

立法會
Legislative Council

LC Paper No. CB(1) 1056/08-09
(These minutes have been seen
by the Administration)

Ref : CB1/PS/3/08/1

Panel on Environmental Affairs

Subcommittee on Improving Air Quality

Minutes of meeting
held on Thursday, 12 February 2009, at 10:45 am
in Conference Room A of the Legislative Council Building

- Members present** : Hon Audrey EU Yuet-mee, SC, JP (Chairman)
Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP
Hon Miriam LAU Kin-ye, GBS, JP
Hon Andrew CHENG Kar-foo
Hon LEE Wing-tat
Hon Jeffrey LAM Kin-fung, SBS, JP
Hon KAM Nai-wai, MH
Hon Cyd HO Sau-lan
- Members absent** : Hon CHAN Hak-kan
Hon CHAN Kin-por, JP
- Public officers attending** : **For item II**
- Mr Carlson K S CHAN
Deputy Director of Environmental Protection (3)
- Mr W C MOK
Acting Assistant Director (Air Policy)
Environmental Protection Department
- Mr S W PANG
Principal Environmental Protection Officer (Air Policy)
Environmental Protection Department

Attendance by invitation : **For item II**

City University of Hong Kong

Dr Richard CHEUNG
Associate Professor
Department of Biology and Chemistry

The Hong Kong University of Science and Technology

Professor Alexis LAU
Associate Professor
Civil and Environmental Engineering

The University of Hong Kong

Professor Anthony J HEDLEY
Chair Professor

The Chinese University of Hong Kong

Professor WONG Tze-wai
Department of Community and Family Medicine

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

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

I. Confirmation of minutes

(LC Paper No. CB(1) 732/08-09 — Minutes of the meeting held on 13 January 2009)

The minutes of the meeting held on 13 January 2009 were confirmed.

2. Before commencing discussion, the Chairman informed members that the Advisory Panel on Review of the Air Quality Objectives and Development of a Long Term Air Quality Strategy (the Advisory Panel) and the consultants were not able to attend the meeting as requested. According to the letter dated 23 January 2009 from the Administration, the Advisory Panel and the consultants were in the final stage of preparation for organizing a public forum to gauge public views on the review of the Air Quality Objectives (AQOs). It was therefore not appropriate for them to appear before the meeting. A paper would be submitted to the Subcommittee upon completion of the review.

Air Quality Objectives and their associated health impacts

Meeting with Dr Richard CHEUNG, City University of Hong Kong

3. Dr Richard CHEUNG declared interest as a former employee of the Environmental Protection Department, and that he had participated in the first public forum on the review of AQOs.

Meeting with Professor Alexis LAU, The Hong Kong University of Science and Technology

(LC Paper No. CB(1) 733/08-09(01))

4. Professor Alexis LAU briefed members on his submission.

Meeting with Professor Anthony J HEDLEY, The University of Hong Kong

(LC Paper No. CB(1) 733/08-09(02))

5. Professor Anthony J HEDLEY highlighted the salient points in his submission.

Meeting with Professor WONG Tze-wai, The Chinese University of Hong Kong

(LC Paper No. CB(1) 733/08-09(03))

6. Professor WONG Tze-wai took members through his submission.

Meeting with the Administration

(LC Paper No. CB(1) 531/08-09(03) — Administration's paper on progress of the review of Hong Kong's Air Quality Objectives

LC Paper No. CB(1) 733/08-09(04) — List of follow-up actions arising from the discussion at the meeting on 13 January 2009

LC Paper No. CB(1) 767/08-09(01) — Administration's paper on the review of Hong Kong's Air Quality Objectives/The Objectives and scope of the review)

7. The Deputy Director of Environmental Protection (3) made a brief response to the points raised by the academics.

8. The Subcommittee deliberated (Index of proceedings attached at **Annex**).

9. The Administration was requested to revert to the Subcommittee the following week as to whether a meeting could be arranged on 19 March 2009 to exchange views with the consultants.

III. Any other business

10. There being no other business, the meeting ended at 12:56 pm.

Council Business Division 1
Legislative Council Secretariat
16 March 2009

Panel on Environmental Affairs

Subcommittee on Improving Air Quality

**Proceedings of the meeting
on Thursday, 12 February 2009, at 10:45 am
in Conference Room A of the Legislative Council Building**

Time marker	Speaker	Subject(s)	Action required
<i>Agenda Item I – Confirmation of minutes</i>			
000001 - 000321	Chairman	The minutes of the meeting held on 13 January 2009 were confirmed.	
000322 - 000700	Chairman	The Chairman made reference to the Administration's letter explaining the non-attendance of the Advisory Panel on Review of the Air Quality Objectives and Development of a Long Term Air Quality Strategy (the Advisory Panel) and the consultants	
<i>Agenda Item II – Air Quality Objectives and their associated health impacts</i>			
000701 - 000731	Dr Richard CHEUNG, City University of Hong Kong (CityU)	Dr Richard CHEUNG declared his former employment with the Environmental Protection Department, and his participation in the first public forum on the review of AQOs.	
000732 - 002335	Professor Alexis LAU, The Hong Kong University of Science and Technology (HKUST) Chairman	<p>Professor Alexis LAU took members through his submission (LC Paper No. CB(1) 733/08-09(01)), the main points of which were summarized as follows -</p> <p>(a) since AQOs were crucial in determining the acceptability of projects under the Environmental Impact Assessment (EIA) process and the status of air quality as reflected by the Air Pollution Index (API), a loose set of AQOs would be a licence to pollute whereas a good set of AQOs would be a driver for improving air quality;</p> <p>(b) it was important to amend the Air Pollution Control Ordinance (APCO) (Cap.311) to make it clear that the primary guiding principle for review of AQOs should be for the protection of public health;</p> <p>(c) Hong Kong should adopt the World Health Organization Air Quality Guidelines (WHO</p>	

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		<p>AQGs) as its AQOs, but allowing a realistic level of exceedances in the short term which would be progressively tightened until reaching an acceptable level; and</p> <p>(d) if WHO AQGs could not be instantly adopted, a clear target should be set in the present review exercise for their eventual adoption</p>	
002336 - 003200	Professor Anthony J HEDLEY, The University of Hong Kong (HKU)	<p>Professor Anthony J HEDLEY highlighted the salient points of his submission (LC Paper No. CB(1) 733/08-09(02)) -</p> <p>(a) the excess risks of pollution and the effects of mitigation measures should be translated into monetary values in an attempt to drive policy;</p> <p>(b) deterioration in Hong Kong's air quality was a direct indicator of the increased risk to population health;</p> <p>(c) health protection should be achieved through exposure reduction rather than the choice of any single limit such as AQO; and</p> <p>(d) Hong Kong needed an independent, sustainable and intellectually honest authority on environmental protection</p>	
003301 - 005207	Professor WONG Tze-wai, The Chinese University of Hong Kong (CUHK)	<p>Professor WONG Tze-wai, took members through his submission (LC Paper No CB(1) 733/08-09(03)), the main points of which were summarized as follows -</p> <p>(a) many observational and experimental studies had shown that there was a cause-effect relationship between ill-health and air pollution, which affected physical fitness and caused premature deaths, diseases of the heart and lungs;</p> <p>(b) as Asia's world city, Hong Kong ought to adopt WHO AQGs as its goal to show the world its commitment to tackle the problem of air pollution;</p> <p>(c) consideration should be given to implementing the package of measures to improve air quality as set out in the submissions from Civic Exchange; and</p>	

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		(d) cross-boundary collaboration was vital in controlling air pollution in both Hong Kong and the Pearl River Delta (PRD) Region from emission sources, including coal-fired power plants, factories, traffic, mines, ports, heavy industry, and oil refineries	
005208 - 010145	Chairman Administration	<p>Administration's response -</p> <p>(a) it was well aware of the views of Professor Alexis LAU and Professor WONG Tze-wai as they were members of the Advisory Panel;</p> <p>(b) protection of public health was indeed the guiding principle in the review of AQOs, In fact, the objectives of AQOs under APCO were to promote the conservation and best use of air in the public interest, including public health;</p> <p>(c) WHO AQGs provided a good basis for all countries to build their local AQOs. However, whether WHO AQGs should be applied directly or whether a progressive approach with interim targets should be adopted remained a decision of individual countries;</p> <p>(d) in addition to logistical and technical planning, careful analysis on issues, such as tariff implications, operational costs and consequential fare impacts for transport trades, had to be made before implementing the Air Quality Management Strategy,;</p> <p>(e) the consultant was conducting cost-benefit analysis on various strategies taking into account technological and health studies; and</p> <p>(f) cross-boundary collaboration was essential in setting AQOs as regional air quality would affect both sides</p>	
010146 - 011002	Mr LEE Wing-tat Administration Chairman	<p>Mr LEE Wing-tat's views -</p> <p>(a) the Administration was using the long life expectancy of Hong Kong people as an excuse to mislead the public regarding the cause-effect relationship between ill-health and air pollution;</p>	

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		<p>(b) the Administration had already formulated its stance to adopt a progressive approach to tighten AQOs with very low and achievable interim targets made under WHO AQGs. The review of AQOs was only a disguise; and</p> <p>(c) there was an urgent need for measures to improve roadside quality, including the provision of "clean zones" and rationalization of bus routes</p> <p>Administration's response -</p> <p>(a) the new AQOs would be more stringent than before and the consultant had initially recommended to introduce a regular review of the prevailing AQOs to assess the need and practicality of further tightening AQOs;</p> <p>(b) given the current air pollution level, strenuous efforts to reduce emissions from power generation and industrial operations would need to be made in order to meet the new AQOs; and</p> <p>(c) measures would also be introduced to reduce roadside emissions to supplement past efforts, such as rationalization of bus routes, use of Euro V diesel, liquefied petroleum gas (LPG) taxi and public light bus schemes</p>	
011003 - 011830	Ms Miriam LAU Administration	<p>Ms Miriam LAU's enquiries on -</p> <p>(a) whether there were countries which adopted WHO AQGs in one go as it appeared that most countries were adopting an progressive approach and had yet to achieve the ultimate AQGs set by WHO; and</p> <p>(b) whether there was collaboration with the Mainland in standardizing fuels used by vehicles and vessels in the PRD Region.</p> <p>Administration's response -</p> <p>(a) no one country in the world had set a definite time frame for achieving the ultimate AQGs set by WHO;</p> <p>(b) Guangdong Provincial Government had made efforts to tighten the fuel standards.</p>	

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		<p>At present, Euro III equivalent fuel was the standard fuel used in most parts of the PRD Region. According to the Guangdong authorities, it was expected that Euro IV equivalent fuel would be adopted as the standard fuel in the PRD Region by 2010; and</p> <p>(c) a trial scheme on the use of ultra low sulphur diesel (ULSD) by local ferries would be conducted. Further studies on the emission reduction measures for marine vessels would also be made</p>	
011831 - 013201	<p>Ms Cyd HO Administration Chairman Professor Alexis LAU, HKUST Professor Anthony J HEDLEY, HKU</p>	<p>Ms Cyd HO's concerns -</p> <p>(a) the public should be apprised of the health risk associated with the use of outdated AQOs;</p> <p>(b) need for emissions control on Government vessels; and</p> <p>(c) unlike smoky vehicles, air pollution generated by improperly maintained LPG vehicles would be hard to detect because this could not be seen by naked eyes</p> <p>Administration's response -</p> <p>(a) the public was informed of the air quality in Hong Kong by way of API. The objective of the current review was to tighten the prevailing AQOs for better protection of health of the general public; and</p> <p>(b) Government vessels had switched to ULSD since 2006. Efforts were being made to encourage vessels plying in Hong Kong waters to use cleaner fuels, starting with the trial of ULSD on local ferries.</p> <p>Professor Alexis LAU's views -</p> <p>(a) while volatile organic compounds, such as formaldehyde, would increase with the use of LPG as vehicle fuels, the effect would be offset by the decrease in respirable suspended particulates which had a greater impact on health; and</p>	

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		<p>(b) more studies on the impact of vehicular emissions on health should be conducted</p> <p>Professor Anthony J HEDLEY's views -</p> <p>(a) deterioration in Hong Kong's air quality was a direct indicator of the increased risk to population health; and</p> <p>(b) HKU and CUHK had worked out the health risks in association with poor air quality and had translated them to hospital visits and avoidable deaths</p>	
013202 - 013448	Professor WONG Tze-wai, CUHK	<p>Professor WONG Tze-wai's response to previous concerns raised by Ms Miriam LAU -</p> <p>(a) the United States was adopting a stringent AQO for fine suspended particulates (PM2.5) whereas no such AQO had been adopted in Hong Kong; and</p> <p>(b) apart from cross-boundary collaboration, efforts should be made to combat local air pollution, which indeed had a direct effect on the air quality in Hong Kong</p>	
013449 - 014721	<p>Mr KAM Nai-wai Chairman Administration Professor Anthony J HEDLEY, HKU Professor Alexis LAU, HKUST Professor WONG Tze-wai, CUHK</p>	<p>Mr KAM Nai-wai's views/queries -</p> <p>(a) non-attendance of the Secretary for the Environment (SEN), the Advisory Panel and consultants to receive valuable views from the academics was unacceptable;</p> <p>(b) whether there was an international trend to tighten AQOs in line with WHO AQGs;</p> <p>(c) whether reference to AQOs under APCO could be amended from "in the public interest" to "protect public health";</p> <p>(d) instead of having a pre-determined goal on the review of AQOs, the Administration should adopt an open mind to views of stakeholders; and</p> <p>(e) measures should be worked out to assist the affected trades to meet the new AQOs</p>	

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		<p>Administration's response -</p> <ul style="list-style-type: none">(a) protection of public health was indeed a part of public interest; and(b) the new AQOs would be set out in a Technical Memorandum (TM) under APCO. Consideration could be given to specifying in TM that AQOs were meant to protect public health instead of amending APCO for simplicity in the legislative process while serving the same purpose <p>Professor Anthony J HEDLEY's views -</p> <ul style="list-style-type: none">(a) the WHO AQGs were considered reasonable, ethical, and achievable. These were drawn up based on a wealth of new studies on the health effects of air pollution and after extensive consultation with leading scientists/health experts worldwide;(b) WHO AQGs had a strong evidence on exposure reduction and mechanisms of legal action for non-compliance;(c) while no country had adopted WHO AQGs in one go, countries like the United States were expected to do more in improving air quality; and(d) emission levels in Hong Kong were higher than countries with a comparable level of social and economic developments. Hence, more research and action on environmental management were needed in Hong Kong <p>Professor WONG Tze-wai views on WHO AQGs -</p> <ul style="list-style-type: none">(a) most countries had their own considerations in formulating AQOs, and the European Union countries were taking a progressive approach in achieving WHO AQGs; and(b) the Government had taken a "political will" in formulating its environmental management strategies, including the new set of AQOs	

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014722 - 020126	Chairman Professor WONG Tze-wai Professor Alexis LAU, HKUST Professor Anthony J HEDLEY, HKU	<p>Referring to the Administration's paper which stated that it would "derive practicable options to revise Hong Kong's AQOs", the Chairman was concerned that the Administration was inclined to place practicality as the guiding principle in formulating AQOs. Academics' views were sought on the following -</p> <ul style="list-style-type: none"> (a) the extent of participation of academics in the review of AQO; (b) whether there were studies on the level of exposure and health impact on residents who lived close to roads with heavy traffic; and (c) whether the present technological advancement was able to develop environment-friendly vehicles which best suit the weather and geographical conditions in Hong Kong <p>Professor WONG Tze-wai's response -</p> <ul style="list-style-type: none"> (a) a briefing on the review of AQOs was made by SEN after the Chief Executive delivered his Policy Address in October 2008; (b) the Advisory Panel spent most time on discussing consultants' recommendations and control strategies, with very little time on formulation of AQOs; (c) the reference to public health in APCO was inadequate. Consideration should be given to stating explicitly in APCO the need for AQOs to protect public health; and (d) there were difficulties in conducting cohort studies on the health impact on residents living close to roads with heavy traffic without a control sample for reference <p>Professor Alexis LAU's response -</p> <ul style="list-style-type: none"> (a) health studies conducted in the United States revealed that the lung functions of children studied in schools in close proximity to roads with heavy traffic were not as good as their counterparts in schools far away from main roads. As a result, legislation was introduced in some parts of United States 	

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		<p>requiring a buffer zone of 300 metres between main roads and schools;</p> <p>(b) HKUST had conducted feasibility studies on the use of liquefied natural gas (LNG) heavy vehicles in Hong Kong. It was concluded that while it was technologically feasible, there were operational and safety implications which needed to be tackled</p> <p>Professor Anthony J HEDLEY's response -</p> <p>(a) studies in the United States revealed that prolonged exposure to air pollution in childhood would cause lifetime damage to lungs;</p> <p>(b) a local study conducted in 1988 also showed that children aged 8 to 10 living in congested areas were more prone to pulmonary diseases; and</p> <p>(c) maximum exposure to nitrogen oxides in California were well below the general station level in Hong Kong. This served to show the severity of the pollution problem in Hong Kong</p>	
020127 - 020300	Ms Cyd HO Chairman	<p>Ms Cyd HO's requests -</p> <p>(a) the Legal Service Division to consolidate a list of provisions in existing environmental legislation which were related to air quality; and</p> <p>(b) academics to provide a checklist of the points to note with reference to air quality in the EIA process</p> <p>Chairman's request for Professor WONG Tze-wai to provide the legal opinion which he had referred to on how APCO should be amended with reference to AQOs</p>	Legal Service Division to consolidate a list of provisions in existing environmental legislation which were related to air quality
020301 - 020837	Dr Richard CHEUNG Chairman Administration Mr KAM Nai-wai Mr LEE Wing-tat	Dr Richard CHEUNG's enquiry on the time frame within which the consultants would complete their report, and whether there would be further consultation	

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		<p>Administration's response -</p> <p>(a) the consultant was in the final stage of preparation for organizing a public forum to gauge public views on the review of AQOs; and</p> <p>(b) would revert to the Subcommittee the following week as to whether a meeting could be held on 19 March 2009 to exchange views with the consultant. Members of the Advisory Panel, when attending the meeting, would be acting in their own capacity and not on behalf of the Advisory Panel</p>	
020838 - 021017	Ms Cyd HO Administration Chairman	Ms Cyd HO's request that the papers for the meeting and the consultant's report should be made available for members' reference a week before the meeting	