Confirmed Minutes of the 113th Meeting of the Environmental Impact Assessment Subcommittee held on 13 September 2010 at 2:00 pm

Present:

Mr TSANG Kam-lam, JP (Chairman)

Prof CHAU Kwai-cheong, JP (Deputy Chairman)

Ms Teresa AU

Dr Dorothy CHAN, BBS

Ms Betty HO

Mr Edwin LAU, MH

Mr Michael LEE

Dr MAN Chi-sum, JP

Dr YAU Wing-kwong

Dr Ray YEP

Prof Paul LAM, JP (ACE Chairman and non-EIA Subcommittee Member)

Ms Josephine CHEUNG (Secretary)

Absent with Apologies:

Prof FUNG Tung

Prof Joseph LEE

Ir Dr LO Wai-kwok, BBS, MH, JP

Mr Simon WONG, JP

In Attendance:

Mr C W TSE, JP Assistant Director (Environmental Assessment),

Environmental Protection Department (EPD)

Mr C C LAY Assistant Director (Conservation), Agriculture,

Fisheries and Conservation Department (AFCD)

Mr Steve TSOI Executive Officer (CBD), EPD
Miss Kim KWAN Executive Manager (CBD), EPD

In Attendance for Agenda Item 3:

Mr Victor YEUNG Acting Principal Environmental Protection Officer

(Metro Assessment), EPD

Mr Steve LI Acting Senior Environmental Protection Officer (Metro

Assessment), EPD

Dr MAK Yiu-ming Marine Conservation Officer/East, AFCD

Miss YANG Ka-yee Acting Senior Nature Conservation Officer/South,

AFCD

Mr Vitus NG Senior Engineer/South Island Line 1, Highways

Department (HyD) (open sessions only)

Mr PAO Lap-kwan Engineer/South Island Line 3, HyD (open sessions

only)

Dr Glenn FROMMER Head of Sustainability Development, The MTR

Corporation Limited (MTRC)

Mr Richard KWAN
Manager-Environmental, MTRC
Ms Rowena CHAN
Environmental Engineer I, MTRC
Ms Jennifer TSANG
Environmental Engineer I, MTRC
Environmental Engineer II, MTRC

Mr Mark CUZNER Project Manager, MTRC
Mr Peter LEUNG Design Manager, MTRC
Mr Wilfred YEUNG Chief Architect, MTRC

Ms C Y WONG Projects Communications Manager, MTRC

Mr P H TANG Project Liaison Manager, MTRC

Dr Anne KERR Director, Mott MacDonald Hong Kong Limited (MM)

Mr Paul KWONG Principal Engineer, MM

Ms Florence YUEN Senior Environmental Consultant, MM

Mr Gary CHOW Ecologist, MM

Ms Elsa KWONG Landscape Architect, MM

Mr VENKATESH Director, Environmental Resources Management

(ERM)

Mr Fesil MUSHTAQ Senior Consultant, ERM

In Attendance for Agenda Item 4:

Mr Edward LAM Senior Environmental Protection Officer (Assessment

& Noise), EPD

Mr Dick CHOI Senior Marine Conservation Officer/West, AFCD

Dr MAK Yiu-ming Marine Conservation Officer/East, AFCD

Dr SO Chi-ming Fisheries Officer (Assessment and Claims), AFCD Mr K H IP Deputy Head of Civil Engineering Office (Projects and

Environmental Management), Civil Engineering and

Development Department (CEDD)

Ms Alice PANG Chief Engineer/Special Duties (Works) Division,

CEDD

Mr Johnny WONG Senior Engineer/4, Special Duties (Works) Division,

CEDD

Mr Christopher HOWLEY
Dr Anne KERR
EIA Team Leader, MM
Mr S M FOO
EIA Coordinator, MM
Ms Julia CHAN
Senior Ecologist, MM

Agenda Item 1 : Confirmation of the draft minutes of the 112th meeting held on 22 March 2010

The Chairman informed Members that the draft minutes of the meeting held on 22 March 2010 had been confirmed by circulation.

Agenda Item 2: Matters arising from the minutes of the 112th meeting held on 22 March 2010

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

<u>Agenda Item 3 : EIA report on South Island Line (East)</u> (ACE-EIA Paper 3/2010)

Internal Discussion Session

- 3. <u>The Chairman</u> informed Members that agenda items 3 and 4 would be divided into the following four sessions -
 - (a) Internal Discussion Session
 - (b) Presentation Session
 - (c) Question-and-Answer Session
 - (d) Internal Discussion Session

The Presentation Sessions and Question-and-Answer Sessions under agenda items 3 and 4 would be opened to the public. Internal Discussion Sessions of agenda items 3 and 4 and all other sessions of the meeting would remain closed.

- 4. The Chairman informed Members that the Environmental Impact Assessment (EIA) report on "South Island Line (East)" (SIL) was a designated project under "Schedule 2" of the EIA Ordinance. The public inspection period of the EIA report was from 10 August 2010 to 8 September 2010. Public comments received by the Environmental Protection Department (EPD) were circulated to EIA Subcommittee Members before the Subcommittee meeting for reference. Separately, the written response from the project proponent to some Members' questions was circulated to Members before the meeting for information.
- 5. <u>A Member</u> declared that her company was involved in a consultancy study with MTR Corporation Limited (MTRC) in around 2004 regarding the potential socio-economic impacts on Southern District associated with the proposed South Island Line. The meeting agreed that she could stay and continue

to take part in the discussion as she had neither personal nor direct interest in the project under consideration.

6. Members agreed that the discussion should mainly focus on construction noise, operational noise, ecological impacts, air quality, ventilation shafts, barging point and public involvement.

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

<u>Presentation Session</u> (Open Session)

7. <u>Dr Glenn Frommer</u> briefed Members on the background and purpose of the project. <u>Dr Anne Kerr</u> briefed Members on the findings of the EIA study.

Question-and-Answer Session (Open Session)

Construction noise

- 8. <u>A Member</u> was concerned that even with the implementation of mitigation measures, some noise sensitive receivers (NSRs) including locations for educational purposes would still be subject to airborne construction noise exceeding the criteria under the Technical Memorandum on Environmental Impact Assessment Process (TM). <u>Dr Glenn Frommer</u> explained that the EIA study adopted the worst-case scenario. Based on previous experience in railway projects, they were able to liaise closely with relevant parties such as schools and re-schedule the construction activities to avoid the highly sensitive periods such as school examination periods. <u>Mr Paul Kwong</u> added that the predicted noise exceedance would be sporadic rather than constant over a period of time.
- 9. In response to a Member's enquiry about the Indirect Technical Remedies (ITR), Mr Paul Kwong explained that these remedies referred to improved glazing and air-conditioning at their initiative as a last resort for NSRs still subject to construction noise impacts exceeding the TM criteria after implementation of mitigation measures. Dr Glenn Frommer supplemented that they would liaise closely with affected parties and mitigate the noise at source by cost-effective measures. If there were no other alternatives, they would employ the ITR at their own expenses for affected NSRs, including schools and residential premises.

- 10. <u>A Member</u> enquired about the mechanism to ensure that ITR could be provided at suitable timing before the commencement of construction works in view of the lead time required. <u>Dr Glenn Frommer</u> explained that they would work closely with the contractors on the use of powered mechanical equipment (PME) and construction methods to achieve better control of noise level at source. The employment of ITR, which would also cause disturbance to the NSRs, might not be required. In case ITR were required, they would provide them prior to the commencement of major construction works.
- 11. Mr P H Tang quoted the experience of the West Island Line on the implementation of ITR. The contractors were required to carry out noise assessment based on the actual list of PME and construction methods to be used on site before the commencement of construction works. In case the predicted noise level at certain NSR locations still exceeded the criteria despite all efforts made, they would approach the NSRs for offering the ITR. There would be sufficient lead time for putting in place the glazing and air-conditioning installations. Mr Mark Cuzner said that experience showed that the employment of different construction methods and sequencing of works by the contractors could help minimize the noise impacts. For example, the conventional method of hammer technique for installing temporary retaining walls would generally be assumed under the worst-case scenario of the EIA study. However, the contractor would be able to use pressing technique which would be quieter.
- 12. The Chairman noted that paragraph 3.1 of the Executive Summary of the EIA report stated that "the residual construction noise impacts of up to 7 dB(A) are predicted at 11 NSR locations". However, the tables under section 3.4.1.5 of the EIA report showed that there were a total of 12 NSR locations where exceedance of the noise criteria was predicted. The project proponent undertook to provide clarification after the meeting.

(<u>Post-meeting note</u>: The project proponent clarified after the meeting that the total number of NSRs predicted with exceedance should be 12. It should be noted that the number of NSRs predicted with exceedance solely due to the construction of the SIL project should be 11 as summarized in Table 3.34 of the EIA report and Section 3.1 of the Executive Summary. The difference was that the exceedance predicted at NSR, Precious Blood Primary School (PBPS), was due to the cumulative impact from Essential Public Infrastructure Works as discussed in Section 3.4.1.6 and with results shown in Table 3.32 of the EIA report.)

- 13. On the ground-borne construction noise, the Chairman was concerned about the ground-borne noise impact during night-time as some tunneling works might be carried out 24 hours. Dr Glenn Frommer explained that the EIA study was based on the worst-case scenario. Ground-borne noise exceedance was predicted at two NSRs near Lei Tung. The condition of these two NSRs would be closely monitored and controlled through vibration monitoring during construction which would be conducted outside the EIA perspective. In addition, construction activities to be conducted in restricted hours would require a construction noise permit under the Noise Control Ordinance.
- 14. <u>The Chairman</u> enquired about the monitoring of vibration level of tunneling works. <u>Dr Glenn Frommer</u> explained that monitoring of vibration level was not required under the EIA and high level vibration was not anticipated during the construction works. However, they would monitor the vibration level during the construction works.

Operational noise

- 15. <u>A Member</u> enquired about the use of special trackforms as noise abatement measure for the viaduct section. <u>Dr Glenn Frommer</u> explained that resilient trackforms were used to minimize the amount of energy released into the ground by the friction between train wheels and the rail. Resilient trackforms had been used in some railway projects such as the West Rail. In the Wong Chuk Hang section of SIL, appropriately selected resilient baseplate trackforms would be used which, together with the noise barriers, would be sufficient to achieve noise abatement purpose in meeting the noise criteria for the viaduct section.
- 16. <u>A Member</u> enquired about the impacts of viaduct section along the Wong Chuk Hang Nullah. <u>Mr Paul Kwong</u> explained that with the implementation of mitigation measures, no noise exceedance was predicted during the railway operation of the viaduct on NSRs. <u>Ms Elsa Kwong</u> supplemented that in terms of visual impacts, aesthetic design with responsive colour scheme would be adopted for the viaduct.
- 17. <u>A Member</u> enquired about the predicted noise level in Wong Chuk Hang depot. <u>Mr Paul Kwong</u> explained that the main source of noise would be the fixed plant noise from machinery which would be fully mitigated to meet relevant standards by proper design, such as by using silencers for ventilation shafts. <u>Dr</u>

Glenn Frommer added that the depot would be operated in an enclosed environment with residential and commercial development on top of the depot. With the adoption of the aforesaid design considerations, no exceedance of noise level was predicted.

Ecological impacts

- 18. A Member enquired about the habitat compensation of not less than 0.43 ha for permanent loss of woodland in Wong Chuk Hang Nullah and north of Sham Wan Towers near Ap Lei Chau portal. Dr Anne Kerr confirmed that habitat compensation which would cover the permanent loss of woodland would be implemented in the existing shrubland and grassland areas. Table 4.13 of the EIA report showed the proposed planting schedule for habitat reinstatement or habitat compensation of the woodland. The recommended plant species were based on those recorded in existing woodlands within the assessment area and surrounding areas. Mr Richard Kwan supplemented that experience in the West Rail showed that larger plots of compensated wetland could achieve a much better performance in terms of habitat reconstruction for wildlife and enhancement of biodiversity. They would avoid fragmentation as far as possible for the woodland compensation under the SIL.
- 19. On the planting strategy, <u>a Member</u> noted that some valuable species were identified in the degraded site and suggested that these species be preserved and planted in the compensated habitat. Moreover, more fruit-bearing species could be planted in the compensated habitat to attract more wildlife and enhance biodiversity.
- 20. <u>A Member</u> enquired about the loss of roosting habitat for some common birds such as ardeid. <u>Dr Glenn Frommer</u> explained that the compensatory planting at the lower course of Wong Chuk Hang Nullah would be provided after completion of construction works. The result of an extensive review on roosting patterns of the ardeid for over one year concluded that they would return to the roosting habitat.
- 21. <u>A Member</u> enquired about the possibility of further enhancing the tree planting ratio to compensate for the tree loss. <u>Dr Glenn Frommer</u> explained that the planting ratio of at least 1:1 in terms of quantity and quality was in compliance with the relevant Technical Circular. With limited available areas,

increasing the number of trees would reduce the distance between them and thus affect their chance of survival and growth.

22. <u>A Member</u> enquired about the distance between the trees. The project proponent undertook to provide the information after the meeting.

(<u>Post-meeting note</u>: The project proponent provided information after the meeting that approximately 2,000 new trees were proposed to be planted in general roadside and planting areas adjacent to proposed stations and above ground structures and within reinstated public open spaces and a combination of semi-mature to standard sized stock would be utilized (as discussed in Section 6.7.5 of the EIA report). These new tree planting might not be evenly spaced due to different planting theme along the alignment and the exact location and spacing of these tree planting which was subject to compensatory planting plans of the tree removal applications to be approved by relevant authorities. As a general guideline, planting distance for landscape planting on flat area was recommended to be about 3 to 5 m. As for whip planting on gentle slope, a planting distance of about 1.5 m was recommended. As regards the compensatory plantation at the lower course of the Wong Chuk Hang Nullah for the loss of ardeid night roost, the planting distance was recommended to be about 3 m.)

Air quality

23. <u>Two Members</u> enquired about the possible emission of black smoke and obnoxious smell from PME in view of the close proximity of some work sites to residential blocks. <u>Dr Glenn Frommer</u> explained that they would closely monitor the work sites and PME used by the contractors. The contractors would be required to maintain the PME in good conditions. Response to this kind of complaints could normally be handled within 72 hours. In response to a Member's enquiry, <u>Dr Frommer</u> explained that the contractors would also be required to use ultra low sulphur diesel as the fuel for all diesel fuelled construction plant.

Ventilation shafts

24. <u>The Chairman</u> noted concerns of local residents over the potential environmental impacts of ventilation shafts. <u>Dr Glenn Frommer</u> explained that monitoring data demonstrated that exhaust from ventilation shafts had no adverse air quality impacts. In terms of design, efforts would be made to maximize the

distance of the shafts from residents and institutions, minimize the size of the shafts and their noise impacts. However, the shafts had to be located in close proximity to the station. There was continuous dialogue with relevant parties to enhance communication. Mr P H Tang added that from their contacts with local residents, the concern was more a perception problem. To clarify their doubts, discussions as well as visits to existing ventilation shafts were conducted. Efforts would continue to be made to enhance communication.

A Member asked about the possibility of beautifying the ventilation shafts to enhance visual impacts. Dr Glenn Frommer explained that attention would be paid to the design of the shafts with a view to minimizing their size and greening them as far as possible. Mr Wilfred Yeung supplemented that there were examples of integrating the shafts with the station entrances to disguise their presence or designing them as a piece of art work or functional elements such as a clock tower. A Member considered that greening the shafts and beautifying them with colourful flowers or plants would help much in changing the perception of local residents on the adverse impacts of the shafts.

Barging point

The Chairman noted concerns over the potential environmental impacts related to the barging point at Telegraph Bay. Dr Glenn Frommer explained that a number of possible barging point locations had been considered and there were extensive discussions with parties concerned. One of the key considerations in the selection of barging point location was the possibility of using existing facilities as far as possible to minimize disturbance to the seabed and foreshore. Mr Mark Cuzner added that there were three barging points for the SIL project for transporting construction and demolition materials from and to different locations in order to release the burden on only one barging point. Before deciding the barging point at Telegraph Bay, consideration had been given to other alternative locations, such as Aberdeen Typhoon Shelter and Tai Shu Wan, but they were considered not suitable due to technical or safety reasons. The barging point at Telegraph Bay was an existing facility. They were addressing the concerns of local residents in planning the routing and scheduling of the trucks.

Public involvement

27. <u>A Member</u> enquired about the setting up of community liaison groups to enhance communication and trust with the community. <u>Mr P H Tang</u>

explained that extensive public consultation was launched since the early planning and design stage of the project, including consultation on the feasibility study and two-stage consultation during preliminary design. Public consultation programme, including public forums, meetings with residents and regular briefings at District Council meetings, was on-going. Moreover, they had volunteered a simplified version of EIA on the website to enhance transparency and communication. Experience showed that it was beneficial to have in-depth public consultation at an early stage. There would be liaison meetings with affected parties throughout the construction phase.

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

Internal Discussion Session

- 28. <u>A Member</u> expressed reservation on the project proponent's approach in providing mitigation measures to reduce noise impacts as he considered that the commitment made by the project proponent had yet to inspire confidence. While the worst-case scenario was adopted in the EIA report, the implementation of mitigation measures had to depend on the actual situation during the construction.
- 29. <u>A Member</u> noted that the project proponent highlighted that the EIA study was based on the worst-case scenario but the employment of mitigation measures had to depend on the PME and construction methods used on the site as the actual noise level generated might not reach the worst-case scenario and some mitigation measures might not be required. To address the concern, the project proponent could be required to submit a plan on the construction noise mitigation measures, including ITR, for the NSR locations with EIA predicted exceedance on construction noise impact having regard to the PME and construction methods to be used on site.
- 30. <u>A Member</u> enquired about the monitoring of parameters during the construction and operational phases in the context of the worst-case scenario assumed in the EIA study. <u>Mr C W Tse</u> advised that it was a requirement for the project proponents to employ independent environmental checkers to conduct EM&A and submit the reports to EPD in accordance with the EM&A Manuals.

- 31. <u>A Member</u> enquired about the criteria of noise level for schools. <u>Mr C W Tse</u> advised that the noise criteria for schools was at 70 dB(A) which was 5 dB(A) lower than that for residential premises.
- 32. <u>A Member</u> asked about the possibility of providing the compensatory planting before the construction works to minimize impacts on the ardeids. <u>Mr C C Lay</u> advised that the Wong Chuk Hang Nullah was a night roosting site, rather than nesting site, mainly for the wintering population. Studies showed that the roosting population varied significantly throughout the year. Shifting of location of roosting sites could occur naturally. The ardeids should have sufficient alternative night roosting sites along the Nullah and the neighbouring areas during the construction period.
- 33. The meeting agreed to recommend to the full Council that the EIA report could be endorsed with the following proposed conditions
 - (a) the project proponent should submit to the Director of Environmental Protection (DEP) for approval, before commencing the construction of the project, a plan on the construction noise mitigation measures including ITR, for the 12 NSR locations with EIA predicted exceedance on air-borne construction noise impact and two NSR locations with EIA predicted exceedance on ground-borne construction noise impact, having regard to the powered mechanical equipment, construction schedule and the latest planned construction methods;
 - (b) the project proponent should set up a continuous noise monitoring mechanism at locations to be agreed with the DEP, make available the results of the continuous noise monitoring mechanism to the public through the proponent's website during the construction stage, and take active remedial measures in the event that the measured noise levels exceed the worst-case scenario predicted in the EIA report or the levels as revised by the construction noise mitigation measures plan referred to in condition (a) above;
 - (c) the project proponent should set up community liaison groups comprising representatives of concerned and affected parties, including owners' corporations, management offices, local committees and schools in the affected areas, to facilitate

communications, enquiries and complaints handlings on all environmental issues. A designated complaint hotline should also be set up for the project to address such concerns and complaints in an efficient manner. The community liaison groups should follow up on the implementation of mitigation measures and other initiatives by the proponent such as ITR in the form of upgraded glazing and air-conditioning for eligible noise sensitive receivers affected by air-borne construction noise impacts, setting up of continuous construction noise monitoring mechanism and any need for web-cam monitoring;

- (d) the project proponent should submit a quality tree planting and landscape plan as well as a post-planting care plan (for a period of three years), including the compensatory woodland and possibility of planting fruit-bearing species, for approval by the DEP;
- (e) the project proponent should submit an updated construction and demolition (C&D) material management plan to the DEP for approval before commencement of the construction works. The plan should include, but not limited to, designated transport routes, maximum volume of C&D materials to be handled per day, working hour and day, maximum number of truck movements per working day, list of measures to minimize potential environmental impacts due to handling of the materials both on site and off site, monitoring and auditing requirements to ensure implementation of the plan; and
- (f) the project proponent should ensure that all diesel fuelled construction plant used by the contractors within the work sites are powered by ultra low sulphur diesel fuel.
- 34. The meeting also agreed that there was no need to invite the project proponent to attend the full Council meeting.

Agenda Item 4: EIA report on Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel (ACE-EIA Paper 4/2010)

35. <u>The Chairman</u> informed Members that the EIA report on "Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel"

was a designated project under "Schedule 2" of the EIA Ordinance. The public inspection period of the EIA report was from 28 July 2010 to 26 August 2010. Public comments received by EPD before the Subcommittee meeting were circulated to Members for reference before the meeting. Separately, the written response from the project proponent to some Members' questions was circulated to Members before the meeting for information.

36. Members agreed that the discussion should mainly focus on the impacts of the project on fisheries and water quality.

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

Presentation Session (Open Session)

37. Mr K H Ip briefed Members on the background and purpose of the project. Dr Anne Kerr briefed Members on the findings of the EIA study.

Question-and-Answer Session (Open Session)

Impacts on fisheries

- 38. <u>A Member</u> noted the concerns of the fishery sector over the impacts of various dredging activities in the past on the fishing resources despite the assurance of project proponents that the impacts were insignificant. As regards the impacts of the subject project on nearby fish culture zones (FCZs), <u>Dr Anne Kerr</u> explained that the impact of the project on the water quality of four identified FCZs had been assessed based on water quality modelling results. The results showed that increase in suspended solid complied with the Water Quality Objectives (WQO) and maximum suspended solid criterion for fisheries. The exceedance of total inorganic nitrogen (TIN) level was due to the already high ambient level while the non-compliance of dissolved oxygen in wet season was mainly due to the low dissolved oxygen level in the background and not contributed by the project. There was no exceedance in terms of unionised ammonia in the FCZs. Recommended mitigated measures included controlling the number and type of dredgers to be used, dredging rate and use of closed grab dredgers.
- 39. <u>Dr Anne Kerr</u> further explained that to address the concerns of the fishery sector, they had proactively proposed to install frame type silt curtains

around dredgers with a view to further reducing the impacts of the project on the water quality. There were 22 proposed water quality monitoring stations in the EM&A Manual, including three control stations for providing controlled data on sediment plume and changes in water quality. Upon commencement of the project, monitoring of the impacts of the project on all four FCZs would be conducted by 24-hour continuous monitoring throughout the construction phase. Ms Julia Chan added that with the availability of modern technology, continuous real time monitoring was made possible through efficient transmission of data for taking prompt response actions.

- 40. <u>A Member</u> asked about the availability of a contingency plan in case of exceedance detected. <u>Dr Anne Kerr</u> explained that the EM&A Manual contained a contingency plan with stipulated action levels and limit levels. Any exceedance detected in the 24-hour monitoring stations would be promptly reported for analysis and immediate actions.
- 41. The Chairman enquired about consultation and discussion with relevant fishery associations. Mr K H Ip explained that the Ma Wan Fishery Group was consulted in late May 2010 which had raised some concerns over the impacts of the project on the water quality and fishery resources. Consultations and discussions with other concerned fishery groups would continue to be held.
- 42. <u>A Member</u> asked about the possibility of setting up liaison groups with the fishery sector as fishermen could provide useful inputs from their experience. <u>Mr K H Ip</u> undertook to consider setting up community liaison groups comprising representatives of affected and concerned parties, including the fishery sector, during the planning and construction phases to facilitate communication.

Impacts on water quality

43. <u>A Member</u> enquired about the generation and control of TIN during the dredging process. <u>Dr Ann Kerr</u> explained that TIN existed in the contaminated seabed sediments and disturbance to the sediments would potentially release some of the TIN into the water column. Elutriate tests were performed on the sediment samples to simulate the agitation of the dredger to the seabed and to quantify the degree of mobilization of various contaminants and TIN into the water column during dredging. These laboratory simulations were conducted according to international standard practices approved by the EPD. The sediment samples,

including a mixture of grab and vibrocore samples, were collected from a wide range of locations across the whole project area on a grid of about 400 m x 400 m. The worst-case scenario, i.e. the highest level of TIN identified from the sediments and elutriate tests, was adopted in the water quality modelling of the EIA study for assessing the water quality impacts of dredging. Closed grab dredger was recommended as it generated the least sediment plume.

- A Member enquired about the cumulative impacts of 16 concurrent projects in the vicinity of the project area on the level of TIN. Dr Anne Kerr explained that all 16 concurrent projects involved some scale of dredging works with some overlapping periods. An assessment of cumulative impacts of the concurrent projects and the subject project was undertaken. The results showed that the subject project would contribute an insignificant level of increase in TIN at the predicted level of 0.002 mg/L. As the background TIN level of Southern Water Control Zone already exceeded the WQO, the contribution from the current project was considered minimal.
- 45. A Member enquired about the timing of conducting assessment, field trial and dredging works at the hotspot which was identified to have the chance of reaching very high ammoniacal nitrogen level at more than 20 mg/L. Dr Anne Kerr explained that dredging at the hotspot was not on the critical path of the project. The dredging works would be scheduled towards the end of the construction programme without affecting the overall construction programme. Mr Christopher Howley further explained that there would be sufficient time for groundwork study and planning. A more detailed study on the hotspot would be conducted to delineate the area of the hotspot and identify a buffer zone. Once the buffer zone was defined, dredging in this zone would not be permitted. Field trials would be carried out prior to the commencement of dredging works at the hotspot area. Sediment samples would be taken at different dredging rates so as to identify the most appropriate dredging method and dredging rate in controlling the release of ammoniacal nitrogen and unionised ammonia into the water column. With careful planning and good site management, dredging of the hotspot would not have adverse impact on water quality.
- 46. <u>A Member</u> asked whether further dredging would be needed in the next five to ten years to accommodate ultra-large container ships with even larger draft. <u>Mr Christopher Howley</u> explained that the largest vessel draft anticipated in the next five to ten years would be 16.5 m. The target depth of dredging for the

project was -17.5 m below the Chart Datum which should be sufficient for ultra-large container ship and further dredging was not anticipated in the near future.

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

Internal Discussion Session

- 47. The meeting agreed to recommend to the full Council that the EIA report could be endorsed with the following proposed conditions
 - (a) the project proponent should submit to the DEP for approval a detailed plan with proven methodology and trial results on the dredging works at the hotspot at northeastern corner of the project before commencing any dredging works at the hotspot and its buffer area:
 - (b) the project proponent should set up community liaison group(s) comprising representatives of concerned and affected parties, including the fishery sector, to facilitate communications, enquiries and complaints handlings on all environmental issues;
 - (c) the project proponent should conduct 24-hour enhanced environmental monitoring and audit at the four FCZs;
 - (d) the project proponent should conduct environmental monitoring and audit of total inorganic nitrogen arising from the project at water sensitive receivers to be agreed by the DEP; and
 - (e) the project proponent should obtain confirmation from the Marine Fill Committee on waste disposal grounds for disposal of marine sediment generated from the project and submit the waste disposal plan to the DEP before commencing the construction of the project.
- 48. The meeting also agreed that there was no need to invite the project proponent team to attend the full Council meeting.

Agenda Item 5: Monthly updates of applications under the Environmental Impact Assessment Ordinance

49. Members noted the updates.

Agenda Item 6: Any other business

Tentative items for discussion at the next meeting

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

Agenda Item 7: Date of next meeting

51. The next meeting was scheduled for 18 October 2010.

(Post-meeting note: The meeting scheduled for 18 October 2010 was cancelled.)

EIA Subcommittee Secretariat September 2010