

立法會
Legislative Council

LC Paper No. CB(1) 351/03-04
(These minutes have been seen
by the Administration)

Ref : CB1/PL/EA/1

Panel on Environmental Affairs

**Minutes of meeting held on
Monday, 27 October 2003, at 2:30 pm
in Conference Room A of the Legislative Council Building**

Members present : Hon CHOY So-yuk (Chairman)
Hon Cyd HO Sau-lan (Deputy Chairman)
Hon Martin LEE Chu-ming, SC, JP
Hon WONG Yung-kan
Hon LAU Kong-wah, JP
Hon Miriam LAU Kin-yee, JP
Hon Emily LAU Wai-hing, JP
Dr Hon LAW Chi-kwong, JP
Hon Audrey EU Yuet-mee, SC, JP

Members absent : Dr Hon David CHU Yu-lin, JP
Hon Henry WU King-cheong, BBS, JP
Dr Hon LO Wing-lok, JP
Hon LAU Ping-cheung

**Public officers
attending** : **For item IV**

Environment, Transport and Works Bureau

Ms Doris CHEUNG
Deputy Secretary (Environment and Transport) E1

Ms Annie CHOI
Principal Assistant Secretary (Environment and Transport) E2

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Environmental Protection Department

Dr Ellen CHAN
Assistant Director (Waste Facilities)

For item V

Environment, Transport and Works Bureau

Ms Doris CHEUNG
Deputy Secretary (Environment and Transport) E1

Ms Annie CHOI
Principal Assistant Secretary (Environment and Transport) E2

Civil Engineering Department

Mr Henry CHAN
Civil Engineer/Port Works

Clerk in attendance : Miss Becky YU
Chief Assistant Secretary (1)1

Staff in attendance : Mrs Mary TANG
Senior Assistant Secretary (1)2

Miss Mandy POON
Legislative Assistant 4

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- I. Confirmation of minutes**
(LC Paper No. CB(1) 85/03-04 — Minutes of the meeting held on
9 October 2003)

The minutes of the meeting held on 9 October 2003 were confirmed.

II. Information paper issued since last meeting

2. Members noted that no information paper had been issued since last meeting.

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III. Items for discussion at the next meeting

(LC Paper No. CB(1) 145/03-04(01) — List of follow-up actions

LC Paper No. CB(1) 145/03-04(02) — List of items for discussion)

3. Referring to the list of items for discussion (LC Paper No. CB(1) 145/03-04(02)), the Chairman advised that the work schedule was drawn up in consultation with the Deputy Chairman and the Secretary for the Environment, Transport and Works during an informal meeting on 21 October 2003. She stressed that the agreed list would be tentative and would have to be reviewed and updated to meet the need of the Administration and the Panel.

4. The Chairman reminded members that at the last joint meeting with the Panel on Planning, Lands and Works (PLW Panel) on 13 October 2003 to discuss the Central Reclamation Phase III (CR III), the Legal Service Division was requested to advise on the propriety for members to meet with deputations to receive views on CR III or Wanchai Development Phase II (WD II), and if so the scope of public consultation. The Legal Service Division had prepared a paper entitled "Examination of the implications of the *Sub Judice* Rule for meeting with deputations on CR III or WD II". In consultation with the Chairman of the PLW Panel, another joint meeting had been scheduled for discussion of the paper on Friday, 31 October 2003, immediately after the House Committee meeting.

5. Members agreed to discuss the Landfill Charging Scheme at the next regular meeting scheduled for Monday, 24 November 2003.

IV. Restoration of Shuen Wan Landfill - post-completion environmental monitoring work

(LC Paper No. CB(1) 145/03-04(03) — Paper provided by the Administration)

6. The Deputy Secretary for the Environment, Transport and Works (Environment and Transport)E1 (DSETW(ET)(E1)) briefed members on the Administration's proposal to submit the public works project item "Restoration of Shuen Wan Landfill - post-completion environmental monitoring work" to the Public Works Subcommittee for upgrading to Category A the continuation of the environmental monitoring works at the Shuen Wan Landfill (SWL) for a further period of seven years at an estimated cost of \$27.5 million in money-of-the-day prices.

Leachate

7. Mr WONG Yung-kan expressed concern about the problem of infiltration of leachate into water bodies and enquired if this had created any environmental impact to the surrounding waters. DSETW(ET)E1 said that the Administration was aware that leachate was highly polluting and, if not properly controlled, might result in

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serious contamination of water bodies due to infiltration or direct discharge of leachate. As such, a leachate management system had been installed six years ago when SWL was restored to direct leachate to the sewage treatment works (STW) in Taipo for proper treatment before discharge. The Principal Assistant Secretary for the Environment, Transport and Works (Environment and Transport)E2 (PASETW(ET)E2) added that as part of the leachate management system, the quality of surface and underground water was monitored on a daily basis by the SWL operator. The two marine water monitoring stations near SWL indicated that the water quality of Tolo Harbour had not been affected by any leachate infiltration. Mr WONG however noted that the treated leachate from the STW in Taipo would be discharged into Kowloon Bay, thereby polluting the surrounding waters. The Assistant Director of Environmental Protection (Waste Facilities) (ADEP(WF)) said that the leachate from SWL would undergo preliminary treatment before being treated at the STW in Taipo. It would then be treated to an acceptable standard before being discharged at the outlet in Kowloon Bay.

8. Ms Cyd HO enquired about the means and the standards adopted in monitoring leachate infiltration. ADEP(WF) advised that apart from the two aforesaid monitoring stations for sea water, there were some 20 stations for leachate production, 11 stations for groundwater quality and 16 stations for surface water quality. There were altogether 58 collection points at which water samples were collected and tested against the acceptable standards on chemical and biological oxygen demand, heavy metals and nitrogen etc. So far, there were no incidents of leachate infiltration.

Landfill gas

9. Ms HO also asked how landfill gas produced at SWL was being treated and managed. PASETW(ET)E2 said that all of the landfill gas produced at SWL were consumed by Towngas after a cleaning process. While agreeing that landfill gas should be utilized as far as possible, it was worth noting that the cost effectiveness of using landfill gas was dependent on the amount of gas produced and the proximity of landfills to the utility network. Given the close proximity of SWL to the towngas production plant and the projected amount of landfill gas produced, it was justified for the construction of gas connection systems for the transport of landfill gas. However, this might not be the case now as the amount of landfill gas actually produced was lower than originally estimated at the time when SWL was first restored.

Cost of post-completion environmental monitoring work

10. PASETW(ET)E2 explained that the construction cost of the restoration facilities at SWL was about \$200 million and this had included the post-completion environmental monitoring work for the first seven years, the cost of which was \$38.9 million. The cost of continuation of the environmental monitoring work for the second seven years was estimated at \$27.5 million. An environmental review

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would be carried out every five years to determine if the monitoring work should continue.

11. Noting that the landfill gas generation rate had reduced from 2 500 cubic metres per hour in 1997 to 650 cubic metres per hour in 2003 and the concentration level of total nitrogen in the leachate had decreased by 40%, Ms Emily LAU asked why the cost of environmental monitoring work for the second seven years was not proportionately decreased. PASETW(ET)E2 said that despite the lower amount of landfill gas being generated at SWL, the concentration of methane in the gas remained high at 40% to 50% and the level of pollutants in leachate was also high. Therefore, the same stringent monitoring measures had to be maintained to prevent off-site gas migration and leachate infiltration. This involved the testing of over 70 water and air samples per day by the existing staff count of 25. As such, the cost of environmental monitoring work for the second seven years could not be significantly reduced. At members' request, the Administration undertook to provide information on the content of landfill gas and leachate of SWL as well as the types of tests conducted in the submission to the Public Works Subcommittee.

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12. The Chairman asked if the cost of environmental monitoring work was based on the original estimate in the main contract without having regard to deflation and the drop in labour cost over the years. PASETW(ET)E2 advised that the current cost of environmental monitoring work of \$27.5 million had already taken into account the price adjustment factors and was in fact lower than that of over \$28 million set out in the original contract. On the annual recurrent expenditure of \$0.6 million, PASETW(ET)E2 advised that this would be absorbed by the Environmental Protection Department (EPD). To facilitate members' understanding on the unit cost for disposal of waste at landfills, the Administration was requested to provide a comparison table on the costs of restoration and post-completion environmental monitoring work incurred for different landfills.

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13. Noting that the existing contract for environmental monitoring work would only expire in December 2004, Ms Emily LAU queried why funding for the continuation of the monitoring work should be sought so soon. PASETW(ET)E2 explained that the monitoring work had already been included in the restoration contract which might last up to 30 years. The contract could be terminated if the Administration considered that further environmental monitoring work was no longer necessary. In accordance with the terms of the existing contract, the Administration had to give one-year advance notification to the operator on the continuation of the environmental monitoring work upon the expiry of the first seven-year work in December 2004, Ms Emily LAU asked whether an assessment would be made on the performance of the operator before renewal of contract. ADEP(WF) said that under the terms of the contract, the operator would be subject to penalty ranging from fine to termination of contract should he fail to meet the requirements laid down by EPD. In fact, EPD had been closely monitoring the performance of the operator which was satisfactory so far. On the Chairman's enquiry on the mechanism for assessing the performance of the operator, ADEP(WF) explained that inspectors from EPD would

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conduct on-site checking to ensure compliance with the pre-set requirements and would report any irregularities for necessary follow up.

Usage of closed landfills

14. PASETW(ET)E2 said that there were restrictions on the use of closed landfills which were not suitable for the construction of permanent building structures. Besides, any developments on site had to be compatible with the post-completion environmental monitoring work. As such, closed landfills could only be used as recreational facilities for more passive sports such as the golf driving range at SWL. On Ms Emily LAU's enquiry about the utilization rate of the golf driving range, ADEP(WF) explained that the golf driving range was operated on a self-financing and non-profiteering basis by the operator of SWL and any profits derived would have to be given back to the Government. Given the low average usage rate of 20% for the 145 golf bays, the operator had been given greater flexibility in the operation of landfills to enable a balanced budget. Ms Emily LAU suggested that consideration could be given to using the precious landfill space for activities, such as those similar to the Harbour Fest, which would bring improvement to the quality of living.

15. The Chairman remarked that landfill sites might not be popular venues for recreational and leisure activities on account of their remote locations. However, she considered that these sites, if properly leveled, could be used for developing recycling business. She said that she had been approached by many waste recyclers urging for the provision of landfill space for operating recycling business. She therefore considered it necessary to conduct a trial on the feasibility of using landfill space for such a purpose. PASETW(ET)E2 said that although most of the closed landfills were earmarked for developing recreational facilities, the Administration had not ruled out the possibility of using the sites for alternative purposes such as recycling operations. However, there might be site constraints and practical difficulties for using these sites for industrial purposes as some of the landfills were close to residential developments while others had steep slopes. Where appropriate, geotechnical studies had to be performed to ascertain the degree of settlement of the landfills to see if they could be used for recycling operations. Meanwhile, invitations would be extended to the private sector to see if there were any interest in developing the closed landfill sites. Besides, any changes in the use of closed landfills would need to have the support of the District Councils concerned because the Administration had previously agreed to develop recreation facilities at some of the closed landfills. The Administration would report to the Panel progress of development in due course.

16. The Chairman was not convinced of the Administration's arguments for not proceeding to develop the closed landfill sites for industrial use as it had never let out any landfill space to recyclers nor consulted the District Councils on the possibility of using the sites for industrial purpose. She further pointed out that it might not be a good idea to use landfill sites for developing recreational facilities given the availability of many similar facilities such as country parks which were located in

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more convenient locations. She considered it more worthwhile to let out the closed landfill spaces at low prices to recyclers to help the development of recycling business on the one hand and revive the economy on the other.

17. Members noted that the proposal would be submitted to the Public Works Subcommittee for consideration at its meeting on 12 November 2003.

(Post-meeting note: According to the Administration, the proposal would be submitted to the Public Works Subcommittee for consideration at its meeting on 3 December 2003.)

V. Management of construction and demolition materials

(LC Paper No. CB(1) 145/03-04(04) — Background brief prepared by the Legislative Council Secretariat

LC Paper No. CB(1) 145/03-04(05) — Paper provided by the Administration)

18. DSETW(ET)(E1) briefed members on the progress in implementing the measures to tackle the problem of construction and demolition (C&D) materials by highlighting the salient points in the information paper.

19. Given the high unemployment rate of construction workers, Ms Emily LAU questioned the accuracy of the Administration's projection that the amount of C&D materials generated in 2003 from local construction activities would reach a record high of 19.6 million tonnes. PASETW(ET)E2 explained that the projection was based on the actual amount produced in the first nine months of 2003 and had taken into account a number of major construction projects, including the tunneling works for the Spur Line at Long Valley and the land formation works at Jordan Valley, both of which would generate huge amount of excavated materials.

Processing/recycling hard materials

20. Ms Miriam LAU expressed support for the recycling of hard inert materials for use in public works projects. She however noted with concern that the recycling facility in Tuen Mun was only operating at half of its capacity because only some 13% of C&D materials received by the Tuen Mun Fill Bank were suitable for recycling. She enquired about the efforts made in increasing the supply of hard inert materials so as to fully utilize the capacity of the recycling facility. PASETW(ET)E2 explained that while efforts had been made in the recycling of hard inert materials, there was no control over the supply of such materials which was dependent on the location, nature and scale of construction activities during the year. Notwithstanding, the Administration had been taking the initiative to encourage developers/contractors of private construction projects to deliver hard inert materials to the recycling facility at Tuen Mun for processing. So far, 700 000 tonnes of high

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quality hard inert materials and 550 000 tonnes of other inert hard materials had been processed into aggregates. These materials were mainly reused in civil engineering works and seawall construction in reclamation works, if applicable. The Administration would endeavour to increase the supply of hard inert materials as well as the demand for recycled aggregates as far as possible. As the existing contract for the recycling facility would expire in October 2004, the Administration was examining the option of extending its operation or putting in place a replacement facility in a more convenient location to facilitate the delivery of hard inert materials from urban construction sites.

Using of soft inert materials in lieu of dredged mud in the capping layer of the contaminated mud pits in East Sha Chau

21. Mr WONG Yung-kan expressed reservations at the proposed measure. He pointed out that soft inert materials were a main source of pollution to the marine environment as they would tend to disperse and form a black odorous substance covering the seabed, thereby destroying the marine life through deprivation of oxygen. By way of illustration, the dumping of inert materials from the construction works at Pak Shek Kok had completely destroyed marine life in the surrounding waters. PASETW(ET)E2 explained that East Sha Chau was in fact a dumping site for contaminated dredged mud. In the past, clean dredged mud from the sea would be used as a capping layer to prevent the contaminated mud in the mud pits from dispersing. As the soft inert materials were excavated soil, which had similar properties as dredged mud, they could be used to replace dredged mud for the capping work. The proposed measure would serve a dual purpose to accommodate some 6.3 million tonnes of soft inert materials on the one hand and to reduce the need for dredging on the other. DSETW(ET)(E1) added that the proposal was worked out by the Civil Engineering Department (CED) in conjunction with EPD. To ensure that the soft inert materials were clean, and that such an arrangement would not lead to other environmental problems, stringent inspection would be carried out at the reception facilities so that only clean excavated soil would be delivered to East Sha Chau used as capping layer. The remaining inert C&D materials would continue to be delivered to the fill banks for stockpiling.

22. On the concern about dispersal of soft inert materials, PASETW(ET)E2 said that as it was the first time that soft inert materials were used for capping mud pits, CED would adopt a cautious and slower dumping process to minimize the effect of dispersal. It was expected that the whole process would take about 18 months to complete, averaging 0.3 million tonnes per month. Mr WONG Yung-kan remained concerned about the capping of mud pits using soft inert materials instead of dredged mud which was natural material dredged from the seabed. He held the view that the Administration was downplaying the effects of the proposed measure, especially when no studies had ever been made on its impact on the marine environment. He urged the Administration to seriously reconsider the proposal taking into the sentiment of the fishing trade.

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23. PASETW(ET)E2 replied that with the ever increasing quantity of C&D materials, there was a need to find new outlets for disposal. She stressed that the soft inert materials were mainly excavated soil from tunneling works which were clean and non-polluting. Besides, the capping layer of soft inert materials would be further coated with mud dredged from the seabed as an additional safety measure. The Chairman remarked that the Administration should be well aware of the problem and should have implemented the proposed capping of mud pits with soft inert materials earlier. This would have avoided the need for dredging of mud from the seabed in the first place. Noting that the fishing industry was also concerned about dredging of mud from seabed, Ms Emily LAU considered that a comparison on the environmental impact of using dredged mud and soft inert materials for capping mud pits at East Sha Chau should be made.

Introducing landfill charging

24. The Chairman said that a possible means to encourage the recycling of C&D materials was to prevent disposal of these materials at landfills. PASETW(ET)E2 said that at present landfill operators were not empowered to reject disposal of C&D materials at landfills. With the introduction of the Landfill Charging Scheme (LCS), landfill operators would be able to direct waste loads with high recyclable content to the appropriate waste reception facilities for sorting and recycling before final disposal at landfills. On the effectiveness of introducing landfill charging, PASETW(ET)E2 said that according to overseas experience, the introduction of a landfill charge had provided an incentive for waste producers to reduce waste, resulting in a reduction of 20% (and in some cases up to 40%) of waste. Dr LAW Chi-kwong however pointed out that, with the present generation rate of C&D materials, the 20% waste reduction achieved through the introduction of landfill charging would only defer the waste production problem by one year.

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25. Noting that the legislative proposals on LCS would be submitted to the Panel for consideration next month, Ms Miriam LAU enquired about the progress of consultation with the trades since the last Panel meeting in April 2003, and whether the contention over the charging arrangement had been resolved. PASETW(ET)E2 said that the Administration had further consulted the trades on the detailed proposals of LCS over the past few months and the outcome of consultation would be presented to members for discussion at the next regular Panel meeting in November 2003. In gist, there were some dissenting views from trade associations on certain aspects of LCS. Ms Emily LAU requested the Administration to include in the discussion paper for the next meeting overseas experience in the implementation of LCS and the charging arrangement in other countries.

Other measures

26. PASETW(ET)E2 said that there was urgency in identifying outlets for C&D materials, in particular the soft inert materials which could only be used as fill

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materials for land formation and reclamation. In the absence of sufficient reclamation projects, there was no demand for such materials in Hong Kong. To this end, the Administration was exploring the possibility of exporting inert C&D materials. Talks on a policy level were held with the Mainland authorities on the transport of these materials to the Mainland. Earlier on, an invitation for expression of interest in the export of inert C&D materials had also been extended to private contractors and some of them had indicated interest in participation. The Chairman asked whether Macau would be able to accept some of the inert C&D materials. PASETW(ET)E2 advised that the Macau authorities had been unofficially approached on the proposal but they had not indicated interest as there was no demand for these materials in Macau. Responding to Ms Emily LAU's question, PASETW(ET)E2 said that it was too early to estimate if there would be any savings arising from the export of soft inert materials at the present stage since there was no such a demand elsewhere.

27. Ms Cyd HO sought elaboration on the cost effectiveness of using inert C&D materials to backfill quarries. PASETW(ET)E2 advised that there were constraints in the backfilling of quarries since some of them were still in operation while others were designated for alternative uses. Any changes to the designated uses would need to have the support of the District Councils concerned. Nevertheless, the Administration would continue to explore the viability of this measure. It would report to the Panel around mid-2004 on the progress made in this respect and possible measures to tackle the problem arising from C&D materials.

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28. Dr LAW Chi-kwong opined that there was a need to quantify the extent of the problem associated with the management of C&D materials. To enable a better understanding of the size of the problem, he suggested that the Administration should provide a breakdown on the generation and disposal of C&D materials in the form of a balance sheet. PASETW(ET)E2 took note of Dr LAW's proposal but pointed out that this might not be able to accurately reflect the size of the problem which was changing constantly because of uncertainties on both the production front and the reception front, and these were beyond the Administration's control. It was expected that with the completion of the capping of mud pits in East Sha Chau and the filling up of the two fill banks in Tseung Kwan O and Tuen Mun in early 2005, there would not be any further outlets for inert C&D materials. By the end of 2005, there would be about 6 million tonnes of inert C&D materials which did not have any outlet for disposal.

VI. Any other business

29. There being no other business, the meeting ended at 4:30 pm.

Council Business Division 1
Legislative Council Secretariat
18 November 2003