立法會 Legislative Council

LC Paper No. CB(1) 807/08-09(08)

Ref.: CB1/PL/EA

Panel on Environmental Affairs

Meeting on 23 February 2009

Updated background brief on control of idling vehicles with running engines (Position as at 17 February 2009)

Purpose

This paper sets out the development of the control of idling vehicles with running engines (idling vehicles), and gives a brief account of the views and concerns at the meetings of the Council and the Panel on Environmental Affairs (the Panel).

Background

- 2. Many drivers in Hong Kong leave the engines of their vehicles idling while they are waiting. Other than those who do so for reasons acceptable to the public (for example, drivers of emergency vehicles who keep the engines of their vehicles running while stationary for operational reasons and drivers of goods vehicles with a built-in refrigerator carrying frozen foods), most others leave their engines on to keep the air-conditioning running for the comfort of themselves, particularly during hot weather, at the expenses of the air quality. A table comparing the emissions by an idling engine and an engine of a moving vehicle is given in the **Appendix**.
- 3. The Environmental Protection Department (EPD) has been conducting a public education campaign since 1997 aimed at promoting a good habit of keeping the engine off while waiting. EPD staff also take the campaign to the streets of the more polluted areas on days where the Air Pollution Index is very high to advise drivers of vehicles to switch off their engines while waiting. However, as keeping the engines off is not a legal requirement, drivers do not have to accept the advice given by EPD staff. This has prompted the question of whether control of idling vehicles by way of legislation should be introduced.
- 4. During the period from July 2000 to January 2001, the Administration consulted the 18 District Councils (DCs) and different sectors of the transport trade, including taxi and public light bus operators, truck drivers, public omnibus operators, school bus operators and operators of works vehicles, on the proposal to control idling

vehicles. Issues, such as types of vehicles to be controlled, designation of no-idling zones and hours as well as setting of a maximum time limit for the engine to idle, had been raised.

- 5. Members of the 18 DCs generally agreed that control of idling vehicles could reduce the nuisance caused to nearby pedestrians by emissions from vehicles waiting on the roads. Many of them considered it impracticable to introduce a total ban on idling vehicles since some vehicles had to leave their engines running after coming to a stop due to practical, operational needs. Besides, the health of the driver and his passengers could be adversely affected if he has to switch off the engines, also the air-conditioning, while waiting in the hot weather. Some DCs members were worried that traffic and air pollution problems could be aggravated if drivers chose not to switch off their engines but to circulate on the road. Moreover, if the control scheme allowed a grace period during which a vehicle could keep its engine running after coming to a stop before its engine had to be switched off, enormous enforcement problems could arise. There was also suggestion that a reasonable transitional period should be provided to allow drivers to get used the new requirement if control was to be introduced.
- 6. While generally agreeing that control of idling vehicles should be implemented to reduce the nuisance caused by emissions from vehicles waiting on the road to nearby pedestrians and residents, the transport trades indicated that any across the board control scheme imposed on passenger vehicles that would require the air-conditioning of the vehicles to be switched off while they were waiting would cause discomfort to the driver and the passengers and thus adversely affect their operations.

Proposal to control idling vehicles

- 7. Based on the views collected, the Administration's assessment was that if a total ban was imposed on idling vehicles, some drivers, due to operational needs or in order to maintain the air-conditioning in the hot weather, might choose to circulate on the road instead of switching off their engines to circumvent the restriction, the pollution caused could offset the environmental benefits gained, or the air pollution problem could even deteriorate. Moreover, there were practical reasons for some vehicles, such as concrete mixers and emergency vehicles, to keep their engines running after they had come to a stop. Hence, any control scheme should not affect the normal operations of such vehicles. Besides, an across the board control scheme would give rise to enforcement problems because it was not easy for an enforcement agent to judge accurately whether or not a vehicle had only just switched on its engine or for how long a vehicle had stopped with its engine idling.
- 8. One of the more practical options was to work on the areas where pedestrians and residents could be easily affected by emissions produced by vehicles waiting on the road. It was proposed that consideration could be given to drawing up codes of practice to require franchised buses, taxis and public light buses waiting at bus termini or taxi stands to switch off their engines when there were no operational needs to keep

them on. For instance, franchised buses were to switch on their engines only a few minutes before boarding of passengers starts, all taxis/public light buses in the queue (except the few taxis/public light buses at the front of the taxi stand/public light bus terminus) must have their engines switched off.

9. The Legislative Council passed a motion on 7 December 2005 urging the Government to, among other things, introduce legislation to require motorists to switch off the engines of their vehicles while waiting, and accord priority to regulate emissions from idling engines of private cars and government vehicles as well as idling engines of vehicles in school and hospital premises.

Public consultation

- 10. In November 2007, the Administration kicked off a five-month consultation exercise to seek public views on the proposed introduction of a territory-wide statutory ban on idling vehicles. In gist, if a motorist does not switch off the engine of his vehicle when it is idled, he commits a contravention and will be issued with a fixed penalty ticket with a fine of \$320. However, exemptions will be granted to certain vehicles having regard to their operational needs -
 - (a) vehicles stopped at roadside for active boarding or alighting;
 - (b) first two taxis or public light buses (PLBs) at a taxi or PLB stand;
 - (c) taxis, PLBs or buses boarding or alighting at a designated stop, including taxis, PLBs or buses in moving queues at a designated stop;
 - (d) special traffic conditions (e.g. traffic congestions and accidents);
 - (e) security transit vehicles (armoured vehicles), vehicles of disciplinary forces and other emergency vehicles (e.g. ambulances);
 - (f) vehicles required to run engines for ancillary purposes (e.g. refrigerator trucks and mobile concrete pumps); and
 - (g) vehicles engaged in a parade or an event authorized by the Transport Department.

Consultation documents and questionnaires were distributed through various channels during the consultation period. At the end of the consultation on 31 March 2008, the Administration received 263 written submissions and 1 349 returns of questionnaires. Detailed findings of the public consultation were set out in the Annex to LC Paper No. CB(1) 1595/07-08(03).

11. In general, there is a broad-based support from the community, including the transport trades, on the proposed ban on idling vehicles. However, many operators, notably operators of non-franchised buses, taxis and PLBs, have asked for further

exemptions to cater for their operational needs. There are also suggestions for a short grace period, granting of exemption when the ambient temperature is above certain limit, and stepping up of enforcement effort when the Air Pollution Index exceeds 100.

12. The Panel has been monitoring the progress of control of idling vehicles. Deputations, including the affected trades, professional bodies and green groups, have been invited to express their views on a number of occasions. The findings of the public consultation were discussed at the Panel meeting on 26 May 2008. While supporting the policy intent of the proposed ban, some members stressed that this should not undermine the operation of the transport trades. Given the many concerns about compliance difficulties raised by the trades, they expressed doubt that the Administration could be able to work out by late 2008 a mutually acceptable solution. Other members however pointed out that the public was frustrated over the slow progress of implementation of the proposed ban which had undergone repeated rounds of consultation. They said that it was not possible to work out a proposal that would be acceptable to all. To avoid further delay on the ban, consideration could be given to excluding certain types of vehicles from the ban in the initial phase. The exemptions could be reviewed one year after implementation of the ban.

Revised exemptions

- 13. Having considered the operational needs of the transport trades, the impact of the proposal on mitigating environmental nuisances caused by idling vehicles, and the enforcement practicability, the Administration proposes to revise the exemption arrangement to cover the following
 - (a) first five taxis at a taxi stand;
 - (b) first two green PLBs of each route at a PLB stand;
 - (c) in addition to the first two red PLBs at a stand, those with one or more passengers on board, plus one immediately behind each of these red PLBs; and
 - (d) coaches with one or more passengers on board.

In view of the genuine need for turbocharger-equipped diesel commercial vehicles to idle for a short while to allow the turbochargers to cool down before switching off, the Administration also proposes to provide to all commercial vehicles (except liquefied petroleum gas vehicles) a three-minute grace period once every 60 minutes, within which drivers of these commercial vehicles are allowed to leave their engines on before switching off when the vehicles are idling.

14. The revised exemption arrangements were discussed at the Panel meeting on 15 January 2009, during which deputations were invited to express their views. The

trades, notably taxi and PLB drivers, remained of the view that the revised exemption arrangements were not enough. They pointed out that sixth and following taxis waiting in line for passengers at a stand would have to switch on and off their engines frequently, which would increase the wear and tear of the engines, resulting in higher maintenance and repair costs. Besides, it would be impractical for taxi drivers to switch off their engines and air-conditioning when the outside temperature was over 30°C or on rainy days when car windows could not be opened. The proposed ban would have adverse impacts on the health of drivers who had to spend their entire working day in the cabin. They urged the Administration not to proceed with the ban supporting facilities, such as subsidy for installation of separate air-conditioning system, provision of shades and covers for taxi stands etc, were put in Green groups on the other hand considered that prolonged consultation and further exemptions would defeat the purpose of the ban to improve air quality. Nevertheless, they agreed that more studies should be made on the technology which could keep the air-conditioning on while the vehicle engines were switched off. Members considered that previous discussions between the Administration and the trades had indeed narrowed their differences. They opined that the Administration should further consult the trades and work out an acceptable solution before the legislative proposal on the ban on idling vehicles was submitted for discussion by the Panel.

Latest development

15. The Administration plans to brief the Panel on outcome of consultation with the trades on the proposed ban at the Panel meeting on 23 February 2009.

Relevant papers

<u>Information paper provided by the Administration for the joint meeting of the EA and Transport Panels on 12 May 2000</u>

http://www.legco.gov.hk/yr99-00/english/panels/ea/papers/1948e03.pdf

Minutes of the joint meeting of the EA and Transport Panels on 12 May 2000 http://www.legco.gov.hk/yr99-00/english/panels/ea/minutes/ej000512.pdf

<u>Information paper provided by the Administration for the joint meeting of the EA and Transport Panels on 27 February 2001</u>

http://www.legco.gov.hk/yr00-01/english/panels/ea/papers/a652e01.pdf

Follow-up paper provided by the Administration

http://www.legco.gov.hk/yr00-01/english/panels/ea/papers/a1666e.pdf

Minutes of the joint meeting of the EA and Transport Panels on 27 February 2001 http://www.legco.gov.hk/yr00-01/english/panels/ea/minutes/ea270201.pdf

<u>LegCo Brief provided by the Administration for the EA Panel meeting on</u> 26 November 2007

http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea1126-ep150v62-e.pdf

<u>Information paper provided by the Administration for the EA Panel meeting on</u> 26 November 2007

http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea1126cb1-283-3-e.pdf

Minutes of the EA Panel meeting on 26 November 2007

http://www.legco.gov.hk/yr07-08/english/panels/ea/minutes/ea071126.pdf

<u>Information paper provided by the Administration for the EA Panel meeting on 8 January 2008</u>

http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea0108cb1-519-34-e.pdf

Follow-up paper provided by the Administration

http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea0108cb1-1009-1-e.pdf

Minutes of the EA Panel meeting on 8 January 2008

http://www.legco.gov.hk/yr07-08/english/panels/ea/minutes/ea080108.pdf

<u>Information paper provided by the Administration for the EA Panel meeting on</u> 16 January 2008

http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea0116cb1-594-8-e.pdf

Follow-up paper provided by the Administration

http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea0116cb1-907-1-e.pdf http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea0116cb1-1601-1-e.pdf

Minutes of the EA Panel meeting on 16 January 2008

http://www.legco.gov.hk/yr07-08/english/panels/ea/minutes/ea080116.pdf

<u>Information paper provided by the Administration for the EA Panel special meeting</u> on 15 January 2009

http://www.legco.gov.hk/yr08-09/english/panels/ea/papers/ea0115cb1-540-18-e.pdf

Council Business Division 1
<u>Legislative Council Secretariat</u>
17 February 2009

Comparison of Exhaust Emissions between a Running Engine and an Idling Engine

(Note: Assuming the vehicle is moving at a speed of 25 kilometres per hour and with the air-conditioning on.)

Emissions of a running engine as compared to those of an idling engine				
	Nitrogen Oxides	Particulates	Carbon Monoxide	Hydrocarbon
Private Car	Two times more	Difference negligible	23% more	25% more
Diesel Taxi	26% more	Four times more	40% more	One and a half times more
Diesel Light Bus	Double	Four times more	Double	Three and a half times more
Heavy Goods Vehicles	Double	13 times more	Double	Four times more