Confirmed Minutes of the 167th Meeting of the Advisory Council on the Environment held on 12 January 2010 at 2:30 pm

Present:

Prof Paul LAM, JP (Chairman)
Prof CHAU Kwai-cheong (Deputy Chairman)
Ms Teresa AU
Mr Oscar CHOW
Prof FUNG Tung
Ms Betty HO
Mr Edwin LAU, MH
Ir Dr LO Wai-kwok, BBS, MH, JP
Dr MAN Chi-sum, JP
Dr Alfred TAM
Mr TSANG Kam-lam
Prof WONG Ming-hung
Mr Simon WONG, JP
Dr YAU Wing-kwong
Dr Ray YEP
Prof Ignatius YU
Mr Carlson K S CHAN (Secretary)

Absent with Apologies:

Dr Dorothy CHAN, BBS
Mr Michael JEBSEN, BBS
Mr Michael LEE
Prof Joseph LEE

In Attendance:

Ms Anissa WONG, JP	Permanent Secretary for the Environment
Mr C C LAY	Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department
Mr P Y TAM	Assistant Director/Technical Services, Planning Department
Ms Esther LI	Acting Principal Information Officer, Environmental Protection Department (EPD)
Ms Josephine CHEUNG	Chief Executive Officer (CBD), EPD
Ms Loletta LAU	Executive Officer (CBD), EPD
Miss Kim KWAN	Executive Manager (CBD), EPD

In Attendance for Agenda Item 4:

Dr Lawrence WONG	Acting Assistant Director (Special Duties), EPD
Dr Alain LAM	Principal Environmental Protection Officer (Waste Management Policy), EPD
Ms Heidi YUNG	Senior Environmental Protection Officer (Waste Management Policy)1, EPD

In Attendance for Agenda Item 5:

Mr Lawrence CHEUNG	Acting Principal Environmental Officer (Corporate Affairs), EPD
Mr Calvary WONG	Environmental Protection Officer (Information Technology)4, EPD

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Action

Agenda Item 1 : Welcome remarks and general briefing on operation of the Council

The Chairman welcomed Prof Fung Tung, Dr Lo Wai-kwok and Dr Ray Yep who had newly joined the Advisory Council on the Environment (ACE) and extended congratulations to Prof Chau Kwai-cheong for being appointed as the Deputy Chairman. He also expressed a note of thanks to Prof Lam Kin-che who had retired from the Council.

2. The Chairman gave a general briefing to the new members on the operation of the ACE, including its functions, meeting schedule, arrangements for open meetings, declaration of interests, the need to maintain confidentiality of classified documents, rules of voting and operation of the three Subcommittees, etc.

3. The Chairman said that as an established practice, the Chairmen of Subcommittees were elected among Members. For the Nature Conservation Subcommittee and Waste Management Subcommittee, the chairmanship would continue until the end of 2010. As regards the EIA Subcommittee, to maintain impartiality, it was not desirable for the ACE Chairman to assume the role of Chairman of EIA Subcommittee concurrently. He suggested Members of the

EIA Subcommittee to elect the Chairman and Deputy Chairman of the Subcommittee during the break of the meeting.

(Note: The Chairman announced after the break that Mr Tsang Kam-lam and Prof Chau Kwai-cheong were elected as the Chairman and Deputy Chairman of the EIA Subcommittee respectively.)

Agenda Item 2 : Confirmation of the draft minutes of the 166th meeting held on 14 December 2009

4. The draft minutes were confirmed without amendment.

Agenda Item 3 : Matters arising from the minutes of the 166th meeting held on 14 December 2009

5. There were no matters arising from the minutes of the last meeting.

Agenda Item 4 : Implementation of Clinical Waste Control Scheme and Code of Practice for the management of clinical waste
(ACE Paper 1/2010)

6. Dr Lawrence Wong briefed Members on the background of the proposed Clinical Waste Control Scheme (the Scheme) and explained the process of migrating from the existing administrative management to statutory control on clinical waste, which involved the enactment of two sets of subsidiary legislation under the Waste Disposal Ordinance and promulgation of two sets of technical Code of Practice (CoP), one for major waste producers and waste collectors, and the other one for small waste producers. Dr Alain Lam briefed Members on the details of the Scheme.

7. A Member declared interest for being one of the clinical waste producers through his private practices. The meeting agreed that he could stay at the meeting and participate in the discussion for providing inputs from the professional point of view. He supported the Scheme as clinical waste would pose a potential risk on public health or cause pollution to the environment. He sought clarification on the type of records to be kept by clinical waste producers as required under the Scheme. Dr Lawrence Wong explained that a trip ticket

system would be used to keep track of the clinical waste from source to disposal facility. Licensed waste collectors would record and certify on a trip ticket the quantity of clinical waste they collected from waste producers and provide waste producer with a copy of the trip ticket as record for the waste consignment. The record that the waste producer needed to keep was only a copy of the trip ticket.

8. A Member supported the Scheme and considered that it should be implemented as soon as possible. He agreed that it was necessary to keep the track record of delivering the clinical waste in case of any possible spillage or leakage incident. Nonetheless, he doubted whether it would be necessary for the waste producers to keep the record for a period of 12 months as it might cause burden on small private clinics with limited staffing resources. Dr Lawrence Wong explained that it was anticipated that small private clinics would require waste collection service about once per month and only about 12 to 20 pieces of tickets would need to be kept per year. Keeping such a small quantity of tickets should not impose burden on their operations. The 12-month period was considered necessary as investigation, such as on malpractice of a waste collector, would require the tracing of records which would be important evidence to substantiate cases on breaching of statutory requirements.

9. A Member sought clarification on the 24-hour requirement of disposal of clinical waste to a collection point or licensed disposal facility as it might have cost implications on waste producers for disposing a small amount of waste on a daily basis. Dr Lawrence Wong explained that the 24-hour requirement applied to the waste collectors rather than waste producers. Different waste producers generated different types of clinical waste, some of which required more timely collection while some could be stored for a certain period of time. The Regulation required the waste collector to deliver the waste collected from waste producers to the final disposal facility within 24 hours. As regards waste producers, they were required to follow the CoP on the storage time for different types of clinical waste.

10. A Member enquired about means to ensure that the on-site storage practice of small clinical waste producers would comply with the CoP. Dr Lawrence Wong explained that the fundamental principle of the CoP on storage of clinical waste was to ensure the waste stored would not impose any health risk on people in the premises. While there were recommended guidelines

on the practice of storage in the CoP, it was acceptable for a private clinic to adopt its own storage practice so long as it could fulfil the fundamental requirements of the CoP. Regular visits would be paid by EPD enforcement teams and the practice of storing clinical waste would be assessed having regard to circumstances of the premises.

11. The Chairman asked whether private clinics could follow their own codes of practice. Dr Lawrence Wong explained that there was a set of guidelines laid down for medical professionals, including codes of practice. The CoP under the Scheme aimed at providing more detailed guidelines and concrete information on the handling and management of clinical waste. The EPD enforcement teams would assess the storage practice of the premises with reference to the CoP.

12. The Chairman asked whether the sets of CoP were legally binding. Dr Lawrence Wong said that the CoP would be issued under section 35 of the Waste Disposal Ordinance to complement the control set out in the Regulation. While failure to observe the CoP would not be a criminal offence, the court might rely upon such failure when establishing or negating any legal liability in a civil or criminal proceeding. If the waste producers and collectors followed the CoP, they would be in compliance with the Scheme under the legislative requirements.

13. A Member referred to the requirements on segregating, packaging and labelling the clinical waste in paragraph 4 of the CoP (Annex I to the paper). He asked whether clinical waste categorized under groups 2, 4, 5 and 6 were required to be segregated as the colour code assigned to their containers was the same. Dr Lawrence Wong explained that the waste categorized under these groups could in theory be mixed together and stored in red heavy-duty plastic bags. In practice, different groups of waste were likely produced by different wards in a hospital and each group would be kept in separate bags before being stored in the storage room.

14. A Member referred to Figure 2 (Schematic drawing of a storage area for clinical waste) of the CoP (Annex I to the paper) and the requirement that a temporary on-site storage area should be enclosed on at least three sides by wall, partition or fence, and should be designed to meet the requirement of protecting the waste containers therein from rainfall and wind, intrusions of animals and

birds as well as free from rodent and insect infections. He asked whether a four-sided enclosure with roof should be required instead to meet the requirements on protection of containers. Dr Lawrence Wong explained that Figure 2 of the CoP illustrated a typical clinical waste storage area inside a covered premises for major clinical waste producers such as hospitals. In case a storage area had to be established outside covered premise, a roof must be provided for the storage area.

15. A Member was concerned about the clinical waste, such as needles used for acupuncture, produced by the large number of Chinese medical practitioners. He envisaged that there would be difficulty for the Administration to reach the Chinese medical practitioners for implementation of the Scheme. Dr Lawrence Wong explained that clinical waste generated by Chinese medical practitioners were mainly sharps such as acupuncture needles which would be controlled under the Scheme and the same provisions would be applied to this type of clinical waste producers.

16. A Member asked whether clinical waste in the form of liquid would be included under the Scheme. Some medical practitioners might just drain the blood generated from surgical operations in waste drainage system. Dr Lawrence Wong explained that the proposed legislation would set out the basic types of clinical waste without explicitly spelling out whether they were in solid, semi-solid or liquid form. As long as the clinical waste contained infectious pathogens, regardless of the form, it would be covered under the Scheme. For clinical operations involving large volume of blood, the usual practice was to soak up the blood with dressings and the dressings would have to be disposed of as clinical waste. It would be important to count on the professional judgement of medical practitioners on the most appropriate practice in handling clinical waste in liquid form. Clinical waste such as blood in a concentrated form of soaked up dressings was covered under the Scheme. A Member said that according to his understanding, the large volume of blood or body fluid generated from operations in hospitals under the Hospital Authority would be contained in separate sealed disposable containers and had to be disposed of as part of clinical waste.

17. A Member noted that only private cars could be used as a means of transport for delivering clinical waste of less than 5 kg by healthcare professionals. He enquired about the rationale for such a restriction on the means of transport. Dr Lawrence Wong said that it was anticipated that majority

of the clinical waste producers would choose to consign the waste to licensed waste collectors instead of delivering the waste by themselves in view of the relatively low cost involved. Nonetheless, the provision was included because when the Waste Disposal (Amendment) Bill was discussed in 2005, some sectors of medical professionals expressed the view that they should not be deprived of the right of delivering the clinical waste by themselves. Considering that clinical waste would pose a potential risk on public health if they were carried around by public transport, it was considered necessary to set out the requirement of using private car which was defined under the Road Traffic Ordinance.

18. A Member asked whether a healthcare professional could hire a van to transport the clinical waste if he preferred not using his own private car. Dr Lawrence Wong said that the waste producers could not engage hired or commercial type of van or vehicle as well as public transport such as taxi as means of transport for delivering clinical waste in order to minimize possible exposure of pathogenic agents to the public.

19. The Chairman enquired about the considerations in setting 5 kg as the cut-off line for allowing healthcare professionals to deliver the clinical waste to the collection point or licensed disposal facility. Dr Lawrence Wong explained that reference was made to international standards in determining the cut-off line.

20. A Member referred to the emergency procedures in paragraph 9.3 of the CoP (Annex I to the paper) which required all spillage or leakage incidents be recorded and reported to the responsible person according to the established procedures. He sought further information on the established procedures. Ms Heidi Yung explained that major clinical waste producers were required to develop a clinical waste management plan for compliance by the staff. The established procedures according to the CoP referred to the procedures laid down in the clinical waste management plan of the organization for dealing with spillage or leakage incidents, including detailed procedures for cleaning up and reporting of the incidents to responsible personnel.

21. A Member suggested imposing a mandatory requirement on major clinical waste producers and collectors to report cases of spillage or leakage incidents, in particular infectious materials categorized under Group 4, as they

might have severe impacts on public health. Instead of relying on self-reporting, it would be necessary to impose more stringent reporting mechanism to ensure protection of public health. Dr Lawrence Wong explained that the clinical waste collectors were required under the licensing provisions to report spillage or leakage incidents to the EPD enforcement teams. Moreover, the Administration would set up an emergency response system similar to that for chemical waste control. Under the system, experienced contractors with the expertise would be responsible for carrying out immediate remedial actions, including cleaning up and removal of spilled waste. Detailed procedures would be laid down on prompt actions to be taken and resources to be mobilized.

22. A Member asked whether there was any contingency plan, including coordination among departments, for handling accidents that might happen between the collection points and disposal facility. Dr Lawrence Wong explained that reference would also be made to the contingency plan for chemical waste control. In the case of an accident, an emergency response system would be activated with concerted efforts of different government departments and relevant parties. All responsible departments, including the Police Force, Fire Services Department and EPD, would take immediate actions.

23. A Member noted that some clinical waste were currently disposed of at the Cape Collinson Crematorium of Food and Environmental Hygiene Department and the Hospital Authorityôs pathological waste incinerator at Tuen Mun Hospital. He asked whether all clinical waste would have to be delivered to the Clinical Waste Treatment Centre (CWTC) after enactment of the legislation. Dr Lawrence Wong explained that the Waste Disposal Ordinance permitted any person who successfully applied for a license to operate waste disposal facilities. However, given the low cost of treating clinical waste at CWTC and stringent requirement of emission standards of a waste disposal facility, it would be unlikely that waste producer would continue to operate their own cremator or incinerator.

24. A Member supported the Scheme. He recommended the Hospital Authority to stop operating the incinerator at Tuen Mun Hospital after the completion of the CWTC as the emissions of the incinerator were of acceptable levels only. Dr Lawrence Wong explained that the Hospital Authority would need to apply for a license in case it wanted to continue the operation of the

incinerator for disposing clinical waste. Given the stringent emission standards, they learnt from the Hospital Authority that they had no intention to apply for the license.

25. A Member noted that the Kwai Tsing District Council (K&TDC) and Greenpeace had raised objection against the proposal. He asked whether the concern of the Greenpeace was similar to that of K&TDC and whether follow-up actions had been taken to address their concern. Dr Lawrence Wong explained that the concern of the Greenpeace was basically similar to that of the K&TDC on the health effects of emissions from the CWTC located at Tsing Yi. After several rounds of discussion with the K&TDC on the plan for upgrading the CWTC, very low level of emissions and stringent emission standards of the plant, no further objection was received. The documents and information presented had adequately addressed their concern on emissions. Upon the Memberôs enquiry, Dr Wong confirmed that all the documents on the issue submitted to the Legislative Council and District Councils were in the public domain.

26. A Member asked whether the CoP or other statutory requirements would be applied to the operator of the CWTC on temporary storage of clinical waste and daily operation of the CWTC. Dr Lawrence Wong explained that control on the CWTC operator would be very stringent and the control regime would be set out under the waste disposal licensing arrangements. The waste disposal license would include a set of comprehensive provisions which set out detailed requirements on every operational step of the CWTC, from receiving and storage of the waste to handling and incineration of the waste. Non-compliance with the provisions would result in prosecution.

27. A Member asked whether the clinical waste would add a heavy load on the existing CWTC. Dr Alain Lam said that it was envisaged that about seven tonnes of clinical waste per day, representing a very small amount of the capacity of the plant, would be delivered to the CWTC for treatment. In terms of vehicle loading, they involved only about 10 to 20 vehicle loads per day which would not constitute any significant impact on the traffic of Tsing Yi.

28. A Member noted that the existing CWTC treated chemical waste only while the upgraded CWTC would treat both clinical and chemical waste. He asked whether there was any difference between the emission standards of the

existing and upgraded CWTC. Dr Alain Lam explained that the operation of the CWTC had been designed to prevent the formation of dioxin during the heating process as incineration of clinical waste might generate a small amount of dioxin due to PVC content of some clinical waste. Emission of the existing CWTC had been closely monitored. Records indicated that the dioxin emission was 0.003 ng I-TEQ/m^3, which was well below the stringent European Union (EU) standard of 0.1 ng I-TEQ/m^3. After installing the feeding system for treating clinical waste, the CWTC would be upgraded by installing De-NO_x and De-SO_x systems as well as Dual Continuous Monitoring System and would be able to further reduce sulphur dioxide, nitrogen dioxide and dioxin emissions. It was expected that the emission level of the upgraded incinerator would be even lower than that of the existing operation and would meet the latest emission standard of the EU.

29. A Member was concerned about the capability and capacity of the CWTC. He noted Footnote 2 of the paper stated that an EIA study was conducted in 1998-99 and concluded that the CWTC was suitable to treat clinical waste in an environmentally acceptable manner, and the ACE endorsed the study report in May 1999. As the EIA Study was conducted some ten years ago, he asked for supplementary information on whether the assessments were still valid. He also noted from paragraph 5 of the paper that EPD was in the process of upgrading the CWTC to receive and treat clinical waste by incineration, meeting the latest emission standard of the EU. He requested EPD to provide information on the emission standards met or to be met before and after the completion of the upgrading works for Membersôinformation.

(Post-meeting note: An Information Note providing the information requested was circulated to Members after the meeting.)

30. A Member enquired about information about the current state of private clinics utilizing waste collection service. If the utilization rate was low, it reflected that more effort had to be made to launch publicity programmes to promote wider use of collection service. He was also concerned that the number of service providers might not be sufficient enough to encourage private clinics to use the service. He strongly recommended that effort be made to educate and help private medical practitioners to understand and comply with the Scheme as some of them might not have sufficient knowledge or had not been practicing

clinical waste management for a long period of time. Clinic staff should also be educated on the best practices of clinical waste management.

31. Dr Lawrence Wong said that little information on the utilization rate of clinical waste collection service by private clinics was available as it was currently not a mandatory requirement. Information collected so far reflected that the utilization rate was relatively low. To consult the stakeholders and let them understand the Scheme, meetings had been held with different groups of stakeholders in the past few months. Workshops and other platforms of exchange with stakeholders were being arranged to disseminate detailed information of the Scheme. Effort would be made to promulgate the Scheme and promote wider use of collection service. Currently, there were 10 private waste collectors in Hong Kong providing clinical waste collection services for small waste producers. By mid-2010, waste collectors could apply for licenses under the Scheme. EPD would then be able to circulate the information on licensed waste collectors to all private medical practitioners. Since the cost involved for private clinics would be relatively low, it was anticipated that the usage rate of the service would be high.

32. The Chairman summarized Membersôviews as follows ï

(a) the Council supported the proposed implementation of the Clinical Waste Control Scheme and promulgation of the CoP for management and control of clinical waste to ensure that clinical waste would be handled and disposed of in an environmentally safe and sound manner under a legal framework;

(b) the Council considered that it was important to put in place an emergency response plan to handle spillage or leakage incidents of clinical waste;

(c) the Council suggested that more information be collected on the current situation on the use of clinical waste collection service to facilitate the launching of the Scheme and promote wider use of collection service; and

(d) the Council also suggested that effort be made to educate and help

private medical practitioners as well as clinic staff to understand the best practices of clinical waste management in the CoP and comply with the requirements under the Scheme.

Agenda Item 5 : Any other business

Conducting paperless meetings

33. The Chairman informed Members that the Administration was considering conducting paperless meetings as a green initiative to reduce paper consumption and greenhouse gas emission. Advisory and statutory bodies were also invited to consider the viability of conducting paperless meetings. To facilitate Membersô consideration on whether the ACE or its Subcommittees could take on the initiative, the EPD would brief Members on the proposed technical arrangements for conducting paperless meetings.

34. Mr Lawrence Cheung briefed Members on the proposed technical arrangements, such as networked notebooks in the conference room and server to be installed to support the proceedings of a paperless meeting and initial design of the user interface. Details of the technical design and security measures would be worked out before implementation.

35. The Chairman asked whether individual notebooks could be operated independently without requiring all users to view the same information on the notbooks at the same time. Mr Lawrence Cheung said that the system design would allow users to operate the notebooks independently and choose to view the documents they selected.

36. A Member expressed concerns on the need to make some setting-up arrangement in the Membersô computers in the office or at home. Mr Lawrence Cheung explained that several forms of set-up were being considered having regard to security considerations. A Member commented that the design of the future paperless meeting system should allow Members to access the system through hyperlink and login account when using their computers in the office or at home. It would not be convenient to make setting-up arrangement in individual Memberôs computer as different companies might have their own security restrictions. He also suggested the Administration to develop a common

platform in the Government intranet for different advisory and statutory bodies to facilitate Members serving different boards and committees.

37. A Member said that apart from the use of the Virtual Private Network (VPN) technology which required making setting-up arrangement in Membersô computers, the Administration might consider another approach of assigning each Member a personal log-in account with password plus a second real-time password, similar to the methods adopted in Internet banking facilities. The use of two-step log-in would meet higher security requirement.

38. A Member enquired about the means for Members to mark up on the documents before the meeting. Mr Lawrence Cheung said that the initial idea was that the secretariat would upload the agenda and papers onto the server for the paperless meeting system before the meeting and Members could copy the documents onto their personal private folders under the paperless meeting system. Members could mark up on the documents inside their personal private folders in the office or at home. They could retrieve the marked-up versions from their personal private folders in the notebooks of the conference room during the meeting. There were available programmes for users to mark up on documents in pdf. format and they would try to explore suitable and compatible programmes.

39. A Member suggested that arrangement be made to provide connection of the notebooks to Internet by Wi-Fi in the conference room to facilitate access to information. Mr Lawrence Cheung undertook to explore the feasibility of arranging Wi-Fi system in the conference room.

40. The Chairman considered that the implementation of paperless meetings should be launched in a steady pace for Members to adapt to a different mode of conducting meetings. Some Members might take time to get used to the mode of paperless meetings. As a transitional arrangement, Members should be given the choice of receiving hardcopies of documents.

41. With the consent of the Chairmen of the Nature Conservation Subcommittee and Waste Management Subcommittee, the meeting agreed that the arrangement of paperless meetings could be tried out at the meetings of the Nature Conservation Subcommittee and Waste Management Subcommittee. Members would be given the choice of receiving hardcopies of documents during the

transitional period to adapt to the mode of paperless meetings. Subcommittee Members concerned would be informed of the arrangement after completion of the technical set-up.

Tentative items for discussion at the next meeting

42. The agenda was being compiled. Members would be informed in due course.

Agenda Item 6 : Date of next meeting

43. The next meeting was scheduled for 8 February 2010.

ACE Secretariat
January 2010