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Legislative Council

LC Paper No. CB(1) 1433/01-02
(These minutes have been seen by the Administration)

Ref: CB1/PL/EA/1

LegCo Panel on Environmental Affairs

Minutes of special meeting held on Tuesday, 12 March 2002, at 9:30 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 CHAN Yuen-han, JP Hon SIN Chung-kai Hon WONG Yung-kan Hon LAU Kong-wah Hon Emily LAU Wai-hing, JP 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 Dr Hon LO Wing-lok Hon LAU Ping-cheung Hon Audrey EU Yuet-mee, SC, JP
Members attending	:	Hon MA Fung-kwok
Members absent	:	Hon Martin LEE Chu-ming, SC, JP Hon Miriam LAU Kin-yee, 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)

Mr Wilson W S PANG
Senior Engineer/Special Duties (Works)

Environmental Protection Department

Mr M J STOKOE
Acting Director of Environmental Protection

Mr Elvis W K AU
Assistant Director (Environmental Assessment)

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

Mr Conrad LAM
Principal Environmental Protection Officer
(Waste Facilities)

Labour Department

Dr W K LO
Occupational Health Consultant

Mr CHEUNG Hon-chung
Senior Occupation Hygienist

Department of Health

Dr Thomas CHUNG
Principal Medical and Health Officer

Agriculture, Fisheries and Conservation Department

Mr C C LAY
Assistant Director (Conservation)

Antiquities and Monuments Office,
Leisure and Cultural Services Department

Mr S T CHIU
Executive Secretary (Antiquities and Monuments)

Tourism Commission

Miss Winnie HO
Assistant Commissioner for Tourism

Environment and Food Bureau

Ms Annie CHOI
Principal Assistant Secretary

Works Bureau

Mr Albert CHENG
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

Attendance by invitation : The Conservancy Association

Mr Albert K T LAI
Chairperson

Friends of the Earth (Hong Kong)

Mrs Mei NG
Director

Green Lantau Association

Mr Bill LEVERETT
Executive Committee Member

Green Peace

Ms Miranda YIP
Campaigner

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

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

Before commencing discussion, the Chairman informed members that it was originally intended that a joint meeting with the Economic Services (ES) Panel and the Planning, Lands and Works Panel be held to discuss the subject. However, as the Chairman of ES Panel had decided that the ES Panel should hold a separate meeting on 20 March 2002 to discuss the funding for the decommissioning of Cheoy Lee Shipyard (CLS) at Penny's Bay, it was agreed that the Environmental Affairs (EA) Panel would hold its own meeting to discuss the treatment of dioxin-contaminated soil at Penny's Bay. Ms Emily LAU pointed out that the House Committee had earlier agreed that Panels should hold joint meetings to discuss subjects of common interest since it was more effective to have one forum to discuss the same subject rather than holding separate Panel meetings in parallel. She suggested that consideration should be given to setting up a subcommittee under the EA and the ES Panels to follow up the issue. Since the opening of the International Theme Park (ITP) would hinge upon the decommissioning of CLS, Ms Cyd HO agreed that there was a need to hold joint discussions on the subject.

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

(LC Paper No. CB(2) 1845/99-00(01) -- Administration's paper on "Report on Dioxin Emissions" (issued for the joint meeting with the Health Services Panel on 5 May 2000)

LC Paper No. CB(2) 1845/99-00(02) -- "An Assessment of Dioxin Emissions in Hong Kong - Summary of Findings" (issued for the joint meeting with the Health Services Panel on 5 May 2000)

LC Paper No. CB(2) 1845/99-00(03) -- "An Assessment of Dioxin Emissions in Hong Kong : Final Report" by Environmental Resources Management (issued for the joint meeting with the Health Services Panel on 5 May 2000)

LC Paper No. CB(2) 1845/99-00(04) -- "Review of Dioxin Emissions in Hong Kong - Summary of Findings" (issued for the joint meeting with the Health Services Panel on 5 May 2000)

LC Paper No. CB(2) 1845/99-00(05) -- "Review of Dioxin Emissions in Hong Kong" by Professor Christoffer RAPPE (issued for the joint meeting with the Health Services Panel on 5 May 2000)

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

2. At the invitation of the Chairman, the Director of Civil Engineering (DCE) gave a power-point presentation on the effects of dioxin and the proposed remediation and clean up plan for CLS by highlighting the salient points in the information paper circulated under LC Paper No. CB(1) 1271/01-02(05).

Meeting with deputations

Conservancy Association (CA)
(LC Paper No. CB(1) 1271/01-02(01))

3. Mr Albert LAI said that from an environmental perspective, the current proposal of off-site treatment for contaminated soil at CLS by a thermal absorption plant at To Kau Wan (TKW) followed by disposal of residue at the Tsing Yi Chemical

Waste Treatment Centre (CWTC) was a high-risk option. He referred to the consultant's comment, as set out in section 3.8 of the Environmental Impact Assessment report of the Decommissioning of CLS at Penny's Bay (the EIA report), about the "disadvantage of associated additional costs and wider risks and impacts" if the thermal desorption plant had to be located off-site. He held the view that the lower-risk option would be in-situ treatment of all contaminated soil, which was also considered technically feasible and desirable in the EIA report except for the risk that the treatment might not be fully completed before the opening of ITP. It was unfortunate that an artificial deadline for completing treatment of contaminated soil was imposed before the scale of contamination was known, hence pushing the Administration to recommend a higher-risk treatment strategy than was otherwise necessary. It was doubtful that the choice of site for ITP at Penny's Bay would have been made had the highly contaminated state of CLS been known earlier. In this connection, the Administration should advise if there was an escape clause in the existing contract for site handover should there be any unforeseen environmental risk. It should also make clear about the apportionment of costs and liability between parties concerned. On the other hand, Legislative Council (LegCo) Members would need to decide whether the cost and risk associated with the delay in the opening of ITP should outweigh that with the using of a higher-risk off-site treatment strategy which involved multiple handling and transport.

4. Regarding the quality of planning and decision making on major infrastructure projects in Hong Kong, Mr LAI said that CA was concerned that similar problems would recur if political commitments on land-use and work programmes were made before the due process of planning and environmental impact assessment (EIA). The society at large would have to pay higher cost and risks for second-rated solutions designed under politically imposed constraints.

Friends of the Earth (FOE)
(LC Paper No. CB(1) 1271/01-02(02))

5. Mrs Mei NG said that FOE was gravely concerned about the decommissioning of CLS and the impacts of the proposed decontamination method in the EIA report. She pointed out that the report had left many unanswered questions such as the choice of site for the thermal desorption plant at TKW having regard to its close proximity to the Chek Lap Kok Airport. The report was silent on the risk arising from transporting the waste to CWTC in Tsing Yi, the health hazard of workers exposed to the dioxin-contaminated soil and the risk involved in the decommissioning of the thermal desorption plant when ITP was near completion. It also failed to provide a cost comparison of the different types of treatment options available, contingency measures and liability in the event of unforeseen circumstances resulting in the delay in the opening of ITP. FOE held the view that in deciding the choice of treatment options, public health and safety should not be compromised for the sake of expediency. The Environmental Protection Department (EPD) should also exercise great care in ensuring the protection of the environment in developing high-risk facilities such as thermal desorption and incineration plants.

6. Mrs NG opined that the Government should not have overlooked the polluting activities engaged by the shipyard having regard to the scale of contamination at CLS. She further pointed out that the present state of affairs was resulted from the exclusion of the decommissioning project from the original EIA on ITP to meet tight development schedules, which was at variance with the spirit of the EIA Ordinance (Cap. 499) (the Ordinance). Moreover, the lack of provisions on land contamination under the Ordinance had allowed polluters to evade their responsibility in cleaning contaminated land. As a result, the project proponent would have to bear the cleaning costs. To plug the loophole and to prevent recurrence of similar problem, a land contamination legislation should be put in place. She added that FOE supported the establishment of an ad hoc committee to investigate into the CLS case.

Green Lantau Association (GLA)
(LC Paper No. CB(1) 1271/01-02(03))

7. Mr Bill LEVERETT said that GLA had identified many problems, including bad science, misleading language, unanswered questions and failure to comply with the spirit of the Ordinance, in the original EIA for ITP. However, one problem that had been overlooked was a gaping hole in the Ordinance regarding the decommissioning of CLS. Since access to CLS to conduct soil surveys was denied at that time, there was no way through which the extent of contamination could be assessed. The solution then was to shelve the EIA for the decommissioning project and to allow the ITP project to proceed without knowing the environmental impact of the former. This had in fact perverted the spirit of the Ordinance. Given the level of contamination at the CLS site which had turned out to be much higher than expected, there was no choice but to approve the EIA for the decommissioning project. As a result, the environment, the taxpayers and the Ordinance had become victims of the decontamination work.

Green Peace
(LC Paper No. CB(1) 1271/01-02(04))

8. Referring to table 1 of the submission from Green Peace, Ms Miranda YIP said that dioxins were highly toxic substances that could bioaccumulate in the fatty tissues of animals and humans. They were carcinogenic and would adversely affect immune and reproductive systems. While supporting the use of thermal desorption method to treat dioxin-contaminated soil as it had proven to be effective in the separation of organics from wastes, Green Peace was skeptical of the proposed incineration at CWTC to destroy highly contaminated oily condensate formed after thermal desorption. Concerns had also been raised on the risks involved in transporting the highly toxic residue from TKW to CWTC. She pointed out that when thermal desorption was adopted to treat the 400 tonnes contaminated wastes at Homebush Bay for the Sydney 2000 Olympic site remediation project, the residue formed was allowed to go through Ecologic and Base Catalyzed Dechlorination which was an effective non-incineration technology used to destroy organochlorine compounds. It was however regretted that the EIA report had not considered non-incineration technologies. Green Peace held the view that the Administration should explore alternative methods and provide members with a full assessment. She also

informed members that a Green Peace member who was an expert in the field of non-incineration technology would be visiting Hong Kong soon and a meeting with members could be arranged.

(*Post-meeting note:* With the concurrence of the Chairman, a special meeting had been scheduled for 19 March 2002 for members to exchange views with experts in the field of dioxin treatment.)

9. Ms Emily LAU thanked the green groups for their views and requested the Administration to provide a written response to concerns raised by the green groups. Referring to CA's concern about politically committed projects which had to proceed at all costs, she said that Hong Kong would be set to lose if this was the case.

Meeting with the Administration

Land contamination

10. Ms LAU considered that the Administration had put the cart before the horse when it gave approval for the ITP project to proceed in the absence of the EIA for the decommissioning of CLS. She also recalled that the total acquisition and clearance cost of $1,250 million for the voluntary surrender of the CLS site to the Government in April 2001 was inclusive of a cleaning cost of $30 million. As it turned out that the contamination at the CLS site was more serious than expected and a cleaning cost of $350 million was anticipated, she asked who should bear the additional cost for cleaning the site and who should be held accountable. DCE explained that full scale site investigation for the EIA on the decommissioning of CLS could not be conducted earlier as permission was not given to enter the site before its voluntary surrender. Therefore, the cost for cleaning the site was estimated based on the contamination of a number of shipyards, and dioxin should not be generated from normal operating activities of shipyards. However, testing of soil samples conducted upon surrender of the CLS site revealed that the soil was contaminated with dioxin, which was not expected from normal operation of shipyards. As a result, the cleaning cost was grossly under-estimated. He added that the Civil Engineering Department could choose to adopt a less costly method by capping the contaminated land with cement since dioxin was not a volatile substance. This was however not a responsible nor preferable way to resolve the contamination problem since capping would not remove or reduce the toxicity and mobility of the contaminants. Furthermore, a potential environmental risk would remain on site, thereby limiting future productive uses.

11. Ms LAU was not convinced that the Administration could not have access to enter and inspect the CLS site before effecting the acquisition payment. Given that the extent of contamination at the CLS site was much higher than expected, it appeared that CLS was not operating under approved conditions and had violated environmental legislation. If so, CLS should be held responsible for cleaning the site. She asked whether complaints had been received on the operation of CLS. In response, the Acting Director of Environmental Protection (AgDEP) said that the Environmental Protection Department (EPD) had conducted regular inspection of CLS just as it did

with other shipyards and industrial premises. EPD had also inspected the site following two complaints against open burning there, but had found no evidence, to support a prosecution. During the site clearance operations in March 2001, improper disposal of one drum of chemical waste containing non-halogenated organic solvent at the site was discovered and the company was fined $30,000 under the Waste Disposal (Chemical Waste) (General) Regulation of the Waste Disposal Ordinance (Cap. 354). The site inspections by EPD staff did not suggest any need to investigate the site for contamination by dioxin, which could only be done by subsurface investigation techniques, such as trial pits or boreholes. Experience in the United States and Europe also revealed that land contamination was only discovered consequent upon detailed site investigation works.

12. Ir Dr Raymond HO did not accept the Administration's explanation. He recalled that he had raised two LegCo questions on the health impact of dioxin and the problem of dioxin in the decommissioning of CLS in 1991 and 2000 respectively. Although the questions had been answered, the problem of dioxin contamination remained unresolved. Mr WONG Yung-kan also said that he had raised a LegCo question on the contamination problem at the CLS site in 1999. According to the Administration, the remediation and clean-up work could be completed within a budget of $30 million. In the absence of knowledge about the extent of contamination, Members were misled by the Administration in approving the funding for acquisition of the site. He considered that the consultants of the original EIA on ITP should also be held responsible for under-estimating the extent of contamination. They should not have made any assumptions before the completion of EIA for the decommissioning of CLS. The Assistant Director of Environmental Protection advised that under Part II of Schedule 2 of the Ordinance, the decommissioning of a shipyard was a designated project which required a separate environmental permit from the Director of Environmental Protection. This was made clear to the Advisory Council on the Environment (ACE) during the previous public consultation process.

13. As regards control of land contamination, Ag DEP further advised that EPD would investigate sites for land contamination if site inspection indicated that waste had been illegally disposed of on the site in circumstance likely to lead to land contamination. However, in the case of CLS, site inspection had not revealed evidence of illegal disposal, and hence no detailed site investigation had been conducted. On the liability for land contamination, DCE advised that the Administration was seeking legal opinion on whether the polluter could be identified and held liable for the remediation and cleaning cost. Mr LAW Chi kwong was not satisfied with the role of EPD in the control of land contamination. He shared Mr SIN Chung-kai's view that there was a need to review the existing control mechanism to prevent similar recurrence, particularly when there were quite a number of shipyards in operation. He also agreed with Ms Emily LAU on the need to set up a subcommittee to probe into the incident. Ms Cyd HO echoed that the subcommittee should look into issues such as risk, liability, accountability, contingency measures as well as the policy and legislation governing land contamination.

Use of thermal desorption to treat dioxin-contaminated soil

14. While acknowledging that thermal desorption was adopted in both the United States and Australia for the removal of pollutants, Ir Dr Raymond HO noted with concern that the thermal desorption plant in Jacksonville, Florida had been out of service for a while before recent resumption of operation. He enquired about the reasons for the suspension. DCE said that the plant had to suspend operation because of the unexpectedly high concentration of organic materials awaiting treatment. The plant had to be upgraded and the treatment process had to be reviewed, hence resulting in the temporary suspension of operation. To facilitate members' understanding, Ir Dr HO considered it necessary for the Administration to provide the names and locations of all overseas thermal desorption plants and their experience in the treatment of dioxin.

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15. On the effectiveness of the thermal desorption method in the removal of contaminants, Professor Jonathan WONG/Hong Kong Baptist University (HKBU) advised that it depended on the nature of the contaminated soil. As such, an analysis of the contaminated soil at the CLS site would have to be performed to ascertain the feasibility of the thermal desorption method. According to his understanding, the consultants had taken over 170 000 soil samples from the site and a detailed analysis would be performed. Ir Dr Raymond HO enquired if laboratory facilities for testing soil samples for dioxin content were available in Hong Kong. Mr Dickson LO/ Executive Director of Maunsell Consultants Asia Limited (MCA) answered in the affirmative. However, as the problem of dioxin was not common in Hong Kong, there were only a limited number of laboratories which were equipped for the testing of dioxin. Although the contractors engaged in site investigation works could choose to test the soil samples either in Hong Kong or overseas, they would be advised to perform testing of soil samples in Hong Kong as far as possible.

16. Ir Dr HO asked whether the facilities in Hong Kong would be able to cater for testing of all samples as it was very expensive to send the samples for overseas testing. Ag DEP advised that CWTC had a laboratory which was accredited to analyze solid residue samples for their dioxin contents. The Government Laboratory was equally equipped for such testing. Given that the EIA report for the decommissioning project was at the consultation stage, he could not be prescriptive about the number of samples that would be tested. He however pointed out that while CWTC and the Government Laboratory had the capacity for testing, it might be desirable to send some samples overseas to cross check with the results in Hong Kong. This would add to the confidence of members and the public.

In-situ treatment versus off-site treatment

17. Professor Jonathan WONG of Hong Kong Baptist University said that although dioxin was highly poisonous, it was not a volatile substance. It could enter the human body through inhalation and food consumption. He agreed that in-situ treatment would be more desirable than off-site treatment as the risk involved in the delivery process would be eliminated. However, if it was decided that off-site

treatment was to be adopted, the consultants would need to assess the risk involved. Apart from environmental considerations, the cost-effectiveness and practicability of both options would need to be assessed.

18. Mr Henry WU opined that the Administration should seriously consider in-situ treatment at CLS, which in his view would surpass off-site treatment at TKW in all aspects. Mr SIN Chung-kai echoed that in-situ treatment would be more effective in terms of cost and time since much savings would be made in dispensing with the need for transport of contaminated soil. Moreover, if the works for the in-situ treatment plant were to start in 2002, there should be ample time for the commissioning and decommissioning of the treatment plant before the scheduled opening of ITP in 2005. DCE said that discounting the transportation cost, the cost for commissioning a treatment plant at the CLS site and at TKW was basically the same. However, putting in place an in-situ treatment plant at the CLS site would involve landfilling works which was a timely process. It might not be in the public interest to delay the opening of the long-awaited ITP. After assessing the advantages and disadvantages of the various options, it was decided that the off-site treatment at TKW would be the most practicable solution. Mr Matthew KO, Associate of MEMC added that MEMC had visited the thermal desorption plant in Jacksonville and learnt that the EIA of the plant concluded that an alternative location should be chosen for the incineration or dechlorination of residue. To facilitate a better understanding,

Admin members requested and the Administration undertook to provide a timetable showing the expected timeframes for in-situ treatment at the CLS site and off-site treatment at TKW. This would provide the public with an idea on why the more cost-effective in-situ treatment option was not adopted because of time constraints.

19. Given the close proximity of TKW to ITP, Mr LAW Chi-kwong was concerned about the risk associated with the operation of the thermal desorption plant in TKW which might have an impact on ITP, resulting in the suspension of operation of the latter. To this end, it might be more advisable to defer the opening of ITP. A careful assessment should also be made on the risk involved in the various scenarios. DCE said that it was the Administration's intention to complete the remediation and

Admin clean up work for the site as far as practicable before the scheduled opening of ITP. However, he could not indicate whether the opening of the park would be dependent on the completion of the treatment works at TKW. The Chairman requested the Administration to advise on the parties who would be held liable for the delay in the opening of ITP and the risk and liability involved in having a treatment plant in TKW operating in parallel with ITP should this be necessary.

20. Ms Cyd HO noted that it had all along been the Administration's intent to adhere to the scheduled opening of ITP, which was expected to create job opportunities and boost economic recovery. As a result, economic consideration had taken precedence over all other considerations. She cautioned that there was a public price to pay if funding for implementing the treatment option proposed by the

Admin Administration was approved in the absence of adequate information on technical feasibility, risk assessment and contingency measures. In this connection, Ms HO considered it necessary for the Administration to provide the best and worst scenarios

in respect of risk, cost and time for the in-situ and the off-site treatment options and the respective contingency plans.

21. Miss CHAN Yuen-han expressed doubt about the Administration's choice of off site treatment in the light of past unpleasant experiences. By way of illustration, the Administration had once proposed to use contaminated sediment from Kowloon Bay as landfill material for the Central Park in the Southeast Kowloon Development. The proposal was subsequently voted down by Members as a result of strong opposition from green groups. Miss CHAN said that she had lost confidence in the Administration. She also concurred with the green groups on the need to look into alternative options given that there would be serious consequence if anything went wrong with the decommissioning project. Noting that ACE EIA Subcommittee had not approved the EIA report for the decommissioning project at its meeting on 4 March 2002, Ms Cyd HO enquired about the reason behind such a decision. DCE advised that owing to time constraints at the meeting on 4 March 2002, the EIA Subcommittee decided that it would continue discussion of the report at its next meeting on 18 March 2002. Ms HO said that members might wish to make reference to the discussion of EIA Subcommittee which comprised professionals in different fields. The Chairman pointed out that as green groups were also represented at EIA Subcommittee, their views had already been made known to the Panel.

Transport arrangements

22. Dr LO Wing-lok agreed that the Administration should explore alternative treatment options, particularly on secondary treatment to be performed at TKW, thereby dispensing with the need for transporting the residue to CWTC. He pointed out that in treating patients with infectious diseases, doctors would avoid moving the patients from one place to another as this would increase the risk of infection. The same should apply to the treatment of dioxin since the multiple handling and transport of contaminated soil would only add on to the risk. Dr LO was particularly concerned that unlike the transport of contaminated soil from the CLS site to TKW which had a dedicated road access, the transport of toxic residue from TKW to CWTC would involve the use of public road network and thus posing a higher risk. He cautioned that no matter what safety precautions were taken by the carrier, there would still be the possibility of failure which could be disastrous given the high toxicity of the organic residue from thermal desorption. He enquired if there were alternative transport modes by which residue from TKW could be transported to CWTC.

23. In response, DCE said that irrespective of the choice of option, be it in-situ treatment at CLS site or off-site treatment at TKW, the organic residue would have to be transported to CWTC via Lantau Link for treatment. To lower the risk of contamination, the residue would be transported in a sealed truck to be escorted by a vehicle each in the front and at the back. Special arrangements could be made if circumstance warranted to transport each consignment using the lower deck of the Lantau Link to minimize the interface with public roads. Furthermore, delivery would be restricted to non-peak hours to avoid congestion and speed limits would be imposed. In fact, these arrangements were similar to those adopted in the conveyance

of dangerous goods along Tsing Ma Bridge. On the proposal of using sea transport in delivering the organic residue from TKW to CWTC, DCE advised that this was considered not acceptable having regard to the busy marine traffic at Ma Wan, the strong water currents at Kap Shui Mun and the proximity to fish culture zones. He also pointed out that there were cost implications in commissioning a secondary treatment plant or incinerator at TKW.

24. Mr Henry WU remained concerned about the risk associated with the transport of 30 000 cubic metres of contaminated soil from the CLS site to TKW, given the already heavy traffic resulting from the construction works of ITP. Expressing similar concern, Mr WONG Yung-kan enquired about the contingency arrangements in the event of a traffic accident took place in the course of delivery of the contaminated soil to TKW. DCE said that as the contaminated soil would be transported from the CLS site to TKW using a dedicated road access, the chance of having a traffic collision was very slim. On the number of consignment trips required to deliver the 30 000 cubic metres of contaminated soil to TKW, Mr Dickson LO/Executive Director of MCA said that this was estimated to be around 50 trips per day for a period of about six months. Mr WONG remained concerned about the contingency arrangements as the number of trips would be tripled if the sealed trucks were to be escorted by a vehicle each in the front and at the back. The risk of collision would also increase. He opined that as a lot of remedial works had to be borne by the public purse as a result of erroneous assessments by consultants, they should be held responsible if anything went wrong in the delivery process At members' request, the

Admin Administration undertook to advise on the risk and liability of traffic collision in the delivery process.

Capability of CWTC in treating dioxin

25. The Principal Environmental Protection Officer (Special Waste Facilities) explained that CWTC was designed and built for the treatment of chemical waste, including dioxin, which was commonly released from thermal processes involving chlorinated compounds. The CWTC incinerator was equipped with two combustion chambers with destruction and removal efficiency of 99.9999%. Oily residue produced from the thermal desorption process would be treated at the rotary kiln up to a temperature of 1100°C which would effectively decompose all the dioxin, the decomposition temperature of which was 800°C. The gaseous product would undergo further heat treatment at the secondary combustion chamber at a temperature of 1200°C. By then, all the toxic substances from the oily residue would be destroyed. Since dioxin would be easily reformed within a temperature range between 400°C and 200 °C, the flue gas would be quenched abruptly to 200°C to prevent the reformation of dioxin. Any dioxin remaining in the flue gas would be further removed by an activated carbon injection system and captured by a bag filter system. The average dioxin emission from CWTC was 0.008 nanogramme per cubic metre last year which was much lower than the most stringent international standard of

Admin 0.1 nanogramme per cubic metre. In view of the highly concentrated residue from TKW to be treated at CWTC, the Chairman considered it necessary for the Administration to justify the capability of CWTC in handling dioxin-contaminated

waste with proven results.

Protection for workers

26. Given that workers exposed to dioxin in their course of work were found to have a much higher content of dioxin in their bodies, the Chairman expressed concern about the occupational safety of workers handling dioxin-contaminated materials. Her concern was shared by Miss CHAN Yuen-han who stressed on the need for environmental monitoring of site conditions. The Occupational Health Consultant, Labour Department (OHC/LD) explained that the thermal desorption plant to be set up in TKW would be an enclosed structure equipped with an air pollution control system to minimize dioxin emission. The dioxin-contaminated soil would be stored in enclosed sheds before treatment. No personnel would be allowed to enter the control zone of the plant without completing proper safety training and wearing protective apparel, gloves and boots. The operation of the plant would be governed by the Factories and Industrial Undertakings Ordinance (Cap 59). Regular inspection would be conducted by the Labour Department to ensure compliance with the legislative requirements. The Chairman enquired if prescribed measures similar to that for handling asbestos were made available for dioxin to ensure the occupational safety of workers. OHD/LD said that with the preventive measures in place at the TKW plant, the possibility of dioxin intake though inhalation, skin absorption and accidental food consumption was quite slim.

Ecological impact

27. The Assistant Director (Conservation)of Agriculture and Fisheries and Conservation advised that the potential and direct impact of the decommissioning works on the ecology in the area would be minimized through controlling construction practices and implementing mitigation measures. The habitat of Rice Fish at Mong Tung Hang would be re-created at the upper steams and plants directly affected by the works would be transplanted to a suitable site at Tai Tam Country Park.

Cultural heritage

28. Noting that some artifacts of different periods had been identified by the Antiquities and Monuments Office (AMO) during its survey at the CLS site, the Chairman enquired if these artifacts had been contaminated with dioxin and whether there was sufficient time for the rescue works. The Executive Secretary (Antiquities and Monuments) Antiquities and Monuments Office, Leisure and Cultural Services Department (ES/AM) said that preservation measures and rescue works would be carried out before commencement of decommissioning works to minimize potential impact on archeological resources. Rescue workers would have to follow special safety guidelines in unearthing artifacts from contaminated soil. The timeframe allowed for the rescue works was considered sufficient. He affirmed in response to Miss CHAN Yuen-han that an extension of time would be allowed should this be necessary. DCE added that AMO staff had conducted survey works last year. The artifacts were found in the northern and central parts of the CLS site where there was

no evidence of dioxin contamination. In view of the limited resources of AMO, Ms Cyd HO asked whether sufficient funding was made available for the rescue works. ES/AM advised that $6.5 million had been earmarked by the project proponent for the rescue works. At members' request, the Administration undertook to seek confirmation from the Antiquities Advisory Board on the adequacy of the funding allocation of $6.5 million for the rescue works.

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Legal implications

29. Ms Audrey EU opined that there was a number of legal issues relating to the decommissioning project which had remained unresolved, and that legal advice on the following had to be sought -

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(a) the legitimacy for the Civil Engineering Department to exclude the decommissioning of CLS from the original EIA for ITP;

(b) the liability of CLS;

(c) the need for a legislation on land contamination to fill the legislative vacuum left by the existing legal framework on the prevention of pollution; and

(d) the availability of an escape clause in the existing contract for site handover of ITP should there be any unforeseen environmental risk.

Way forward

30. On the proposal of setting up a subcommittee to follow up the subject, Mr SIN Chung-kai considered that members should first decide whether funding should be approved for the decommissioning works. Other issues such as liability and accountability should be dealt with at a later stage. He supported the scheduled opening of ITP and he believed that his view was shared by members of the public at large who were keen to have ITP in place for the benefit of Hong Kong.

31. As regards funding arrangements for the decommissioning project, DCE said that the Administration intended to submit the funding proposal for consideration by the Public Works Subcommittee at its meeting on 8 May 2002 and to seek funding approval from Finance Committee in June 2002. He agreed to provide written responses to the issues raised at the current meeting in two weeks' time. The Chairman agreed to hold another special meeting to continue discussion on the subject.

(*Post-meeting note:* With the concurrence of the Chairman, a special meeting had been scheduled for 10 April 2002 to continue discussion on the subject.)

Action

II Any other business

32. There being no other business, the meeting ended at 12:25 pm.

Legislative Council Secretariat
8 April 2002