

立法會
Legislative Council

LC Paper No. CB(2) 581/00-01
(These minutes have been seen by
the Administration)

Ref : CB2/PL/EA

LegCo Panel on Environmental Affairs

Minutes of meeting
held on Tuesday, 7 November 2000 at 2:15 pm
in the Chamber of the Legislative Council Building

Members Present : Prof Hon NG Ching-fai (Chairman)
Hon Cyd HO Sau-lan (Deputy Chairman)
Ir Dr Hon Raymond HO Chung-tai, JP
Hon Eric LI Ka-cheung, JP
Hon Bernard CHAN
Hon Mrs Miriam LAU Kin-ye, JP
Hon Emily LAU Wai-hing, JP
Hon CHOY So-yuk
Hon LAW Chi-kwong, JP
Hon Abraham SHEK Lai-him, JP
Hon Henry WU King-cheong, BBS
Hon Tommy CHEUNG Yu-yan, JP
Hon Michael MAK Kwok-fung
Hon Albert CHAN Wai-yip
Dr Hon LO Wing-lok

Members Attending : Hon LAU Kong-wah
Hon Andrew CHENG Kar-foo
Hon WONG Sing-chi

Members Absent : Hon Martin LEE Chu-ming, SC, JP
Hon WONG Yung-kan
Hon LAU Ping-cheung

Public Officers Attending : Item IV
Mr Kim Salkeld
Deputy Secretary for the Environment and Food

Ms Annie CHOI
Principal Assistant Secretary for the Environment
and Food

Mr LO Shit-cham
Assistant Director (Civil) / Port
Civil Engineering Department

Item V

Mr Kim Salkeld
Deputy Secretary for the Environment and Food

Mr Sam WONG
Principal Environmental Protection Officer
Environmental Protection Department

Mr F M LUK
Chief Engineer (Technical Services)
Civil Engineering Department

Mr Donald TONG
Principal Assistant Secretary for the Environment and Food

Mr C H WONG
Senior Engineer (Consultants Management)
Drainage Services Department

Mr David S H LEUNG
Senior Engineer (Mainland South)
Drainage Services Department

Mr LO Wing-sang
Administrative Assistant/
Lands District Lands Office, Sha Tin

Clerk in Attendance : Mrs Constance LI
Chief Assistant Secretary (2) 5

Staff in Attendance : Ms Joanne MAK
Senior Assistant Secretary (2) 2

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I. Confirmation of minutes of the meeting held on 10 October 2000 and the special meeting held on 25 October 2000
(LC Papers Nos. CB(2) 161/00-01 and CB(2) 183/00-01)

The minutes of the meetings held on 10 and 25 October 2000 were confirmed

II. Date of next meeting and items for discussion
(LC Papers Nos. CB(2) 181/00-01(01) and (02))

2. Members agreed to discuss the following items at the next regular meeting scheduled for Tuesday, 5 December 2000 at 2:30 pm -

- (a) Protection of wetlands in Hong Kong; and
- (b) Greening Policy

Deputy Secretary for the Environment and Food (DS(EF)) undertook to coordinate discussion papers for the above items with the relevant bureaux and Government departments.

(Post-meeting note : At the request of the Administration, the Panel Chairman had agreed to add two new items to the agenda, and to defer discussion of "Greening policy" to February 2001. The revised agenda had been circulated to members.)

3. With regard to the meeting with the International Review Panel (IRP) on the review of the Strategic Sewage Disposal Scheme, DS(EF) said that IRP was expected to present its report to this Panel, the Advisory Council on the Environment and the public around the end of November 2000. He would confirm with the IRP the date of its meeting with the Panel.

III. Information paper(s) issued since last meeting
(LC Paper No. CB(2) 181/00-01(03))

4. Members noted the information paper entitled "Disposal of contaminated dredged mud from Container Terminal 9 to Mainland waters" provided by the Administration.

IV. Management of construction and demolition (C&D) materials
(LC Papers Nos. CB(2) 181/00-01(04), (05) and CB(2) 197/00-01(01))

5. DS(EF) said that the Administration's paper on this item was prepared in

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response to members' concern about a suggestion of building an island to receive public fill in future as recently reported by the media. He said that the suggestion was included in the paper as part of Government's overall strategy for managing C&D materials.

Presentation materials provided by the Administration

6. DS(EF) took members through the following presentation materials (LC Paper No. CB(2) 197/00-01(01)) tabled at the meeting -

- (a) Composition of C&D materials in Hong Kong;
- (b) Statistical information on the amounts of C&D materials reused in reclamation projects and C&D materials disposed at landfills from 1989 to 1999;
- (c) Public fill generation and capacity forecast;
- (d) C&D materials management strategy - reduce, reuse and recycle; and
- (e) Actions for the management of C&D materials.

Anticipated shortfall in landfills and public filling capacity

7. DS(EF) said that given the steady increase in C & D materials, the public filling areas which provided the major outlet for inert C & D materials were running out. DS(EF) pointed out that all currently approved public filling areas would be exhausted by 2002 and limited new capacity had been approved due to re-scheduling and holding back of reclamation projects. He said that until new reclamation projects were approved, there was the problem of diminishing space available for the reception of inert materials. The Administration was concerned that the three existing landfills would be filled up in 10 to 15 years' time.

Sorting of mixed C&D materials

8. DS(EF) said that separation of inert C&D materials from C&D waste could enable reuse and recycling inert C&D materials and could reduce the amount of waste to be landfilled. He informed members that sorting facilities were being set up at Government sites. Recognizing the fact that private construction sites in general were rather small, the Administration was putting in place off-site sorting facilities for the construction industry to sort C&D materials, with a temporary one being provided at Tseung Kwan O and another one coming up soon.

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Reduction of C&D materials and use of recycled construction materials

9. DS(EF) said that to reduce the production of C&D materials at source, the Administration had tried to foster the adoption of new construction techniques. The Housing Authority (HA), for example, had been using metal formworks to reduce the use and subsequent disposal of timber. The Construction Industry Review Committee also tried to expedite the introduction of new construction methods with a view to reducing C&D materials.

10. DS(EF) pointed out that as broken concrete could be recycled into construction materials, the Administration was now amending the specifications for public works projects to enable the use of recycled aggregates. Also, the Administration was collecting views from the relevant industries on the introduction of landfill charging which the Administration believed would be able to provide economic incentive for waste producers to reduce the generation of C&D waste and to reuse/recycle the materials as far as possible.

11. DS(EF) said that based on the current composition of C&D materials in Hong Kong, the most ideal scenario would be to reuse 59% of the materials as public fill in reclamation works, recycle 25% as aggregates for concrete/asphalt production (or as granular materials for road sub-base/drainage layers), and to dispose of the remaining 16% as C&D wastes at landfills. He said that in last year, 21% of the overall C&D materials had been disposed of at landfills, of which about 5% were inert materials which could have been used for other useful purposes.

Transportation of public fill

12. DS(EF) said that the Administration would ensure that a network of conveniently located barging points would be provided for the Hong Kong Island, Kowloon and other areas so that public fill could be transported by barge. He said that these barging points would be well-managed to minimize environmental problems caused to nearby residents.

Way forward

13. DS(EF) stressed that the Administration pledged to promote the concept of sustainable construction. He said that apart from encouraging the industry to adopt alternative construction methods, materials and technologies to reduce C&D materials, the Administration was expecting recommendations from the Construction Industry Review Committee on any further ways to reduce C&D materials. He added that constructing more durable buildings and extending their lives through better maintenance and design would defer the need for demolishing old buildings, thereby reducing the generation of C&D materials.

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14. DS(EF) informed members that the Civil Engineering Department (CED) would search for suitable sites to accommodate inert materials. The Administration would conduct a study on the long-term arrangements to accommodate inert C&D materials, including the viability of building an off-shore island. The study would examine the overall environmental impacts and benefits of this option.

15. DS(EF) concluded that given the scale of construction and redevelopment activities in Hong Kong, management of C&D materials would remain a problem for the construction industry and Government for many years to come. He hoped members would support the proposed measures in the Administration's paper for dealing with the problem.

Discussion

16. Miss Emily LAU expressed support for the Administration's proposed measures and urged the Administration to implement them as soon as possible. She also supported the suggestion of providing economic incentives through measures such as landfill charging. On sustainable construction, Miss LAU asked whether the Administration would consider charging developers if they demolished buildings within a short time after construction, as such acts would generate C&D waste at a much faster pace.

17. DS(EF) responded that the proposal of landfilling charging was one form of economic incentive, and the Administration would explore other incentives to encourage reuse and recycling of C& D materials. Regarding Miss LAU's suggestion of charging developers for demolishing very young buildings, he said that the Administration would need to examine whether this could substantially reduce the volume of C&D waste.

18. Ir Dr Raymond HO said that he had moved a motion in the Council in January 2000 urging the Administration to review expeditiously the existing Buildings Ordinance (Cap. 123) to ensure that, inter alia, future building developments should take into account the principles of sustainable development. He noted that the Administration had agreed to introduce the legislative amendments to Cap. 123 shortly. He considered that the Administration should provide more economic incentives to encourage the construction industry to use environmental friendly design and materials, and that less timber should be used for buildings, for example. He also expressed support for the Administration's proposal to step up control of the transportation of public fill by trucks, in order to minimize the dust problem and nuisance to nearby residents.

19. Mr LAW Chi-kwong urged the Administration to adopt a more proactive approach to explore practical means to solve the anticipated shortfall in public filling capacity and landfills from 2002. He said that as planning of new

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public filling areas and landfills would take time, the Administration should take early actions to identify viable options to address the problems. Mr LAW also suggested introducing a charging scheme for public filling areas similar to that for landfills to further encourage reduction and recycling of inert C&D materials.

20. Referring to paragraph 10 of the Administration's paper, Mr LAW said that he disagreed that the use of inert C&D materials for reclamation was to reduce the need for using marine sand for reclamation. He pointed out that the problem did not lie in the supply of marine sand but that there was an anticipated shortfall in public filling capacity and lack of alternative means to reuse inert C&D materials.

21. DS(EF) explained that the dredging of marine sand could damage the marine environment and should therefore be minimized. He said that while some inert C&D materials could be recycled, a large part of them could only be used for reclamation. With regard to the suggestion of introducing public filling charges, he said that the Administration would need to carefully examine the benefits of the charging schemes and the implications on the trade. He pointed out that if charges were introduced only for municipal waste landfill but not for public filling areas, people would try to dump municipal wastes in public filling area by disguising these as C&D wastes.

22. DS(EF) further said that the projected shortfall in public filling capacity as shown in the presentation material was calculated on the basis of the approved reclamation projects. He said that the projection would be different if new reclamation projects were approved. However, as there would be a time gap between the production of inert materials and the availability of new public filling areas, CED was identifying suitable sites where C&D materials could be stockpiled before additional public fill areas were available.

23. Mr LAW Chi-kwong requested the Administration to provide further information on the projected demand for public fill taking into account all the proposed reclamation projects. Principal Assistant Secretary for the Environment and Food (PAS(EF)) responded that many proposals were still at the planning stage and she would try to provide information on the works programme based on approved reclamation projects.

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24. Mr LAW Chi-kwong also asked about the percentage of C&D materials being recycled as aggregates for concrete production or as granular materials. PAS(EF) responded that currently there were no facilities to recycle inert C&D materials as construction materials. However, the Administration planned to provide such a facility in Kai Tak next year. The Administration aimed at utilizing all the hard materials (i.e. 25% of the C&D materials) produced in Hong Kong for recycling as construction materials. She also explained the differences between reuse and recycling of inert C&D materials and pointed

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out that currently about 79% of inert materials were reused in public filling areas.

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25. Mr LAW Chi-kwong commented that the Administration's response did not give any concrete action plan for coping with the anticipated shortfall of public filling areas in the coming years. He urged the Administration to make early plans for facilities to accommodate C&D materials, bearing in mind slippage often occurred in public works projects. In this respect, the Chairman urged the Administration to provide proposals to the Panel to address the problem of anticipated shortfall in public filling capacity as soon as possible. PAS(EF) responded that the Administration had been actively exploring measures to deal with the shortage problem and would consult the Panel on the proposals once these were available.

26. DS(EF) stressed that the Administration was also very concerned about the problem and had asked for reclamation projects to be brought forward. He said that whilst the Administration had tried to put in place as many measures as it could to manage the problem of C&D materials, there was still a limit to the space available for stockpiling and permanent disposal. He explained that even if approval was granted to the proposed reclamation projects, these could only accommodate the C&D materials to be produced in the next four to five years. He envisaged that by 2006/07, Hong Kong would still face the same problem of impending shortfall in public filling capacity. He said that the Administration had explained the problem to the construction industry, and would work with the industry to find better ways to manage the problem.

27. Miss CHOY So-yuk commented that not much progress had been made in the management of C&D waste. She requested the Administration to provide a timetable on the implementation of all the proposed measures, the targets and the timetable for achieving the targets. DS(EF) replied that a number of measures had actually been implemented. For example, the specifications to allow more materials to be used for recycling would be formulated before the end of this year. DS(EF) said that he would provide the plan for temporary sorting facilities, barging points and sorting facilities, the timetable for the proposed projects in next 18 months for public fill, and the contingency arrangements for stockpiling. He added that the implementation of measures to abate the problems in the management of C&D materials was dependent on other departments' timetable for reclamation projects. The Tung Chung/Tai Ho project and Central/Wanchai reclamation project, for example, would have a great bearing on the availability of public filling capacity. He undertook to keep members informed of the progress.

28. Miss CHOY So-yuk said that at the Panel meeting on 2 March 2000, members gave suggestions on how HA could reduce the production of C&D wastes, such as allowing Home Ownership Scheme purchasers and public housing tenants to choose their own fitting out packages. She asked about the

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position of such suggestions and whether any difficulty had been encountered in implementation.

29. DS(EF) replied that he had relayed members' suggestions to the relevant departments. As far as he knew, the Housing Department (HD) had done a lot of work in reducing C&D waste in the production of public housing units and for the Home Ownership Scheme. DS(EF) said that he could provide a copy of HD's environmental report to members if necessary. He added that HD could further explain to the Panel their work in implementing these measures if the Panel so wished.

30. Mr Albert CHAN criticized Government for taking the lead in damaging the natural environment in many instances. He considered that the problem lay in the mismatch between the supply and demand for public fill due to the poor timing of reclamation projects. He pointed out that for example, the Penny Bay reclamation project could have used inert C&D materials instead of marine sand as the fill materials, if not due to Government's tight schedule of work for the construction of the Disney theme park. He further said that the West Kowloon Reclamation Project had also largely used marine sand for reclamation, resulting in damages to the marine environment of Hong Kong. Mr CHAN considered that no real improvement could be made in managing C&D materials unless Government made determined efforts to reschedule reclamation projects for taking up more inert C&D materials.

31. Mr Henry WU said that as a member of the Environmental Campaign Committee, he was in support of the Administration's proposed measures to tackle the problems of C&D materials. Referring to the reward scheme of the Building Innovation Unit, he considered that the Administration should introduce more incentives, rather than new charges, to encourage wider use of innovative and sustainable construction methods, designs and materials. He also requested the Administration to consider sponsoring tertiary institutions to carry out research studies on innovative construction methods and materials.

32. PAS(EF) replied that Government had been sponsoring such studies using funds from the Environment and Conservation Fund and the Innovation and Technology Fund. On providing more incentives to the construction industry, PAS(EF) said that apart from the Buildings Department granting concessions in the plot ratio and expediting the processing time to developers, it would be difficult to offer incentives which were of practical value to the industry. She added that the Administration had also set examples to promote the use of environmental friendly construction methods and materials. She said that HA had, for example, adopted the use of metal formworks to reduce C&D materials.

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V. Water quality of Shing Mun River
(LC Paper No. CB(2) 181/00-01(06))

33. Introducing the Administration's paper, Principal Environmental Protection Officer (PEPO) said that members' support was sought for the proposal to upgrade part of Public Works Project Item 5051DP, namely "Environmental improvement of Shing Mun River - Stage I", to Category A of the Public Works Programme. PEPO also briefed members on the background and the pollution problem of Shing Mun River. He said that the river was heavily polluted in the 1980's due to the rapid increase of population in Sha Tin and indiscriminate discharges from industrial and other sources. However, the pollution problem had been greatly improved after the declaration of the Tolo Harbour and Channel Water Control Zone under the Water Pollution Control Ordinance (WPCO) in 1987, the implementation of the revised Livestock Waste Control Scheme in 1994, and the provision of sewerage network for the unsewered villages in Sha Tin.

34. Referring to Annexes 2 and 3 of the paper, PEPO said that high compliance rates for major water quality objectives, such as dissolved oxygen, suspended solids and pH of the River, had been recorded following implementation of the above measures. He said that only the E.coli level of the river was found not complying with the standard at the moment although it had dropped significantly over the past ten years. The Administration believed that the E.coli level could be further reduced in the coming year.

35. Chief Engineer (Technical Services) (CE(TS)) of CED supplemented that while there was a substantial decrease in pollution load discharged into Shing Mun River, the water quality of the River was still adversely affected by the contaminated sediment accumulated on the riverbed over the years. He said that CED now proposed to carry out bioremediation works and dredging at selected sections of the River, in order to reduce the contaminated content and the obnoxious odour. CE(TS) explained that it was the hydrogen sulphide in the sediment that gave rise to obnoxious odour, and the odour problem was particularly serious during low tide when the contaminated sediment was exposed to air. The purpose of the bioremediation project was therefore to inject oxidant into the sediment to prevent the production of hydrogen sulphide.

36. CE(TS) informed members that CED had already completed the design of the project and drafting of the relevant tendering documents. He said that CED planned to start works for the first stage of the project in March 2001.

Discussion

37. Mr LAU Kong-wah asked about the water quality targets to be achieved by the proposed improvement works for Shing Mun River. PEPO replied that the targets were the same as the water quality objectives stipulated in WPCO.

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He added that the dissolved oxygen level of the water actually had been improving. He believed that when provision of sewerage network for the unsewered villages was completed, the organic contaminant content in the water would be greatly reduced and the dissolved oxygen level of the water would continue to improve. He said that the proposed bioremediation works would further reduce the organic contaminant content and the odour of the river sediments. PEPO added that it was the Administration's target to make the river suitable for water-related activities such as rowing and boating, but not for swimming which was not the purpose of the design of the river.

38. Mr LAU Kong-wah commented that improvement works for Shing Mun River had been taken only intermittently in the past. He asked whether the Administration would consider other methods such as chemical treatment and aeration if the proposed bioremediation project proved to be ineffective in improving the water quality of the River. CE(TS) replied that Government would carry out environmental monitoring of the first stage of bioremediation project which would be completed in December 2002. The Administration would carry out further treatment should problems remain at isolated spots after the first stage of improvement works. He stressed that according to a pilot field trial carried out for the Shing Mun River, bioremediation had proven effective in significantly reducing the organic contaminant content in the sediment and the emission of obnoxious odour. He added that the contractor would be at liberty to apply other proven treatment methods apart from the tested methods.

39. Mr LAU Kong-wah further asked whether it was safe to carry out activities such as boating in the River. PEPO replied that the only threat now posed by the river was its high E.coli level, which hopefully could be reduced to a lower level in the next few years subject to satisfactory progress in the provision of sewerage network for the unsewered villages there.

40. Referring to paragraphs 7 and 12 of the paper, Miss Emily LAU noted that there would be a time gap between completion of the Tolo Harbour Stage I sewerage scheme in 2005/06 and completion of the first stage of the bioremediation project in December 2002. She asked whether the pollution load discharged into the River from the unsewered villages from 2003 to 2006 would undermine the benefits brought about by the implementation of the first stage of the project. She expressed concern that the odour problem would persist if there were still unsewered villages in Sha Tin.

41. CE(TS) responded that the contaminated sediment on the riverbed had taken almost twenty years to accumulate, but the Administration was confident that the bioremediation works would be able to reduce such contaminant content significantly. He pointed out that the pollution load discharged into the River would be greatly reduced with the implementation of the Tolo Harbour Stage I sewerage scheme. He believed that this small amount of

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discharge would only give rise to very minor odour problem. He also pointed out that the first stage of the bioremediation works would be designed in such a way that a residue of the oxidant injected into the River would be left on the riverbed to deal with any subsequent pollutants discharged into the River.

42. Miss Emily LAU said that the odour problem of Shing Mun River had been a nuisance to the residents in the area for many years and she had dealt with numerous complaints on the matter. She hoped that the proposed project would be effective in improving the water quality of the River.

43. In view of Miss Emily LAU's concern, the Chairman requested the Administration to provide an estimate of the volume of accumulated pollution load on the riverbed of Shing Mun River and the annual waste to be discharged into the River in the coming years. CE(TS) agreed.

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(Post-meeting note : The Administration had subsequently provided the information which was circulated to members vide LC Paper No. CB(2) 298/00-01 dated 20 November 2000.)

44. Miss CHOY So-yuk enquired whether there would be recurrent financial implications in addition to the proposed expenditure of \$70 million for the improvement project. CE(TS) said that the estimated cost of \$70 million for the first stage of the project was an one-off expenditure. He said that the environmental monitoring and maintenance cost would be small in comparison. Moreover, provisions had been made in the second stage of the project if further bioremediation and/or dredging were deemed necessary.

45. Mr Andrew CHENG queried why EPD had taken such a long time to submit the improvement proposal since the study to improve the water quality of Shing Mun River was launched in 1996. He was dissatisfied that it took one decade to solve the problem as the completion date of the second stage of the project would be 2005/06. He also expressed concern that the Administration might not be able to achieve its water quality targets with a \$70 million project. He urged the Administration to expedite the works by means such as deployment of more staff for the project.

46. PEPO said that the initial findings of the EPD study were available in 1998 which showed that bioremediation was effective in reducing organic contaminant content in the treated sediment. CE(TS) supplemented that depending on the progress of the works by the contractor, he considered that some of the more heavily polluted areas could possibly be completed earlier. CE(TS) said that the Administration would provide a response at the Public Works Subcommittee meeting on 22 November 2000.

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47. At the request of Mr Andrew CHENG', PEPO also agreed to provide details of the 41 convictions for non-compliance with WPCO, including the nature of the offences involved and the levels of penalties imposed. He said that the Administration was making conscious efforts to strictly enforce the WPCO to curb illegal discharges into Shing Mun River.

(Post-meeting note : The Administration had subsequently provided the information which was circulated to members vide LC Paper No. CB(2) 298/00-01 dated 20 November 2000.)

48. The Chairman concluded that members generally agreed that the proposal could be forwarded to the Public Works Subcommittee.

VI. Any other business

Proposed terms of reference of the Panel on Environmental Affairs and the proposed Panel on Food Safety and Environmental Hygiene
(LC Papers Nos. 181/00-01(07) and (08) and CB(2)193/00-01 (02))

49. The Chairman said that as the House Committee had endorsed the establishment of a new Panel on "Food Safety and Environmental Hygiene", the responsibility for monitoring policy issues relating to environmental hygiene would be transferred from this Panel to the proposed Panel, subject to the approval of the Council. He invited members to consider the revised terms of reference of this Panel and that for the proposed Panel on Food Safety and Environmental Hygiene as prepared by the Secretariat. Members made no comments on the proposed terms of reference of the two Panels. The Chairman suggested that the terms of reference be endorsed. Members agreed.

Overseas duty visit

50. The Chairman informed members that funds had been earmarked for overseas duty visit by committees each year. He invited members to give suggestions at the next regular meeting.

51. The meeting ended at 3:40 pm.

Legislative Council Secretariat
29 December 2000