

**Confirmed Minutes of the 259<sup>th</sup> Meeting  
of the Advisory Council on the Environment (ACE)  
on 10 July 2023 at 2:30 p.m.**

**Present:**

Prof John CHAI, BBS, JP (Chairman)  
Prof Kenneth LEUNG, JP (Deputy Chairman)  
Dr Sylvia CHAN, MH  
Ms Ada FUNG, BBS  
Mr Eric HO  
Ms Linda HO  
Mr Alex KWAN  
Dr Theresa KWONG  
Prof Alexis LAU, JP  
Prof Dennis LEUNG  
Mr Simon NG  
Mr Daryl NG, SBS, JP  
Mr Albert SU, MH, JP  
Ms Christina TANG  
Dr WONG Kwok-yan, MH  
Dr Raymond YAU  
Mr Alan LO, JP (Secretary)

**Absent with Apologies:**

Ms Carmen CHAN, BBS, JP  
Prof Dan TSANG  
Prof WONG Kam-bo  
Dr William YU

**In Attendance:**

Mr Terence TSANG	Assistant Director (Environmental Assessment), Environmental Protection Department (EPD)
Mr Simon CHAN	Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department (AFCD)
Ms Maggie CHIN	Assistant Director of Planning / Technical Services, Planning Department (PlanD)
Miss Mavis HUI	Chief Information Officer, Environment and Ecology Bureau (EEB)
Ms Karen CHEK	Chief Executive Officer (CBD), EEB
Miss Sally SHEK	Executive Officer (CBD) 1, EEB
Miss Avynn WONG	Executive Officer (CBD) 2, EEB

**In Attendance for Item 3:**

Dr Kenneth LEUNG	Principal Assistant Secretary (Air Policy), EEB
Dr Sunny CHEUNG	Principal Environmental Protection Officer (Air Policy), EEB
Mr Nick TSANG	Senior Environmental Protection Officer (Air Policy) 2, EEB

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Action

The Chairman welcomed all to the meeting and informed Members that apologies of absence had been received from Ms Carmen Chan, Prof Dan Tsang, Prof Wong Kam-bo and Dr William Yu.

**Item 1 : Confirmation of the draft minutes of the 258th meeting held on 3 May 2023 (Closed-door session)**

2. The draft minutes of the last meeting were confirmed without any proposed amendments.

**Item 2 : Matters arising (Closed-door session)**

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

**Item 3 : Proposal on Tightening the Volatile Organic Compound (VOC) Limits of Regulated Architectural Paints and Extending the VOC Control to Cleaning Products (ACE Papers 10/2023 and 11/2023)**

4. The Chairman invited Members to refer to *ACE Paper 10/2023* which detailed EEB's proposal on tightening the VOC content limits of 22 types of regulated architectural paints and extending the VOC control to seven types of cleaning products with a view to improving air quality. A background note on the subject (*ACE Paper 11/2023*) had been circulated to Members before the meeting.

5. A Member declared that he had worked with EPD on various air quality related projects and initiatives in the past years. Another Member declared that he was a member of the International WELL Building Institute Governance Council. The Chairman considered that the two Members could stay to participate in the discussion, and there was no other view.

*(The presentation team joined the meeting at this juncture.)*

**Presentation cum Question-and-Answer Session (Open session)**

6. With the aid of a PowerPoint presentation, Dr Kenneth Leung briefed Members on the proposal to regulate the VOC content limits of architectural paints and cleaning products.

*Scope of Regulation and Enforcement*

7. Members welcomed EEB's proposal on regulating the content limit of VOC in the relevant products, which would improve the air quality of Hong Kong and bring positive health benefits to the public. A Member pointed out that the emission of formaldehyde from furniture products was a major air quality concern and enquired about the Government's plan to tackle the issue. Mr Nick Tsang advised that EEB was in the process of exploring the feasibility on imposing regulations on the emission level of formaldehyde from furniture products. Some trade consultation was ongoing.

8. Addressing a Member's question on the regulation of solvents, Dr Kenneth Leung advised that EEB encouraged the use of water-soluble architectural paints which would not require the use of solvents. As the current proposal was to regulate the VOC content of architectural paints and cleaning products, another Member suggested that a timetable should be devised to control the level of VOC in all other products in the long run. Dr Leung explained that the Government had to ensure that there were sufficient alternative products of low VOC content in the market before tighter control could be imposed to avoid affecting product availability causing disturbance to the consumers and trades. As such, a thorough analysis of the relevant sector had to be conducted beforehand. He also clarified that the regulation was imposed on the importers and manufacturers not the sellers of the products.

9. In response to the Chairman's enquiry on the difference between aerosol and non-aerosol products in terms of their effectiveness and usage, Mr Nick Tsang explained that the VOC content in aerosol products mainly served as a propellant to help disperse the products. Noting the VOC concentration in aerosol products was usually higher as compared with the non-aerosol ones, the Chairman suggested that EEB could consider encouraging the use of products in non-aerosol form. A Member was of the view that consumers might have a preference on products in different forms based on their purposes of usage. Another Member added that aerosol could facilitate the application of a thin layer of the product on the surface of an object which could limit or avoid causing damage to the object itself.

10. A Member opined that the level of VOC emission during construction and renovation works was very high and suggested that EEB should put in place a mechanism for monitoring construction and renovation sites. Dr Kenneth Leung responded that it would be more effective to impose control on the products used in the construction or renovation process as checking and monitoring the countless construction and renovation sites in the territory would not be practicable.

11. Considering that the existing regulation was confined to manufactured or imported products, a Member suggested and echoed by five other Members that the Government should step up its efforts from product control to risk control through regulating the ambient concentration of VOC. One of the five Members elaborated

that there should be an overall regulation in the storage, transportation, sale and disposal of VOC products. A Member echoed the view and added that EEB should consider imposing regulation on the proper treatment of VOC products such as refrigerants used in air conditioners and engine oil of vehicles before their disposal. Another Member supplemented that the Government could differentiate the regulations for the general public and the trades depending on their magnitude of product usage. Dr Kenneth Leung explained that it might not be practicable to control the non-local manufacturers and the unlimited online sellers from varying sources. Dr Leung opined that the priority should be accorded to strengthening publicity and public education with a view to informing the public of the health risks of VOC and discouraging the use of relevant products.

12. Pointing out that the existing Air Quality Objectives (AQO) had yet to cover VOC which was carcinogenic, a Member suggested that the Government should include this element in the future review to strengthen the control of ambient concentration of VOC. Dr Kenneth Leung thanked the Member for his suggestions which would be taken into account in the next AQO review.

13. A Member further suggested that EEB should include VOC as an assessment criterion of the Indoor Air Quality (IAQ) Certification Scheme. Drawing reference from his work experience in relation to the international WELL Building Standard, another Member added that the Government should regulate not only the total VOC level, but also the individual VOC organic components under the IAQ Certification Scheme to align with international standards. Sharing the recent achievement of WELL certification for the development projects of his company, another Member suggested that the Government should encourage the adoption of WELL standard in Hong Kong. Dr Kenneth Leung responded that instead of portable equipment typically used in IAQ assessment, more sensitive equipment in a laboratory setup would be required for the detection of individual VOC components. He said that EEB would nevertheless explore the possibility to include VOC components in the IAQ assessment.

14. In response to a Member's question on the monitoring and enforcement, Dr Kenneth Leung advised that EPD would conduct sampling checking on the VOC content of the relevant products in the market. Noting that EPD would conduct laboratory tests on the end-products in a ready-to-use condition, another Member suggested that EEB should draw reference from other places by introducing the requirements of chamber testing of the VOC level of the paint products before occupation permits are released for new buildings. Dr Leung indicated that the issue of occupation permit was under the purview of Buildings Department instead of EEB or EPD.

15. A Member further suggested that the Government should take the lead by including relevant requirements such as the use of VOC-free or low-VOC products and the adoption of WELL standard in the tender requirements of all Government

construction or development projects. Dr Kenneth Leung thanked the Member for her suggestion the feasibility of which would be explored.

#### *Publicity and Public Education*

16. A Member suggested and echoed by two other Members that the Government should strengthen public education of the significant cancer risks brought by air pollutants such as VOC and formaldehyde. Another Member furthered that EEB should commence publicity and public education work as soon as possible before the implementation of the new legislation. One of the above Members added that EEB should collaborate with the Education Bureau and Department of Health in promoting and educating the public. Dr Kenneth Leung indicated that EEB had produced promotional materials such as videos and leaflets on VOC to strengthen publicity and public education.

17. To facilitate the public in making informed decisions in their consumption, a Member proposed with the support of two Members that an easy-to-understand labelling system on the environmental performance of products including but not limited to the level of VOC content should be put in place. One of the two Members supplemented that EEB should draw reference from the labelling system of the Mainland and highlighted that publicity would be important for its success. Another Member supplemented that EEB should liaise with organisations such as the Consumer Council or Green Council to promulgate a list of low-VOC or VOC-free products to help consumers make their choices. Dr Kenneth Leung thanked Members for their suggestions.

#### *Regional Cooperation*

18. Pointing out that the Pearl River Delta (PRD) economic zone was a major source of VOC in Hong Kong, a Member suggested with the support of another Member that EEB should strengthen regional cooperation to reduce VOC emissions at source. Another Member enquired whether there was any alignment of the regulations on VOC content limits in the Mainland and Hong Kong as air pollutants would drift across borders. Dr Kenneth Leung explained that Hong Kong had been working closely with the Greater Bay Area on devising VOC emission reduction targets, while the control on VOC content in products in Hong Kong were more stringent. One of the above Members added that EEB should share with PRD the use of the pollutant tracking technology which would provide insight for controlling VOC emission.

#### *Implementation Timeframe*

19. A Member suggested that the control on cleaning products should be tightened sooner than January 2025 and preferably at the same time as that for the architectural paint products. Mr Nick Tsang explained that the relevant trade would need time to prepare for the new regulation. EEB considered it appropriate to

implement the new regulation in January 2025 after taking into account the views of the trade.

20. Addressing a Member's question on the target reduction of the overall VOC level from products in Hong Kong, Dr Kenneth Leung said that it would not be feasible to set any target at the moment as the overall VOC emissions from products were not only depending on the VOC content of individual products, the total product consumptions was also an important factor which was difficult to control and estimate. The above notwithstanding, Dr Leung said that EEB would closely monitor the technological development and explore the possibility to further tighten the control when opportunity arose.

### *Conclusion*

21. The Chairman concluded that Members were supportive of the Government's proposal to tighten the VOC content limit of architectural paints and to extend the control to cleaning products. He thanked the Government representatives for their detailed explanation and invited them to take on board the suggestions of Members.

*(A Member left the meeting during the Question-and-Answer Session while the presentation team left at the end of the session.)*

### **Internal Discussion Session (Closed-door)**

22. While appreciating the existing arrangement to benchmark with the stringent international standard, a Member opined that the Government should strive to take further actions such as through conducting health and risk analysis to minimise ambient VOC concentration.

23. Two Members took the view that EEB should liaise with the Housing Department and Architectural Services Department to impose a requirement for all Government projects to deploy low-VOC products and to achieve the WELL standard, which would help reduce public health care and medical expenses in the long run. One of the above Members and two other Members agreed that the Government should take the lead and put in place more comprehensive measures covering the usage and disposal of products as well as strengthening the monitoring of products sold online.

24. A Member suggested that the Government should convey to the general public that the relevant policies were meant for the well-being of the citizens to solicit their understanding and support. Pointing out that environmental protection was an important policy direction in the Mainland, another Member considered that Hong Kong could be a leading example in the country by taking the high road in the control of VOC emissions.

25. As EEB had indicated that the availability of alternative products in the market would be a prerequisite for imposing more stringent regulation, a Member saw it as an opportunity to motivate the suppliers or developers to put more resources in product development for meeting the new requirements. Instead of waiting for the availability of alternative products in the market, she considered that the Government should take a more assertive approach by informing the trades of the upcoming requirements so that they could have sufficient time for preparation.

26. Mr Terence Tsang said that when devising new policies or regulations, the Government had to consider a basket of factors such as the practicality, enforceability and the interest of the relevant stakeholders. Mr Tsang thanked Members for their useful suggestions and remarked that both EEB and EPD would consider the feasibility of their suggestions.

*(A Member left the meeting at the end of the Internal Discussion Session.)*

**Item 4 : Report on the 42nd Waste Management Subcommittee Meeting (Closed-door session) (ACE Paper 12/2023)**

27. Further to the discussion at the ACE meeting on 20 March 2023, the Waste Management Subcommittee (WMSC) had a more in-depth discussion on the subject “Waste Management and Reduction Initiatives” at its meeting on 1 June 2023. On the invitation of the Chairman, the Secretariat reported the key discussions at the 42nd WMSC Meeting as summarised in ACE Paper 12/2023 on behalf of the WMSC Chairman who was unable to attend the meeting. Members noted that the WMSC was supportive of the various waste management initiatives and gave suggestions on different issues, including publicity and public education, producer responsibility schemes and community recycling network etc.

*(A Member left the meeting at this juncture.)*

**Item 5 : Report on the 37th Nature Conservation Subcommittee Meeting (Closed-door session) (ACE Paper 13/2023)**

28. On the invitation of the Chairman, the Chairman of the Nature Conservation Subcommittee (NCSC) briefed Members of the key discussions at the 37th NCSC Meeting which had been summarised in ACE Paper 13/2023. The NCSC Chairman reported that the subcommittee Members were supportive of the proposed amendments to the Wild Animals Protection Ordinance (Cap. 170) and had given some suggestions to facilitate enforcement. As for the other issue on turtle poaching, Members had suggested different ways to help tackle the issue and were glad to note that AFCD had already taken relevant follow-up actions.

*(A Member left the meeting at this juncture.)*

**Item 6 : Any other business (Closed-door session)**

*Environmental Impact Assessment (EIA) Report not selected by EIA Subcommittee (EIASC) for submission to ACE*

29. The EIASC Chairman reported that since the last ACE Meeting, the EIASC received the Executive Summary of the EIA report on “Traffic Improvement Scheme in Tuen Mun - Widening and Addition of Slip roads at Lung Fu Road / Tuen Mun Road / Wong Chu Road / Hoi Wing Road” which was not selected for discussion. The Executive Summary of the EIA report had been circulated to EIASC Members upon the commencement of the public inspection period, with the relevant hyperlinks copied to non-EIASC Members for information. Members were advised to provide their comments, if any, on the EIA report directly to the Director of Environmental Protection within the respective public inspection period. Given that the EIA report had not been selected by EIASC for presentation and discussion, the EIASC Chairman informed Members that EPD would take that the ACE had no comments on the EIA report under section 8(3)(b) of the EIA Ordinance (EIAO).

*Update on Amendment of EIAO*

30. Mr Terence Tsang informed Members that the amendment of the EIAO and the revised Technical Memorandum on EIAO were passed by the Legislative Council on 29 June 2023. He informed Members that two new and six updated EIAO Guidance Notes (GN) had already been issued. The new and updated GNs would be submitted for Members’ information in due course. Mr Tsang added that, in consultation with the parties concerned, EPD would continue to enhance the Central Environmental Database through exploring an appropriate vetting mechanism for the inclusion of research data by external organisations such as tertiary institutions and green groups. He thanked Members for their suggestions and support on the subject.

31. There was no other business for discussion at the meeting.

**Item 7 : Date of next meeting (Closed-door session)**

32. Members would be advised on the agenda in due course.

33. There being no other business, the meeting ended at 4:15 p.m.

**ACE Secretariat  
September 2023**