

**LEGISLATIVE COUNCIL BRIEF**

**Air Pollution Control Ordinance (Cap. 311)**

**Air Pollution Control (Air Pollutant Emission)  
(Controlled Vehicles) Regulation**

**INTRODUCTION**

The Secretary for the Environment ('the Secretary'), after consultation with the Advisory Council on the Environment, made the Air Pollution Control (Air Pollutant Emission) (Controlled Vehicles) Regulation ('the Regulation') at **Annex A** on 15 October 2013 under section 43 of the Air Pollution Control Ordinance (Cap. 311) for phasing out some 80,000 existing pre-Euro IV diesel commercial vehicles and setting a service life limit of 15 years for newly registered diesel commercial vehicles.

**JUSTIFICATIONS**

2. To improve roadside air quality and better protect public health, the Chief Executive proposed in the 2013 Policy Address to phase out some 80,000 pre-Euro IV diesel commercial vehicles through an incentive-cum-regulatory approach and to limit the service life of newly registered diesel commercial vehicles at 15 years. These diesel commercial vehicles include goods vehicles, light buses and non-franchised buses, regardless of whether the vehicles are used commercially or non-commercially<sup>1</sup>. The implementation of the

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<sup>1</sup> The term "diesel commercial vehicles" is a generic name that has been used among the transport trades and in the two previous incentive vehicle replacement schemes launched by the Environmental Protection Department. It is used to avoid ambiguity to the transport trades and include diesel goods vehicles, non-franchised buses and light buses. The Regulation is intended to cover diesel goods vehicles, non-franchised buses and light buses regardless of their nature of use.

proposal can help reduce emissions of respirable suspended particulates (RSP) and nitrogen oxides (NO<sub>x</sub>) from vehicles by 80% and 30% respectively. Apart from contributing to the attainment of the new Air Quality Objectives (AQOs) which will take effect in 2014, the proposal can also reduce the cancer risk due to exposure to diesel engine exhaust which has been classified as carcinogenic by the World Health Organization. A comparison of the emission performance of pre-Euro to Euro V diesel commercial vehicles is at **Annex B**. As at end March 2013, there were some 131,200 registered diesel commercial vehicles in Hong Kong, of which some 84,600 were pre-Euro IV vehicles. A profile of these vehicles is at **Annex C**.

3. Having consulted the relevant transport trades, other relevant stakeholders and the Legislative Council Panel on Environmental Affairs (EA Panel), we revised the proposal and obtained the EA Panel's support at its meeting on 2 October 2013. Under the revised proposal, –

- (i) an ex-gratia payment ranging from 27% to 33% of the average taxable values of new vehicles will be offered to vehicle owners for phasing out their pre-Euro IV diesel commercial vehicles. The payment level will inversely correlate with the age of the vehicles to be phased out and will remain the same throughout the scheme period. This will give extra impetus for vehicle owners to take actions earlier. There will only be one tier of ex-gratia payment irrespective of whether a new replacement vehicle will be acquired;
- (ii) pre-Euro IV diesel commercial vehicles will be phased out in phases with reference to their respective dates of first registration. The retirement deadline for the most polluting pre-Euro diesel commercial vehicles is 1 January 2016, while that for Euro I is 1 January 2017, Euro II is 1 January 2018 and Euro III is 1 January 2020; and

- (iii) a service life limit of 15 years will be set for newly registered diesel commercial vehicles.

4. The Regulation is to effect the proposed retirement deadlines for pre-Euro IV diesel commercial vehicles and the proposed service life limit of 15 years for diesel commercial vehicles first registered after the commencement of the Regulation. The Regulation will require these vehicles to, on each licence application from the specified deadlines or from its 15<sup>th</sup> anniversary date of first registration, as the case may be, comply with the emission standards applicable to them as if they were first registered on the date of the vehicle licence application. Failure to comply with the requirement may be a ground for the Commissioner for Transport to refuse to license the vehicles under section 25(1)(iic) of the Road Transport Ordinance (Cap.374).

5. In line with the previous two incentive schemes for replacing pre-Euro III diesel commercial vehicles and the mandatory installation of emission reduction devices in pre-Euro diesel vehicles launched by the Environmental Protection Department, we propose to use first registration dates for distinguishing pre-Euro IV vehicles of different emission standards in the Regulation. As first registration dates are stated in vehicle registration documents and are not subject to changes, they are easy and clear for pre-Euro IV vehicle owners to understand the phasing-out deadlines applicable to their vehicles. The dates on which Euro I to Euro III emission standards were adopted for the vehicles concerned at their first registration are in the Schedule to the Regulation. For vehicles with first registration dates before 1 April 1995, they have to be phased out by 1 January 2016.

6. After the enactment of the Regulation, we will seek funding approval from the Finance Committee for implementing the ex-gratia payment scheme in the first quarter of 2014.

## **THE REGULATION**

7. The Regulation will be implemented in accordance with sections 43(1)(r) and 43(1)(rg) of the Air Pollution Control Ordinance (Cap. 311), which state that for the purposes of the Air Pollution Control Ordinance (Cap. 311), the Secretary for the Environment may, after consultation with the Advisory Council on the Environment, by regulation provide for-

- (i) the application of standards (including vehicle design standards), specifications, descriptions, methods, procedures, requirements or tests laid down in documents (whether or not published or produced in Hong Kong) not forming part of the regulations and relating to the prevention or reduction of the emission of air pollutants including the application of such standards, specifications, descriptions, methods, procedures, requirements or tests in relation to the prohibition or control of the emission of air pollutants from motor vehicles; and
- (ii) the imposition of requirements as to the design, construction, maintenance, adjustment, repair or operation of any motor vehicle or motor vehicle engine in order to prevent or reduce the emission of air pollutants therefrom.

Besides, section 25(1)(iic) of the Road Transport Ordinance (Cap. 374) provides that the Commissioner for Transport may refuse to license a motor vehicle if the vehicle or any equipment thereof does not comply with any requirement imposed by regulations made under section 43(1) of the Air Pollution Control Ordinance (Cap. 311) in relation to the prohibition or control of the emission of air pollutants from motor vehicles.

8. The Regulation prescribes -

- (i) the vehicles covered by the Regulation;

- (ii) the requirement for the vehicles concerned to comply with the emission standards at the specified dates;
- (iii) the emission standards; and
- (iv) the power of exemption of the Authority.

## **LEGISLATIVE TIMETABLE**

9. The Regulation will be gazetted on 25 October 2013 and tabled at Legislative Council on 30 October 2013 for negative vetting. It will come into operation on 1 February 2014.

## **IMPLICATIONS**

### **Environmental Implications**

10. The Regulation is essential for implementing the proposed retirement deadlines for pre-Euro IV diesel commercial vehicles and setting the service life limit of 15 years to newly registered diesel commercial vehicles. Phasing out pre-Euro IV polluting diesel commercial vehicles can reduce emissions of RSP and NO<sub>x</sub> from vehicles by 80% and 30% respectively. The reduction will reduce the number of premature deaths due to long-term exposure to these pollutants by around 14% per annum. Apart from helping the attainment of the new AQOs, which will take effect in 2014, the phasing-out of these diesel commercial vehicles can also reduce by half the cancer risk due to exposure to diesel engine exhaust. The service life limit of 15 years for newly registered diesel commercial vehicles can help timely replacement of diesel commercial vehicles in the long run for better roadside air quality.

### **Sustainability Implications**

11. The Regulation is in line with the sustainability principles of avoiding environmental problems for present and future generations and providing a living environment which promotes and protects the physical health of the people of Hong Kong. Better air quality is also conducive to improving the quality of life, attracting more tourists and retaining foreign investments and talents in Hong Kong. All these would help reinforce our position as a world city and leading business hub.

### **Economic, Financial and Civil Service Implications**

12. The mandatory retirement of pre-Euro IV diesel commercial vehicles would impose higher business costs for the transportation and logistics sectors as the affected vehicle owners need to replace their vehicles early. This may have adverse impact on the livelihood of some professional drivers and small and medium-sized enterprises providing transport and logistics services. Nevertheless, part of the increased cost burden may be passed on to users of transportation services including various businesses, consumers and passengers, resulting in higher business costs, transport fares and inflation. However, the reduced vehicular emissions of RSP and NO<sub>x</sub> would help reduce the hidden costs of health hazards and productivity loss due to respiratory diseases. To alleviate the financial hardship of the owners of pre-Euro IV diesel commercial vehicles, the Government proposes to provide them with ex-gratia payment involving a one-off non-recurrent funding of about \$11.71 billion and will seek funding approval from the Finance Committee accordingly. The proposed ex-gratia payment for different types of diesel commercial vehicles based on the average vehicle taxable values of all the vehicle classes concerned in 2012-13 financial year is at **Annex D**.

13. To handle the licensing work arising from the de-registration of the retired diesel commercial vehicles arising from the proposal, the Administration will seek the necessary resources through the established channels.

## **Other Implications**

14. The Regulation has no family implications. It is in conformity with the Basic Law, including the provisions concerning human rights.

## **PUBLIC CONSULTATION**

15. Since the announcement of the phasing-out proposal in the 2013 Policy Address, we consulted the Advisory Council on the Environment and the Transport Advisory Committee in March 2013 on the proposal. They both supported the proposal to phase out pre-Euro IV diesel commercial vehicles through an incentive-cum-regulatory approach and to set a statutory retirement age of 15 years for newly registered diesel commercial vehicles.

16. We have consulted the relevant trades including transport operators, vehicle vendors, vehicle body builders and vehicle scrapping agents on the proposal. We also consulted the EA Panel on 15 May 2013 and the EA Panel received deputations from transport trades and other stakeholders on 25 May 2013 on the proposal. The transport trades suggested the phasing out timetable for pre-Euro IV diesel commercial vehicles be extended and the ex-gratia payment be enhanced. Goods vehicle body builders also suggested allowing at least two years for phasing out pre-Euro II, Euro II and Euro III goods vehicles respectively.

17. Having regard to all the views collected, the objective of reducing air pollution caused by pre-Euro IV diesel commercial vehicles as soon as practicable, the principles of prudent fiscal management and the polluter pays, we revised the proposal as set out in paragraphs 3 to 6 above and obtained the support of the EA Panel at its meeting on 2 October 2013. Subsequently, we briefed the relevant transport trades and other stakeholders about the details of the revised proposal in early

October 2013 and they are generally supportive to the revised proposal.

## **PUBLICITY**

18. A press release will be issued before gazettal of the Regulation. A spokesman will be made available for answering media enquiries.

## **ENQUIRIES**

19. For enquiries about this brief, please contact Mr W C Mok, Assistant Director of Environmental Protection (Air Policy) on 3509 8618.

**Environmental Protection Department**  
**October 2013**

## Air Pollution Control (Air Pollutant Emission) (Controlled Vehicles) Regulation

(Made by the Secretary for the Environment under section 43 of the Air  
 Pollution Control Ordinance (Cap. 311) after consultation with the  
 Advisory Council on the Environment)

### Part 1

#### Preliminary

**1. Commencement**

This Regulation comes into operation on 1 February 2014.

**2. Interpretation**

In this Regulation—

*bus* (巴士) has the meaning given by section 2 of the Road Traffic Ordinance (Cap. 374);

*compression-ignition engine* (壓燃式引擎) has the meaning given by regulation 2 of the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311 sub. leg. J);

*controlled vehicle* (受管制車輛)—see section 3;

*designated vehicle* (指定車輛) means a motor vehicle equipped with a compression-ignition engine and falling within any of the following classes—

- (a) a goods vehicle;
- (b) a light bus;
- (c) a non-franchised bus;

*emission* (排放) means emission of any air pollutant;

*first registered* (首次登記) means first registered under the Road Traffic (Registration and Licensing of Vehicles) Regulations (Cap. 374 sub. leg. E);

*goods vehicle* (貨車) has the meaning given by section 2 of the Road Traffic Ordinance (Cap. 374);

*light bus* (小型巴士) has the meaning given by section 2 of the Road Traffic Ordinance (Cap. 374);

*non-franchised bus* (非專利巴士) means a bus that is not a franchised bus as defined by regulation 2(1) of the Road Traffic (Traffic Control) Regulations (Cap. 374 sub. leg. G);

*permitted gross vehicle weight* (許可車輛總重) has the meaning given by section 2 of the Road Traffic Ordinance (Cap. 374);

*registered owner* (登記車主) has the meaning given by section 2 of the Road Traffic Ordinance (Cap. 374);

*vehicle licence* (車輛牌照) has the meaning given by regulation 2(1) of the Road Traffic (Registration and Licensing of Vehicles) Regulations (Cap. 374 sub. leg. E).

## Part 2

### Emission Requirements for Controlled Vehicles

#### 3. Controlled vehicles

A controlled vehicle is—

- (a) a designated vehicle first registered before 1 April 1995;
- (b) a designated vehicle first registered within the period specified in column 3(a) of the Schedule opposite to the vehicle's permitted gross vehicle weight specified in column 2 of the Schedule;
- (c) a designated vehicle first registered within the period specified in column 3(b) of the Schedule opposite to the vehicle's permitted gross vehicle weight specified in column 2 of the Schedule;
- (d) a designated vehicle first registered within the period specified in column 3(c) of the Schedule opposite to the vehicle's permitted gross vehicle weight specified in column 2 of the Schedule; or
- (e) a designated vehicle first registered on or after 1 February 2014.

#### 4. Requirements to conform to emission standards

- (1) For the purposes of an application made on or after the date specified in subsection (2) in respect of a controlled vehicle for a vehicle licence, the emission of the vehicle must conform to the emission standards applicable to the vehicle under section 5.
- (2) The date referred to in subsection (1) is—

- (a) for a controlled vehicle within the meaning of section 3(a), 1 January 2016;
- (b) for a controlled vehicle within the meaning of section 3(b), 1 January 2017;
- (c) for a controlled vehicle within the meaning of section 3(c), 1 January 2018;
- (d) for a controlled vehicle within the meaning of section 3(d), 1 January 2020; or
- (e) for a controlled vehicle within the meaning of section 3(e), the 15th anniversary of the date on which the vehicle is first registered.

### Part 3

## Emission Standards

#### 5. Emission standards

(1) In this section—

*vehicle design standards* (車輛設計標準) means the vehicle design standards applied in the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311 sub. leg. J).

(2) For section 4(1), the emission standards applicable to a controlled vehicle are the vehicle design standards, insofar as they relate to the testing procedures, requirements (except type approval requirements) and emission limits, applicable to the vehicle as if the vehicle were first registered on the date on which the application for a vehicle licence is made.

(3) In determining the vehicle design standards applicable to a controlled vehicle, the vehicle's permitted gross vehicle weight is taken to be its design weight.

#### 6. Exemption by Authority

(1) The Authority, if satisfied that exceptional circumstances make it impractical or unreasonable for a controlled vehicle, or a type of controlled vehicle, to comply with this Regulation, may exempt the controlled vehicle or the type of controlled vehicle from the application of this Regulation.

(2) The exemption may be granted subject to any conditions the Authority thinks fit.

(3) For exempting a controlled vehicle, the Authority must give the registered owner of the vehicle written notice of the exemption.

- (4) For exempting a type of controlled vehicle, the Authority must publish notice of the exemption in the Gazette.
- (5) A notice under subsection (4) is not subsidiary legislation.

**Part 4**  
**Saving**

**7. Saving of other regulations**

This Regulation is in addition to, and not in substitution for, the Road Traffic (Construction and Maintenance of Vehicles) Regulations (Cap. 374 sub. leg. A).

**Schedule**

[s. 3]

**Controlled Vehicles**

Column 1 Designated vehicle	Column 2 Permitted gross vehicle weight (tonnes)	Column 3		
		(a) Period	(b) Period	(c) Period
Goods vehicle	Not more than 1.7	From 1 April 1995 to 30 September 1998	From 1 October 1998 to 31 December 2000	From 1 January 2001 to 31 December 2005
	More than 1.7 but not more than 2.5	From 1 April 1995 to 30 June 1999	From 1 July 1999 to 31 December 2001	From 1 January 2002 to 31 December 2006
	More than 2.5 but not more than 3.5			
	More than 3.5 but not more than 4	From 1 April 1995 to 30 September 1998	From 1 October 1998 to 30 September 2001	From 1 October 2001 to 30 September 2006
	More than 4	From 1 April 1995 to 31 March 1997	From 1 April 1997 to 30 September 2001	

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Column 1	Column 2	Column 3		
Designated vehicle	Permitted gross vehicle weight (tonnes)	(a) Period	(b) Period	(c) Period
Light bus	Not more than 1.7	From 1 April 1995 to 30 September 1998	From 1 October 1998 to 31 December 2000	From 1 January 2001 to 31 December 2005
	More than 1.7 but not more than 2.5	From 1 April 1995 to 30 June 1999	From 1 July 1999 to 31 December 2001	From 1 January 2002 to 31 December 2006
	More than 2.5 but not more than 3.5			
	More than 3.5 but not more than 4	From 1 April 1995 to 30 September 1998	From 1 October 1998 to 31 July 2003	From 1 August 2003 to 30 September 2006
	More than 4	From 1 April 1995 to 31 March 1997	From 1 April 1997 to 30 September 2001	From 1 October 2001 to 30 September 2006

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Column 1	Column 2	Column 3		
Designated vehicle	Permitted gross vehicle weight (tonnes)	(a) Period	(b) Period	(c) Period
Non-franchised bus	Not more than 4	From 1 April 1995 to 30 September 1998	From 1 October 1998 to 30 September 2001	From 1 October 2001 to 30 September 2006
	More than 4	From 1 April 1995 to 31 March 1997	From 1 April 1997 to 30 September 2001	

Secretary for the Environment

2013

### **Explanatory Note**

The purpose of this Regulation is to impose emission standards on specified goods vehicles, light buses and non-franchised buses, in order to improve roadside air quality.

2. The Regulation is divided into 4 Parts.
3. Part 1 provides for commencement and defines terms used in the Regulation.
4. Part 2 provides for the meaning of *controlled vehicle* and the time from which a controlled vehicle must conform to the emission standards.
5. Part 3 prescribes the emission standards and empowers the Director of Environmental Protection to grant exemptions.
6. Part 4 contains a saving provision.

**Comparison of Emission Performance of Diesel Commercial Vehicles  
of Different Vehicle Design Standards**

Vehicle Design Standards	Amount of Exhaust Emission Relative to Euro IV Diesel Commercial Vehicle	
	RSP	NO <sub>x</sub>
Pre-Euro	34	2.6
Euro I	18	2.3
Euro II	7.5	2
Euro III	5	1.4
Euro IV	1	1
Euro V	1	0.6

## Annex C

## Profile of Registered Diesel Commercial Vehicles (as at end March 2013)

Engine Standard (Years of service)	Light Goods Vehicles		Medium Goods Vehicles (5.5<pgvw<=24 T)		Heavy Goods Vehicles (pgvw>24 T)		Non-franchised Bus		Public Light Bus (diesel)		Private Light Bus (diesel)		All Diesel Commercial Vehicles	
	No. of vehicles	% of total	No. of vehicles	% of total	No. of vehicles	% of total	No. of vehicles	% of total	No. of vehicles	% of total	No. of vehicles	% of total	No. of vehicles	% of total
Pre-Euro (18+ years)	10,394	7.9%	7,515	5.7%	674	0.5%	192	0.1%	15	0.0%	322	0.2%	19,112	14.6%
Euro 1 (15-18 years)	9,573	7.3%	2,502	1.9%	315	0.2%	135	0.1%	306	0.2%	365	0.3%	13,196	10.1%
Euro 2 (12-15 years)	12,377	9.4%	6,373	4.9%	824	0.6%	822	0.6%	535	0.4%	392	0.3%	21,323	16.3%
Euro 3 (7-12 years)	17,581	13.4%	9,666	7.4%	515	0.4%	2,662	2.0%	389	0.3%	157	0.1%	30,970	23.6%
Euro 4 or above (0-7 years)	25,856	19.7%	13,780	10.5%	2,271	1.7%	3,805	2.9%	225	0.2%	669	0.5%	46,606	35.5%
Total	75,781	57.8%	39,836	30.4%	4,599	3.5%	7,616	5.8%	1,470	1.1%	1,905	1.5%	131,207	100%

### The Proposed Ex-gratia Payment Based on the Average Vehicle Taxable Values for 2012-13 Financial Year

Vehicle Classes	Average Taxable Value <sup>1</sup> (HK\$)	Age of Scrapped Vehicles and the Proposed Ex-gratia Payment Level (HK\$)		
		16 years or above (27%)	13 years – below 16 years (30%)	below 13 years (33%)
Light Goods Vehicles (weight not exceeding 1.9t)	213,000 <sup>2</sup>	57,510	63,900	70,290
Light Goods Vehicles (van-type)(weight more than 1.9t, but not exceeding 5.5t)	260,880	70,438	78,264	86,090
Light Goods Vehicles(non van-type)(weight more than 1.9t, but not exceeding 5.5t)	332,871	89,875	99,861	109,847
Medium Goods Vehicles (5.5t <weight ≤ 10t)	418,035	112,869	125,411	137,952
Medium Goods Vehicles (10t <weight ≤ 13t)	550,361	148,597	165,108	181,619
Medium Goods Vehicles (13t <weight ≤ 16t)	691,998	186,839	207,599	228,359
Medium Goods Vehicles (16t <weight ≤ 24t)	832,433	224,757	249,730	274,703
Heavy Goods Vehicles(weight more than 24t)	901,782	243,481	270,535	297,588
Non-franchised Buses (17-30 seats)	646,863	174,653	194,059	213,465
Non-franchised Buses (≥ 31 seats)	1,139,649	307,705	341,895	376,084
Light Buses	532,959	143,899	159,888	175,876

<sup>1</sup> To reflect the latest vehicle prices as far as practicable, we will review the amount of ex-gratia payment in the light of the average taxable values of vehicles first registered over the latest twelve-month period available before making our submission to the Finance Committee and hence the estimated funding required for the scheme may be subject to further refinements. The ex-gratia payment amount will remain the same thereafter throughout the proposed scheme.

<sup>2</sup> As no vehicle of this weight class was registered in the 2012-13 financial year, the average vehicle taxable value is based on the vehicles of similar weight that were registered in the 2012-13 financial year.