

**Confirmed Minutes of the 163<sup>rd</sup> Meeting of  
the Advisory Council on the Environment  
held on 14 September 2009 at 2:30 pm**

**Present:**

Prof LAM Kin-che, SBS, JP (Chairman)  
Prof Paul LAM, JP (Deputy Chairman)  
Dr Dorothy CHAN, BBS  
Prof CHAU Kwai-cheong  
Ms Betty HO  
Mr Michael JEBSEN, BBS  
Mr Edwin LAU, MH  
Dr MAN Chi-sum, JP  
Dr Alfred TAM  
Mr TSANG Kam-lam  
Dr YAU Wing-kwong  
Mr Carlson K S CHAN (Secretary)

**Absent with Apologies:**

Ms Teresa AU  
Mr Oscar CHOW  
Prof Joseph LEE  
Mr Michael LEE  
Prof WONG Ming-hung  
Mr Simon WONG, JP  
Prof Ignatius YU

**In Attendance:**

Ms Anissa WONG, JP	Permanent Secretary for the Environment
Mr J K CHAN	Acting Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department (AFCD)
Miss H Y CHU	Acting Assistant Director/Technical Services, Planning Department
Ms Esther LI	Acting Principal Information Officer, Environmental Protection Department (EPD)
Ms Josephine CHEUNG	Chief Executive Officer (CBD), EPD
Ms Loletta LAU	Executive Officer (CBD), EPD

### **In Attendance for Agenda Item 3**

Ms Margaret HSIA	Assistant Director (Waste Management Policy), EPD
Mr K F TANG	Assistant Director (Environmental Compliance), EPD
Mr Jonathan LEUNG	Chief Assistant Secretary (Works)5, Development Bureau
Mr G M ROSS, JP	Deputy Director (Specialist) (Lands Administration Office, Headquarters), Lands Department
Mr CHEUNG Kwok-wai	Senior Conservation Officer (Technical Services), AFCD
Mr Kelvin CHAN	Chief Town Planner (Central Enforcement and Prosecution), Planning Department
Mr Fedrick KAN	Chief Engineer (Mainland North), Drainage Services Department
Mr Stephen CATLIN	Engineer (New Territories East, Headworks 1), Water Supplies Department (WSD)
Mr YEUNG Tak-hoi	Engineer (New Territories East, Headworks 3), WSD

### **In Attendance for Agenda Items 5 and 6**

Mr C W TSE, JP	Assistant Director (Environmental Assessment), EPD
Mr Y K CHAN	Senior Marine Conservation Officer/North, AFCD

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### Action

#### **Agenda Item 1 : Confirmation of the draft minutes of the 162<sup>nd</sup> meeting held on 6 July 2009**

The draft minutes were confirmed without amendment.

#### **Agenda Item 2 : Matters arising from the minutes of the 162<sup>nd</sup> meeting held on 6 July 2009**

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

#### **Agenda Item 3 : Progress of measures to enhance control on the depositing of construction and demolition materials** *(ACE Paper 12/2009)*

3. The Chairman informed Members that in view of the increasing concern over the problem of depositing of construction and demolition (C&D)

materials, especially in the New Territories, the Administration was requested to submit a paper to update Members on the progress of control measures taken to address the problem. Such activities might cause a variety of problems and each of the problems might fall under the control of different legislation. It was therefore important to have better coordination among the concerned Government departments in tackling the problem.

4. The Chairman informed Members that a submission from the World Wide Fund for Nature (Hong Kong) addressed to the Council expressing their views on the subject was received shortly before the meeting. The submission was circulated to Members before the meeting for information.

5. Ms Margaret Hsia briefed Members on the purpose of the paper which aimed to update Members on the progress of measures to enhance control on depositing of C&D materials. The problem of fly-tipping and land-filling, both of which related to illegal depositing of C&D materials, had become increasingly a public concern. The control mechanism called for joint action from all the concerned enforcement departments. A multi-pronged approach had been adopted in tackling the problem, including an enhanced inter-departmental coordination mechanism, stepped up enforcement measures and actions to examine the feasibility of tightening legislative control. Mr K F Tang briefed Members on the details of the enhanced control mechanism. Mr Kelvin Chan briefed Members on the reinstatement actions for unauthorized land-filling cases under the framework of the Town Planning Ordinance (TPO).

6. The Chairman was pleased to note that enhanced measures were being introduced and taken by various departments to improve the increasingly serious problem. He enquired about the number of statutory notices served and prosecution cases handled in the past two years. Mr K F Tang said that 16 summonses had been served on illegal depositing of C&D materials and 35 fixed penalty tickets issued against cases of minor nature under the Waste Disposal Ordinance (WDO) in 2008. From January to July of 2009, 16 summonses had been served and 18 fixed penalty tickets issued. Mr Kelvin Chan said that the Planning Department (PlanD) had investigated about 300 cases of suspected unauthorized land/pond filling in 2008, mostly arising from public complaints. Enforcement and reinstatement actions were undertaken on 53 and 37 confirmed cases respectively. Summonses were served for nine cases and there were four convicted cases involving 16 offenders. The average fine for unauthorized land-

filling cases was about \$20,000.

7. Mr G M Ross said that the Lands Department (LandsD) would serve notices to identified persons who placed materials illegally on Government land and require them to remove the materials. Most of the people were willing to comply with the requirements, thus avoiding prosecution and hence there were not many prosecution cases. Mr Fedrick Kan said that in 2007 and 2008, two illegal obstructions/structures had been detected within the main watercourses in San Tin and Tin Shui Wai areas by the Drainage Services Department. The parties concerned had been ordered to remove the illegal obstructions/structures.

8. A Member noted that the PlanD could only take enforcement actions against unauthorized land-filling activities in areas falling within the Development Permission Areas (DPA). However, not all rural areas were subject to control under DPA Plans, as some areas were not covered by any statutory plans or only covered by Outline Zoning Plans (OZP) but outside DPA. In view of the fact that some areas in the new towns, such as Shatin, Tai Po and Fanling, were still rural in nature, illegal dumping activities would endanger the ecology of the area and cause disturbance to its rural character. She asked whether PlanD or the Town Planning Board (TPB) had any intention to extend the planning enforcement power by preparing DPA Plans for these areas.

9. Mr Kelvin Chan said that TPO did not confer enforcement authority in respect of areas not currently or previously covered by DPA Plans, including mainly the urban areas, new towns and rural townships. A great percentage of the land within conservation-related zones in these areas was Government land which was already subject to control under existing legislation. PlanD had been progressively and systematically preparing DPA Plans and OZPs for the rural areas currently not covered by statutory plans, which was about 10% of the area in the territory, including Frontier Closed Area and military land. These areas would be subject to statutory planning control by the TPB and enforcement action by the Planning Authority against unauthorized developments. Regarding the suggestion of extending planning enforcement to areas covered by statutory plans but outside DPA, Mr Chan further explained that the land uses in urban areas and new towns were much more complicated due to highly intermixed uses of buildings, thereby making the enforcement more difficult. Overhauling the planning regime to forestall a particular form of illegal or unauthorized activities would have far-reaching implications. The suggestion had been raised with the

Legislative Council from time to time and it was considered that TPO was not considered as the most appropriate tool to control land-filling activities.

10. A Member said that he had been keeping track of an illegal dumping case in Tai Mei Tuk in 2008. He noted that the critical factor in controlling the activities was timely action to stop the activities. He also noted that staffing resources deployed for surveillance and enforcement, in particular from the PlanD, was not sufficient. The fine for the case was only about \$6,000 but the cost of reinstatement works was very high. He was glad to note that the Environmental Protection Department (EPD) had taken up the lead to coordinate efforts of relevant departments under the enhanced control mechanism.

11. In response to a Member's enquiry, Mr K F Tang said that the efficiency and effectiveness of responding to illegal dumping activities had been improved after strengthening the coordination among departments. With the detailed procedures in the new circular and a contact list of officers at district level, inter-departmental communication was greatly strengthened. Investigation could be conducted more timely and enforcement actions could be taken by relevant departments in parallel.

12. A Member enquired about the review of penalty level. Mr K F Tang said that in case the penalty imposed by the court was considered too lenient or insufficient to reflect the severity of the offence, the Administration would, where the circumstances of an individual case could justify, apply via the Department of Justice (DoJ) for a court review. In the past 12 months, EPD had applied to DoJ for court review on five occasions, three of which were related to fly-tipping or land-filling activities. So far, DoJ supported the review of one case which was not related to fly-tipping or land-filling activities. For the other cases, DoJ considered that there were not sufficient grounds to justify a court review. Notwithstanding this, EPD would continue its effort to seek court review if the case warranted.

13. A Member said that it was encouraging to note the concerted efforts among departments in stepping up enforcement actions against illegal dumping activities. Statistics showed that the average fine for these activities in 2007 was as low as \$2,750 to \$4,000. He considered that standard procedures were important for departments to take prompt actions. It would be useful for EPD to issue authorization letters to people, such as truck drivers, so as to save the trouble

of verification. It was difficult to root out the problem as long as it was easy to dump the waste free of charge somewhere. Setting up of closed-circuit television (CCTV) or road barriers in potential sites and provision of sufficient manpower resources might help alleviate the problem.

14. A Member said that he was pleased to note that the Government had taken enhanced measures to combat the problem. Nonetheless, the measures mainly focused at the operational level. More effective means to solve the problem was a comprehensive review of the relevant legislation. Ms Margaret Hsia said that EPD was examining, in collaboration with departments concerned, the feasibility of tightening the control on illegal depositing of C&D waste on private land under the WDO in view of the operational difficulties encountered when taking enforcement actions against such activities. Currently, one of the major difficulties was to locate landowners concerned to verify whether prior consent had been given to the depositing activities. Even if the landowners were located and contacted, they might not be very cooperative. EPD was examining proposals to require permission in written form and the Authority to be notified prior to the depositing activity to address the constraints.

15. The Chairman asked whether the proposed requirement could be dealt with by only amending the WDO or whether other legislation was involved. Ms Anissa Wong said that any unauthorized depositing of C&D materials on Government land was an offence. Regarding the depositing of C&D materials on private land, a control under a house of legislation was involved, including the WDO, the TPO and the Land Drainage Ordinance. Under the WDO, prior consent of landowner of private land was required before depositing of C&D materials could take place and the activities should not cause adverse environmental impacts. However, the limitation of the current provision was that enforcement action had to rely on retrospective confirmation of the landowners to ascertain whether prior consent had been given which might delay the enforcement action. EPD was exploring the possibility to advance the confirmation process so that anyone depositing C&D materials on private land could be verified on site without delay. This proposal would facilitate a more effective enforcement under the WDO though it would not be able to address other issues such as compatibility with the statutory land use of the areas concerned. That said, the EPD had strengthened the co-ordination with other government departments so that all concerned departments could speedily follow up with appropriate actions under their respective legal responsibilities. A

Member supported the proposed legislative amendment so that the burden of proof would rest with the person who dumped the materials. Moreover, he considered that a review mechanism was necessary to monitor the progress of the control measures and assess the effectiveness of the measures.

16. The Chairman enquired about the proportion of illegally dumped materials arising from public works projects. Mr Jonathan Leung said that the trip-ticket system had been working well in ensuring all C&D materials generated by public works projects would be deposited at designated disposal facilities. For the past few years, only one illegal dumping case occurred at Ho Sheung Heung was suspected of relating to public works project. The case was caused by a lack of strict enforcement of the trip-ticket system.

17. The Chairman enquired about the penalty imposed on the contractor involved in the case. Mr Jonathan Leung said that the case was related to a minor works project at Wo Hop Shek and the project was supervised by a consultant. Both the consultant and contractor got “poor” performance assessments. The low score would adversely affect their chance of being awarded future public works contracts. Immediately after the incident, the contractor had strengthened the control, including installation of CCTV, to ensure compliance of the trip-ticket system.

18. The Chairman asked the likelihood of imposing heavier penalty in order to send a stronger message to the community and stakeholders. Mr Jonathan Leung explained that the Architectural Services Department and the Police were carrying out an investigation of the case at this stage. All relevant factors, including the investigation results, would be taken into consideration before deciding further penalty and regulatory actions. A Member asked whether the contractor was required to pay any fine. Mr Leung explained that it would depend on the result of the investigation and prosecution actions. In case the contractor was convicted, he would need to pay the fine and payment would also be deducted from the contract.

19. A Member suggested introducing economic disincentives to stakeholders, such as devising a voluntary scheme with trade associations to encourage contractors not to hire truck drivers who had been convicted of illegal dumping activities. Another Member suggested uploading information of car registration numbers of trucks involved in convicted cases onto Government

websites. For public works projects, convicted truck drivers should be suspended for taking up any public works for a certain period. Another Member suggested distributing the comprehensive guides not only to truck drivers but also truck owners. The Chairman agreed that it was necessary to send a stronger signal to achieve a greater deterrent effect.

20. A Member supported that control mechanism should be stepped up to tackle illegal dumping activities. Nonetheless, he noted that there was an increasing trend of land-filling activities on agricultural land and some of the cases got the consent of landowners. To better control land-filling activities on agricultural land, he considered that there was a need to review the existing land and planning policies or legislation.

21. Mr G M Ross explained that most agricultural land was granted under Block Crown Leases many years ago. The LandsD was responsible for enforcement of the lease conditions. Whether land-filling activity was allowed on private land depended on the land lease conditions. The filling of agricultural land was not restricted under the land lease.

22. A Member also expressed concern about the problem relating to changes of use of agricultural land. Mr G M Ross explained that from a land perspective, the extent of control would depend on the conditions of the lease. He quoted the case of Attorney General v Melhado [1983], where the court held that the grantees were free to use agricultural land held under the block leases which had no express restriction on the uses to which the land could be put. As a result, because most agricultural leases were in such form, there followed a widespread conversion of such agricultural land in many rural areas to open storage in the 1980s and 1990s. Action by LandsD was taken relating to the control or authorization of structures erected or to be erected on the agricultural land.

23. Mr Kelvin Chan explained that the statutory plans for the rural New Territories had already incorporated control on land-filling activities under the Agriculture zone and conservation-related zones such as Green Belt, Site of Special Scientific Interest and Conservation Area. Within the rural areas, there were also development-related zonings, such as Village Type Development Open Storage zones, where filling of land was always permitted, as they were operations incidental to the developments permitted within the same zone.



24. The Chairman summarized Members' views as follows –

- (a) both the public as well as the Council were concerned about the problem of illegal depositing of C&D materials which might lead to a number of problems, including pollution to the environment, destruction of natural scenery, environmental hygiene and blockage to drainage and watercourses;
- (b) the Council considered that concerted efforts and inter-departmental collaboration among Government departments concerned were of vital importance to tackle the problem effectively;
- (c) the Council considered that a comprehensive review of relevant legislation was required in order to provide a legal framework for enforcement actions. The Council was pleased to note that EPD was examining the feasibility of tightening the control on depositing of waste on private land under the WDO. Relevant departments should work together and look for other instruments under different legislation, such as the TPO, to come up with a package of control measure to address the problem;
- (d) the Council considered that further efforts were necessary to tighten the control by administrative instruments, such as the devise of register systems and declaration systems. Vigorous monitoring measures with the use of new technology would be required;
- (e) the Council considered that a more forceful penalty system should be imposed on convicted contractors and truck drivers, in particular on public works projects, and a stronger signal should be sent to the community and stakeholders on the consequences of committing the offence in order to achieve a greater deterrent effect; and
- (f) the Council considered that a review mechanism was necessary to monitor the progress of the control measures and assess the effectiveness of the measures.

**Agenda Item 4 : Review of Air Quality Review**  
*(ACE Paper 13/2009)*

25. The meeting agreed to defer the discussion of agenda item 4 to the next meeting in view of the approach of typhoon and the need to discuss agenda items 5 and 6 regarding two EIA reports on which the Council had to give comments within the statutory time frame.

**Agenda Item 5 : Report on the 109<sup>th</sup> Environmental Impact Assessment Subcommittee meeting**  
***(ACE Paper 14/2009)***

26. The Chairman informed Members that the paper reported on the recommendation of the Environmental Impact Assessment (EIA) Subcommittee on the EIA report on “Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link” (XRL).

27. A Member declared interest as her company was involved in the public engagement study of another rail project to be constructed by the project proponent. The meeting agreed that she could stay and continue to take part in the discussion in view of the indirect relationship with the project under consideration.

28. The Chairman informed Members that the public inspection period of the EIA report was from 21 July to 19 August 2009. Comments received by the EPD before the EIA Subcommittee meeting had been circulated to Subcommittee Members for reference. Public comments received by the EPD after the Subcommittee meeting had been circulated to all Council Members before the full Council meeting for reference. Separately, a submission related to the EIA report directly addressed to the EIA Subcommittee had been circulated to Subcommittee Members before the Subcommittee meeting for information. The submission had also been circulated to all Council Members before the Council meeting for information.

29. The Chairman informed Members that the Council had received a petition letter, with about 2,000 signatures, regarding the XRL project from the “Slow Development HK” shortly before the meeting. With the consent of the group, the softcopy of the petition letter had been sent to Members in the morning of the meeting date for advance information. Hardcopy of the letter was tabled for Members’ easy reference.

30. The Chairman noted that some of the concerns of the public related to the procedures under the EIA mechanism, he invited Mr C W Tse to brief Members on the background of the related issues. Mr C W Tse said that there were some queries on the neutrality and credibility of the EIA report as the report was prepared by consultants employed by the project proponent. He explained that the EIA Ordinance (EIAO) stipulated that the applicant, i.e. the project proponent, had to prepare and submit the EIA report to the Authority for consideration. The requirement for the applicant to provide information and justifications to the authorities was a common practice of various statutory processes. In the process of preparing the EIA report, an Environmental Study Management Group, comprising representatives of EPD and relevant Government departments, would be set up to provide guidance to the project proponent and its consultants. Relevant authorities would scrutinize the assessments and findings of the EIA studies to ensure that the requirements under the Study Brief and Technical Memorandum on EIA process (TM) were complied with before the EIA report was considered suitable for public inspection.

31. Mr C W Tse noted that there were some queries that EIA study was conducted for only one alignment instead of all alternative alignments. He explained that the final selection of an alignment had to take into account a number of factors, environmental factors being one of them. As stated in the Study Brief of the EIA project, the applicant should describe the considerations given, when exploring various feasible alternative option(s) for alignment to avoid adverse environmental impacts to the maximum practical extent. Section 2.12 to 2.49 of the EIA report provided a detailed report of the above. It was not a requirement under the EIAO to conduct full EIA for each option considered. He also noted some comments that the EIA study had not assessed the hydrogeological impact of the project. He pointed out that Chapter 11.8 of Volume VII (Appendix) of the EIA report (with about 100 pages of A-3 size) specifically reported on the findings of the hydrogeological impact assessment.

32. The Chairman of EIA Subcommittee reported on the recommendation of the Subcommittee on the EIA report.

33. A Member expressed concern over the alignment of the XRL. The Chairman of EIA Subcommittee said that the issue of alternative alignments had been discussed at the Subcommittee meeting. Mr C W Tse advised that Section 2.22 of the EIA report elaborated on the consideration of alignment alternatives

and rationale for selecting the preferred option. Table 2.4 of the EIA report summarized the evaluation of alignment options in the preliminary design study. The criteria of considerations included engineering factors (implementation programme, operations safety, flexibility and maintainability, constructability and land acquisition), environmental factors (ecology and other environmental considerations), and other factors (avoidance of issues/constraints and disruption to the community) for seven options. The alignment options were shown in Figures 1 to 3 of Part I (Drawings) of Volume II of the EIA report.

34. A Member acknowledged that the EIA report complied with the statutory requirements under the EIA process. Nonetheless, he considered that a more prudent approach should be adopted. The descriptive words, such as “very few business to be affected”, were not detail enough for assessment. He noted that the EIA report on “Liquefied Natural Gas (LNG) Receiving Terminal and Associated Facilities” included two detailed EIA studies for two alternative sites. For the planned Integrated Waste Management Facilities (IWMF), he also noted that two EIA studies would be conducted for the two potential sites.

35. Mr C W Tse explained that for the LNG and IWMF projects, the project proponents submitted two proposals and thus they had to conduct two detailed EIA studies. As for the XRL project, the project proponent submitted one proposal and thus a detailed EIA study on the preferred option was required. A Member enquired about the situations on which EPD would suggest the project proponent to conduct EIA studies for more than one option. Mr Tse explained that the Authority would not require the project proponent to conduct more than one EIA studies for a particular project. For the LNG and IWMF projects, it was the initiative of the project proponents to conduct detailed studies for more than one option as the EIA studies would facilitate the project proponents to select from the two options which were comparable.

36. The Chairman said that it was the usual practice for project proponents to conduct evaluation of alternative options, narrow down the options, conduct EIA study for the preferred option and demonstrate that the environmental impacts of the preferred option were acceptable.

37. A Member considered that the evaluation of alignment selection out of the seven options (three options of Southern Section and four options of Northern Section) in the EIA report was quite elaborate. It would only be

meaningful to conduct detailed EIA studies for more than one option in case more than one option stood out to be comparable in terms of various criteria. In the evaluation of alignments for the XRL, the project proponent was able to identify a preferred alignment with justifications.

38. A Member shared the Member's views and considered that the evaluation showed that some of the options were not viable due to various reasons, such as engineering constraints or safety considerations. Detailed EIA study for only one option was agreeable. However, for projects with two or three options which were comparable, detailed EIA studies for each option would be useful.

39. A Member considered that it was difficult to judge from the descriptive assessment of the options on the degree of comparability. On the prudent side, he urged the Government to request the project proponent to provide more detailed information on the assessment of the second best option. Mr C W Tse said that the issue of alternatives had been considered in depth in the judgment of the EIA Appeal Board for "Sheung Shui to Lok Ma Chau Spur Line". The judgment pointed out that the possible alternatives to be investigated in an EIA process also hinged upon further strategic and policy decisions outside the scope of an engineering project. Furthermore, in assessing whether an alternative was "practical and reasonable", matters to be weighed included "adverse impacts, engineering constraints, extra-time involved, additional cost and even government policy". Given that environmental impacts were not the sole determining factor, the EIA process should not be used for determining alignments but for evaluating whether the proposed alignment would fully comply with the statutory requirements and standards under the EIAO.

40. The Chairman considered that the key issue for the Council to consider was whether adequate considerations had been given to justify the selection of the preferred alignment and whether the approach was consistent with past practices. The rejection of the EIA report had to be based on justified grounds. The meeting agreed that there were no further queries on the issue of alignment options.

41. A Member expressed concern over the hydrogeological impact of the project. Mr C W Tse referred to Chapter 11.8 of Volume VII (Appendix) of the EIA report which provided a detailed report on the hydrogeological impact

assessment. For the purpose of detailed design, the project proponent had undertaken to conduct further site investigation before commencement of the tunneling and soil excavation works. In the Environmental Monitoring and Audit programme, there would be a groundwater monitoring programme to monitor the groundwater level along the entire alignment.

42. A Member considered that the 30-day public inspection period was on the short side for such a complex EIA report. There were not many projects with similar scale in other countries to which reference could be made. There would probably be unforeseeable challenges which had not been encountered by the project proponent, such as hydrogeological impact of the 26 km long underground railway.

43. A Member said that the project proponent had made reference to the experience of tunnel construction underneath Long Valley in the Spur Line project to demonstrate that there were insignificant impacts of the underground tunnel to the water table of the freshwater wetland. Members were satisfied with the explanations. For precautionary purpose, the Subcommittee recommended the submission of a contingency plan to deal with any unforeseeable incidents which might affect the groundwater level.

44. The Chairman of EIA Subcommittee informed Members that the issue of hydrogeological impact and groundwater drawdown during the construction phase was discussed at length at the Subcommittee meeting. With the use of advance technology in tunnel construction which had been used worldwide, the EIA study showed that there would not be significant hydrogeological impact. To address the concern of unforeseeable circumstances, the Subcommittee thus recommended a condition on contingency plan. If Members would like to be more prudent, he suggested that an additional condition be included to require the project proponent to provide the Director of Environmental Protection (DEP) with an updated hydrogeological impact assessment, before the commencement of any tunneling or soil excavation works, to reaffirm the findings of the EIA report with respect to the extent of the environmental impacts. Moreover, as agreed by the project proponent, they should put in place a groundwater level monitoring system before and after the tunneling works to ensure no adverse impacts on the groundwater regime.

45. A Member agreed to the other Member's suggestion to add an additional condition. Nonetheless, he noted that some scholars found that tunnel construction might also affect the groundwater flow system. Mr C W Tse explained that the most useful indicator for monitoring groundwater system was the groundwater level at different locations. The EIA studies on groundwater level were based on existing information and investigations conducted by drilling bore holes at different locations along the alignment. The purpose of the groundwater monitoring programme was to keep track of the changes in groundwater level, including the groundwater flow system.

46. A Member considered that there were two major issues related to hydrogeological impact. First, the possible seepage of water into the tunnel. Members were satisfied with the explanations given by the project proponent and experience in other similar projects. Second, the possible impact of change of groundwater level or flow regime on marsh land or agricultural land. He suggested that particular attention should be paid to the monitoring of groundwater level in ecologically sensitive areas so that mitigation measures could be taken. A Member agreed that monitoring should be more intense and targeted at ecologically sensitive areas.

47. A Member said that some expert reports showed that with the existence of fractured crystalized rocks, the mitigation measure of void grouting might not be 100% effective during the drilling process if there was change in water table and thus might lead to surface land settlement in excess of 10 cm. As Mai Po area was an ecologically sensitive area, special attention should be paid to the possible impacts. He suggested the Council not to endorse the EIA report at this stage and request the project proponent to collect more information and conduct detailed modellings on hydrogeological impact assessment and submit the supplementary information for the Council to review.

48. Mr C W Tse advised that the project proponent had conducted a thorough hydrogeological impact assessment in accordance with the requirements. There was no evidence in the findings to show that there would be potential problem. The purpose of further investigations to be conducted by the project proponent was to facilitate the preparation of the detailed design. The result of the assessment would help reaffirm the findings of the EIA report. The groundwater level monitoring programme would serve the purpose of detecting impacts on the seepage of water into the tunnel as well as groundwater level and

flow regime. The disapproval of the EIA report had to be based on justified grounds. Members noted that the statutory deadline for the Council to give comments to the DEP on the EIA report was 18 September 2009.

49. A Member reiterated his views that the project proponent should collect more data on the hydrogeological impact in the more ecologically sensitive areas before the Council made a decision. Mr J K Chan referred to Chapter 11 of the EIA report which showed a detailed water quality impact assessment, including pre-construction hydrological monitoring and groundwater level monitoring programmes. He advised that the project had minimized environmental impacts by avoiding the ecologically sensitive areas. Based on the EIA study, a large section of the underground tunnel was underneath dried up grassland or degraded land.

50. Ms Anissa Wong referred to paragraphs 26 to 30 of Annex B of the paper which covered the aspect of hydrogeological impacts. As indicated in paragraph 30, Agriculture, Fisheries and Conservation Department (AFCD) had assessed the impacts of the large-scale tunneling works on the ecology of the area and advised that for wetland areas with underground tunnel construction, they were mostly fish ponds and no adverse impact of tunneling construction on these wetland areas would be anticipated with the implementation of proposed mitigation measures. Mr Y K Chan added that the project had minimized environmental impacts on the ground surface as a large part of the railway alignment would be constructed underground. While the alignment would pass through some areas near Mai Po Nature Reserve and country parks, experience in the Spur Line project and the EIA study showed that no adverse impact of the tunneling works would be anticipated with the implementation of mitigation measures.

51. The Chairman enquired about the comparison of the tunneling works in the Long Valley for the Spur Line project and Mai Po area for the XRL. Mr Y K Chan said that the project proponent would use the same tunneling construction method, i.e. by using a tunnel boring machine, which was a well-proven closed tunnel boring system. Mr C W Tse said that monitoring results of the Spur Line project did not show any indication that the project had significant hydrogeological impact on the area, including wetlands and fishponds. He highlighted that the issue of hydrogeological impact was not an issue ignored and instead it had been thoroughly studied and assessed.



52. A Member enquired about the comparison of the depth of the tunnels for the Spur Line project and XRL. Mr C W Tse said that the depth of the tunnel for the Spur Line project was up to about 30 m and that for XRL was up to about 20 to 35 m and they were of comparable level.

53. A Member considered that fish ponds in Mai Po area should not be affected by any drawdown of underground water, even there was any, as there was a layer of marine deposit at about 3 to 7 m beneath ground level which would help hold water for the fish ponds.

54. A Member said that Mai Po Nature Reserve was listed as a Wetland of International Importance under the Ramsar Convention. To ease the worries, he suggested that AFCD and management of Mai Po Nature Reserve be invited to be part of the monitoring bodies throughout the process. Moreover, views of experts on wetland conservation could also be drawn to address issues related to mangroves and ecosystem. The Chairman agreed that a vigorous monitoring programme involving stakeholders would be necessary.

55. The Chairman pointed out that the EIA report showed that assessment had been conducted on the hydrogeological impact of the project and the findings showed that the impacts would be insignificant. The Subcommittee had proposed to put in place a contingency plan to deal with any unforeseeable incidents which might affect the groundwater level. The key consideration was whether Members were satisfied with the findings of the assessment. The project proponent had undertaken to conduct updated assessment before the commencement of the project for detailed design and to conduct groundwater level monitoring before and after the tunneling works. The Council could consider whether an additional condition on these assessment and monitoring works should be incorporated into the conditions proposed by the Subcommittee.

56. A Member supported incorporating the additional condition. He also suggested the project proponent to devise a comprehensive contingency plan with targets which would trigger actions when necessary. The meeting agreed to add an additional condition to address the concern of potential hydrogeological impact of the project.

57. A Member expressed concern over the noise and vibration impacts on insects. The Chairman of EIA Subcommittee said that the issue was

discussed at the Subcommittee meeting. Members noted that low noise trackform would be installed at some sections to minimize noise and vibration. It was accepted that there was no evidence worldwide to substantiate any adverse impact of ground-borne noise and vibration of railway on wildlife and insects. Mr C W Tse added that the findings showed that the maximum noise level throughout the alignment would be about 50 dB(A) and the average would be 40 dB(A) or below. The noise level was much less than that of a highway.

58. A Member said that he was more concerned about the noise and vibration impacts on insects during the relatively long construction phase. Mr C W Tse explained that blasting and tunneling works were very common construction methods in urban and rural areas. The findings of the EIA report showed that there would be exceedance of up to 15 dB(A) above the relevant criteria at a few sensitive receivers for about two to three days. Mr Y K Chan explained that the issue of noise and vibration impacts on insects was not an area of concern in international forum on ecological impact assessment. There was only some information to show the noise impact on egrets or birds but there was no record showing any adverse impact of tunnel construction on insects.

59. The Chairman considered that it was important to consider the magnitude of the noise and vibration concerned. Reference could also be made to previous tunneling projects. A Member informed Members that the impact of tunnel blasting on a major colony of bats was monitored during the construction period of the West Rail. It was found that there was insignificant impact on the bats.

60. The meeting agreed that there was no evidence to show the adverse impacts of noise and vibration on wildlife and insects.

61. A Member suggested that the project proponent should be reminded to pay special attention to the reinstatement of rivers and streams particularly in Kam Tin area. Instead of only channelizing the rivers and streams which made them looked unnatural, more innovative design would be required. On the compensatory tree planting ratio of 1 to 1, trees with comparable size and basal area should be provided. The use of native species and structured planting should be encouraged. There should also be early plans for keeping stocks of native species with appropriate size in view of the large number involved. He also recommended dense planting in the Stabling Sidings (SSS), Emergency

Rescue Station and West Kowloon Terminus (WKT) in order to hide the structures.

62. In response to the Chairman's enquiry on the impingement of the alignment into river courses, Mr Y K Chan said that part of a stream in Kam Tin would be affected by the construction of the SSS and the part would be decked over and channelized. The remaining part of the stream, which would not be affected, would be enhanced. The Chairman suggested and Members agreed that the suggestions of Prof Chau Kwai-cheong could be incorporated into the tree planting and landscape plan which the project proponent had to submit to DEP under one of the proposed conditions.

63. On cumulative impacts of the project, a Member considered that while the information of EIA studies on the Kowloon Cultural District projects was not yet available at the time of EIA study for the XRL, the project proponent should shoulder its responsibility by taking into account the anticipated cumulative impacts of other projects for the construction of the WKT, including noise, air quality, transport and visual impacts. He suggested careful and innovative design of the WKT, such as the exit positions, by taking care of the traffic flow as Kowloon West was already a congested area and the projects were of large scale.

64. Mr C W Tse explained that cumulative impacts covered not only environmental issues. The area where WKT located fell in the Comprehensive Development Area. The town planning process would require the submission of a master plan with detailed layouts and the process was open to the public. The Chairman suggested and Members agreed that the suggestions of the Member be conveyed to the project proponent.

(Post-meeting note: The suggestions had been conveyed to the project proponent.)

65. The Chairman concluded that the Council endorsed the EIA report with the conditions set out in paragraph 10 of the paper plus an additional condition on hydrogeological impact assessment and groundwater level monitoring, i.e. before the commencement of any tunneling or soil excavation works, the project proponent should provide DEP with an updated hydrogeological impact assessment to reaffirm the findings of the EIA report with respect to the extent of the environmental impacts as a result of the potential

hydrology and groundwater level changes. Moreover, before, during and after the soil excavation or tunneling works, the project proponent should conduct groundwater level monitoring, in particular in the ecologically sensitive areas, in consultation with relevant stakeholders to verify the predictions in the EIA report.

66. A Member registered his disagreement to endorse the EIA report in view of his concerns over the hydrogeological impact of the project as well as noise and vibration impacts on insects during the construction phase.

**Agenda Item 6 : Report of the EIA Subcommittee**  
***(ACE Paper 15/2009)***

67. The Chairman of the EIA Subcommittee reported the Subcommittee's recommendation on the EIA report on "Provision of a Poultry Slaughtering Centre in Sheung Shui". The Subcommittee endorsed the report with some conditions by circulation.

68. A Member enquired about the disposal of the biodegradable poultry waste at landfill and the possibility of disposal by incineration. Mr C W Tse explained that assessment of disposal of poultry waste was included in the EIA report. Poultry waste was classified as "special waste" and the established procedures for transporting and disposal of special waste would be followed. With the development of incineration facilities in the future, disposal of the poultry waste by incineration would be considered.

69. The meeting agreed that the Council endorsed the Subcommittee's recommendation. The Chairman concluded that the Council endorsed the EIA report with the conditions set out in paragraph 8 of the paper.

**Agenda Item 7 : Any other business**

EIA report of non-selected projects

70. The Chairman informed Members that based on the updated Modus Operandi of the EIA Subcommittee, there was a new arrangement that the EIA Subcommittee Chairman would report to the full Council about the submission from project proponents of Executive Summaries of EIA reports which were not selected by the EIA Subcommittee for presentation and discussion for the

information of all Council Members.

71. The Chairman of the EIA Subcommittee reported that since June 2009, one set of Executive Summary of non-selected EIA report, i.e. EIA report on “Road Works at West Kowloon”, was received by the EIA Subcommittee. The Executive Summary was circulated to EIA Subcommittee Members.

#### Consideration of EIA reports by the Council

72. The Chairman highlighted the role of the EIA Subcommittee and the full Council in considering EIA reports. In view of the complexities of EIA reports, the EIA Subcommittee was entrusted by the Council to examine selected EIA reports in detail at the stage of the Subcommittee meeting with the presence of the project proponent team. The Subcommittee would report its findings and make recommendations for the consideration of the full Council. Unless there were outstanding issues or the Subcommittee considered necessary, the project proponent team would not normally be invited to attend full Council meetings. He encouraged non-EIA Subcommittee Members to attend the Subcommittee meetings, especially major development projects, to give views and raise questions to the project proponent at an early stage. Members who could not attend the Subcommittee meetings could also pass written questions or comments to the secretariat for response by the project proponent. Without the presence of the project proponent team at the full Council meeting, it would be difficult to have the response and undertakings of the project proponent in addressing the questions and concerns. Moreover, the Council had to comply with the statutory time frame in giving comments to the DEP.

73. A Member considered that there were constraints in the remit of the Council in considering EIA reports. The sustainability development of major infrastructure projects should not only focus on environmental aspects. It would be beneficial for the Council to consider the projects also from other perspectives, such as the need of a project, social and economic aspects.

74. Ms Anissa Wong said that for the Council to consider the merits of a specific project or policy initiative for infrastructure developments, the Council could initiate the discussion of an agenda item and invite relevant bureaux and departments to attend the meeting to explain the justifications, need, considerations and merits before the project was taken forward to the EIA process.

Nonetheless, the EIA mechanism was a statutory process. The role of the ACE in considering designated projects under the EIAO was well-defined in the legislation and the role of DEP was also guided by the statutory process with well-defined parameters and criteria.

Tentative items for discussion at the next meeting

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

**Agenda Item 8 : Date of next meeting**

76. The next meeting was scheduled for 12 October 2009.

**ACE Secretariat  
September 2009**