping and comparison of noise exposure between countries. The department would continue to monitor the development.
- 22. <u>ACE Chairman</u> suggested the authority devise a Guidance Note on rail noise impact assessment as rail transportation would be a favoured mode of transportation in the long run. <u>Mr Maurice Yeung</u> said that they were making efforts towards this direction. Nevertheless, they would have to discuss with the two operators on the prediction scheme before a Guidance Note could be drawn up.

#### Conclusion

- 23. <u>The Chairman</u> concluded that Members supported the issue of the Guidance Note which could facilitate the work of the practitioners and minimize disputes. Members also made the following recommendations and suggestions on the Guidance Note
  - (a) to elaborate more clearly that the "overall noise level" in paragraph 4.7.7 referred to overall traffic noise level and the

- "cumulative noise impact" referred to additional overall traffic noise level on top of the existing traffic noise level before the road project commenced;
- (b) to add "landscape and visual impacts" as one of the factors mentioned in paragraph 4.7.11;
- (c) to elaborate more clearly the relationship between composition of heavy vehicle, speed and noise impact in paragraph 6.2;
- (d) to require project proponents to spell out clearly in the EIA reports the assumptions in traffic data and modeling as well as details on the proposed noise barriers such as design, configuration and colour scheme;
- (e) to conduct random checks on the traffic noise modeling data submitted by project proponents for quality assurance;
- (f) to consider, for long-term planning, including more parameters on top of dB(A) in noise impact assessment especially in addressing the problem of boundary or marginal effect;
- (g) to consider reviewing traffic noise standards in a broader perspective at the level of the full Council at a later stage; and
- (h) to devise a Guidance Note on rail noise impact assessment as rail transportation would be a favoured mode of transportation in the long run.

### Agenda Item 5: Monthly Updates of Applications under Environmental Impact Assessment Ordinance

24. Members noted the updates.

#### **Agenda Item 6: Any Other Business**

# Tentative items for discussion at the 95<sup>th</sup> meeting

25. <u>The Chairman</u> informed Members that according to the tentative schedule provided by EPD, there were no EIA reports scheduled for the next meeting to be held on 21 November 2005. The Secretariat would liaise with EPD nearer the time and notify Members in due course.

#### Maintenance dredging works at Deep Bay

The Chairman informed Members that he received a mail 26. from the vice-chairman of the Hong Kong Bird Watching Society (HKBWS) in his capacity as a member of the Advisory Council on the Environment. The vice-chairman of HKBWS expressed concern that the proposed maintenance dredging work at Deep Bay would commence in November 2005. As Deep Bay was an ecologically important site for resident and migratory birds, the dredging work should be carried out during summer months instead of winter months to minimize the impact on birds. Members expressed concern as they recalled that project proponents should have been advised to avoid dredging works in the site during winter period. To understand more about the background and latest position of the dredging project, the Chairman suggested and Members agreed that the Secretariat would obtain more information from the project proponent, the Civil Engineering Development Department (CEDD), before considering the way forward. The Chairman would take necessary action and consult Members if necessary.

Secretariat

(Post-meeting note: CEDD advised that the proposed works were requested by the Drainage Services Department to remove the sediment at the lower downstream of three rivers near the Deep Bay area. The desilting works had to be carried out during the dry season to alleviate the possible flooding in the next wet season. The heavy rainstorms might endanger the desilting works in river downstream during rainstorm seasons. In view that the bird migratory period was between November to March, the department had commenced consultation with the concerned groups in May 2005 to explore the possibility to carry out the works in dry season. Meetings had been held with the concerned groups, including HKBWS, which supported the works but preferred the works to be carried out outside the bird migratory period. CEDD had submitted the revised desilting programme in November 2005 and would work closely with the concerned groups to determine the earliest workable commencement programme.)

#### Impact of lighting of the Shenzhen Western Corridor

27. The Chairman drew Members' attention to press reports that the Director of Highways indicated that the Shenzhen Western Corridor would become a landmark of Hou Hoi Wan. Lighting and decorations would be added on during festivals and special events. The HKBWS expressed concern about the impact of the lighting on birds. Members were concerned whether the proposed lighting scheme of the Corridor, including those for festivals and special events, would be within the levels proposed in

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the EIA report. To understand more about the issue, the Chairman suggested and Members agreed that the Secretariat would obtain more Secretariat information about the latest position of the lighting scheme from the Highways Department before considering the way forward. The Chairman would take necessary action and consult Members if necessary.

(Post-meeting note: The Highways Department advised that the design of the lighting scheme of the project was within the levels proposed in the EIA report. No flashing lighting would be provided. To minimize the impact and strike a good balance between social celebration and the ecological life, the deck side lighting would be restricted to be turned on only during Friday, Saturday, festivals and special events from 7:30 pm to 10:00 pm (about 320 hours per annum). The bridge lighting scheme and bird collision would be monitored for three years in accordance with the condition in the Environmental Permit.)

#### **Agenda Item 7: Date of Next Meeting**

28. The next meeting was scheduled for 21 November 2005.

(Post-meeting note: The meeting scheduled for 21 November 2005 was cancelled.)

**EIA Subcommittee Secretariat** November 2005