

AIR QUALITY OBJECTIVES REVIEW  
PUBLIC CONSULTATION FORUM

10 October 2009

FINAL REPORT

Prepared by  
Hong Kong Productivity Council  
October 2009

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- Opening Remarks: Ms Anissa Wong Sean-ye, JP, Permanent Secretary for the Environment Bureau / Director of Environmental Protection Department
- Keynote Speaker: Mr Carlson CHAN, Deputy Director, Environmental Protection Department
- Panel Speakers: Professor NG Cho-nam, Chairman of Public Consultation; Department of Geography, University of Hong Kong  
Ms Anissa Wong Sean-ye, JP, Permanent Secretary for the Environment Bureau / Director of Environmental Protection Department  
Mr Carlson CHAN, Deputy Director, Environmental Protection Department  
Mr MOK Wai-chuen, Assistant Director (Air Policy), Environmental Protection Department  
Mr PANG Sik-wing, Principal Environmental Protection Officer (Air Policy), Environmental Protection Department

## **1. Introduction**

The public consultation forum was conducted at the Exhibition Hall, 4/F, Hong Kong Productivity Council Building, 78 Tat Chee Avenue, Kowloon Tong from 9:00 a.m. - 12:45 p.m. on 10<sup>th</sup> October 2009. The consultation forum, targeting at the general public, was attended by 96 participants with a total registration of 131.

This consultation forum started with an opening remark given by the Permanent Secretary of the Environment Bureau / Deputy Director of Environmental Protection Department (EPD) and followed by a briefing on the proposed Air Quality Objectives (AQOs), emission control measures and consultation focus by the Deputy Director of EPD.

## **2. Presentations**

**Opening speech by Ms. Anissa Wong Sean-ye, JP, Permanent Secretary of the Environment Bureau / Director of Environmental Protection Department**

At the beginning of the consultation forum, Ms. Wong expressed her wish to solicit public opinions on the AQOs review and the recommendations stated in the consultancy report. Ms. Wong mentioned that the consultancy study was conducted in 2007 and aimed to improve the local air quality and by making reference to the Air Quality Guidelines (AQGs) established by the World Health Organization in 2006 along with the management strategy and objectives on air quality adopted by different advanced regions. Recommendations were made by the consultants on the review of the air quality objectives and development of a long-term air quality strategy for Hong Kong. She pointed out that EPD had published various publications including consultation paper and leaflet for reference by the public. The consultancy report had also been uploaded to EPD's website. She encouraged the general public to express their views through various channels.

Ms. Wong pointed out that the main purpose of the AQOs review, in which WHO's AQGs were adopted as a long-term goal, was to protect public health. The consultants suggested that three out of the seven major air pollutants should adopt the ultimate WHO's AQGs, while the others would be significantly tightened based on WHO's Interim Targets (ITs). The proposed new AQOs would be similar to that of other advanced countries.

Ms. Wong went on to introduce the 19 measures proposed by the consultants under the first stage of emission control, including the change in fuel mix to increase the ratio of natural gas used for electricity generation, replacement of heavily polluting vehicles, establishment of low emission zone, etc. Before launching these measures, she hoped to garner the participation and support from different sectors of the community. Although the proposed measures would involve price adjustments, and lifestyle and business operation changes, Ms. Wong emphasized that implementation of these measures would improve our air quality, and enhance the competitiveness and long-term development of Hong Kong.

Through the consultation forum, Ms. Wong aimed to gather public opinions from different sectors of the society; and the discussions during the consultation period would help reach a consensus in the society so as to achieve the new AQOs earlier. Lastly, stressing that the consultation forum was an essential component of the whole consultation exercise, Miss Wong urged the participants to submit their opinions to EPD by the end of November this year.

**Keynote Speech: Briefing on Proposed AQOs and Emission Control Measures by Mr. Carlson CHAN, Deputy Director, EPD**

Mr. Chan started by explaining that a number of factors needed to be considered for the AQOs review. One factor was the need to update the current set of AQOs as it was considered outdated and had never been reviewed since its adoption in 1987. Furthermore, as a new set of AQGs was released by the WHO in October 2006, it was an opportune time for Hong Kong to review and update its AQOs.

The purpose of the AQOs review was to update the AQOs with reference to the latest research findings by the WHO and international practices; to identify more emission control measures to improve the air quality; and to consider the introduction of a mechanism for regular review of the AQOs. Ove Arup & Partners Hong Kong Limited was the consultants of the AQOs review study and for that, a steering committee was set up with the participation of experts in public health and atmospheric science, representatives of industrial and commercial enterprises and government bureaux and departments.

Mr. Chan illustrated with charts and graphs the trend of local emissions and low visibility in recent years and pointed out that the pollutant emission had been reduced while the visibility problem had become more severe. It reflected that the air pollution problem of Hong Kong was strongly influenced by the surrounding environment, and so reduction of regional emissions was important in improving local air quality. He also highlighted local vehicular emission was the major source of roadside air pollution and therefore, reducing vehicular emission was vital to improve the roadside air quality.

Apart from explaining the principles for the AQOs review, Mr. Chan elaborated on the proposed AQOs and its comparison with that of other countries. It was suggested by the consultants that the AQOs should be subject to regular review in not less than every five years.

According to Mr. Chan, the consultants classified the measures into three phases for implementation according to the feasibility, technology maturity, emission control effectiveness and acceptance by the affected groups. The 19 measures recommended in the first phase would touch on four main areas, including emission capping and control, transport management, infrastructure development

and planning and energy efficiency measures. Mr. Chan then briefly went through the above measures. As projected by the consultants, the proposed new AQOs could be achieved after full implementation of the Phase I control measures and the continuous effort of Mainland and Hong Kong to reduce regional air pollutant emissions.

Mr. Chan further listed out in detail the estimated benefits and social costs to our society, which validated the case for adopting the proposed new AQOs. Finally, Mr. Chan encouraged the participants to examine all the issues relevant to the AQOs review and provide comments.

### **3. Q&A Session**

The major viewpoints expressed by the participants during the Q&A session are as follows:

#### **Severe Roadside Air Pollution**

- As the population and social activities in Hong Kong increased over time, the problem of roadside air pollution has remained severe as the roadside pollution level, respirable suspended particulates in particular, exceeded the standards persistently for more than a decade. This has reflected on the lack of a monitoring system in spite of the set goal. The government ought to install more monitoring stations and conduct reviews to safeguard public health.
- Citizens could better understand the effectiveness of the measures only if monitoring stations were available and the measurement data adequately reviewed. The government, therefore, ought to consider establishing a regular monitoring/review mechanism.
- To address the pollution caused by vehicle and industrial fuels, higher standard should be set to govern the environmental performance of such fuels.

#### **Switching off of Idling Engines**

- Switching off idling engines could improve air quality as well as reduce emission and nuisance to people in the vicinity.

#### **Encouraging Bicycles as a Form of Transportation**

- Participants generally agreed to establishing more cycling tracks as they believed that bicycles could serve as a “zero-emission” and environmentally friendly form of transportation and not only for recreational purpose.
- Bicycles should be considered as another transportation mode in urban areas. The Government should refer to the experience of the use of bicycles in Tokyo and London and encourage the dual use of roads for both pedestrians and cyclists.
- Cycling tracks should be developed in both the urban areas and the New Territories. Connection of cycling tracks between the two regions would be vital.
- Apart from improving air quality, cycling could help promote healthy and quality lifestyles.

### **Setting Up Low Emission Zones**

- Some participants doubted the effectiveness of low emission zones (LEZ) to improve air quality in busy areas such as Mong Kok; rather this measure would probably exacerbate the congestion problem.
- LEZ was one of the beliefs of the Government to improve air quality. Successful establishment of LEZ in the densely populated areas could significantly resolve the problem of roadside air pollution.
- LEZ might cause grave inconvenience to the residents and businesses in the affected district.

### **Reduction in SO<sub>2</sub> emission**

- To reduce SO<sub>2</sub> emission, it was suggested that power companies should use 50% natural gas for electricity generation and all ocean-going vessels should be required to use ultra low sulphur diesel.
- Regarding the emission control for SO<sub>2</sub>, some participants thought that the WHO IT-1 standard was too moderate to the extent that Hong Kong would be able to realize this proposed target without adopting further improvement measures.
- To have tighter control for SO<sub>2</sub> emission, it was suggested to adopt WHO IT-2 standard in order to bring real improvement to the protection of public health.
- The SO<sub>2</sub> emission level would be reduced significantly if the would accelerate the pace of achieving IT-2, to bring about a better environment.

### **Environmental Impact Assessment (EIA)**

Major infrastructure projects such as railway projects and the Central-Kowloon Route would lead to huge pollutant emission during their construction. The Government should apply stringent requirements for the project proponents to conduct EIA study prior to the commencement of construction work. To safeguard public health, no construction could be started until the satisfactory completion of the EIA study.

### **Carbon Emission Control**

- It was suggested that Government should launch publicity and educational programmes or executive measures to educate or encourage the concept of low carbon lifestyles.
- To improve the living environment, the Government should encourage the public to pay more attention to the conservation of energy, such as switching off unnecessary air-conditioning and lights.

### **Issues for consideration in setting the new AQOs**

- From the perspective of citizens and scholars, the Government should regard protection of public health as the primary principle for updating the AQOs. Measures concerning public health should be given high priority.
- Neither the number of exceedance allowed nor the increase in costs would be the primary concern. The Government should regard public health protection as the primary principle in updating the AQOs.
- The current level of air pollution in Hong Kong had caused a considerable number of premature deaths and increased hospital bed days. The participants expected the new AQOs could bring improvement to the public health and significantly reduce the number of bed days by 25 -30 % in the future.
- The Government should release more information and figures especially those regarding the influence of air quality on personal health, in order to enhance public awareness and their understanding of the issue.
- Apart from the health consequences, the Government could consider sustainability as the direction of developing the AQOs to safeguard public health.
- The Government ought to further consider from a macro point of view the impact created by the new AQOs on human beings, plants and the ecological environment.

### **Participants' opinions towards the new AQOs**

- The participants held divergent views on the method for establishing the new AQOs. To achieve the ultimate WHO standards, a few of the participants suggested the staged approach while others a one-step approach.
- In updating the AQOs, the Government seemed to have mixed up the priorities. The AQOs should have first been established before dwelling on the relevant measures to achieve the new objectives.
- Regarding the Government's proposal to include 'achievable' targets in the new AQOs, some participants questioned whether its purpose was to achieve a better result and distract public attention. Targets which could not be achieved were not directly addressed. Instead, they were lightly touched on and resolved by means of adopting relevant interim targets.
- When revising the AQOs, the Government should not just focus on the stringency of the standards. It is important for the Government to help the public to understand what impacts the exceedance of the AQOs would have on them as individuals and what actions they could take accordingly.
- When a stringent set of AQOs was established, the local industry would probably be able to come up with certain creative ideas and methods for compliance for their own 'survival'. These ideas and methods could turn into business opportunities for export to overseas and thus help the growth of the local creativity industry.
- The Government was encouraged to come up with methods for improving the air quality in a comprehensive manner. Hong Kong should develop its own guidelines to suit the local situation instead of following some particular guidelines of WHO.

### **Timetable**

- The Government was expected to expedite revision of the AQOs and confirmed the timetable for action.

In addition to the responses by Ms. Wong, Permanent Secretary for the Environment / Director of Environmental Protection, and other representatives of EPD to the questions raised by the participants, before closing the forum, Ms. Wong thanked all participants for their views and support. She said she hoped this 4-month long consultation would have conveyed the sincerity of the Government in soliciting public's views on the proposal. So far, different sectors of the community have expressed different viewpoints. Although there was a consensus to implement the

proposed control measures to improve our air quality, it would still need to build up the consensus on the pace of implementation, whether it should be a progressive approach or that the WHO AQGs should be adopted directly. Ms. Wong stressed that all the public views gathered during the consultation would be carefully examined and considered for consolidation and submission to LegCo for consideration as soon as possible.