

**立法會**  
**Legislative Council**

LC Paper No. CB(1) 1810/01-02  
(These minutes have been seen  
by the Administration)

Ref: CB1/PL/EA/1

**LegCo Panel on Environmental Affairs**

**Minutes of special meeting held on  
Wednesday, 10 April 2002, at 8:30 am  
in the Chamber of the Legislative Council Building**

**Members present** : Hon CHOY So-yuk (Chairman)  
Hon Cyd HO Sau-lan (Deputy Chairman)  
Ir Dr Hon Raymond HO Chung-tai, JP  
Hon Martin LEE Chu-ming, SC, JP  
Hon SIN Chung-kai  
Hon WONG Yung-kan  
Hon LAU Kong-wah  
Hon Miriam LAU Kin-ye, JP  
Hon Emily LAU Wai-hing, JP  
Hon LAW Chi-kwong, JP  
Hon Michael MAK Kwok-fung  
Dr Hon LO Wing-lok  
Hon LAU Ping-cheung  
Hon Audrey EU Yuet-mee, SC, JP

**Members absent** : Hon CHAN Yuen-han, JP  
Hon Abraham SHEK Lai-him, JP  
Hon Henry WU King-cheong, BBS  
Hon Tommy CHEUNG Yu-yan, JP

**Public officers attending** : Civil Engineering Department  
  
Dr C K LAU  
Director  
  
Mr W K TAM  
Deputy Director/Special Duties

Mr P D MORGAN  
Chief Engineer/Special Duties (Works)

Environmental Protection Department

Mr M J STOKOE  
Acting Director of Environmental Protection

Mr Patrick LEI  
Principal Environmental Protection Officer  
(Waste Policy & Services)

Mr Conrad LAM  
Principal Environmental Protection Officer  
(Waste Facilities)

Mr Simon HUI  
Principal Environmental Protection Officer  
(Assessment & Audit)

Antiquities and Monuments Office, Leisure and Cultural  
Services Department

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Mr H W CHAU  
Curator (Archaeology)

Tourism Commission

Miss Winnie HO  
Assistant Commissioner for Tourism

Environment and Food Bureau

Ms Annie CHOI  
Principal Assistant Secretary

Works Bureau

Mr C L NG  
Chief Assistant Secretary (Programme Management)

Maunsell Consultants Asia Limited

Mr Dickson LO  
Executive Director

Mr Eric MA  
Associate

Maunsell Environmental Management Consultants Limited

Mr Matthew KO  
Associate

Hong Kong Baptist University

Professor Jonathan WONG

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

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

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**I Confirmation of minutes of previous meeting**

(LC Paper No. CB(1) 1433/01-02 — Minutes of the special meeting held on 12 March 2002)

The minutes of the special meeting held on 12 March 2002 were confirmed.

**II Effect of dioxin and removal of dioxin-contaminated soil at Penny's Bay**

(LC Paper No. CB(1) 1271/01-02(05) — Information paper provided by the Administration

LC Paper No. CB(1) 1420/01-02 — Motion passed by Kwai Tsing District Council

LC Paper No. CB(1) 1434/01-02(01) — List of questions raised by members which require follow-up actions by the Administration

LC Paper No. CB(1) 1434/01-02(02) — Administration's response to CB(1) 1434/01-02(01)

LC Paper No. CB(1) 1451/01-02(01) — Treatment of dioxin-contaminated soil at Cheoy Lee Shipyard, Penny's Bay proposed by the Green Island Cement Company Ltd.)

2. At the Chairman's invitation, Mr Eric MA, Associate of Maunsell Consultants Asia Limited (MCA) gave a power-point presentation on the information paper prepared in response to members' concerns raised at the meeting on 12 March 2002.

*(Post-meeting note: The power-point presentation materials were circulated to members vide LC Paper No. CB(1) 1468/01-02(01).)*

#### On-site versus off-site treatment

3. Mr LAW Chi-kwong enquired whether the Environment Impact Assessment (EIA) study for the decommissioning of Cheoy Lee Shipyard (CLS) had specified any time restriction for completing the remediation project, thereby precluding the adoption of more time-consuming on-site treatment options. The Director of Civil Engineering (DCE) explained that the purpose of the EIA study was to work out an acceptable remediation plan. As such, no time restriction had been imposed in the specifications for the EIA study. He added that the Administration had conducted a thorough comparative analysis of both on-site and off-site treatment options. Given that the scheduled opening of the International Theme Park (ITP) would be delayed by about two to three years if the 30 000 cubic metres (m<sup>3</sup>) of dioxin-contaminated soil were to be treated on-site, it was recommended that off-site treatment options be adopted.

#### Transportation risk

4. Ms Miriam LAU expressed concern about the transportation risk associated with the transfer of contaminated soil from CLS to To Kau Wan (TKW). She questioned why sea transport which would have less interface with public transport was not considered in the first place. Mr Eric MA/MCA confirmed that the feasibility of sea transport was examined in the context of the EIA study. It was subsequently dropped in favour of road transport due to the inherent risks of transporting the shipment through the busy marine traffic at Ma Wan and Kap Shui Mun where a recent collision involving a Russian dredger had taken place. Besides, a temporary barging point would have to be set up if the dioxin-contaminated soil was to be transported by sea. To minimize interface with public roads, the contaminated soil would be transported from CLS to TKW via a dedicated non-public haul road. He added that the health risk in relation to inhalation of dioxin in case of transportation accident was extremely low given the non-volatile and non-infectious nature of the contaminated soil.

5. Ms LAU further enquired about the inherent risk arising from transportation of the oily residue generated from the thermal desorption process from TKW to the Chemical Waste Treatment Centre (CWTC) at Tsing Yi which would involve the use of public roads. Mr Eric MA/MCA confirmed that the residue would be transported from TKW to CWTC via North Lantau Highway and Route 3 before reaching Tsing Yi Road. The proposed routing was mainly by way of trunk roads passing through industrial districts. The 600 m<sup>3</sup> of residue would be collected and transported to

CWTC by batches in sealed drums at non-peak or night hours between two to three trips per week. Safety measures such as speed limit control and escort would be adopted to minimize the risks of spillage during transportation. In fact, these measures were more stringent than those adopted in the United States where a much higher load would be transported for a longer distance. Despite the assurances, Ms Cyd HO remained of the view that on-site treatment was more preferable as this would not give rise to transportation risk.

#### Incineration at CWTC

6. Ir Dr Raymond HO asked how the transportation risk compared with the risk of incineration at CWTC. Professor Jonathan WONG/Hong Kong Baptist University (HKBU) agreed that there were always risks involved in the handling of pollutants. However, the risk in relation to the transport of dioxin-contaminated soil and the oily residue generated from the thermal desorption process was quite low under the proposed transport arrangements. He added that while he did not advocate the use of incineration, the proposed incineration of the residue at CWTC was considered the most appropriate course of action. As regards the risk of dioxin emission arising from incineration of the oily residue, Professor WONG said that this would be greatly reduced with the use of a properly managed incinerator to treat the flue gas. He nevertheless noted that the main obstacle which had to be overcome was the psychological resistance against incineration as a result of the unpleasant past experience with the use of old-type incinerator at Kennedy Town. To allay public concern about the risk associated with incineration, he urged the Administration to step up publicity on the capability of the state-of-the-art incineration technology adopted at CWTC.

7. Ms Emily LAU sought clarification on the capacity of Professor WONG. DCE said that Professor WONG was one of the few experts in Hong Kong who specialized in the dioxin research. Professor WONG was not a Government representative nor an EIA consultant but was attending the meeting at the invitation of the Administration to offer independent opinion on the subject.

8. On the capability of CWTC in handling dioxin-contaminated material, the Principal Environmental Protection Officer (Waste Facilities) said that under the CWTC contract managed by the Environmental Protection Department (EDP), the incinerator was required to meet a minimum destructive and removal efficiency of 99.9999% for polychlorinated biphenyls, dioxins and furans, polychlorophenols and polychlorobenzenes. There was regular monitoring of dioxin emissions from CWTC from the stack and ashes. According to the monitoring results in 2001, the average dioxin concentration was 0.008 ng I-TEQ/m<sup>3</sup> in the flue gas, 0.006 parts per billion (ppb) in the bottom ash and 0.021 ppb in the fly ash, which were all well below the most stringent international emission standards of 0.1 ng I-TEQ/m<sup>3</sup> and the United States Environmental Protection Agency's recommended clean-up level of 1 ppb for soil of residential exposures.

### Testing of dioxins

9. Ir Dr Raymond HO enquired about the availability of local facilities for testing soil samples for dioxin content. Professor WONG/HKBU agreed that it was worthwhile to consider setting up a research laboratory in one of the universities in Hong Kong for the testing of dioxins and other pollutants since it would be very costly to send all the samples overseas for laboratory testing.

10. Ms Miriam LAU noted that instead of measuring the direct content of dioxin in flue gas and ashes, the level of carbon monoxide (CO) was used as an indicator. She sought elaboration on the correlation between dioxin and CO. Mr Eric MA/MCA said that in conducting air monitoring studies, there were difficulties in assessing the level of dioxin given its trace quantities. Instead, the level of CO was measured as it was an useful indicator for complete combustion. A higher level of CO would mean a lower level of combustion and suitable adjustments might have to be made to enhance the efficacy of thermal and incineration treatment. He added that such a monitoring system was commonly adopted in many overseas countries.

### Decommissioning of the thermal desorption plant at TKW

11. Ms Cyd HO enquired about the details on the decommissioning of the thermal desorption plant at TKW. DCE advised that the plant would be decommissioned and the site would be restored to its original condition upon completion of the thermal desorption process. Mr Eric MA/MCA said that details of the decommissioning works had been set out in the EIA study. At members' request, the Administration undertook to provide the following information -

- (a) nature and toxicity of end-products of the thermal desorption process;
- (b) details of the decommissioning of the thermal desorption plant; and
- (c) progress of consultation with the Antiquities Advisory Board on archeological rescue works at CLS.

12. Referring to Annex A to the information regarding the locations of overseas thermal desorption plants, Dr LO Wing-lok considered that more information should be provided on the final-stage treatment of residue generated from these plants. Mr Eric MA/MCA advised that most of the thermal desorption plants referred to adopted incineration as the final-stage treatment process for residue generated from the thermal desorption process. For instance, the plant at Jacksonville would transport the residue to Texas for incineration. To facilitate members' understanding, the Administration was requested to provide cases of accidents in the United States as a result of transporting residue produced from thermal desorption plants for final-stage treatment during the period from 1990 to 1997.

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Liability for land contamination

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13. Ms Emily LAU tabled for members' reference a letter from Mr Bill LEVERETT of Hong Kong Dolphinwatch Ltd stating that the Administration should have been aware of the extent of contamination at CLS judging from some of the aerial photographs in the original EIA study for ITP which revealed evidence of burning and burial of waste. The Acting Director of Environmental Protection (Ag DEP) said that he had to check the aerial photographs referred to before responding to the points raised by Mr LEVERETT. A written reply to members would be provided to members in due course. On the need for legislation on land contamination, the Principal Assistant Secretary for the Environment and Food said that the position had been set out clearly in the paper.

*(Post-meeting note: The submission from Dolphinwatch Ltd was circulated to members vide LC Paper No. CB(1) 1468/01-02(03).)*

14. Ms Cyd HO expressed disappointment that the Administration had refused to disclose information on the liability for land contamination as well as the liability of the Government in case of delay in the opening of ITP. She opined that the rash approval of ITP was a misstep in the first place. Now that problems had been identified, the public should at least have the right to know the extent of liability on the part of the Government. DCE explained that the Government was bound by the provisions under the agreement with The Walt Disney Company and Hong Kong International Theme Parks Limited not to make any comment on or disclosure of the same.

15. Ms Emily LAU was not convinced of the Administration's response. She pointed out that under the Basic Law, the Administration was accountable to the Legislative Council (LegCo). As such, it should provide information, particularly information in relation to public expenditure, as requested by members to facilitate the latter to make informed decisions. Contractual obligations were therefore not an excuse for the Administration to withhold information from LegCo. DCE reiterated that the issue of liability had been discussed with the Department of Justice. It was agreed that there should not be further disclosure on the subject other than the information set out in the Administration's paper. Ms LAU however cautioned that it would be a breach to the Basic Law if the Administration insisted to withhold the relevant information. She considered that there might be a need to bring the subject to the attention of the Chief Secretary for the Administration.

16. Mr WONG Yung-kan opined that the consultants of the original EIA on ITP should be held responsible for under-estimating the extent of contamination at CLS and the impact of dredging on the marine ecology. He also urged the Administration to take a more proactive role in monitoring the performance of consultants to prevent similar recurrences. Professor Jonathan WONG/HKBU considered that members should focus their attention on the EIA report for the decommissioning of CLS while issues of accountability could be followed up at a later stage.

### Medical examination for former workers of CLS

17. Ms Emily LAU noted that the need to recall former workers of CLS for a medical examination was raised when the subject of financial implications of the decommissioning of CLS was discussed at the meeting of the Economic Services Panel on 20 March 2002. She was disappointed that the question had not been addressed in the Administration's response. She said that as a responsible Government, efforts should be made to recall these workers for medical examination in view of the discovery of dioxins at the CLS site. DCE said that since the dioxin-contaminated data showed that the average level of contamination at the CLS site was low as compared to the acceptable standard of 1 ppb TEQ, it was believed that former workers of CLS were unlikely to have been exposed to high airborne concentrations of dioxin in a continuous manner. He also made reference to the findings of a study which showed that an average of 270 out of 10 000 persons coming into direct contact with dioxin-contaminated soil for 30 years might result in having cancer. Having regard to the low long-term health risk to former workers of CLS, the Administration did not consider it necessary to recall them for medical examination.

18. The Chairman could not accept the Administration's explanation as there was evidence showing that workers of old-type incinerators had a higher dioxin content in their bodies. She agreed that proactive steps should be taken to follow up the issue. Ms Cyd HO said that it was her understanding that the Administration had once set up a fund to recall and check on patients who might have been come into contact with contaminated blood through transfusion. She opined that the same arrangement should be applied to former workers of CLS with a view to checking on their health and providing treatment as necessary. Her views were shared by Mr WONG Yung-kan. DCE said that the question of health risk to former workers of CLS had been discussed with the Health and Welfare Bureau. He nevertheless undertook to raise the subject again in the light of members' concern.

### Alternative treatment process proposed by Green Island Cement Company (GICC)

19. The Chairman sought the Administration's views on the proposed on-site thermal treatment option put forward by GICC. DCE said that the proposal was a direct incineration method by nature which was not welcomed by green groups, particularly Greenpeace. Professor Jonathan WONG/HKBU added that GICC's proposal would involve the setting up of a new incinerator at TKW, which was not desirable from an environmental point of view as this would mean that more waste would be incinerated. Besides, direct incineration would render the soil useless. He therefore held the view that it would be more cost effective to treat the dioxin-contaminant soil at the existing CWTC which was well equipped to meet environmental standards.

20. Referring to the comparison between the GICC's proposal and the recommended option at LC Paper No. CB(1) 1452/01-02(01), DCE pointed out that the



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GICC's estimate only covered the capital and operating costs of the purpose-built incinerator and incineration process while costs related to excavation and transport were excluded. If the latter were to be included in GICC's estimate, the total operating costs of the GICC's proposal would likely be higher than that of the recommended option. To enhance members' understanding, Dr LO Wing-lok requested the Administration to include in the comparison table more details about the recommended option for the sake of clarity.

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21. The Chairman asked if the Administration was prepared to consider other alternatives for treatment of the dioxin-contaminated soil or it would have to adopt the option recommended in the EIA report. DCE reiterated that the Administration had not imposed any specifications on the treatment methods in the EIA brief, and that it had all along adopted an open approach on the choice of options. The recommended option was selected by both the EIA consultants and The Walt Disney Company after a thorough comparison on all available options, including the one proposed by GICC. In this connection, the Administration was requested to advise whether it would consider in the tendering exercise for the decommissioning of CLS other treatment technologies apart from thermal desorption that were able to meet the requirements under the EIA report.

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#### Way forward

22. Ir Dr Raymond HO considered that the Panel should reach a consensus on the decommissioning project before the relevant funding proposal was submitted to the Public Works Subcommittee to avoid repeated deliberation. Given the strong opposition from green groups and district representatives, Ms Emily LAU considered it necessary to hold another meeting to gauge their views on the decommissioning project. Views from the medical sector should also be sought. She stressed that members had to be convinced that public safety and health would not be compromised. DCE clarified that the green groups were not opposed to the proposed remediation plan, which met with international standards and was made after a thorough comparison of various options, but had expressed concern on the use of incineration to treat the oily residue. However, the use of Base Catalytic Dechlorination as recommended by Greenpeace was not considered acceptable as the technology was not well tried out apart from a small-scale project at the Sydney Olympic site at Homebush Bay. The Administration had explained the proposed remediation plan to the Advisory Council on the Environment in which green groups were represented and had gained their support. Members agreed to hold another meeting on Friday, 19 April 2002, at 10:45 am to continue discussion on the subject. Representatives from the medical sector as well as deputations which had previously given views on the subject would be invited to attend the meeting.

### III Any other business

23. The Chairman reminded members that when the proposed amendments to the Technical Memorandum on effluent standards under the Water Pollution Control Ordinance (Cap.358) was discussed at the meeting on 18 January 2002, it was agreed that invitations for submission be extended to affected parties. So far, 10 submissions had been received. The Chairman suggested and members agreed to hold an informal meeting to exchange views with the affected parties on the proposed amendments.

*(Post-meeting note: With the concurrence of the Chairman, the informal meeting was scheduled for Monday, 6 May 2002, at 4:30 pm.)*

24. There being no other business, the meeting ended at 10:45 am.

Legislative Council Secretariat  
23 May 2002