

**Friends of the Earth (HK) Submission on HKAQOs Review
EA Panel Paper
2006/11/27**

If Air Quality Objectives (AQOs) are not installed to protect public health, then they exist in name only. However, if they are for the protection of public health, then it is the government's obligation to tell the public in an honest and responsible manner how bad our air quality has become and amend the current measuring yardsticks to a meaningful level.

No mistaking with the Almanac

“Holding on to one almanac till old” is a Cantonese saying describing the foolishness of adhering to the unchanging almanac as one's action guide. The government has failed the policy objective of safeguarding the health and well being of the community by hardheadedly sticking to the moldy air quality measuring standards set in 1987 as the timeless almanac, surrendering the citizens' health to the fallacy of anachronism.

Just exactly how time-worn is this almanac? Many academics and green groups have pointed out that our AQOs are obsolete, falling behind the pace of the World Health Organization and the European Union.

**Comparison of Hong Kong, WHO and EU Air Quality Standards
(microgrammes per cubic metre)**

Pollutants	Averaging Time	WHO standard	EU standard	Hong Kong standard
Respirable Suspended Particulates (PM10)	24 hour	50	50	180
	Annual	20	40	55
Respirable Suspended Particulates (PM2.5)	24 hour	25	--	--
	Annual	10	--	--
Sulphur Dioxide	24 hour	20	125	350
Nitrogen Dioxide	Annual	200	200 *	300
	1 year	40	40 *	80

* has to be met by 2010 Jan

Reference : CLSA (2006) *Boomtown to gloomtown*, September.

Hong Kong's air quality standard is lax compared to the WHO and trails behind the EU. Is Hong Kong's standard to that of other Asian governments like the other three little dragons? Hong Kong's standard is still the most forgiving if it is to use the measurement of PM10 (suspended particulates with a diameter of 10 micrometres) for comparison.

Comparison of the Standards of Suspended Particulates of the Four Little Dragons
(microgrammes per cubic metre)

Country/Region	Concentration of PM10
	Averaging Time (24 hour)
Hong Kong	180
South Korea	120
Taiwan	150
Singapore	150

Source: The Clean Air Initiative for Asian Cities

(<http://www.cleanairnet.org/caiasia/1412/channel.html>)

National Environment Agency of Singapore (<http://app.nea.gov.sg/>)

To make matters worse, Hong Kong's air quality control is again more tolerant compared to Vietnam, Thailand, Philippines and Bangladesh.

Comparison of Hong Kong and some Asian Countries
(microgrammes per cubic metre)

Country/Region	Concentration of PM10
	Averaging Time (24 hour)
Hong Kong	180
Thailand	120
Vietnam	50
Philippines	150

Bangladesh	150
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Source: The Clean Air Initiative for Asian Cities

Friends of the Earth (HK) would like to ask: If the objective for the stipulation of AQOs is to safeguard the public's health, is the bygone standard serving the purpose ?

《Today in History》 Air Quality Objectives

1987 is almost 20 years ago when there were only 160,000 private cars, while now the figure has risen to 355,000, a 120% increase. And the air quality of busy roads is worsening. Are the old objectives appropriate for the measurement of pollution we face now?

"The American Lung Association is suing the United States Environmental Protection Agency for failing to review their 24-hour RSP standard. The Association claims that the standard of 150 micrograms per cubic metre is too high to protect human health. If this turns out to be so, then our own Hong Kong standard of 180 micrograms per cubic metre will need to be lowered. Similarly, the present annual standard of 55 micrograms per cubic metre may need to be revised downwards."
(PP.37)

from *Environment Hong Kong 1995*

The possibility of modifying the air quality standard expressed by the Environmental Protection Department ten years ago has become a certainty in other places supported by substantial research. Unfortunately, the lung association did not win the case then, giving the Hong Kong government an excuse for overriding the potent threat of the RSP on health and remains passive with regard to the air quality control.

Unarming Effect of Bygone Standard

The lax benchmarks of the AQOs disarm the public's guard on air pollution, leading us to believe that the air is fine. The daily broadcast of Air Pollution Index (API) is based on

the AQOs as a reference, which cannot reveal the reality of the air pollution at all.

If the establishment of AQOs is to protect the public's health, then the wording of the API should honestly reflect the relationship between the air pollution and health. But Friends of the Earth (HK) has found the current wording for API 100 to 200 changed from "Unhealthy" to now "Very High". This is to replace the inconvenient truth of the hazardous effect of bad air with pure mathematics, which can lower the public's guard against air pollution further.

Description of Air Pollution Index in the USA and the Four Little Dragons

Country/Region	0 – 50		51 – 100	101 - 200	201 - 500		
Hong Kong (1995)*	Good		Moderate	<u>Unhealthy</u>	Very Unhealthy		
Hong Kong (2006)	0-25	26-50	High	<u>Very High</u>	<u>Severe</u>		
	Low	Medium					
Taiwan	Good		Moderate	Unhealthy	201-300	300 or above	
					Very unhealthy	Hazardous	
Singapore	Good		Moderate	Unhealthy	Very Unhealthy	Hazardous	
South Korea	Good		Moderate	101-150	151-250	251-350	350-500
				Unhealthy for sensitive groups	Unhealthy	Very Unhealthy	Hazardous
USA	Good		Moderate	Unhealthy for sensitive groups	151-200	201-300	301 or above
				Unhealthy	Very Unhealthy	Hazardous	



□ **Conclusion**

More stringent Air Quality Objectives to the ones adopted by the WHO may not be achieved immediately but this will demonstrate at least the will of the government to face the challenge by tightening the control rather than evading the issue. After all, health is priceless !

Friends of the Earth (HK) would like to urge the government to:

- Shorten the 18-month reviewing period and quicken the pace of adopting the new WHO 2006 standard as Hong Kong's AQOs;
- Tighten the standard of the PM10 measurement, lower the tolerable 24-hour PM10 concentration from 180 microgrammes per cubic metre to 150 microgrammes per cubic metre, on a par with the mainland for the moment. But raise the standard to the one of WHO gradually;
- Include the control of PM2.5, the more hazardous RSP, soon.

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