

**Confirmed Minutes of the 136<sup>th</sup> Meeting of  
the Environmental Impact Assessment Subcommittee  
on 18 November 2016 at 2:00 pm**

**Present:**

Prof Nora TAM, BBS, JP (Chairperson)  
Dr HUNG Wing-tat, MH (Deputy Chairman)  
Ir Cary CHAN  
Dr Billy HAU  
Dr Michael LAU  
Prof John NG  
Miss Yolanda NG, MH  
Dr Eric TSANG  
Mr Luther WONG, JP  
Ms Becky LAM (Secretary)

**Absent with Apologies:**

Prof CHAU Kwai-cheong, BBS, JP  
Prof Albert LEE  
Ir MA Lee-tak, SBS  
Dr Eric TSANG

**In Attendance:**

Mrs Alice CHEUNG, JP	Deputy Director of Environmental Protection (3), Environmental Protection Department (EPD)
Mr K F TANG	Assistant Director (Environmental Assessment), EPD
Miss Dora CHU	Executive Officer (CBD) 1, EPD
Mr Alan CHUNG	Executive Manager (CBD), EPD
Miss Apple LEUNG	Executive Officer (CBD) 2, EPD

**In Attendance for Item 3:**

Mr WONG Chuen-fai	Principal Environmental Protection Officer (Strategic Assessment), EPD
Mr LAM Wah King, Edward	Senior Environmental Protection Officer (Strategic Assessment)3, EPD
Mr CHEUNG Kwok-wai	Senior Nature Conservation Officer (North) , AFCD
Ms Eva YAU	Nature Conservation Officer (Yuen Long), Agriculture, Fisheries and Conservation Department (AFCD)

**Project Proponent Team**

*Glory Queen Limited*

Ir Dr Owen YUE, Chief Town Planner

Mr Gregory CHAN, Assistant General Manager  
Ms Alison IP, Senior Town Planner  
Mr Captain WONG, Ecologist

*Ramboll Environ Hong Kong Ltd.*

Mr David YEUNG, Managing Director  
Mr Henry NG, Senior Consultant

*Ecosystems Ltd.*

Mr H K KWOK, Senior Ecologist

*ADI Limited*

Ms Elsa KWONG, Associates

*AECOM*

Mr Sean TONG, Senior Engineer

*CKM Asia Limited*

Mr Kim Meng CHIN, Director

*Westwood Hong & Associates Ltd.*

Dr Westwood HONG, Managing Director

*Vision Planning Consultants Ltd.*

Mr Kim CHAN, Managing Director

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#### Action

The Chairperson welcomed Members to the meeting and informed that apologies of absence had been received from Professor Chau Kwai-cheong, Professor Albert Lee, Ir Ma Lee-tak and Dr Eric Tsang.

#### **Item 1 : Confirmation of the draft minutes of the 134<sup>th</sup> and 135<sup>th</sup> meetings held on 17 and 24 October 2016 respectively**

2. The Chairperson informed that the draft minutes of the meetings on 17 and 24 October 2016 were circulated to Members on 8 and 9 November 2016 respectively. The draft minutes were confirmed subject to the proposed amendments from two Members in paragraphs 43 and 80 respectively of the draft minutes of the 134<sup>th</sup> EIASC meeting, and another Member in paragraph 29 of the draft minutes of the 135<sup>th</sup> EIASC meeting.

#### **Item 2 : Matters arising**

3. The Chairperson informed that information on the approval of the EIA reports on “Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station” and “Police Facilities in Kong Nga Po” was circulated to ACE Members on 20 and 24 October 2016 respectively.

4. There was no matter arising from the minutes of the last meeting.

5. In response to the general concerns of many members against “destroy first, build later”, the Chairperson enquired about the information and standards that should be used for conducting baseline studies in EIA, in particular when unauthorized development was involved in the past.

6. Mr K F Tang explained that, to comply with the requirements of the Environmental Impact Assessment Ordinance (EIAO), baseline studies should base on information of existing characteristics of the proposed site. Where appropriate, the baseline condition could make reference to the land use zoning under the purview of TPB.

**Item 3 : Discussion on the EIA report on “Proposed Low-rise and Low-density Residential Development at Various Lots and their Adjoining Government Land in D.D. 104, East of Kam Pok Road, Mai Po, Yuen Long, New Territories”**

*(ACE-EIA Paper 8/2016)*

**Internal Discussion Session**

7. Without any conflict of interest declared by Members, the Chairperson informed that the discussion would be divided into the Presentation and Question-and-Answer Session which would be opened to the public while the Internal Discussion Session would remain closed.

8. The Chairperson reminded Members to keep confidentiality of the discussion on the EIA report.

*[The project proponent team joined the meeting at this juncture.]*

**Presentation Session (Open Session)**

9. With the aid of a powerpoint presentation, Dr Owen Yue briefed Members on the need of the project and Mr David Yeung followed to introduce the findings of the EIA Study, the site surroundings and existing conditions of the project, consideration of development options and mitigation measures of the project.

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

***Impact on waterbirds***

10. With his earlier written submission given to the project proponent before the meeting, a Member enquired on the measures that would be adopted to preserve the habitat for waterbirds found in the pond within the project site, namely *little grebe*, *Chinese pond heron* and *purple heron*.

11. Mr H K Kwok clarified that *purple heron* was not discovered within the project area. He added that the bird species of conservation importance recorded

inside the Project Area were *Little Grebe*, *Chinese Pond Heron*, *Little Egret* and *Grey Heron*. According to the EIA report, the loss of the pond would not cause adverse impact to these species and preservation of habitat for these species was not considered necessary. He added that ecological survey was conducted 25 times during the EIA study period and the cumulative abundance of these species recorded in the Project Area were on the low side (i.e. fewer than 5 birds). This reflected the utilisation of this abandoned fishpond by these waterbird species was considered very low, therefore, the ecological value of the abandoned pond in the Project Area was ranked very low in the EIA study.

12. In response to a Member's enquiry on the possible underestimation of impacts on *Black-faced Spoonbill* and other birds foraging in the Ngau Tam Mei Drainage Channel (NTMDC), Mr H K Kwok said that the ecological profile of the bird species of conservation importance was established from literature review and ecological surveys, and methodology adopted in the ecological surveys was reviewed by AFCD. Additional surveys were conducted between November 2015 and January 2016. He acknowledged that waterbirds, mostly *ardeids* were observed foraging in NTMDC during low tides in winter. He suggested that based on the results, ecological value of NTMDC in which foraging habitats were provided to waterbirds was ranked as "moderate". Furthermore, there was no direct impact on NTMDC associated with the project; in fact, the major impact was associated with the disturbances during construction phase which was temporary and reversible. As such, mitigation measures were proposed to address the construction disturbances, including installation of hoardings before construction phase, the use of movable noise barriers and quiet type equipment and construction method.

13. The Chairperson enquired whether the number of *Black-faced Spoonbill* was underestimated. She cited a public comment that 33 *Black-faced Spoonbill* were observed in January 2014 but only 11 to 15 were regularly observed from November 2014 to March 2015 in the section of NTMDC west of the project site.

14. Mr H K Kwok explained that in addition to reviewing ecological profile in the EIA Report that was established based on continuous ecological surveys over the years, they had reviewed ongoing monitoring data of nearby development projects and all published reports, such as the EIA conducted for the Comprehensive Development and Wetland Protection near Yau Mei San Tsuen. In the EIA for Yau Mei San Tsuen, it was recorded that 10 *Black-faced Spoonbill* at maximum were observed. This showed that the EIA study recognized the presence of *Black-Faced Spoonbill* and other waterbird species in the NTMDC in low tides during dry season. Having considered other reports on the presence of *Black-faced Spoonbill* and other waterbirds, he said that they had ranked the ecological value of NTMDC as "moderate", despite the channel was for drainage purpose, located in urbanised landscape with roads on two sides. He considered the potential impact was not under-estimated.

**Noise impact**

15. A Member was concerned about the visual obstruction associated with the 4.5m tall noise barrier along the eastern site boundary. He questioned if any other alternatives had been explored by the project proponent. In addition, he expressed concern about the slender structure proposed to be adopted and its associated wind blockage effect.

16. Dr Owen Yue explained that the major source of noise pollution came from the eastern part of the project site. Part of the 4.5m tall retaining wall was associated with a landscape berm that provided support underneath. Having consulted the Planning Department, they had come up with the current design with a combination of factors including the need to minimize noise impact, landscape and visual factors.

***Tree planting as buffer zone for waterbirds***

17. A Member asked if the project proponent could provide any record on the breeding level of *Little Grebe*. Mr H K Kwok explained that when *Little Grebe* was observed, the presence of nest was searched. No nest of this species could be found within the project site, thus there was no such record.

18. A Member considered that trees planted alongside NTMDC would act as a buffer zone to the waterbirds that were observed roosting and foraging in this area during low tides, and to provide screening effect against construction disturbance. Therefore, he asked if the tree planting area at the project site would be further enhanced after the commencement of the project.

19. Ms Elsa Kwong explained that 190 trees would be preserved on-site and 84 would be transplanted to the proposed landscape area, hence approximately 75% of existing trees would be retained. She considered that the existing buffer planting was dense enough. Amongst the 90 trees that would be removed, 56 were *Leucaena leucocephala* and they were of low ecological value. These trees would be removed with an aim to eliminating evasive risk and avoiding competition that would lead to poor plant growth. As a result, only the outer layer of the existing buffer would be preserved at Kam Pok Road (KPR).

20. Mr Captain Wong explained that they had recognized the importance of providing planting as buffer for waterbirds, and they would enhance the function of buffer planting through landscape planting.

21. A Member enquired if only a single layer of trees would be preserved as green buffer along NTMDC. Ms Elsa Kwong clarified that two to three layers of trees would be preserved, and trees would be planted at the main entrance of the project site at KPR with a view to enhancing the existing green buffer.

22. The Chairperson suggested that the felling of trees and its potential impact on waterbirds foraging in the NTMDC should be considered, even though

the trees fell were of low ecological value.

23. A Member enquired if the project proponent would consider planting trees in groups rather layers. Ms Elsa Kwong explained that they relied on the landscape core to provide trees in groups, and there would be a continuous 5m to 8m wide landscape buffer surrounding the site boundary.

24. In response to the Member's question, Ms Elsa Kwong informed that the existing green coverage/ landscape area within the project site was 30%. The Member further asked if the future green coverage would increase or decrease in comparison to the existing 30% green coverage. Mr H K Kwok supplemented that the total project area was 3.8 hectare and 0.3 hectare was mapped out as the plantation area. Ms Elsa Kwong supplemented that after commencement of the project, the plantation area would be developed to 1.1 hectare.

25. As regards the impact on waterbirds foraging in the NTMDC, Mr H K Kwok said that during construction phase, hoardings would be erected along the boundary of the project area that could act as a buffer zone. He further explained that NTMDC was located at a landscape lower than KPR, the embankment of the channel already provided some screening effect. Black-faced Spoonbill was not a big bird and hence the site hoardings that would be erected were considered sufficient to provide screening and buffering effects for the waterbirds.

#### ***Construction and Demolition waste (C&D waste)***

26. A Member enquired about the amount of C&D waste generated from the project site that would be reused and recycled. Mr Gregory Chan explained that the major construction waste would be generated from excavation during site formation works. For this site, most the excavated soil would be re-used and recycled locally for pond filling and land leveling. Off-site fabrication materials would also be considered for construction to minimize C&D waste.

27. Mr. David Yeung further explained that the existing ground level would need to be raised to the proposed site formation level by imported fill materials. As such, it was initially estimated that about 52,000 m<sup>3</sup> of soil would be imported for site leveling, about 5,600 m<sup>3</sup> of soil would be re-used in-situ, and about 1,400 m<sup>3</sup> of non-inert materials would be disposed of to the landfill.

#### ***Visual impact***

28. In relation to the use of innovative and responsible building design, Mr Gregory Chan explained that having considered the need to integrate with surrounding natural environment, the proposed development was a low-density residential development comprised of houses of two storeys, provided with private gardens. Continuous landscape buffer and tree planting surrounding the development would be provided as they intended to disguise the residential development and enhance the visual amenity to the passersby.

29. A Member doubted whether a single layer of peripheral planting

alongside KPR could achieve the purpose of disguising the housing development. Mr Captain Wong explained that it would depend on the tree species that was planted. Learning from past experiences at Wo Shang Wai project in which the single layer of tree planting had successfully enhanced the visual amenity by disguising the fishponds, the selection of appropriate plant species such as *Ficus microcarpa* and *Hibiscus tiliaceus* could provide a continuous peripheral planting.

### ***Sustainability***

30. A Member enquired whether environmental targets for the design and construction of buildings would be set. He further questioned if the Building Environmental Assessment Method (BEAM) or Leadership in Energy and Environmental Design (LEED) assessment criteria would be adopted as well as setting emission targets for embedded carbon at the construction and operational stages.

31. Mr Gregory Chan explained that the project was aimed to achieve the BEAM Plus (New Buildings) at “Gold” rating or above for the project, subject to the final project design.

### ***Sewage Treatment***

32. A Member enquired whether untreated discharge would flow into NTMDC despite the presence of the interim sewage treatment plant (STP). Mr Sean Tong explained that water would be extracted from NTMDC for treatment to offset the pollution loads in order to follow the principle of no net increase in pollution loadings.

33. The Member further enquired if there would be any contingency plan during possible breakdown of the operation of the STP. The Chairperson concurred with the Member and considered that the implementation of a contingency plan was important as the interim STP would be relied on until the project site could be connected to the public sewerage system.

34. Mr Sean Tong explained that a sewage holding tank would be provided for temporary storage of sewage for a maximum of three days in case of outage of the interim STP, in addition to the emergency response plan covering other possible emergency situation.

35. The Chairperson asked the project proponent to further explain how no net increase principle could be achieved through the system of combination of biological treatment, membrane filtration and Reverse Osmosis (MBR + RO) processes. Mr David Yeung explained that design of the interim STP would follow the principle of no net increase of pollution loadings. During construction, the contractor would be required to apply a discharge licence under the Water Pollution Control Ordinance (WPCO) and the discharge should comply with the terms and conditions of the licence and the discharge standards for effluents

specified in the licence. In addition, appropriate site drainage such as sedimentation tanks and similar facilities would be provided on site to properly direct stormwater to sand/silt removal facilities. Treated construction site runoff would be discharged into nearby existing stormwater drains and eventually discharged into NTMDC. During operational phase, the interim STP would be used for treatment of sewage generated from the proposed development site until the operation of public sewerage system.

36. Mr Sean Tong cited an example whereby there might be 10 mg/L biochemical oxygen demand (BOD) concentration taken from the water sample at NTMDC, by adopting MBR + RO, the BOD in water sample could be reduced to 3 mg/L. Weekly monitoring on water samples would be conducted and reviewed to ensure compliance with the no net increase principle, and mitigation measures would be adopted in case net increase was found. After sewage offsetting calculation of pollution loads for the Kam Pok Road Development (KPR development), it was found that the loading after was smaller than the loading before the KPR development, hence the requirement of “No Net Increase in Pollution Loading to Deep Bay” was achieved.

37. A Member was concerned about the impact of the proposed interim sewerage system and its connection to the planned Ngau Tam Mei sewerage system. Mr Sean Tong explained that the interim STP would be decommissioned and converted into a sewage pumping station once the trunk sewer became available for connection.

38. In relation to the water abstraction from NTMDC, a Member asked if water samples were assessed. Mr Sean Tong advised that water samples were taken at the channel from September 2012 to September 2013 and from March to April 2015, the results were assessed and compared with the worst case scenario. Mr Sean Tong explained that if 200 m<sup>3</sup>/d of water was abstracted from NTMDC, according to the laboratory test results, the BOD would be 4 mg/L. The sewage flow from the development was estimated to be 51 m<sup>3</sup>/d. With 200 m<sup>3</sup>/d water from the nearby NTMDC for offsetting, in total 251 m<sup>3</sup>/d, the concentration of BOD would be reduced to 3 mg/L, and the level of other water pollutants would also be reduced. As such, the overall net of pollution load should be reduced.

39. A Member asked whether cumulative assessment was conducted for the concurrent projects, namely the present development at KPR and the “RD Site” Project (i.e. The Proposed Residential Development within “Residential (Group D)” zone at various lots in D.D. 104, Yuen Long, N.T.). He further enquired if there would be sufficient quantity of water abstraction from NTMDC for treatment for the two projects, in particular during dry seasons.

40. Mr David Yeung explained that they considered the water quantity of NTMDC be sufficient for water abstraction. He added that for the “REC Site” Project, it was assumed that there would be no population intake until the commissioning of the planned local public sewerage system. As such, there



would have no adverse water quality impact due to sewage discharge of this Project.

### ***Land contamination***

41. The Chairperson asked if there was any risk of land contamination at the project site. Mr David Yeung explained that currently the majority of the Project Site was vacant with paved car parking area. As such, they considered that potential land contamination problem at the project site was unlikely.

### ***Potential hazard effects of high pressure gas pipeline***

42. The Chairperson requested the project proponent to address the public concern on the possible risk from the existing high pressure gas pipeline underneath Sam Tam Road. Dr Owen Yue explained that the concerned underground high pressure gas pipeline was about 300m away from the project site. The Electrical and Mechanical Services Department, as the gas safety authority had confirmed that a risk assessment was not necessary for the project.

*[The project proponent team left the meeting at this juncture.]*

### **Internal Discussion Session**

43. The Chairperson advised that the EIA Subcommittee might make recommendations to ACE on the EIA report with the following consideration:

- (i) endorse the EIA report without condition; or
- (ii) endorse the EIA report with conditions and details of the proposed conditions; or
- (iii) defer the decision to the full Council for further consideration – highlight issues or reasons for not reaching a consensus or issues to be further considered by the full Council; or
- (iv) reject the EIA report and inform the project proponent of the right to go to the full Council.

44. The Chairperson proposed and Members agreed to endorse the EIA report with conditions and recommendations. She concurred with a Member's proposal to impose a condition by requesting the project proponent to devise a contingency plan for the interception of sewage in case of breakdown of interim sewage treatment plant (STP).

45. Mr K F Tang suggested and Members agreed to request the project proponent to devise a detailed operation and emergency response plan for the STP to ensure no net increase in pollution load to the Deep Bay, including ensuring sufficient annual quantity of water extraction from NTMDC for treatment to offset the pollution loads of the effluent arising from the development, and the

emergency arrangements during possible breakdown of the operation of the STP; and to submit the plan to the DEP for approval before commencement of the operation of the STP.

46. The Chairperson proposed and Members agreed that the project proponent should be required to devise a detailed drainage plan to ensure no uncontrolled surface discharge into the NTMDC particularly during the construction stage of the Project; and to submit the plan to DEP for approval before commencement of construction.

47. The Chairperson suggested that a condition or recommendation could be imposed on the project proponent to review the needs of deploying the 4.5 metres tall noise barrier at detailed design stage, to explore alternatives and consider adopting a less obstructive design to reduce the visual impacts and to minimize the wind channel effect. As the Planning Department had been consulted on the visual impact of the design of the noise barrier, Mr K F Tang opined that a recommendation might be more appropriate.

48. The Chairperson proposed and Members agreed to set targets for achieving environmental sustainability in the design and construction of buildings for the project, devise measures to minimize the carbon footprint and energy consumption, explore the feasibility of renewable energy generation, and provide mechanisms for waste separation and resource recovery.

49. A Member suggested that the project proponent should consider appropriate tree species for landscape planting with a view to enhancing screening effect to the waterbirds at NTMDC.

50. The Chairperson proposed to recommend the project proponent to conduct a detailed assessment of potential land contamination within the project site before commencement of the construction works and implement remediation action plan as appropriate to ensure decontamination of the site.

51. A Member considered that the information in the EIA study brief was outdated as it was issued in September 2009 and the validity period of the study brief was only three years. Mr K F Tang explained that the issue depended on when the EIA study was commenced and whether the survey findings and information contained in the EIA report were still valid.

52. Mr Cheung Kwok Wai added that the project proponent would be required to provide the most updated information in order to conduct verification survey where necessary, in particular when there was a change in the condition of the project site. In this case, the project proponent had conducted verification survey on NTMDC and he considered that they had provided the latest information available for the project.

53. The meeting agreed that the project proponent team would not be required to attend the full Council meeting scheduled on 12 December for the report.

*[Post meeting note: The list of proposed conditions and recommendations were circulated to Members for comments on 22 November 2016.]*

**Item 4 : Any other business**

54. A Member considered that the Environmental Impact Assessment Ordinance (EIAO) - Technical Memorandum (TM) was rather outdated, in particular the requirements for visual impact. As such, he suggested initiating a review of the TM.

55. Mr K F Tang explained that the standards and criteria of the TM were adequate and he did not see any urgent need for a review. If there were environmental concerns on a particular issue, the study brief could spell out the issue and require it to be addressed in the EIA study. Also, as Members seemed to be concerned about surveys or assessment methodologies and information included in the EIA report, these concerns could be addressed through reviewing and strengthening the existing Guidance Notes and guidelines developed by EPD for the EIA study consultants to follow.

56. A Member proposed the use of Guidance Notes to address the various problems identified by Members. Mr K F Tang agreed, and pointed out that there already existed many Guidance Notes covering different subject areas, and these could be reviewed and, where appropriate, revised to make the EIA process more effective.

57. A Member agreed that the Guidance Notes could be reviewed. She suggested issuing a Guidance Note on the aspect of public engagement and participation, as she observed that the existing mechanism might not generate effective coordination and implementation of the recommendations proposed by the Council.

58. Mr K F Tang recognized that there was a need to enhance public engagement under the current EIA framework. The project proponent would be required in the study brief to engage stakeholders and parties concerned and should address the environmental concerns raised by the public in the EIA process.

59. A Member emphasized the need for collaborative planning and the effective implementation of the conditions and recommendations through administrative measures such as the use of Guidance Notes. He expressed his expectation that the project proponent should adopt the best practicable measures.

**Item 5 : Date of next meeting**

60. The Chairperson advised Members that the next Subcommittee meeting was scheduled on 21 November 2016 for the discussion of the EIA reports on “Expansion of Sha Tau Kok Sewage Treatment Works” and “Port Shelter Sewerage, Stage 3 - Sewerage Works at Po Toi O”.

**EIA Subcommittee Secretariat  
January 2017**