

立法會
Legislative Council

LC Paper No. CB(1)547/08-09(02)

Ref. : CB1/PS/3/08

Panel on Environmental Affairs

Subcommittee on Improving Air Quality

Meeting on 13 January 2009

Background brief on review of Air Quality Objectives

Purpose

This paper sets out the progress of the review of Air Quality Objectives (AQOs), and gives a brief account of the views and concerns expressed by the Panel on Environmental Affairs.

Introduction

2. The Air Pollution Control Ordinance (Cap. 311) empowers the Government to establish AQOs. In 1987, a set of AQOs comprising seven major air pollutants was established with reference to researches done mainly in the United States. The current AQOs and achievement status as in November 2006 are in the **Appendix**.

Review of AQOs

3. In October 2006, the World Health Organization (WHO) announced an updated set of Air Quality Guidelines (AQGs), which provide a scientific basis for supporting the development of air quality policies and management strategies in various parts of the world to protect human health. Owing to the stringency of the new AQGs, WHO has recommended interim targets in the new guidelines for countries to improve their air quality progressively. The actual air quality standards set in each country will vary according to the approach adopted for balancing health risks, technological feasibility, economic considerations as well as various other political and social factors. WHO also advises that governments should consider their own local circumstances carefully before adopting the new AQGs as statutory standards.

4. Since the new WHO AQGs are much more stringent than the current AQOs, achieving the new WHO AQGs in Hong Kong will require drastic measures to be taken not only in Hong Kong, but also the Pearl River Delta (PRD) Region which has great influence on the pollution in Hong Kong. To draw up a new set of AQOs for Hong Kong and devise a long-term plan for meeting such new AQOs, the Administration needs not only detailed information on required specified measures, their implications and available options, but also full public participation. In this connection, the Administration has commissioned a study in 2007 for completion by the third quarter of 2008 to review Hong Kong's AQOs and develop a long-term air quality management strategy to achieve the new AQOs. Upon completion of the study, a public engagement process will be conducted to finalize the new AQOs and the required long-term strategy on air quality management within 2009.

Deliberations by the Panel

5. The review of AQOs was discussed by the Panel at its meeting on 27 November 2006 during which deputations were invited to express their views.

6. There was a general consensus that the present AQOs were outdated and fell behind other developed countries, particularly in respect of protection of health. These AQOs had also failed to inform policy makers and the public the true health impact of air pollutants, let alone the current Air Pollution Index derived from them. Hence, a critical review of AQOs covering both the criteria pollutants and their corresponding quality limits were urgently required to maintain Hong Kong as a world class city. While agreeing that a study might be required to map out a long-term air quality management strategy, taking into account the cost and benefit analysis of air quality control and the need for reduction in ambient concentration of pollutants, there was question on the need to spend another 18 months to conduct a further review of AQOs when reference to research data and standards being adopted by developed countries were readily available.

7. As regards the setting of interim targets on AQOs, members noted that this would have substantial impact on the environmental impact assessment (EIA) process. Some deputations however pointed out that the EIA process would not serve the intended purpose of reducing the environmental impact of projects on the surrounding community if the standards were to be lowered to ensure compliance. Others considered that measurements in terms of health benefits could be made if interim targets were set as milestones on a strict timeline. To facilitate better understanding, the Administration was requested to provide the study brief of the study on the review of AQOs as well as the interim measures to be taken to abate air pollution pending the outcome of the review. The required information was circulated vide LC Paper No. CB(1) 2253/06-07(01).

Latest development

8. In his 2008-09 Policy Address, the Chief Executive has announced that the Government is now reviewing AQOs, and that Hong Kong will adopt targets in stages giving due regard to WHO AQGs.

Relevant papers

Information papers provided by the Administration for the EA Panel meetings on 27 November 2006

<http://www.legco.gov.hk/yr06-07/english/panels/ea/papers/ea1127cb1-331-12-e.pdf>

Follow-up paper provided by the Administration

<http://www.legco.gov.hk/yr04-05/english/panels/ea/papers/ea0929cb1-2253-1-e.pdf>

Minutes of the EA Panel meeting on 27 November 2006

<http://www.legco.gov.hk/yr06-07/english/panels/ea/minutes/ea061127.pdf>

Council Business Division 1
Legislative Council Secretariat
12 January 2009

The Current Hong Kong AQO and Achievement Status

Pollutants	Averaging Time	Air Quality Objectives ($\mu\text{g}/\text{m}^3$)	Measured highest Concentrations in 2005 ($\mu\text{g}/\text{m}^3$) (In bracket is/are the station(s) where the highest data was/were recorded)		Status of Achievement	
					% of AQO at Highest Concentration	Evaluation of Achievement
Sulphur Dioxide (SO ₂)	1-hour	800	General Station	453 (Tap Mun)	57	Well achieved
			Roadside Station	476 (Mong Kok)	60	Well achieved
	24-hour	350	General Station	138 (Yuen Long)	39	Well achieved
			Roadside Station	114 (Mong Kok)	33	Well achieved
	Annual	80	General Station	32 (Kwai Chung)	40	Well achieved
			Roadside Station	25 (Central)	31	Well achieved
Nitrogen Dioxide (NO ₂)	1-hour	300	General Station	309 (Central/Western)	103	Not yet achieved
			Roadside Station	345 (Central)	115	Not yet achieved
	24-hour	150	General Station	147 (Tung Chung)	98	Achieved
			Roadside Station	195 (Causeway Bay)	130	Not yet achieved
	Annual	80	General Station	65 (Sham Shui Po)	81	Achieved
			Roadside Station	99 (Central)	124	Not yet achieved
Respirable Suspended Particulates (RSP)	24-hour	180	General Station	217 (Tung Chung)	121	Not yet achieved
			Roadside Station	191 (Causeway Bay)	106	Not yet achieved
	Annual	55	General Station	62 (Yuen Long)	113	Not yet achieved
			Roadside Station	84 (Causeway Bay)	153	Not yet achieved
Total Suspended Particulates (TSP)	24-hour	260	General Station	322 (Kwai Chung)	124	Not yet achieved
			Roadside Station	205 (Mong Kok)	79	Achieved
	Annual	80	General Station	104 (Yuen Long)	130	Not yet achieved
			Roadside Station	112 (Mong Kok)	140	Not yet achieved
Ozone (O ₃)	1-hour	240	General Station	365 (Tap Mun)	152	Not yet achieved
Carbon Monoxide (CO)	1-hour	30,000	General Station	5730 (Tung Chung)	19	Well achieved
			Roadside Station	4370 (Central)	15	Well achieved
	8-hour	10,000	General Station	4541 (Tung Chung)	45	Well achieved
			Roadside Station	3693 (Central)	37	Well achieved
Lead (Pb)	3-month	1.5		0.069 (Tsuen Wan, Annual average)	5	Well achieved