

**Confirmed Minutes of the 204th Meeting of
the Advisory Council on the Environment
held on 9 March 2015 at 2:30 pm**

Present:

Prof Paul LAM, SBS, JP (Chairman)
Prof CHAU Kwai-cheong, BBS, JP (Deputy Chairman)
Ir Cary CHAN
Prof FUNG Tung
Dr Billy HAU
Dr HUNG Wing-tat, MH
Dr Michael LAU
Prof Albert LEE
Mr Anthony LOCK
Ir MA Lee-tak, SBS
Prof Nora TAM, BBS, JP
Dr Eric TSANG
Mr Luther WONG
Dr Carrie WILLIS, SBS, JP
Mr Stanley WONG, SBS, JP
Mr Andrew LAI (Secretary)

Absent with Apologies:

Ir Prof Irene LO
Prof John NG
Miss Yolanda NG, MH
Ir Conrad WONG, BBS, JP
Prof Jonathan WONG, MH, JP
Ms Pansy YAU
Dr Eric YIP

In Attendance:

Ms Anissa WONG, JP	Permanent Secretary for the Environment / Director of Environmental Protection
Mr SO Ping-man	Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department (AFCD)

Mr Wilson CHAN	Assistant Director of Planning / Technical Services, Planning Department (PlanD)
Ms Esther LI	Principal Information Officer, Environmental Protection Department (EPD)
Miss Evelyn LEUNG	Chief Executive Officer (CBD), EPD
Ms Daicie TONG	Executive Manager (CBD), EPD

Action

The Chairman informed Members that apologies for absence had been received from Ir Prof Irene Lo, Prof John Ng, Miss Yolanda Ng, Ir Conrad Wong, Prof Jonathan Wong, Ms Pansy Yau and Dr Eric Yip. The Chairman also said that Dr Eric Yip would resign from the Advisory Council on the Environment (ACE) with effect from 1 April 2015 due to a career move to Shanghai. He extended his sincere thanks to Dr Yip for his contributions to ACE in the past two years and the best wishes for his new endeavor in Shanghai.

Item 1 : Confirmation of the draft minutes of the 203rd meeting held on 27 January 2015

2. The draft minutes were confirmed subject to the proposed amendments by Dr Michael Lau in para. 10 of the draft which had been tabled for Members' reference.

Item 2: Matters arising

3. The Chairman said that a visit to two construction sites on the environmental measures implemented by the MTR Corporation Ltd had been arranged on 13 March afternoon. 10 Members would join the visit.

Item 3 : Enhancing Land Supply Strategy: Reclamation outside Victoria Harbour and Rock Cavern Development *(ACE Paper 3/2015)*

4. The Chairman said that the Civil Engineering and Development Department (CEDD) would brief Members of their latest plan of enhancing land supply through reclamation outside Victoria Harbour and rock cavern development (RCD). Members' views were invited for the studies to be conducted in future, including planning and engineering studies as well as the

statutory environmental impact assessments (EIAs). Members took note that when CEDD had firm plans to take forward individual proposals, they would be required to conduct project-specific EIA studies in accordance with the EIA Ordinance. The related EIA reports would come to ACE for comments after completion.

5. The Chairman asked if Members had any interest to declare. A Member declared that his employing company had lands in Siu Ho Wan for development. A Member declared his involvement in the feasibility study on the relocation of Diamond Hill fresh water and salt water service reservoirs to caverns in his capacity as the Director of Water Supplies before retirement from the civil service. A Member advised that she had served as a panelist in one of the public fora on the land supply consultation exercise organized by CEDD. A Member said that he was working on a project with AECOM but that was not related to CEDD's reclamation or RCD proposals. The meeting agreed that these Members could stay on and participate in the discussion.

Presentation and Question-and-Answer Sessions (Open Session)

6. Mr Lam Sai-hung explained the Government's six-pronged approach to provide additional land in meeting population growth, aspiration for better living environment and infrastructural and economic developments. He then introduced the two studies conducted, i.e. the land supply study for identifying potential sites for reclamation and RCD and the cumulative environmental impact assessment (CEIA) study on the three potential reclamation sites at Lung Kwu Tan, Siu Ho Wan and Sunny Bay in the western waters. Dr Daman Lee followed and briefed Members on the site selection process, the key findings of the strategic studies of the land supply study, i.e. the broad technical assessments and strategic environmental assessment (SEA), and the key results of the two-stage public engagement exercise which together put forward five potential reclamation sites, the possible artificial islands in the central waters and the three potential RCD sites for further consideration by the Government. Mr Freeman Cheung then briefed Members on the CEIA and its major findings as regards the four environmental aspects, namely air quality, water quality, ecology and fisheries.

7. A Member supported the conduct of the SEA and CEIA as well as the public process in gauging public acceptance for creating additional usable land from reclamation and RCD to augment land reserve in Hong Kong. He

suggested the Government to conduct a third round of public engagement on those specific sites which were located in ecologically sensitive areas. Subsidies could also be provided for independent professional groups or academics to conduct specific supplementary studies on the selected sites, e.g. ecological study in the western waters which were the known habitats for Chinese White Dolphins (CWDs). The Member opined that the RCD proposals, which were generally welcomed by the community, and some less controversial reclamation proposals should be given priorities when the Government selected amongst the shortlisted sites for the next-stage assessment. He suggested the Government to devise and implement appropriate strategic conservation plans for enhancing the overall marine condition prior to the development of any of the potential sites.

8. A Member sought clarification on the difference between the SEA and CEIA. He also enquired how the selected Siu Ho Wan site, which the SEA had already identified it with likely high environmental impact, was selected for further assessment under the CEIA. The Member suggested CEDD to provide the full SEA and CEIA reports for Members' reference as he expected that there would be more details in the reports on both the site selection process and findings of the assessments.

9. In response, Mr Lam Sai-hung advised that relevant green groups had been engaged in the public engagement exercise. In particular, two CWD workshops were organized in 2013 to give an account on the methodology adopted for the dolphin surveys and the interim survey results. He advised that another workshop was being arranged, tentatively in May/June 2015, to present the complete set of CWD survey results and assessment findings. He assured Members that all interested stakeholders, including green groups, would be engaged in the coming stages of project development. As regards the suggestion to prioritize projects for implementation, Mr Lam said that the feasibility study for the three potential RCD sites had commenced last year. The Government had also prioritized reclamation proposals. Subject to the funding approval from the Legislative Council (LegCo), the planning and engineering study for Sunny Bay reclamation and the strategic study for the artificial islands in the central waters would commence first.

10. Regarding the site selection criteria for potential reclamation sites, Mr Lam Sai-hung said that potential impacts on the environment and the community were the two main concerns raised by the public during Stage 1 of

public engagement. CEDD had taken these concerns into account when shortlisting the five potential reclamation sites, with the support of the broad technical assessment and the SEA. He said that the Government would strive to strike an appropriate balance amongst environmental, social and economic considerations when pursuing any of the development proposals. The environmental impacts of the potential reclamation sites would be further assessed under the statutory EIA process for firming up any development plans and formulating relevant mitigation measures.

11. On the difference between the SEA and CEIA, Mr Robin Lee explained that the land supply study was conducted in 2011 to assess the feasibility of enhancing land supply through reclamation outside Victoria Harbour and RCD. A territory-wide site search was carried out to identify potential reclamation and RCD sites. A SEA was conducted to provide environmental inputs throughout the process, which included (i) review of all environmental baseline conditions to identify no-go areas; (ii) screening of possible sites by assessing the environmental constraints and opportunities using environmental performance indicators; (iii) broad environmental assessment on the longlisted sites; and (iv) together with Stage 1 public engagement results on site selection criteria coming up with the potential sites for further consultation in Stage 2 public engagement. A separate CEIA was conducted in 2013 to assess the overall environmental effects of the three potential reclamation sites in the western waters identified in the land supply study, namely the Lung Kwu Tan, Siu Ho Wan and Sunny Bay sites in respect of air quality, water quality, ecology, particularly marine ecology and CWDs, and fisheries. The study had taken into consideration the cumulative impacts of existing, committed, planned and proposed development projects in the vicinity. Mr Lee said that the CEIA was a more quantitative study on the environmental issues in consideration with strategic mitigation options. The CEIA's findings would be reviewed in future statutory EIAs supported by updated project information and environmental conditions. He explained that as the SEA and CEIA were closely linked, CEDD submitted the findings of both studies to ACE at the same time to facilitate an informed discussion on the development proposals.

12. Mr Lam Sai-hung said that the full SEA and CEIA reports could be provided for Members' reference after the meeting. CEDD Mr Robin Lee added that the key environmental issues of the longlisted sites and the shortlisted sites were set out in sections 6 and 7 of the SEA Executive Summary respectively.

[Post-meeting note: The SEA and CEIA full reports were provided for Members' reference on 31 March 2015.]

13. In response to the question from a Member on the source of dolphin data adopted in the CEIA and the carrying capacity of CWDs in the western waters, Mr Lam Sai-hung said that the CWD track lines were obtained from the six-month dolphin survey conducted by CEDD specifically for the three potential reclamation sites. The survey provided information of CWD occurrence as well as their behaviour and usage in the nearshore waters. Dr Daman Lee supplemented that the nearshore waters covered by the dolphin survey had not been investigated in previous surveys conducted by the Agriculture, Fisheries and Conservation Department (AFCD) and other local CWD experts including Dr Samuel Hung. CEDD's survey was led by two dolphin experts, i.e. Dr Bernd Würsig and Dr Tom Jefferson. Field surveys at the three potential reclamation sites, including shore-based theodolite tracking and passive acoustic monitoring on CWDs, had provided valuable information in deriving track lines and validating the existence of dolphin activities at night time.

14. A Member pointed out that according to Dr Samuel Hung's data, there was a significant drop in CWD population plying the waters near Siu Ho Wan. He questioned the reliability/credibility of using the current data for setting the assessment baseline under the CEIA, as the dolphin density was already very low in the vicinity. CWDs had also been significantly affected by construction works nearby including the Hong Kong-Zhuhai-Macao Bridge (HZMB). The Member also quoted Dr Würsig's remark at the discussion of the EIA report for the proposed three-runway system of the airport that the acoustic survey result had little contribution to the assessment of CWDs. In response, Mr Lam Sai-hung said that in view of the dynamic ecological conditions in the western waters, they would conduct further surveys to fill the information gaps before taking forward the proposals. The Government was open to suggestion and comments on the methodology of conducting dolphin surveys and monitoring on their activities. In response to the Chairman's enquiry, Mr Lam said that they planned to conduct further dolphin surveys as a follow-up to the six-month CWD survey completed.

15. A Member commented that the three potential reclamation sites in the western waters would provide an aggregated land supply ranging from 360 to 550 hectares (ha). That would become a major source of new land under the

strategic plan. Given the development constraints and potential ecological impacts, he enquired about the Government's stance on whether to take forward only one or two of the three reclamation proposals, or to launch three developments in one-go, or to commence the works in phases by starting with the most preferred or less controversial site. The Member asked further about the objectivity and validity of assessing the worst-case scenario under the CEIA as Hong Kong had no precedence in conducting reclamation works on such a mega scale.

16. Mr Lam Sai-hung said that the Government planned to start with the planning and engineering study on Sunny Bay reclamation first, while some further technical studies might be required at Lung Kwu Tan and Siu Ho Wan before taking forward further detailed planning and engineering studies. He advised that the Government was open to suggestions in taking forward the proposed reclamation works. Mr Robin Lee supplemented that the Government had included all three potential reclamation sites in the CEIA as the worst-case scenario for assessing the cumulative environmental impacts in addition to other concurrent projects in the vicinity including the HZMB, the proposed three-runway system of the airport and the proposed Tung Chung New Town Extension. He advised that the Government planned to commence the study at Sunny Bay earlier than others as it had less impact on the environment including CWDs.

17. A Member reiterated his concerns on the impacts on CWDs in the western waters and suggested that the full SEA and CEIA reports should be made available to relevant academics, professional bodies or green groups for comments. Mr Lam Sai-hung replied that, taking on board the results of the CEIA, the reclamation scale of Siu Ho Wan site would be reduced, and proper mitigation measures would be implemented at the construction stage in order to reduce the impact on CWDs in the western waters.

18. A Member opined that the CEIA failed to give proper assessment to conclude that there were no significant impacts on CWDs at the three potential reclamation sites as some of the impacts, such as the impact arising from the construction of the proposed three-runway system of the airport, would not surface until then. The Member added that CWD population had declined by more than 60% in the last decade due to the development in the western waters which was beyond the estimation of the HZMB project. He was concerned about the carrying capacity of the western waters and how the dolphins would

be affected by the proposed reclamation projects. He asked whether the Government planned to carry out more focused studies on the impact of reclamation works in order to address key environmental issues especially on CWDs. As regards the impact assessment on fisheries, the Member suggested the Government to conduct new field surveys rather than relying on old data from previous studies which recorded the already depleted fisheries stock. He said that according to anecdotal information from some fishermen, since the enforcement of the trawling ban in 2012, there had been increase in the catches, supporting the findings of University of British Columbia's modeling study that predict a significant recovery of certain fish stock in the coming years. The Government should take into account these new environmental conditions and conduct new rounds of fisheries impact assessment.

19. A Member said that the Government should pay special attention to the planning and phasing of construction works as some of the proposed RCD sites would infringe into the boundaries of country parks. The level of encroachment and impact could be minimized by using access tunnels instead of surface road or deploying advance construction technologies. The Member also suggested the Government to provide more details to the public on the development proposals in future public engagement exercises so as to facilitate an informed discussion in the community.

20. Mr Lam Sai-hung assured Members that further CWD surveys would be conducted to investigate the behavior and activities of CWDs in the western waters to fill the information gaps as far as possible. Concerning the potential RCD sites, Mr Lam said that they would minimize interference to the environment, in particular the adjacent country parks, during both the construction and operational stages. He also thanked the Member's comments as regards the public engagement process to be carried out in the next round of studies.

21. A Member commented that the Government should take into account economic development and population growth of Hong Kong in the coming decades when searching for suitable development sites. On reclamation, the Member remarked that a number of mega works projects were under construction or planning in the western waters, resulting in significant impact on ecology and marine life in the region. He opined that no further projects, including the three potential reclamation sites under the CEIA, should be implemented there for the time being in order to allow sufficient time for the

marine ecology and fisheries to recuperate. Regarding the RCD proposal, he suggested the Government to consider the feasibility of using the abandoned mines in Ma On Shan for cavern development.

22. Mr Robin Lee reiterated that the land supply study was a territory-wide search to identify potential reclamation and RCD sites for use in the next twenty to thirty years. Population growth, improvement to quality of life and economic development were the three drivers for developing adequate usable land. In meeting Hong Kong's long-term need for land, apart from considering nearshore reclamation, the Government would pursue other land supply options and explore the opportunity of developing artificial islands of 700-800 ha total in size in the central waters between east Lantau and Hong Kong Island which could accommodate some 0.5 million population and a central business district. As regards reclamation in the western waters, Mr Lee said that the Government would take into account various factors, including the viability of phased implementation, in devising their development programmes. On the RCD development, Mr Lee referred to the proposal of the Drainage Services Department in relocating the Shatin Sewage Treatment Works into rock caverns in Ma On Shan. The proposal, if implemented, would release 28 ha of land for development.

23. A Member said that the Government had not provided information on the total land reserve to be created and asked whether the three potential reclamation sites would still be required if the Government was to proceed with the proposed artificial islands in the central waters. She suggested that CEDD should consider if there was a genuine need to develop all three sites, and even if in the affirmative, the developments should be properly staggered to allow sufficient time between projects for the marine ecology and fisheries to recover. The Member also suggested that further elaboration should be given regarding the CEIA's concluding remarks that the proposed reclamation projects would not create significant impacts on the environment, which was contrary to the general perception, given there were many ongoing projects in the western waters. She added that the public would support the reclamation proposals mainly in anticipation that the additional land was for residential use. Now that the Sunny Bay reclamation development was principally geared towards tourism, while that at Lung Kwu Tan and Siu Ho Wan would partly serve logistics and commercial purposes. This might not go well with the community aspiration as collected during the consultation. The Member was also concerned that the current research data on CWDs, water quality and fisheries would not give

sufficient reference for future studies in view of the dynamic environmental conditions in the western waters in the coming years, including engineering works and the trawling ban launched in 2012.

24. Mr Lam Sai-hung responded that they had been adopting a six-pronged approach in land supply to cope with the social and economic developments of Hong Kong. For each development proposal, they would ascertain the key environmental and social impacts as well as draw up practicable mitigation measures before deciding whether to proceed with the development. The CEIA was conducted strategically on a worst-case scenario basis, i.e. all three reclamation sites were implemented concurrently with all other projects in the vicinity, ongoing, committed or planned, to assess the impacts on the environment in both the construction and operational phases. It concluded that there should not be insurmountable problem provided that proper land use planning, eco-friendly construction methods and strategic mitigation measures were in place. CEDD would continue the monitoring and survey work and take on board Members' comments in planning for further studies.

25. A Member stressed that the principle of avoidance should be considered before mitigation, and that reclamation works should be avoided as far as possible. She said that the Government should provide basic information on the total area of new land required to augment our land bank, and reclamation should only be carried out if there was an overriding need for land which could not be met elsewhere.

26. Regarding individual EIAs for each of the three potential reclamation sites, a Member suggested CEDD to engage a wider spectrum of the relevant stakeholders before deciding on the methodology to be adopted for the study. This would enhance the credibility of the EIA reports and avoid potential arguments over the propriety of the methodology at a later stage of the EIA process. That was the experience which ACE gained last year when the Council considered the EIA report on the proposed three-runway system submitted by the Airport Authority Hong Kong.

27. In reply to a Member's enquiry about the comparison of the scenarios with and without the reclamation projects, Mr Lam Sai-hung assured Members that such detailed comparison would be conducted in the statutory EIA for individual projects.

28. A Member enquired about the projected resident and mobile population in the reclaimed areas, which would have significant implications on the environmental impact and the supporting services to be provided. Mr Robin Lee responded that a detailed planning and land use study would be carried out for individual sites for a more realistic planning of the population in-take for each of the development sites. Mr Freeman Cheung supplemented that various development scenarios, which included tourism and logistics uses apart from residential uses, were identified for the purpose of the CEIA. Details of development proposals would however only be formulated in the next stages of study.

29. In response to the Chairman's enquiry about any insurmountable problems/issues to be expected during the construction phase of the reclamation works, Mr Lam Sai-hung said that the CEIA had assessed the impacts on the environment in both the construction and operational phases, and that the worst-case scenario during the construction stage had assumed reclamation works of the three sites to commence concurrently.

30. The Chairman summarized Members' comments and suggestions raised at the meeting, which covered the purposes for the projects, methodology for conducting technical studies and assessment for the statutory EIAs, putting avoidance before mitigation when assessing the impacts of the projects especially with regard to CWDs. Mr Lam Sai-hung thanked Members for their views. CEDD would continue to engage relevant green groups, academics and professionals in the next stages of study. There would be further consultations in the community after more detailed development proposals, including the scale of reclamation, development parameters and mitigation works, etc. were developed.

[The presentation team left the meeting at this juncture.]

Internal Discussion Session

31. The Chairman welcomed this sharing session with CEDD. On the three potential reclamation sites at Lung Kwu Tan, Siu Ho Wan and Sunny Bay, the Chairman pointed out that the three sites all clustered in the western waters. He was concerned about the cumulative environmental impacts in the region during the construction phase should the reclamation works were to commence concurrently. He recapped Members' views at the meeting that CEDD should

give further assessment over the timeline and need of phased implementation of the works when taking forward the reclamation proposals. They should avail sufficient time for marine ecology and fisheries to recuperate. Having said that, the Chairman stressed that CEDD had to conduct detailed studies and assess the environmental impacts before considering taking forward individual projects. Besides, CEDD would be required to submit project-specific EIA studies in accordance with the EIA Ordinance. ACE would have the opportunity to comment on the relevant EIA reports upon completion.

32. A Member shared her experience as a panelist in a public forum during the CEDD's engagement exercise. She said that the public supported the reclamation proposals principally on the understanding that the land to be created was for residential purpose. If the developments at Lung Kwu Tan, Siu Ho Wan and Sunny Bay would be mainly geared towards tourism and logistics uses, she was concerned that public support would not sustain when CEDD confirmed the reclamation proposals as currently planned.

33. A Member opined that CEDD should have planned to increase land supply from the five proposed reclamation sites in the SEA shortlisted from 27 selected sites plus the proposed artificial islands in central waters. He pointed out that while CEDD had not provided detailed information or timeline regarding the total land reserve to be created, the three potential reclamation sites in the CEIA already represented 75-80% of the total new land to be created through reclamation. Under the current strategic plan, it could be CEDD's target to develop the three reclamation sites and the artificial islands proposal in one-go. Echoing this concern, the Chairman stressed that CEDD should conduct further technical studies particularly with regards the construction phase impacts to the environment, and to demonstrate to ACE that sufficient effective mitigation measures had been put in place when they submitted project-specific EIA reports to the Council in due course.

34. A Member suggested that CEDD should consider enlisting support from academics and professionals to conduct detailed studies on marine ecology (including CWDs) and fisheries and to provide guidelines for the studies given that the current baseline data had been challenged by some local experts and stakeholder groups. Another Member said that having regard to the experience gained when ACE considered the third runway EIA report last year, it was imperative for CEDD's consultant teams to make reference and apply the historical data as available from different academic/professional studies when

they conducted their studies and assessment in respect of impacts on CWDs and fisheries. A Member commented that CEDD should provide the SEA and CEIA reports to ACE before the meeting to facilitate Members to better understand the assumptions and site selection criteria of their studies. That might have answered some of the questions which Members had in mind.

35. As regards a Member's comment that the Government should announce the total land supply target from reclamation and RCD as well as the strategic timeline for individual projects, the Chairman recapped the Council's consensus view that the land supply strategy should adopt a well-planned phased implementation approach. This would allow sufficient time for marine life and fisheries in the western waters to recover. He suggested that these concerns should be incorporated in the EIA Study Briefs for CEDD to take forward the respective statutory EIA studies.

36. Mr KF Tang said that CEDD had assessed the potential environmental impacts of individual proposed reclamation and RCD projects at the strategic level, and had identified areas/impacts necessitating further studies during both the construction and operational phases. There should be statutory EIAs in the next stages to determine their environmental acceptability. Updated project information and environmental conditions would be taken into account for carrying forward these development proposals. Mr Tang assured Members that the Council's views and concerns would be reflected to CEDD and be included in the EIA Study Briefs for detailed EIAs in accordance with the EIA Ordinance as appropriate when CEDD had firm plans to take forward individual development proposals. He advised that CEDD would commence a planning and engineering study including the statutory EIA for the Sunny Bay reclamation site subject to funding approval from the LegCo, while further planning and engineering studies and statutory EIAs would be required for the proposed developments at Lung Kwu Tan and Siu Ho Wan.

Item 4 : Any other business

(A) Tentative discussion items for ACE, Waste Management Subcommittee and Nature Conservation Subcommittee in 2015

37. The Secretary briefed Members on the tentative discussion items for ACE, the Waste Management Subcommittee and the Nature Conservation Subcommittee for 2015 which had been tabled for reference. He advised that

discussion items for the EIA Subcommittee had not been included as EPD did not have full control over the submission timetable of individual EIA reports. The first EIA Subcommittee meeting was expected to be held in May/June 2015.

38. As regards the Waste Management Subcommittee, the Secretary said that the Subcommittee would hold three meetings a year, each meeting with two to three topics for discussion. For the Nature Conservation Subcommittee, two meetings were planned. The respective secretariats would contact the chairmen shortly to schedule the first meeting of the subcommittees.

(B) Report of EIA Subcommittee on non-selected EIA reports

39. The Chairperson of the EIA Subcommittee, reported that since the last ACE meeting, the Subcommittee had received the Executive Summary of the EIA report on “Alternative Ground Decontamination Works at the Proposed Kennedy Town Comprehensive Development Area Site” submitted by CEDD which the Subcommittee had not selected for discussion. The Executive Summary of the EIA report had been circulated to Subcommittee Members, and the relevant hyperlinks been copied to non-Subcommittee Members for information. The EIA report was exhibited for public comments from 29 January to 27 February 2015. Individual Members had been reminded to send their comments on the EIA report, if any, directly to the Director of Environmental Protection within the public inspection period.

40. Given that the EIA report had not been selected by the EIA Subcommittee for discussion, EPD had taken that ACE had no comment on the report upon close of the public inspection period. The meeting agreed.

Item 5 : Date of next meeting

41. The next ACE meeting was scheduled on 13 April 2015 (Monday). Members would be advised on the agenda in due course.

(Post-meeting note: The meeting scheduled on 13 April was cancelled. The next meeting would be held on 11 May.)

ACE Secretariat

March 2015