Confirmed Minutes of the 107th Meeting of the Environmental Impact Assessment Subcommittee held on 21 January 2009 at 11:30 am

Present:

Prof Paul LAM, JP (Chairman)
Mr TSANG Kam-lam (Deputy Chairman)
Prof Joseph LEE
Mr Michael LEE
Mr Simon WONG, JP
Dr YAU Wing-kwong
Ms Josephine CHEUNG (Secretary)

Absent with apologies:

Ms Teresa AU
Dr Dorothy CHAN, BBS
Ms Betty HO
Mr Edwin LAU
Dr MAN Chi-sum, JP

In Attendance:

Mr C C LAY	Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department
Mr C W TSE, JP	Assistant Director (Environmental Assessment), Environmental Protection Department (EPD)
Mr KWAN Chung-kit	Office Manager (CBD), EPD
Ms Loletta LAU	Executive Officer (CBD), EPD

In Attendance for Agenda Item 3:

Mrs Shirley LEE	Principal Environmental Protection Officer (Metro Assessment), EPD
Mr David COX	Senior Environmental Protection Officer (Metro Assessment)2, EPD
Mr P L KWAN, JP	Project Manager (Kowloon), Kowloon Development Office, Civil Engineering and Development Department (CEDD)
Mr C B MAK	Chief Engineer/Kowloon East, Kowloon Development Office, CEDD

Mr Walter LEUNG	Senior Engineer/District Monitoring Group on Housing Sites & Special Duties (Kowloon), Kowloon Development Office, CEDD
Mr Eric MA	Managing Director, Maunsell Consultants Asia Ltd. (MCAL)
Mr Igor HO	Associate, MCAL
Mr Freeman CHEUNG	Executive Director, ENSR Asia (HK) Ltd. (ENSR)
Mr Peter LEE	Associate, ENSR
Miss Amy CHEUNG	Principal Environmental Consultant, ENSR
Mr Steven WONG	Senior Environmental Consultant, ENSR

In Attendance for Agenda Item 4:

Mr H M WONG	Principal Environmental Protection Officer (Strategic Assessment), EPD
Mr Lawrence NGO	Senior Environmental Protection Officer (Strategic Assessment)2, EPD

In Attendance for Agenda Item 5:

Mr Sam WONG	Principal Environmental Protection Officer (Regional Assessment), EPD
Mr Stanley LAU	Senior Environmental Protection Officer (Regional Assessment)3, EPD

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Action

The Chairman welcomed Ms Teresa Au (could not attend the meeting), Prof Joseph Lee and Mr Michael Lee who had newly joined the Environmental Impact Assessment (EIA) Subcommittee.

Agenda Item 1 : Confirmation of the Draft Minutes of the 106th Meeting held on 17 November 2008

2. The Chairman informed Members that the draft minutes of the 106th meeting held on 17 November 2008 had been circulated to Members in December 2008. Members had confirmed the draft minutes by circulation.

Action

Agenda Item 2 : Matters Arising from the Minutes of the 106th Meeting held on 17 November 2008

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

Agenda Item 3 : EIA report on Kai Tak Development
(ACE-EIA Paper 1/2009)

Internal Discussion Session

4. The Chairman informed Members that agenda item 3 would be divided into the following four sessions –

(a) Internal Discussion Session
(b) Presentation Session
(c) Question-and-Answer Session
(d) Internal Discussion Session

The Presentation Session and Question-and-Answer Session would be opened to the public. Internal Discussion Sessions of agenda item 3 and all other sessions of the meeting would remain closed.

5. The Chairman informed Members that a Member had declared interest before the meeting. Her company was the planning consultant for the redevelopment of the Kowloon Godown located at Kai Hing Road, which fell within the Kai Tak Recommended Outline Development Plan (RODP). Her company was also the public engagement consultant for the Central Kowloon Route running through Ma Tau Kok to trunk road T2 in Kai Tak, which fell within the planning boundary of the Kai Tak RODP. To avoid possible conflict of interest, he agreed that the Member should abstain from the meeting.

6. The Chairman informed Members that the current EIA was a Schedule 3 designated project (DP) under the EIA Ordinance (EIAO), being greater than 20 ha of study area. The public inspection period of the EIA report was from 9 December 2008 to 7 January 2009. The Environmental Protection Department (EPD) received four sets of public comments. Separately, some Members had raised some questions and made some comments on the EIA report. The public

comments as well as the response from the project proponent to Members' questions and comments had been circulated to Members for reference before the meeting.

7. Members agreed that the discussion should focus on odour emission impacts, air quality impacts, marine ecology, waste management and carbon footprint.

(The project proponent team joined the meeting at this juncture.)

***Presentation Session* (Open Session)**

8. Mr P L Kwan introduced the background and purpose of the project. Mr Eric Ma briefed Members on the findings of the EIA study.

***Question-and-Answer Session* (Open Session)**

Odour emission impacts

9. A Member enquired about the in-situ bioremediation treatment. Mr Peter Lee explained that it was a process of injecting liquid calcium nitrate solution into the upper layer of the underlying sediment on the seabed of the entire Kai Tak Approach Channel (KTAC) and Kwun Tong Typhoon Shelter (KTTS). Similar technology had been adopted to address the odour problem at Shing Mun River Channel and Sam Ka Tsuen Typhoon Shelter.

10. In response to the Chairman's enquiry, Mr Peter Lee explained that while Shing Mun River Channel was an inland water channel subject to comparatively less tidal mixing, KTAC was largely open marine water subject to tidal effects with flushing from discharges of Kai Tak Nullah and other drainage outfalls. Drawing on the practical experience from these previous bioremediation treatment projects, field trials were specifically conducted in KTAC to ascertain the effectiveness of the sediment treatment approach. The trial results proved that in-situ bioremediation treatment could successfully reduce odour emission from the sediment at KTAC and KTTS.

11. In reply to a Member's enquiry, Mr Peter Lee said that full-scale

application would take about two to three years to complete. Coupling with other measures, such as creating a 600 m gap opening at the ex-runway, to be adopted as a package of odour mitigation measures, the assessment showed that the odour intensity at adjoining land of KTAC and KTTS could be significantly reduced. Nevertheless, further treatment would be anticipated at localized spots of KTAC such as areas adjacent to major drainage outfalls. The actual performance of these mitigation measures would be closely monitored under the Environmental Monitoring and Audit (EM&A) programme and the need for in-situ bioremediation would be subject to review. Mr C B Mak added that it was noted from the bioremediation treatment conducted for Shing Mun River Channel that the odour condition remained satisfactory yet the works had been completed for over four years.

12. A Member enquired about the effect of the calcium nitrate on the bottom sediment, which had been anaerobic for a long period of time. Mr Peter Lee explained that based on sediment samples taken on site, the odorous part of the sediment was mostly confined to the top layer and the bottom sediment, which had been largely degraded, was less a concern. Indications from the field trials at KTAC were that treatment of the top 500 mm layer would suffice in reducing the surface odour emission.

13. A Member enquired about the implications of water current and flushing on the effectiveness of the bioremediation sediment treatment after opening of the 600 m gap at the runway. Mr P L Kwan clarified that the opening would be constructed in phases and planned for completion after successful application of the in-situ bioremediation treatment at KTAC. Mr Peter Lee further explained that it was anticipated that about 70% of the calcium nitrate would be consumed shortly after the injection and the residual nitrate in the sediment would serve as a capping layer to prevent odour emission. After opening of the gap at the ex-runway, the odour emission would also be alleviated by means of increased dissolved oxygen levels in water resulting from the enhancement of water circulation in KTAC and KTTS.

14. A Member expressed concern about the environmental impacts arising from leakage of calcium nitrate into the water. Mr P L Kwan explained that the liquid calcium nitrate would be injected into the sediment through nozzles of the injection line to ensure the calcium nitrate would not be released into the water.

The field trials showed that the loss of calcium nitrate into the water was minimal.

15. A Member enquired about the public acceptability of the residual odour level of about 32 odour unit (OU)/m^3. Mr Peter Lee explained that the predicted residual odour level was based on the worst-case scenario, such as very hot season or low tide period, thus the impacts would be intermittent. Reference was also made to some odour levels recently recorded at sensitive receivers along Shing Mun River Channel (i.e. after mitigation) at about 37 OU/m^3 over an averaging time of several minutes rather than seconds, which did not attract any complaints from the public. A comparison of the predicted residual odour level with equivalent hydrogen sulphide concentration was presented in the EIA report. Indications were that the predicted residual odour level of 32 OU/m^3 would be thousands times below the threshold of hydrogen sulphide content that would cause any health impacts. In the light of the above, it was concluded that the residual odour impact was acceptable.

16. The Chairman considered that acceptance of the odour level at Shing Mun River Channel would probably be due to the fact that the residents had already got used to the odour. The situation of this project might be different as residents were to move into KTD. Mr P L Kwan explained that the proposed residential development would be at a distance from areas with predicted highest residual odour level, such as the culvert outfalls and upper part of KTAC, which were planned for roads and part of Metropolitan Park on the deck above the 600 m gap.

17. A Member asked whether there would be any contingency plans in the event the odour level was found not acceptable. Mr C B Mak said that an odour monitoring programme would be put in place under the EM&A programme to ascertain the effectiveness of the proposed mitigation measures after implementation. While there might be opportunity that some odour exceedances might occur at culvert outfalls and near channel embankment, localized dredging would be an option where necessary to address these localized issues. Furthermore, silt traps and additional intercepting facilities could be considered to facilitate regular maintenance and minimize the continuous inflow of polluted discharges into the channel.

18. A Member enquired about the availability of field trial results of the bioremediation treatment. Mr Peter Lee confirmed that the key findings were included in the EIA report, which had been available in the EIAO register.

Action

Air quality impacts

19. A Member enquired about on the control of air emissions such as sulphur dioxide from vessels in the cruise terminal to be located at the runway tip. Mr Peter Lee explained that the assessment of air quality impacts from cruise vessels based on the current international standard of fuel quality under MARPOL Annex VI was considered as the worst-case scenario. With continuous efforts to improve and tighten control on the fuel quality, the air emissions from cruise vessels were expected to be improved. Mr P L Kwan said that there would be provision for the installation of onshore power supply facilities at the cruise terminal in future to minimize emissions from vessels. While there were not many ocean-going vessels currently equipped with the necessary facilities onboard to make use of onshore power supply, it was a long-term objective in the cruise industry that vessels had to install such facilities. Mr Eric Ma further explained that some exceedances of air quality standards were predicted at the commercial developments within the proposed Tourism Node adjacent to the cruise terminal. It was recommended in the EIA report to locate the fresh air intakes of the central air-conditioning systems of these buildings to lower levels to avoid direct impingement of emissions from cruise vessels.

Marine ecology

20. In response to the Chairman's enquiry about the translocation of coral being directly affected by the project, Mr Peter Lee said that reference would be made to the successful experience of translocating coral colonies in other projects. The coral translocation approach was the same as that adopted in the EIA report for the cruise terminal dredging works which had already been endorsed by the Council.

Waste management

21. A Member enquired about the disposal of construction and demolition (C&D) materials. Mr P L Kwan explained that the 600 m gap opening at the runway which was about 600 m by length and 250 m by width in plan, was a major source of C&D materials. Of the estimated amount of 5.95 million m^3 of C&D materials generated, about 2.73 million m^3 would be reused. The remaining 3.22 million m^3 might be reused at other project sites and/or disposed of at public fills.

Action

22. In reply to the Chairman's enquiry about the disposal site of the C&D materials, Mr C B Mak said that the C&D materials, which could not be reused, would be disposed of at public fills to be allocated by the relevant authority and in-principle agreement on possible receiving sites had been sought.

Carbon footprint

23. A Member enquired about the application of the low carbon economy concept in the design of facilities in KTD. Mr Eric Ma explained that the EIA study had been conducted in accordance with the EIA Study Brief. There was no established guideline on the assessment of the new low carbon economy initiatives and thus assessment on carbon footprint was not made. Nonetheless, one of the key planning themes of KTD was a green and environment-friendly community with low carbon footprint. Thus, a number of environment-friendly facilities had been incorporated in the project, including the provision of 90 ha of greenery open space out of the project site of about 320 ha, district cooling system, environment-friendly transportation system, Kai Tak River at the north apron, stepped height profiles to enhance ventilation at hinterland, improvement of air circulation by aligning the building orientation along the prevailing wind direction and elimination of obstructive high-rise podiums and avoidance of the use of noise barriers.

24. A Member considered that it was a good opportunity to implement some green and environment-friendly initiatives such as using more renewable energy and planting more trees in KTD, as it was a major infrastructural project in Hong Kong. Mr P L Kwan said that the use of energy efficient features and renewable energy technologies would be considered in the design of government projects on "Government, Institution, and Community" sites according to the prevailing guidelines. Given the Government's initiatives and the development time-frame of about 20 years for the project, the low carbon initiatives would be taken forward as far as practicable.

25. Mr Peter Lee further explained that a district cooling system would be implemented to centralize the supply of chilled seawater to developments for cooling purposes. Although the cost of developing the system would take a relatively long pay back period, the Government considered that the proposal should be pursued for environmental sake. A Member enquired about the impacts

of residual chlorine discharged from the proposed district cooling system. Mr P L Kwan explained that a feasibility study was being undertaken separately by the Electrical and Mechanical Services Department. The EIA study had also assessed the possible impacts due to the discharge of residual chlorine from the system. The result concluded that the impacts would be localized and acceptable.

26. A Member enquired about the type of proposed environment-friendly transportation system. Mr C B Mak said that the exact mode of transportation system had yet to be determined. One of the possible options would be the monorail system.

27. Upon a Member's enquiry, Mr Peter Lee confirmed that the term "BOD3" in Tables 3.24 to 3.28 in Volume 1 of the EIA report was a typo and they should read "BOD5" to represent 5-day biochemical oxygen demand.

(The project proponent team left the meeting at this juncture.)

Internal Discussion Session

28. The Chairman informed Members that the EIA report was a Schedule 3 EIA. Mr C W Tse advised that the Schedule 3 EIA of KTD had identified 18 Schedule 2 designated projects (DP) within the study area. Among the 18 Schedule 2 DPs, three of them had been approved under the EIAO at an earlier stage, the EIAs of another three DPs were presented in the current EIA report and the EIAs for the other 12 DPs would be conducted in accordance with the development programme and submitted to the Council for further examination. Since the major issues discussed concerned the Schedule 3 EIA which would not involve the issue of an Environmental Permit, Members agreed that it would be more appropriate to give some advice rather than specific conditions on the project.

29. Having regard to the findings and recommendations of the EIA report and information provided by the project proponent, Members agreed to recommend to the full Council that the current EIA report could be endorsed with the following proposed advice for the project proponent –

(a) to evaluate the effectiveness of the following package of odour mitigation measures on a regular basis by conducting detailed

assessments having regard to changing circumstances, such as current flow, water circulation and flushing effect –

(i) in-situ bioremediation sediment treatment by injecting liquid calcium nitrate solution into the upper sediment layers of the entire KTAC and KTTS;

(ii) localized dredging within KTAC and KTTS;

(iii) creation of a 600 m opening at the northern part of the former Kai Tak Runway to improve water circulation in KTAC and KTTS; and

(iv) interception of polluted discharges in the hinterland of the project.

(b) to adopt energy-efficient and resource-saving measures to reduce the carbon footprint in order to achieve the objective of a low carbon environment and environment-friendly city in the KTD project.

30. The meeting also agreed that there was no need to invite the project proponent team to attend the full Council meeting.

Agenda Item 4 : EIA report on Sludge Treatment Facilities
(ACE-EIA Paper 2/2009)

31. The Chairman informed Members that the public inspection period of the EIA report on "Sludge Treatment Facilities" (STF) was from 17 December 2008 to 15 January 2009. The EPD received four sets of public comments and all of them had been circulated to Members for reference before the meeting. Mr H M Wong added that another set of public comments stating "no comment" was also received within the public inspection period. Separately, some Members had raised some questions and made some comments on the EIA report. The response from the project proponent had been circulated to Members for information before the meeting.

32. Having considered the written response from the project proponent,

the Subcommittee agreed before the meeting that there was no need to invite the project proponent to attend the meeting.

Capacity of the Sludge Treatment Facilities

33. The Chairman informed Members that a Member (who could not attend the meeting) asked whether the capacity of the STF could be increased to reach 2,200 wet tonnes/day to meet the projection of 2,185 wet tonnes/day in 2020. Mr H M Wong said that according to the EIA report, the project proponent indicated that the quantity of dewatered sewage sludge generated from the major treatment works would increase from about 800 wet tonnes/day currently to about 1,430 wet tonnes/day in 2014 after the commissioning of the Harbour Area Treatment Scheme Stage (HATS) 2A and the upgrading works of the Pillar Point Sewage Treatment Works. The sludge quantity would further increase to about 2,185 wet tonnes/day in 2020 after the commissioning of the HATS Stage 2B. The design capacity of the STF was about 2,000 wet tonnes/day. The project proponent had provided a response to Members' comments and stated that subject to the then sludge disposal strategy and findings of future EIA study, the STF could be further expanded to cope with higher sludge throughput.

Landscape and visual impacts

34. In reply to the Chairman's enquiry about the visual impacts of the STF, Mr C W Tse advised that the current landscape and visual design for the development was considered acceptable by the Planning Department. If there was any significant change to the design of the STF, the consent of the Planning Department on the landscape and visual impacts would be necessary.

Ecological impacts

35. In response to the Chairman's enquiry about the impacts of the construction on the potential breeding ground of Little Grebe in the East Lagoon, Mr C C Lay advised that the East Lagoon was a dried up watercourse. It was not the main foraging and breeding ground for Little Grebe and thus compensation was not required. The EIA report confirmed that an alternative habitat in the adjacent Middle Lagoon would be available for the Little Grebe and an enhanced pond habitat for the Little Grebe would also be created within the proposed STF site.

Action

36. Having regard to the findings and recommendations of the EIA report and information provided by the project proponent, Members agreed to recommend to the full Council that the EIA report could be endorsed with the proposed condition that the project proponent should submit to the Director of Planning and the Director of Environmental Protection a landscape plan, including detailed mitigation measures, for any change in the landscape and visual design of the STF for agreement prior to the commencement of the operation phase of the project.

37. The meeting also agreed that there was no need to invite the project proponent team to attend the full Council meeting.

Agenda Item 5 : EIA report on Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate
(ACE-EIA Paper 3/2009)

38. The Chairman informed Members that the public inspection period of the EIA report on "Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate" was from 17 December 2008 to 15 January 2009. The EPD received one set of public comment. Separately, some Members had raised some questions and made some comments on the EIA report. The set of public comment as well as the response from the project proponent to Members' questions and comments had been circulated to Members for reference before the meeting.

39. Having considered the written response from the project proponent, the Subcommittee agreed before the meeting that there was no need to invite the project proponent to attend the meeting.

40. Having regard to the findings and recommendations of the EIA report and information provided by the project proponent, Members agreed to recommend to the full Council that the EIA report could be endorsed without condition.

41. The meeting also agreed that there was no need to invite the project proponent team to attend the full Council meeting.

Agenda Item 6 : Monthly Updates of Applications under the Environmental Impact Assessment Ordinance

Action

42. Members noted the updates.

Agenda Item 7 : Any other business

Meeting schedule for 2009

43. The Chairman informed Members that the tentative meeting schedule for 2009 had been circulated to Members before the meeting. He suggested and Members agreed to change the meeting date in April from 20 April to 21 April. Members endorsed the revised meeting schedule for 2009.

Tentative items for discussion at 108th meeting

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

Agenda Item 7 : Date of Next Meeting

45. The next meeting was scheduled for 23 February 2009.

EIA Subcommittee Secretariat
January 2009