

**立法會**  
**Legislative Council**

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**Panel on Environmental Affairs**

**Minutes of special meeting  
held on Wednesday, 29 July 2009, at 10:45 am  
in Conference Room A of the Legislative Council Building**

- Members present** : Hon CHAN Hak-kan (Deputy Chairman)  
Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP  
Hon James TO Kun-sun  
Hon Miriam LAU Kin-yee, GBS, JP  
Hon Andrew CHENG Kar-foo  
Hon Albert CHAN Wai-yip  
Hon LEE Wing-tat  
Hon Jeffrey LAM Kin-fung, SBS, JP  
Prof Hon Patrick LAU Sau-shing, SBS, JP  
Hon KAM Nai-wai, MH  
Hon Cyd HO Sau-lan  
Hon CHAN Kin-por, JP  
Dr Hon Priscilla LEUNG Mei-fun
- Members attending** : Hon WONG Kwok-hing, MH  
Hon Tanya CHAN  
Hon IP Wai-ming, MH
- Members absent** : Hon Audrey EU Yuet-mee, SC, JP (Chairman)  
Hon WONG Yung-kan, SBS, JP  
Hon LAU Kong-wah, JP  
Hon CHEUNG Hok-ming, GBS, JP
- Public officers attending** : Mr Edward YAU  
Secretary for the Environment
- Mr Carlson K S CHAN  
Deputy Director of Environmental Protection (3)  
Environmental Protection Department

Mr PANG Sik-wing  
Principal Environmental Protection Officer (Air Policy)  
Environmental Protection Department

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

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

Miss Mandy POON  
Legislative Assistant (1)4

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### Action

As the Chairman was not in Hong Kong, Mr CHAN Hak-kan, Deputy Chairman, took over the chair.

#### **I. Review of Air Quality Objectives**

(Air Quality Objectives Review - Public Consultation)

LC Paper No. CB(1) 2361/08-09(01) — Administration's paper on review of Air Quality Objectives

LC Paper No. CB(1) 2361/08-09(02) — Paper on review of Air Quality Objectives prepared by the Legislative Council Secretariat (background brief)

2. The Secretary for the Environment (SEN) briefed members on a proposal to update the Air Quality Objectives (AQOs) and the proposed emission control measures identified for attaining the proposed new AQOs on the basis of the consultation document issued to members on 23 July 2009. The public consultation exercise would be held from 23 July to 30 November 2009.

#### Proposed new Air Quality Objectives

3. Mr KAM Nai-wai noted with concern that the proposed new AQO on respirable suspended particulates (RSP) was way behind the World Health Organization (WHO)'s Air Quality Guidelines (AQGs). The Deputy Chairman also questioned why some of the new AQOs could only meet the WHO interim targets (ITs). They enquired about the timeframe for all AQOs to meet WHO AQGs. SEN said that the proposed new AQOs were set with reference to WHO AQGs and ITs, taking into account local situations. The Review of AQOs showed that it was practicable to benchmark the proposed new AQOs of three out of seven pollutants, viz. nitrogen dioxide, carbon monoxide and lead, to the ultimate WHO AQGs. As regards the other three air pollutants, viz. sulphur dioxide, particulate matters and ozone, it was proposed to set the new AQOs against the most stringent and yet

achievable WHO ITs.

#### Proposed emission control measures

4. Ms Miriam LAU said that there was a general perception that the Administration had not done enough in protecting the environment. Referring to the recent visit of a delegation led by the President to Guangdong Province, she said that members were quite impressed with the efforts, including the use of solar powered street lamps, made by the Guangdong Provincial Government in protecting the environment. She hoped that the Administration was equally committed to environmental protection. SEN said that much effort had been made in reducing emissions through such measures as raising the fuel standard, using more environment-friendly fuels, and relying on railways as the backbone of mass transport, etc. To further improve air quality, the Administration had embarked on the review of AQOs. A host of emission control measures targeting all major emission sources had been identified and packed into three Phases according to their effectiveness and readiness of the affected sectors in accepting the proposed measures. The 19 measures included under Phase I were more ready for implementation and in fact some of these were already being implemented while others were on the pipeline.

#### *Increasing the ratio of natural gas in local electricity generation*

5. While supporting measures to improve air quality, Mr WONG Kwok-hing noted with concern about the possible increase in electricity tariff by 20% as a result of the proposed increase of the ratio of natural gas in local electricity generation from 28% to 50%, together with other emission abatement measures. The situation would be further aggravated if the two power companies continued to over-generate electricity, the surplus of which was 27.6% for the CLP Company and 30.9% for Hong Kong Electric Company in 2006. More surplus electricity was expected to be generated by the Hong Kong Electric Company in 2007 following the commissioning of additional power generation facilities. The excessive electricity generation would not only cause pollution to the environment, but would also create additional financial burden to the public. He questioned the role of the Administration in monitoring the power companies to avoid generation of surplus electricity. Mr LEE Wing-tat also opined that efforts should be made to open the electricity market to prevent monopolization by the two local power companies. SEN said that as the power companies were obliged to generate sufficient electricity to meet demand, they had to ensure availability of the needed generation capacity and facilities. Under the new Scheme of Control Agreements, the two power companies had reduced the level of reserve capacity. As regards the proposed increase of the share of natural gas in local electricity generation from 28% to 50%, SEN said that this would be very effective in reducing pollutant emissions. However, raising the share of natural gas would have tariff implications due to the higher cost of natural gas and the need for additional gas-fired generators. The public would be consulted on whether they were prepared to pay for a higher electricity tariff in return for better air quality.

*Early retirement of polluting vehicles*

6. Ms Cyd HO considered it unfair to hold consumers solely responsible for the rise in electricity tariffs and transport fares as a result of implementation of emission reduction measures because they might not be the actual polluters. She said that the Administration should devise a tax policy so that those who were responsible for the pollution and could afford to pay should pay more for emission reduction measures rather requiring the general public to fund the cost through increases in tariffs/fares.

7. Mr Albert CHAN noted that some of the measures to improve air quality, including the replacement of pre-Euro and Euro I diesel commercial vehicles with Euro IV models, had caused operational problems. Drivers had complained about the frequent breakdowns (an average of 50 days in the course of six months) of Euro IV models which were designed to run on highways and expressways in Europe and had not been used in any Southeast Asian countries. Besides, no study had been made on their performance before they were introduced into Hong Kong. Owners who had taken the Administration's advice to replace their vehicles with Euro IV models were facing much difficulty in running their businesses due to frequent breakdown of the vehicles. However, no assistance had been given by the Administration. As a result, some vehicle owners chose to stick to their old and more polluting models rather than replacing them with Euro IV models, thereby giving rise to more emissions. He considered it necessary for the Administration to conduct sufficient research before implementing any environmental initiatives.

8. Expressing similar concerns, Ms Miriam LAU said that Euro IV models were problematic as they were not designed for use on the roads in Hong Kong. While there were a large number of polluting diesel vehicles due for replacement, owners were reluctant to replace their vehicles with Euro IV models which required a long idling time for complete combustion. This explained the under-subscription of the \$3.2 billion one-off grant scheme to encourage early replacement of pre-Euro and Euro I diesel commercial vehicles. It was expected that the new Euro V models would have the same problem, and the transport trades had requested that studies should be conducted on their performance before they were introduced into Hong Kong. In this connection, she would list out all the problems encountered in the use of Euro IV models in a letter to the Administration, requesting for a meeting on the subject. These problems would need to be resolved before proceeding with the replacement schemes.

9. SEN advised that there was a need to balance the interest of stakeholders in taking forward environmental policies. He acknowledged that there were some mechanical problems encountered in the use of Euro IV models, and efforts were made to resolve these problems with the manufacturers. Arrangements had been made for the manufacturers to meet with the vehicle owners with a view to solving the problems encountered in the use of Euro IV models. In response to Mr LEE Wing-tat's enquiry on the progress of the \$3.2 billion one-off grant scheme, SEN said that the Administration would further look into the scheme with a view to encouraging early replacement of pre-Euro and Euro I diesel commercial vehicles with Euro IV models.

10. While supporting measures to improve roadside air quality, Mr James TO said that he would not support the banning of vintage cars. Given that these cars were mainly used for display and rarely used by the owners, consideration could be given to imposing a higher licence fee rather than banning them from the roads.

11. Noting from SEN that franchised buses were responsible for 40% of vehicular emissions at busy corridors, Mr Jeffrey LAM asked whether plans were put in place to replace polluting buses. SEN said that the Administration would explore with the franchised bus companies the feasibility of expediting the replacement programme of polluting buses. Miss Tanya CHAN opined that consideration should be given to including in the terms of contracts with bus companies the requirement for the early replacement of franchised buses.

*Ultra low sulphur diesel (USLD) for local vessels*

12. Mr Jeffrey LAM enquired about the progress of the trial scheme to ascertain the technical feasibility of domestic ferries using ULSD. He asked if consideration would be given to extending the scheme to cover Mainland vessels. SEN said that the trial scheme would soon be commenced. The Government had worked out the arrangements for supplying ULSD to the participating ferries. As regards the use of cleaner fuels by Mainland vessels, this would be discussed by the Hong Kong Guangdong Joint Working Group on Sustainable Development and Environmental Protection. Meanwhile, the Cruise Terminal being developed at Kai Tak would provide on-shore electricity supply as a means to reduce emissions from ocean liners entering Hong Kong waters. Mr James TO said that the requirement for ocean liners to use cleaner fuels would be worth supporting if this was considered manageable.

*Low emission zones (LEZs)*

13. Mr LEE Wing-tat said that a comparison between the present pollutant emission levels and that of 1999 had revealed that not much improvement had been made to roadside air quality. However, no health warning had been given despite that worsening roadside air quality would be hazardous to public health. Members belonging to the Democratic Party had been requesting for urgent measures, including rationalization of bus routes and setting up of LEZs, to improve roadside air quality. He was disappointed at the delay in setting up of LEZs which had to be subject to further consultation. SEN clarified that the ambient air pollution had been reduced by 9% to 20% from 2004 to 2008 albeit not much improvement had been seen in roadside air quality. He agreed to the need for transport management measures, such as LEZs and bus rationalization schemes, to improve roadside air quality but support from District Councils would be required.

*Bus route rationalization*

14. Ms Cyd HO noted that while the public would welcome the rationalization of bus schedules, particularly during non-peak hours, the bus rationalization schemes were not well received in some districts. The Administration should meet with

District Councillors to solicit their support for the bus rationalization schemes. She also opined that the provision of connecting footbridges, such as from Sheung Wan to Admiralty, for pedestrians would help reduce traffic and hence vehicular pollution. SEN said that it was understandable that some district representatives would not support reducing the number of bus routes serving their districts. Notwithstanding, the Administration would continue to solicit the support of District Councils for the bus rationalization schemes. Mr Albert CHAN pointed out that other measures, such as free bus interchange schemes, were also worth pursuing to help rationalize bus routes. SEN said that the Administration was prepared to exchange views on the consultation document with all interested parties.

#### *Cycling network connecting to major public hubs*

15. Dr Priscilla LEUNG welcomed the proposed provision of cycling network connecting to major public hubs as this was not only a very healthy and environment-friendly measure but also emission free. Given the successful experience of Holland and Taiwan in promoting cycling, she supported that sufficient funding should be earmarked for the provision of cycling tracks in new development areas, including the West Kowloon Cultural Development and the Kai Tak Development. SEN said that the provision of cycling network would be considered in the context of planning for new development areas, and the districts concerned would be duly consulted. Mr James TO however pointed out the need to take into account the land cost when considering the provision of cycling network as well as the necessary supporting facilities. Besides, the public would need to adjust to the changes if cycling was to be encouraged in new development areas.

16. Dr Priscilla LEUNG questioned why the proposed Phase I measures did not include green procurement and green labeling. She considered that the Government should take the lead to adopt green procurement practices, and that tax incentives should be provided to encourage commercial and industrial enterprises to follow suit. SEN said that the Administration had put in place a green procurement policy for Government departments. For example, many of the vehicles procured for the Government fleet were environment-friendly vehicles, including hybrid models with high environmental performance. The Government was also prepared to take the lead in the trial of electric vehicles to pave way for their introduction to Hong Kong.

#### Health benefits

17. Mr KAM Nai-wai noted from the consultation document that the average life expectancy of the population would be increased by about one month if Phase I emission control measures were implemented. However, some of these measures might result in a 20% increase in electricity tariffs and 15% increase in transport fares, which had to be borne by the general public. He expressed concern about the possible negative feedback if consultation was held on the basis of the above information. He held the view that the types of information to be presented in the consultation document should include the health risk and premature deaths associated with air pollution. As it appeared that the public would likely be held responsible for the costs of the emission control measures, he enquired about the roles of the

Government, power companies, franchised bus companies as well as the trades in reducing emissions. He also pointed out that some of the questions, such as "Do you agree that protection of public health should be the key consideration in updating the AQOs?", raised in the consultation document were quite rhetorical. Expressing similar concerns, Mr LEE Wing-tat was skeptical that the Administration was trying to discourage the public from demanding for more efforts to improve air quality by emphasizing the cost implications of the proposed emission reduction measures.

18. In response, SEN stressed that it was the Administration's intention to introduce a new set of AQOs with a view to improving air quality and protecting public health. The proposed new AQOs were set against the most stringent standards and yet achievable WHO ITs. To achieve the new AQOs, a host of emission control measures had been identified, including the 19 measures under Phase I which were more ready for implementation over the short to medium term. Concerted efforts from both the Government and the community were required in implementing these measures. While resources had been allocated for some of these measures, including district cooling system in the Kai Tak Development and energy efficiency standards for domestic electrical appliances, it would not be easy to work out the associated costs. Besides, there were difficulties to be overcome in implementing the 19 Phase I measures, which could not be resolved through the mere injection of funds. The Principal Environmental Protection Officer (Air Policy) supplemented that while air quality standards would make direct reference to the criteria for protection of public health, the international practices for setting statutory AQOs included also the allowance of number of exceedances and the target timeframe for attainment.

19. Miss Tanya CHAN was disappointed that apart from the increase in average life expectancy of the population by about one month, the consultation document did not make much reference to the health benefits associated with the review of AQOs. Neither had the Administration explained the high health costs and the increased mortality rates associated with air pollution. While the cost-benefits analysis of the proposed Phase I emission reduction measures had revealed that the benefits clearly outweighed the costs, much emphasis had been put on the costs for implementing the 19 emission control measures and the impacts on electricity tariffs and transport fares. Also, there was a lack of commitment on the part of the Administration as evidenced by the absence of roadmap and timetable for meeting WHO AQGs. Expressing similar concern, Mr Albert CHAN said that the existing Government policies were only targeting at the general public because policies affecting the interest of major corporations, such as the opening of the electricity market, had never been adopted. He stressed that without the needed determination and commitment on the part of the Administration, there would not be much improvement in air quality even if the 19 Phase I measures were implemented.

20. SEN explained that the consultation document had clearly set out that the new AQOs should be set to protect public health and updated with reference to WHO AQGs and ITs. The key emission sources and the health effects of air pollutants were explained at Annex A to the consultation document. Given that the benefits of the proposed Phase I emission reduction measures would outweigh the costs, the Administration considered it worthwhile to pursue these measures. However,

consensus from the public was required, and hence the need to set out the cost implications associated with these measures in the consultation document. As regards the implementation time-table, SEN said that the timeframe for taking forward the various emission control measures would vary. For example, the legislation on mandatory implementation of Building Energy Codes would be introduced shortly, and the scheme could likely take effect some time next year. Following the approval of the funding for the development of the district cooling system at the Kai Tak Development, the system was expected to be completed by 2013. As for the proposal to increase the ratio of natural gas in local electricity generation, this would be contingent upon the supply of natural gas and the associated development of infrastructure network, which was expected to be completed in 2013. Stakeholders were invited to express their views on the pace, priority and price of implementing the emission control measures during the public consultation from 23 July to 30 November 2009.

21. Ms Cyd HO queried why medical savings were not included in the cost-benefit analysis. She opined that medical savings should have been taken into account by the consultants as otherwise the anticipated benefits of about \$1,228 million per year and the estimate that some 4 200 hospital admissions would be avoided with implementation of Phase I emission control measures could not have been worked out. She held the view that medical savings could have been much higher due to improvement of children health as a result of cleaner air. To facilitate better understanding, the Administration was requested to provide an estimate on the medical savings which could be achieved. SEN said that while health benefits were difficult to quantify, the consultants had tried to do so using life expectancy and hospital admission as the references. As the anticipated benefits of about \$1,228 million per year far outweighed the annualized cost of about \$596 million to be incurred by the society, the Administration considered it worthwhile to pursue with the implementation of Phase I emission control measures.

22. As the anticipated benefits of \$1,228 million should have included medical savings, Ms Cyd HO considered that these savings should be ploughed back to fund other environmental initiatives, such as providing subsidy to encourage franchised bus companies to replace their polluting buses. These savings could also be used to cover the anticipated increase in cost/tariffs so that these would not be passed onto consumers. Her views were shared by Mr Jeffrey LAM. Mr James TO echoed that there was a need to quantify the health benefits associated with improvements in air quality. He also considered it unfair that the cost of early replacement of buses should be borne by bus commuters through increased bus fares. Instead, the Government should pay the cost for improving air quality in the interest of public health. SEN responded that in considering how different parties should bear the costs, the Administration would need to take into account the economic gains and cost-effectiveness of the proposals. There were also political considerations and hence public consultation would be needed on the means through which the costs associated with the implementation of the emission reduction measures should be shared. However, it was worth noting that not all environmental initiatives would incur cost, some would only require a change in public behaviour as in the case of the levy scheme on plastic shopping bags. Given that efforts had been made to



encourage the early retirement of polluting diesel vehicles, which were a major source of vehicular emissions, it was not considered appropriate to use medical savings to subsidize the replacement of buses. Other transport management measures, such as bus rationalization and LEZs, would be adopted to improve roadside air quality.

23. Mr CHAN Kin-bor said that the main purpose of the consultation document was to inform the public that there was a price to pay for improving air quality. Given that the health benefits of implementing Phase I emission reduction measures far outweighed the costs, the Administration should have implemented these measures expeditiously. However, unlike the quick response to the outbreak of Severe Acute Respiratory Syndrome (SARS), the Administration had been slow in addressing air pollution, which had caused more deaths than SARS. He said that there were certain measures, including capping of power emissions, early replacement of polluting buses and the switch to ULSD by ocean liners and local vessels, which would warrant early implementation. Concerted efforts from the Mainland were also required to reduce emissions from across the border. SEN said that the Administration was working with the ferry operators on a trial scheme to ascertain the technical feasibility of domestic ferries using ULSD. The measures to promote energy efficiency would help reduce the electricity demand and hence offset the increased electricity tariffs. The Administration was prepared to consult the public on the pace and priority in the implementation of emission reduction measures. Meanwhile, joint efforts were made by both Hong Kong and Guangdong to achieve the emission reduction targets by 2010 and to transform the Pearl River Delta (PRD) Region into a green and quality living area.

#### Cooperation with the Mainland

24. The Deputy Chairman opined that the resources put to implement the 19 Phase I emission control measures could only resolve part of the air pollution problem. Concerted efforts from the Mainland were required in order to improve the regional air quality. He enquired whether there would be joint consideration in the formulation of a more stringent set of emission reduction targets which would be applicable to both sides. Mr WONG Kwok-hing echoed that improvements in regional air quality could not be attained unless cooperative efforts were made by the Mainland. Mr LEE Wing-tat added that regional air quality could not be improved if the Mainland allowed the continued use of inferior vehicle fuels.

25. In response, SEN said that implementation of the 19 Phase I emission control measure was only a starting point to meet the proposed new AQOs. He agreed that Hong Kong alone could not resolve the regional air pollution problem, the sources of which were from power generation, vehicular and industrial emissions. Cooperation from both sides was required to improve the regional air quality and emission reduction targets had been set for the purpose. A mid-term review of the progress of the 2010 emission reduction targets had been conducted in 2007/08, and a final review would be made after 2010 with a view to ascertaining the delivery of the emission reduction targets. The latest monitoring results of the PRD regional air monitoring network had revealed that the emissions of sulphur dioxide and RSP in the region had decreased by 19% and 11% respectively in 2008. As regards the fuel standards in

the Mainland, SEN said the Guangdong Province had tightened the fuel standards to National III. Given that Beijing had tightened the fuel standards to National IV, it was expected that the Guangdong Province would follow suit.

26. Mr Jeffrey LAM enquired about the progress of cleaner productions in the PRD Region. SEN advised that funding had been provided to the Hong Kong Productivity Council to launch a five-year Cleaner Production Partnership Programme to promote cleaner production technologies and practices among Hong Kong-owned factories in the PRD Region. The Programme was meant to encourage factory operators to shoulder corporate responsibilities through cleaner production. Since the Programme was launched last year, over 200 applications had been received. Cooperation had been sought from the Guangdong authorities in implementing the Programme.

Way forward

27. Ms Cyd HO requested to hold another meeting in early October 2009 to exchange views with interested parties on the consultation document. The Deputy Chairman agreed to consult the Chairman on the date for holding the meeting upon her return to Hong Kong.

*(Post-meeting note: With the concurrence of the Chairman, a special meeting had been scheduled for 6 October 2009 at 2:30 pm to exchange views with deputations and the Administration on the consultation document.)*

**II. Any other business**

28. There being no other business, the meeting ended at 12:50 pm.