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1<sup>st</sup> September 2011

Dear Sir,

Whilst your PATH trans-boundary air modelling program seemingly relies on specific inputs to achieve specific hypothetical outputs it seems clear to everyone in Hong Kong without PHD 's that roadside pollution is of major concern to the public and not hypothetical pollutants dropped on us by the Himalayas – and roadside pollution is increasing not decreasing. Clear the Air's email below addressed to Lego Health Panel is quite clear regarding pollution levels in Hong Kong at Chinese New Year 2011. Did your computer tell you that came from Nepal since the PRD was shut for holidays or was it from the nose to tail buses in Central without SCR fitted in their exhausts and ocean going ships in the harbour and Indonesian coal burning in the power stations?

It also seems highly possible that the delay in implementing Air Quality Standards (not Guidelines) approaching those promulgated by WHO is a deliberate ploy by the Hong Kong Prevarication Government to lead us up the garden *path* maze to try and force through major development programs under the 1984 outdated AQO's (since they know any revision of such in Law would be the immediate death knell of major projects like the HKZM bridge and airport third runway).

A visit to any 1<sup>st</sup> world website such as the US EPA finds data on PM2.5 and superfines whilst Hong Kong remains deliberately tethered in the Dark Ages under command from the top. The toxicity of PM2.5 is well known and this is far worse than just 'a subset of PM10' as Government lawyers try to pose. The Government is scared of old Euro diesel trucks blocking roads in Central if owners are forced to change to new vehicles and allows the diesel pollution to continue unabated. The same spineless retort is used by HK Government for not instigating an Emissions Control Area for shipping under Marpol (we cannot do that only China can, is the reply). So much for our own laws for 50 years from 1997 !

The EPA and Government of HKSAR has a duty of care towards the health of Hong Kong citizens and visitors. It is placing unnecessary development ahead of the health of the public and the marine park dolphins will make nice sushi, it seems.

Since your modelling software needs inputs, what inputs will you use for the 3<sup>rd</sup> runway EIA ?

Yours faithfully,

*James Middleton*

Chairman  
Clear the Air NGO

[www.cleartheair.org.hk](http://www.cleartheair.org.hk)



Christopher Fung – Environmental Protection Department

Tackling air pollution overhanging an area must be based on detailed knowledge of the sources and formation of the air pollutants. Only an air quality modelling system (i.e. a set of inter-linked mathematical equations solved on a high speed computer) is up to the task of putting together all the information relevant to air pollution in a coherent framework. Since 1993, Christopher Fung has been working for the Environmental Protection Department, **guiding the development of numerical air quality modelling systems and their applications in support of environmental impact assessment and air quality policy formulation, resulting in realistic emission reduction targets.**

Over the last two decades, our awareness of Hong Kong's air pollution problems has grown, from that of a local issue concerning one or two non-interacting pollutants to that of a regional or a continent-wide issue involving complex transport patterns and many chemically reacting pollutants. Growing together with this awareness are the tools needed to dissect and understand the air pollution pattern.

The Hong Kong Government has introduced and developed a number of tools to simulate the air pollution phenomenon on various scales with a view to seeking effective solutions to problems. A simulation system called **Pollutants in the Atmosphere and their Transport over Hongkong (PATH)** was developed and used in various study, notably the Pearl River Delta Air Quality study completed in 2002 which set the emission reduction targets to be achieved by 2010. **Further study involves determining what measures or combinations of measures are required to bring our air quality in line with more stringent air quality standards.**

Given that new air quality simulation tools are being developed, the Hong Kong Government is also upgrading its own set of tools so that some important pollutants like particulates can be simulated more accurately. It has also planned to bring all assessments – be it local like building a small road, setting up a process that will emit some pollutant or works on a large scale like building a cross-border road networks – under one consistent simulation framework. **This would ensure that all projects with air quality implications would be assessed under the same comprehensive framework, making overall planning for better air quality possible.**

There are plans to work together with our Chinese counterpart to further develop models and databases and to compare model results with a view to gaining a more nuanced understanding of the causes of air pollution in the region. This will lay the foundation for and prompt further action within the region.

When it comes to making a change for the better, we need moral courage. In many cases, this moral decision has to be informed by knowledge – detailed technical information. When courage and intellect join hands, a solution is possible for many of the inter-related problems (e.g. environmental degradation and poverty) that we face.

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**“Using SAS, Hong Kong's Environmental Protection Department (EPD) has made significant inroads in reducing air pollution”.** “We use SAS to build models that predict air quality and provide better advice on mitigating air pollution **so people in Hong Kong can breathe clean, healthy air,**” said Dr. Christopher Fung, Senior Environmental Protection Officer at EPD.  
<http://www.sas.com/news/preleases/bagrowth-asiapacific-pblshk.html>

[http://www.science.gov.hk/paper/EPD\\_CFung.pdf](http://www.science.gov.hk/paper/EPD_CFung.pdf) **The Challenges of Modelling Air Quality in Hong Kong** Christopher Fung Environmental Protection Department



**From:** James Middleton [mailto:dynamco@netvigator.com]

**Sent:** Monday, February 14, 2011 10:22

**To:** 'panel\_ea@legco.gov.hk'

**Subject:** Photo taken by a pilot of the PRD next to Macau Wednesday 26 Jan 2011 on final approach to Hong Kong Chep Lap Kok

Dear Legco Panel on Environmental Affairs

Clear the Air says : Think of this -

In the past two weeks the so-called API (an outdated inaccurate index that was issued 24 years ago) reached 177 in Causeway Bay.

**During that period:**

**Southern China factories were closed for CNY and local (some) and Chinese construction sites were closed.**

**The Castle Peak 'B' power station with FGD was fully operational – this has the new FGD equipment installed and the 'A' station is being retrofitted and not in use.**

**This shows the pollution is locally based.**

So what causes it ?

- 1 Pre Euro buses running nose to tail 90% empty for most of the day (aka Very Old Diesel Moving Billboards) We should have electric buses only to be allowed in gazette Clean Air Zones such as Nathan Rd, Queens Rd and Kings Road. All diesel buses should stop at termini outside these areas and passengers change on to the **Clean Air Zone** shuttle buses (bought by Government) at no extra charge on their Octopus card.
- 2 Shipping emissions – we have no Emissions Control Area mandated as in Europe and USA The bunker diesel is 3+% sulphur These emissions are trapped between the tall buildings. Between Shenzhen port and HKG port sea lanes we have the busiest ocean shipping area in the world.

Even though the Flue Gas Desulphurization is fully working it does not catch the 1% of PM2.5 and superfines and both power companies rejected technology that would stop 75% of the PM2.5 and superfines (Indigo Agglomerator) <http://www.isesp.org/ICESP%20X%20PAPERS/PDFS/Paper%206A2.pdf>

The superfines remain suspended in the chemical smog caused by the bus NOx emissions and VOCs causing the brown haze effect that is highly toxic. Overdevelopment canyon walls of areas like Causeway Bay and Central prevent harbour winds from dispersing the pollutants.

Yours sincerely,

James Middleton  
Chairman Energy Committee  
[www.cleartheair.org.hk](http://www.cleartheair.org.hk)

<http://www.epd-asg.gov.hk/english/pastapi/pastapie.html>

Alleged API in Hong Kong during Chinese New Year 2011 at 1200 hrs each day commencing **3<sup>rd</sup> February 2011 up to and including 13<sup>th</sup> February 2011**

[www.cleartheair.org.hk](http://www.cleartheair.org.hk)



Roadside API			General API						
Causeway		Mong			Kwai	Kwun		Sham Shui	
Bay	Central	Kok	Central/Western	Eastern	Chung	Tong	Sha Tin	Po	Tai Po
123	95	91	53	51	56	54	53	55	53
126	99	92	50	51	66	53	52	61	50
177	136	116	81	63	88	59	67	80	53
105	79	98	49	49	51	52	50	54	55
126	108	117	53	59	76	53	53	73	55
110	95	109	52	51	51	54	51	61	51
127	120	102	65	54	57	54	47	57	48
81	67	93	64	58	58	62	55	60	56
110	92	94	62	54	60	56	56	60	54
81	76	58	52	38	43	44	37	42	38
89	66	83	58	52	54	55	54	54	53

<http://www.epd-asg.gov.hk/english/pastapi/pastapie.html>

CX Pilot's email below

**Email received by CTA from an airline pilot CTA member approaching Hong Kong for landing 26 Jan 2011**

“Taken at about 11:30 this morning, Wednesday 26th January 2011 at about 25,000 feet over Macau, looking east. The hills at left of centre are Lantau, CLK to their north, at centre, invisible. Just above the finger-marks on the window at 8 o'clock from centre is a tiny white dot. This is water vapour (and other things) coming from the power station at Castle Peak. Above that, at 9 o'clock from centre, you can just make out Tai Mo Shan.

Airport visibility reported as 5,000 m in haze, actual observed on final approach about 3,500m. Temperature 16c, dew point 8, wind from 350 degrees at 10 knots. Strong smell of nitrogen oxides passing about 15,000 feet on descent. A normal winter day in Hong Kong in the early 21st Century.

Regards,

Airline Pilot member of CTA”

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