

**Confirmed Minutes of the 110th Meeting of
the Advisory Council on the Environment
held on 10 November 2003 at 2:30 p.m.**

Present:

Prof. LAM Kin-che, J.P. (Chairman)
Prof. HO Kin-chung
Mr. Peter Y. C. LEE
Mr. LIN Chaan-ming
Prof. LUNG Ping-yee, David, S.B.S., J.P.
Dr. NG Cho-nam
Mrs. Mei NG, B.B.S
Mr. Otto L. T. POON, B.B.S.
Mr. Michael J. D. RUSHWORTH
Mr. Markus SHAW
Prof. WONG Yuk-shan, J.P.
Ms. Jessie WONG (Secretary)

Absent with Apologies:

Prof. Peter HILLS
Ms. Iris TAM, J.P.
Prof. WONG Tze-wai

In Attendance:

Mrs. Rita LAU, JP	Permanent Secretary for the Environment, Transport and Works (Environment and Transport)
Ms. Doris CHEUNG	Deputy Secretary for the Environment, Transport and Works (Environment and Transport)(E)1,
Mr. Thomas CHOW	Deputy Secretary for the Environment, Transport and Works (Environment and Transport)(E)2,
Mr. Rob LAW, JP	Director of Environmental Protection
Mr. C C LAY	Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department
Miss CHU Hing-yin	Chief Town Planner/Technical Services, Planning Department
Mr. Matthew LEUNG	Secretariat Press Officer (Environment, Transport and Works), Environment, Transport and Works Bureau (ETWB)
Ms. Polly LEUNG	Principal Information Officer, Environmental Protection Department (EPD)
Miss Petula POON	Chief Executive Officer (E), ETWB
Mr. Eddie CHENG	Executive Officer (E), ETWB

In Attendance for Agenda Item 3 :

Mr. James CHAN	Chief Assistant Secretary for the Environment, Transport and Works (Works) 4,
Mr. Damien KU	Assistant Director/Development, Water Supplies Department (WSD)

Action

The Chairman welcomed Mr. Markus Shaw who was newly appointed as a Member of the Council.

Agenda Item 1 : Confirmation of Minutes of the 109th Meeting held on 13 October 2003

2. The draft minutes were confirmed without amendment.

Agenda Item 2 : Matters Arising

Para. 8: To provide Members with the findings of the Preliminary Environmental Review of the Hong Kong-Zhuhai-Macao Bridge project

3. The Chairman informed Members that the information note on the Preliminary Environmental Review of the Hong Kong-Zhuhai-Macao Bridge was circulated to Members on 7 November 2003.

Para. 9: Members' participation in the consultation process of the EIA study of the Hong Kong-Zhuhai-Macao Bridge conducted by the Mainland side

4. The Chairman informed the meeting that the Secretariat had asked the Transport Sub-branch to take necessary follow-up actions

Para. 13: To brief Members on the strategic development of Lantau Island

5. The Chairman said that the Secretariat had informed the Planning Department of the Council's request and asked the Department to take necessary follow-up actions.

6. In response, Miss Chu Hing-yin informed Members that the Planning Department would start the Stage III Public Consultation on the Hong Kong 2030 Study in end-November 2003 and brief the Council in December 2003. The Hong Kong 2030 Study would cover, among other things, the major development issues and possible development patterns for the whole territory. Upon completion of the study, the Government would draw up the broad development picture of the territory, including the Lantau Island. In response to the Chairman's question about the planned

developments in the Lantau Island, Miss Chu said that the issue could be discussed during the briefing in December. As regards a Member's comments about the possible cumulative impacts of the proposed Hong Kong-Zhuhai-Macao Bridge and other projects under planning, Mr. Thomas Chow said that the environmental impact assessment (EIA) study of the bridge project would cover the impact of both the existing and planned connecting infrastructure.

Agenda Item 3 : Total Water Management in Hong Kong
(ACE Paper 32/2003)

7. The Chairman welcomed the presentation team to the meeting. Mr. James Chan briefed Members on the paper.

8. In view of the need for additional pipeline systems, a Member pointed out that the cost of using treated effluent would be quite high. He considered that there was no point in pursuing the scheme because the Guangdong Province was supplying water to Hong Kong at a low cost and the supply was abundant. Another Member supported the Member's views and said that although the Guangdong Province supplied 80% of the water required by Hong Kong, he did not see any problem with the arrangement particularly since Hong Kong was already part of the country. While agreeing that water resources should be protected, he had doubt on the cost effectiveness of using the treated effluent.

9. Two Members pointed out that the lack of water resources was a global problem, and the Mainland was also suffering from it. Hong Kong should therefore join hands with the Guangdong side to reduce water consumption and protect water resources. Mr. James Chan said that due to the rapid development of the Guangdong Province, water resources would become scarcer. While the Guangdong authorities would provide sufficient water to Hong Kong, there was a limit to the overall capacity of Dongjiang. Hence, there was a need to look for more water resources. The effluent reuse scheme in Ngong Ping was a pilot scheme for studying the cost-effectiveness of reusing the treated effluent. Mr. Damien Ku added that during rainy days, the water collected in the Dongjiang catchment could be used to meet the demand of Hong Kong. However, in times of drought, the Guangdong authorities would have to release water from the upstream reservoirs to provide the water for Hong Kong. He further explained that if the effluent could be collected and treated in-situ, the cost for using the treated effluent might be lower.

10. In reply to the Chairman's question on whether sea water desalination was more cost effective than the use of the treated effluent, Mr. Damien Ku said that the comparison would depend on the costs of

production and delivery to the consumers. A Member considered that desalination should be adopted in small communities on offshore islands to avoid the need for laying water pipes which might affect the ecology and the landscape of rural areas.

11. In reply to a Member's enquiry, Mr. James Chan said that WSD was currently discussing with the Guangdong authorities on a more flexible water supply agreement and the result would be announced once available. Mr. Damien Ku informed Members that there was in practice some flexibility in the present water supply arrangement and the current supply level was actually lower than the level agreed originally. He pointed out that discarding the surplus water was sometimes unavoidable during rainy days because reservoirs in Hong Kong were too small and WSD had to maintain an adequate storage at the reservoirs for emergency use.

12. A Member suggested that to provide a better business environment for factory proprietors, the Government should provide non-drinking water for industrial use at a lower cost. In response, Mr. Damien Ku said that WSD had been closely monitoring the water demand of the industrial sector and there had been no problem in meeting the demand. At present, the unit water charges for industrial use was lower than the domestic rates at the high tier levels.

13. A Member pointed out that as far as she knew, drinking water was used for street cleansing and she queried whether the Food and Environmental Hygiene Department should continue with such practice. In response, Mr. Damien Ku agreed that more could be done in water conservation but he pointed out that it was quite costly to provide both treated water and raw water to users, as it would require separate water supply systems. Mr. James Chan added that health risk was also a concern because using non-drinking water for purposes other than flushing might pose a certain level of health risk to the users if the water was not treated to the required standards. Furthermore, a separate supply system with clear indications that the water was not drinkable would be needed.

14. In response to a Member's enquiry, Mr. Damien Ku said that the use of water cooled centralized air conditioning systems would require a large quantity of water. WSD had been very cautious in considering applications for such supplies.

15. A Member expressed concerns about the high percentage of water leakage which amounted to 25% of the total water supply. In response, Mr. Damien Ku explained that the water leakage figure was the difference between the water consumption as indicated by the water tariff collected and the total water supplied to the system. It was believed that

some water was lost through illegally tapping instead of just pipe leakage. To reduce water leakage, WSD had been using leak noise detectors to locate the leakage and repair the defective pipes more efficiently. The department had a 20-year plan for replacing the aged pipelines throughout the territory. In addition, the water pressure management method would be adopted to reduce both water consumption and water leakage. In response to the Chairman's enquiry, Mr. Ku said that the leakage rate was expected to drop to around 15% with the implementation of the above measures.

16. A Member pointed out that Hong Kong should be made more self-reliant by expanding the water-gathering grounds and optimizing the reservoirs. She also asked whether there were plans to use the disused reservoirs as a contingency measure. In reply, Mr. James Chan said that according to a feasibility study conducted by WSD, expanding water-gathering grounds would be more expensive than desalination and effluent reuse. Also, a balanced approach should be adopted in extending the water-gathering grounds in order not to affect the country parks and the wildlife there. Mr. Damien Ku added that there were low-land pumping stations for collecting more water from the existing water-gathering grounds. However, these facilities were not used when the water level of the receiving reservoir was already quite high, so as to save pumping energy. As regards disused reservoirs, Mr. Ku said that there was only one disused reservoir, namely the Wong Nai Chung Reservoir which was very small and could not function as a reservoir due to the silts therein. It was presently used for recreational purpose. As regards contingency planning, Mr. Ku said that WSD was conducting a pilot study in Ngau Tam Mei to see whether small water treatment plants could be built to treat water direct from a raw water supply point. In response to the Member's suggestion of conducting a comparative study on desalination, effluent reuse and optimizing existing water-gathering grounds, Mr. Damien Ku confirmed that WSD could examine the costs and merits of the different options on a case by case basis.

17. A Member said that extension of the existing water-gathering grounds would have adverse ecological impacts. He suggested exploring the feasibility of converting abandoned irrigation reservoirs into wetland. In response, Mr. Damien Ku said that the Government was aware of the possible environmental problems of expanding water-gathering grounds, and future use of the abandoned irrigation reservoirs, and converting them into wetland could be one of the options for consideration.

18. A Member asked whether there were new devices that could reduce water consumption and whether WSD had considered rainwater harvesting which had already been started in Beijing. In response, Mr. Damien Ku said that WSD had been considering various water-saving apparatuses and would recommend them for wider use if appropriate. On

rainwater harvesting, Mr. Ku said that WSD had not yet considered the option and undertook to conduct more studies in that area.

19. A Member suggested that education programmes on water conservation should emphasize the actual cost of water, including energy cost, environmental cost, as well as the procurement cost. She said that more demonstrations on water saving measures should be conducted for schools and educational institutions. In response, Mr. Damien Ku said that WSD had been organizing activities to promote water conservation and would continue to enhance such publicities.

20. A Member commended the Government for conducting a pilot scheme on effluent reuse in Ngong Ping. If the effluent reuse scheme was too expensive, he suggested that WSD modify the process to make it more affordable. He also pointed out that simple devices such as water restrictors and low consumption flushing toilets could help reduce water consumption. The Government should consider those devices and promote them as far as possible. In response, Mr. Damien Ku said that WSD had already used water pressure reduction devices and allowed consumers to use such devices in reducing water consumption. In addition, the department was studying the low consumption flushing toilet device and would publicize it if it were effective. He also agreed that more publicity on water saving devices would be required.

21. In response to a Member's question on whether the current differential pricing system had provided sufficient incentive for water conservation, both Mr. James Chan and Mr. Damien Ku confirmed that the system was effective but it would be difficult to further increase the price difference under current economic conditions.

22. A Member said that total water management was an integrated management concept covering the whole hydrological cycle and should mean more than water conservation and protection of water resources. There was still room for improvement in the management of the water system in Hong Kong.

23. The Chairman thanked the presentation team and said that the Council fully supported the concept of total water management. As total water management was closely related to sustainable development, it should be implemented in an integrated approach. In addition, public education was very important and there should be more publicity and demonstrations on water conservation. He also looked forward to regular reports on the implementation of the total water management concept in Hong Kong.

Agenda Item 4 : Visit of the Advisory Council on the Environment to the

Environmental Protection Bureau of Guangdong Province on 31 October 2003

(ACE Paper 33/2003)

24. The Chairman briefed the meeting on the delegation's visit to the Environmental Protection Bureau (EPB) of Guangdong Province on 31 October 2003.

25. A Member said that the visit was very useful. She was interested in the "community monitoring officers system" (社會監督員制度) adopted by EPB of Guangdong Province and hoped to receive more information on the system. She also suggested exchanging views with the monitoring officers when opportunities arose. Another Member suggested paying visits to the environmental authorities in Shenzhen and Zhuhai. In addition, he said that the monitoring officers should be invited to attend the Council's meetings when they visited Hong Kong in future. A Member said that such exchange should be done on an informal basis only.

26. A Member said that he was impressed by the determination of the Guangdong authorities in implementing the polluter-pays principle and hoped that the Administration could move ahead in that direction as soon as possible.

Agenda Item 5 : Any Other Business

Information Note on the Hong Kong-Zhuhai-Macao Bridge

27. Upon a Member's suggestion, Members agreed that the above information note should be discussed at the coming EIA Subcommittee meeting. EIA Subcommittee

Tentative items for discussion at the next meeting

28. The Chairman informed the meeting that the Third Comprehensive Transport Study and Hong Kong 2030 Study were tentatively scheduled for the next meeting.

Agenda Item 6 : Date of Next Meeting

29. The next meeting would be held on 8 December 2003.

**ACE Secretariat
November 2003**