Legislative Council Panels on Environmental Affairs and Transport

Comprehensive Control of Diesel Vehicle Emissions

At the last meeting of the Joint Panel on 23 May 2000, Members asked the Administration to provide the following supplementary information:

- (a) future distribution of converted sites for LPG filling stations and their filling capacity;
- (b) a breakdown of the numbers of fixed penalty tickets and summonses issued in respect of smoky vehicles;
- (c) a full report of the consultancy study on the annual cost in medical expenses and loss of productivity resulting from air pollution (the estimated cost is around \$3.8 billion) and the possible decrease in the annual cost after introduction of the air pollution control initiatives;
- (d) whether Secretary for Health and Welfare has advised the Chief Executive or the Executive Council in the past two years of the impact of air pollution on public health, and, if so, what the advice was; and
- (e) a list of priorities of the Task Force to Improve Air Quality on the implementation of air pollution control initiatives.
- 2. The information requested is set out in the following paragraphs.

Future distribution of converted sites for LPG filling stations and the filling capacity

3. In Paper No. CB(2)1948/99-00(02) entitled "LPG Taxi Scheme" submitted to the Joint Panel meeting on 12 May 2000, the Administration

informed Members that there would be 12 LPG filling stations by the end of this year. Of these 12 stations, three would be combined petrol cum LPG filling stations through the retrofitting of LPG facilities on existing petrol filling stations:

Location	Filling Capacity
Pokfulam Road, Pokfulam Siu Lek Yuen, Sha Tin	240 480
Shek Kong, Yuen Long	240

The capacity is calculated on the assumption that 60% of taxis are refilled during the peak shift-change hours between 3pm and 6 pm.

- 4. Other than these 12 LPG filling stations, the Government is working on a programme to make available 28 additional LPG stations by the end of 2001. Together the 40 LPG stations will provide adequate capacity for the entire fleet of about 18,000 taxis. Of the 28 additional LPG stations, 19 are among the 64 existing petrol filling stations which we have preliminarily assessed to be suitable for conversion from the safety distance point of view. As a general rule, any LPG filling station has to be 15 metres away from industrial/commercial building and 55 metres away from residential development. We are discussing with the oil companies concerned the incorporation of LPG filling facility into these 19 petrol filling stations. With these 19 combined petrol cum LPG stations, the four temporary LPG stations in operation and the 13 dedicated LPG stations, we will have capacity for the entire taxi fleet by end-2001.
- 5. Details of the existing 64 petrol filling stations which we have preliminarily assessed to be suitable for conversion from safety distance point of view are set out at **Annex A**.

Breakdown of numbers of fixed penalty tickets and summonses issued for smoky vehicles

6. The breakdown is at **Annex B.**

Consultancy study on the annual cost in medical expenses and loss of productivity resulting from air pollution/possible decrease in the annual cost after introduction of the air pollution control initiatives

- 7. A copy of the study report has been passed to the Secretary of the Joint Panel. The report is also available at Environmental Protection Department's website at http://www.info.gov.hk/epd/air/ehs.
- 8. Our target is to reduce respirable suspended particulates (RSP) by 80% and nitrogen oxides by 30% in 2005 through the implementation of the comprehensive programme to improve air quality. It is estimated that the possible decrease in the annual cost resulting from the reduction of RSP and nitrogen oxides levels could be around \$880 million.

Secretary for Health and Welfare's advice to Chief Executive or Executive Council in the past two years on the impact of air pollution on public health

- 9. The Secretary for Health and Welfare (SHW) monitors and advises bureaux/departments on the public health implications of their policies/programmes, including the impact of air pollution on public health. The measures taken by Environment and Food Bureau (formerly Planning, Environment and Land Bureau) to combat air pollution in the past two years are in line with Health and Welfare Bureau's objective to improve the health of the community.
- 10. Health and Welfare Bureau (HWB) and the Health Department work closely with other bureaux and departments on various environmental health issues. SHW is a member of the Task Force to Improve Air Quality.

Priorities of Task Force

11. The work plan of the Task Force is at **Annex C.**

Environment and Food Bureau June 2000

Annex A

Location of existing petrol filling stations deemed to have potential for incorporation of LPG filling facilities

No.	Location		
	Hong Kong South		
1	66 Wong Chuk Hang Road, Aberdeen		
2	South Bay Road, Repulse Bay		
3	Stanley Village Road, Stanley		
	Hong Kong North		
4	Java Road, North Point		
5	23 Fung Yip Street, Chai Wan		
6	Wong Nai Chung Gap Road		
7	145 Wong Nai Chung Gap Road		
	Kowloon East		
8	Prince Margaret Road, Homantin		
9	5 Fung Shing Street, Po Kwong Village		
10	5 Kai Fuk Road, Kowloon Bay (East Bound)		
11	Kai Fuk Road, Kowloon Bay (East Bound)		
12	4, Kai Fuk Road, Kowloon Bay (West Bound)		
13	6, Kai Fuk Road, Kowloon Bay (West Bound)		
14	8 Kai Fuk Road, Kowloon Bay (West Bound)		
15	Po Lam Road, Tseung Kwan O		
16	100 Po Hong Road, Tseung Kwan O		
	Kowloon West		
17	Tai Hang Tung		
18	488 Tai Po Road, Kowloon Reservoir		

19	Lot 5555 Tai Po Road, Kowloon
20	Lot 5716 Tai Po Road, Kowloon
21	99 Castle Peak Road, Kwai Chung
22	101, Castle Peak Road, Kwai Chung
23	682-688 Castle Peak Road, Kwai Chung
24	739-745, Castle Peak Road, Tsuen Wan
25	KCTL 413, Kwai Chung
26	15 Tsing Yi Road, Tsing Yi
27	53-67 Tsing Yi Road
28	171 Tsing Yi Road West
29	Tsing Yi Road West
	New Territories East
30	9500 Tai Po Road, Shatin Height
31	Lot 1466, Tai Po Road, Shatin Height
32	Au Pui Wan St, Fo Tan
33	Shek Mun, Shatin
34	21 On Shan Lane, Ma On Shan
35	Tai Po Road, Kau Lung Hang, Fanling
36	Sheung Shui Town Lot 132, Fanling
37	Sha Tau Kok Road – Long Yuek Tau, On Lok Tsuen Sheung Shui
38	287 Jockey Club Road, Fanling (near Fan Leng Lau)
39	DD1980 Clear Water Bay Road, Sai Kung
40	233 Clear Water Bay Road, Tseng Lan Shue
41	Clear Water Bay, Sai Kung (near TVB City)
42	Hiram's Highway, Sai Kung (near Fui Yiu Ha)
	New Territories West
43	Lot 812, Kam Tin Road, Shek Kong
44	Kam Tin Road Shek Kong

45	Castle Peak Road, Long Ha, Yuen Long		
46	Castle Peak Road, Au Tau, Yuen Long		
47	Tai Tong Road, Yuen Long		
48	Ping Ha Road, Tin Shui Wai		
49	Hung Tin Road, Yuen Long		
50	Ping Shan, Tong Yan San Tsuen Road, Yuen Long		
51	DD121, Lot2013, Tong Yan San Tsuen Road, Ping Shan, Yuen Long		
52	10 Castle Peak Road, Fu Sha Wai, Yuen Long		
53	DD124, Lot2254-2255, Castle Peak Road, Hung Shui Kiu,		
	Yuen Long		
54	Fuk Hang Chuen Road, Lam Tei, Tuen Mun		
55	Tsing Chuen Wai Road, Lam Tei, Tuen Mun		
56	TMTL402, San Hui, Tuen Mun		
57	5 Tsun Wen Road, Tuen Mun		
58	Tuen Mun River Trade Terminal		
59	38 Castle Peak Road, Gold Coast, Tuen Mun		
60	17.5 Miles, Castle Peak Road, Tuen Mun		
	Lantau Island		
61	Airport passenger terminal		
62	Airport cargo terminal		
63	DD316, South Lantau Road, Pui O		
64	South Lantau Road, Pui O		

Note: The LPG filling capacity of each station varies, depending on the size of the station and the number of LPG filling nozzles to be provided. For the purpose of planning, we assume that on the average each station is capable of providing at least 4 filling nozzles (which are sufficient to serve at least 240 LPG vehicles per day). Larger stations or those with potential for expansion can provide bigger filling capacity.

Annex B

${\bf Smoky\ Vehicles-Enforcement\ Statistics}$

	1997	1998	1999			
(a) Fixed Penalty						
No. of fixed penalty tickets issued	1,085	1,643	5,095			
(b) Summons						
No. of summonses issued	144	57	32			

Annex C

Task Force to Improve Air Quality Work Plan

(Within each category, the items are not listed in any particular order of priority)

A. Issues for Immediate Attention

- > Ultra low sulphur diesel
- ➤ LPG taxi incentive scheme
- ➤ LPG filling facilities
- Release of emission system maintenance data by vehicle manufacturers
- ➤ Introduction of Euro III vehicles (from 1 January 2001)
- Control on idling engines
- ➤ Restrict fuel carried by cross-border vehicles
- ➤ LPG/electric light bus trial scheme
- ➤ Black smoke spotters scheme enhancement
- ➤ Heavier penalty for smoky vehicle repeat offenders
- > Feasibility of taking special measures on extremely high API days
- ➤ Chassis dynamometer tests for annual roadworthiness inspections
- Pedestrianisation programme
- ➤ Enhanced hydrocarbon recovery system at petrol filling stations
- Incentives for cleaner fuel vehicles

B. Second batch of issues

- ➤ Catalytic converters for pre-Euro heavy diesel vehicles
- ➤ Incentives for replacement of old vehicles
- ➤ Alternatives for light diesel vehicles

C. Third batch of issues

- > Implementation of decision on public light bus trial scheme
- Restraining vehicle numbers and road use
- ➤ Non-vehicle pollution sources
- > Use of alternative fuel, including natural gas and fuel cell