

*Submission from Clear the Air*

**Presentation to Legco Panels  
on Environmental Affairs and Transport  
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**Introduction**

CLEAR THE AIR are deeply concerned about the current state of air quality in Hong Kong. The Air Pollution Index (API) has reached 'very high' levels in Causeway Bay in recent months, partly due to the recent introduction of roadside monitoring combined with the generally poorer air quality in the drier seasons. However, Causeway Bay is no different to many other urban areas of Hong Kong in terms of traffic and density of high-rise buildings. It is likely that street level air quality of many other districts is equally unhealthy.

What advice should the government give to people who work in Causeway Bay and other polluted districts, especially people who work at street level? How much are people at risk from short-term exposure to high levels of nitrogen dioxide and other pollutants? What advice is being given to doctors, sports clubs and schools about the risk of conducting strenuous activity outdoors on days of high air pollution?

The Administration maintains that Hong Kong's air quality has not suddenly got worse—it is simply an artefact of the introduction of roadside monitoring. Yet longer term trends indicate that Hong Kong's air quality is deteriorating in terms of certain types of pollution such as particulates, ozone and nitrogen dioxide. Much of the pollution comes from vehicles, particularly diesel vehicles.

Last year 7 out of 9 stations failed to meet annual air quality objectives for the fine but deadly particulates known as RSP. In terms of particulate pollution Hong Kong's levels are twice those of London and worse than Kuala Lumpur, Singapore, Seoul and Tokyo.

The effects of this air quality on our health, productivity, business, tourism and quality of life are incalculable but are estimated to be of the order of billions of dollars a year. No-one disputes the need to do something about air quality—the dispute lies in the solutions preferred and the timetable for their implementation. CLEAR THE AIR would like to comment on government's short-medium term proposals to improve air quality and point the way to action in the longer term.

## **LPG switch**

CLEAR THE AIR support the Administration's proposals to switch taxis to LPG. While taxis are not the only vehicles causing pollution, they are a significant contributor.

The Administration proposed making all newly registered taxis to use LPG by end of 2000 and it is estimated that all taxis will be running on LPG by year 2005. CLEAR THE AIR find it unacceptable to wait another 6-7 years for all taxis to be converted. We consider that the implementation period for the compulsory introduction of the LPG scheme could be fast-tracked.

In terms of the schedule for construction of the new LPG filling stations, the Administration must be asked to present a detailed schedule for implementation of each filling station, and asked to expedite the process where possible.

The Administration's recently issued consultation paper "A Proposal to Introduce LPG Taxis" fails to provide any details on costs or financial incentives. CLEAR THE AIR considers that the Administration should provide the necessary financial incentives to successfully implement the LPG scheme quickly. This could involve measures such as waiving the duty on LPG and providing a subsidy based on the depreciated value of the taxi to encourage early conversion. The Administration has stated that "financial incentives such as tax concessions may need to be considered if appropriate" but has given no firm commitment.

In the LPG consultation paper the government state that they are examining the technical feasibility of extending the LPG option to other types of vehicles such as minibuses. CLEAR THE AIR want the Administration to present a timetable for the extension of the LPG option to minibuses as soon as possible.

## **Inspection and Enforcement**

Furthermore, the Administration should take immediate steps to combat the pollution from all poorly-maintained diesel vehicles. In the LPG consultation paper the Administration stated it will step up inspection and enforcement against smoky vehicles. Details should be provided on the resources allocated to this initiative. CLEAR THE AIR recommend three essential measures the Administration should adopt within the next 12 months:

**(a) *Increased fines for smoky vehicles***

The Chief Executive committed to introduce legislation to increase the fixed penalty fine for smoky vehicles in the 1999-2000 Legislative Session. This means in practical terms that fixed penalty fines will be unlikely to be increased before the end of 2000. The present fine of HK\$450, imposed as an on-the-spot fine by Police, fails to act as a sufficient deterrent to owners of smoky vehicles to maintain their engines properly. CLEAR THE AIR propose that a fine of HK\$10,000 should be introduced to act as a real deterrent. The Administration should introduce this in the 1998-1999 legislative session. Drivers who maintain their engines properly can save significant fuel costs. CLEAR THE AIR also consider that road-side testing by the Police should be significantly stepped up until compulsory emission testing is introduced.

**(b) *Compulsory emission testing***

As part of the annual road-worthiness test there should be a compulsory emission test. The Transport Department are currently doing this on a sampling basis but all vehicles could be brought into the scheme within the next 6 months. Any failing vehicle will not have their licence renewed. This will provide a real incentive for vehicle owners to have their vehicles properly maintained, and to retire older, polluting vehicles.

**(c) *Introduction of advanced testing equipment***

The current test for excess smoke emission is a simple snap-acceleration test which is easy to manipulate. This is the reason why only 10% of the 26,000 vehicles 'spotted' last year emitting dark smoke failed the test, and why so many of the spotted vehicles are repeat offenders. It is a huge waste of time and effort to call in vehicles for testing which then are able to pass the test by a simple tuning of their engine. New emission testing equipment, known as dynamometers, which simulate the full-driving cycle are more accurate and makes it harder to fudge the results. EPD has already tested the equipment for smaller vehicles and have stated that these will come into full use by the middle of next year. Similar systems for larger vehicles will also be introduced. This should also be expedited, so that all emission testing centres are required to use this equipment.

**Longer term measures needed**

Emission standards for all vehicles need to be strengthened and enforced on an on-going basis. Due to the rapid development of different fuels and engine technologies the government should be looking at piloting advanced zero-emission (or significantly reduced emission) vehicles including hybrid vehicles, natural gas, electric, and fuel-cell vehicles. Legislative Council members should ask the Transport Department of its long-term strategy to introduce cleaner-burning or operating fuels and engine technologies.

The Administration also need to address the growth in traffic since its projections show that even with technical improvements to vehicle emissions, air quality will continue to deteriorate due to the sheer growth in vehicle numbers on Hong Kong's roads. The Administration as a whole needs to introduce financial, planning and technological measures to reduce traffic growth.

At the same time the Administration should continue with plans for mass-transit systems such as rail, MTR, light rail and trams on a priority basis for future territorial development. Early introduction of these clean, economic and efficient transit alternatives will establish environmentally friendly transport patterns during initial phases of community settlement.

## Summary of questions

### Air quality and health

- What advice is being given to people who work in Causeway Bay and other polluted districts, especially people who work at street level?
- How much are people in Causeway Bay and other similar districts at risk from short-term exposure to high levels of nitrogen dioxide and other pollutants?
- What advice is being given to doctors, sports clubs and schools about the risk of conducting strenuous activity outdoors on days of high air pollution?

### LPG scheme

- Why do we need to wait for another 6-7 years for all taxis to be running on LPG?
- Can the schedule for construction of the new LPG filling stations be fast-tracked in any way?
- What financial incentives will be given to support the implementation of the LPG switch for taxis and other vehicles?
- What is the timetable for the extension of the LPG option to minibuses and other vehicles?

### Inspection and enforcement

- What are the resources, in terms of time and manpower, allocated to stepping up inspection and enforcement against smoky vehicles?
- Whether legislation to increase the fixed penalty fine for smoky vehicles can be introduced into the current Legislative Session?
- When compulsory emission testing will be introduced for all vehicles as part of the annual road-worthiness test?
- Will vehicles failing the test have their licences revoked?
- What is the timetable for the introduction of advanced emission testing equipment (dynamometers) for all vehicles and can this be expedited?

### Other vehicles

- Does the Administration have any plans to pilot advanced zero-emission (or significantly reduced emission) vehicles including hybrid vehicles, natural gas, electric, and fuel-cell vehicles?

### Transport policy

- What is the Administration's long term strategy to introduce cleaner-burning or operating fuels and engine technologies?
- What are the Administration's plans to address the projected growth in traffic?