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# ROAD TRAFFIC ACT (CHAPTER 276)

## ROAD TRAFFIC (VEHICULAR EMISSIONS TAX) RULES 2017

#### ARRANGEMENT OF RULES

#### Rule

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In exercise of the powers conferred by section 11AA of the Road Traffic Act, the Minister for Transport makes the following Rules:

### Citation and commencement

**1.** These Rules are the Road Traffic (Vehicular Emissions Tax) Rules 2017 and come into operation on 1 January 2018.

### **Definitions**

- 2. In these Rules, unless the context otherwise requires
  - "Band C1", in relation to any prescribed vehicular emission, means the range of emission levels that is specified under Band C1 for such emission in the Second Schedule;
  - "Band C2", in relation to any prescribed vehicular emission, means the range of emission levels that is specified under Band C2 for such emission in the Second Schedule;

- "EC Directive" means the most current version of a directive of the European Parliament and the Council of the European Union or a directive of the Council of the European Communities, as the case may be;
- "emission level", in relation to any prescribed vehicular emission, means the quantity of that prescribed vehicular emission expressed in the unit of measurement specified in the Second Schedule for that prescribed vehicular emission;
- "Euro VI", in relation to any passenger car, means the test requirements as specified for Type I tailpipe emission tests in Commission Regulation (EC) No 692/2008 as amended by Commission Regulation (EC) No 459/2012, excluding the requirement to apply deterioration factors on the emission results;
- "HC + NO<sub>x</sub>" means the combined mass of hydrocarbons and oxides of nitrogen in grams per kilometre;
- "JPN 2009", in relation to any passenger car, means the test requirements for exhaust emission standard specified in paragraph 1(1), 1(3) and 1(7) of Article 41 of the Japanese Ministry Land, Infrastructure of and **Transport** No. 619 15 2002 Announcement dated July That Prescribes Details (Announcement of Safety Regulations for Road Vehicles), as amended by the Japanese Ministry of Land, Infrastructure, Transport and Tourism Announcement No. 348 dated 25 March 2008;
- "NMHC" means any non-methane hydrocarbon;
- "prescribed vehicular emission" means any of the vehicular emissions specified in the First Schedule;
- "tax" means the vehicular emissions tax chargeable under section 11AA of the Act;
- "UNECE Regulation No. 101" means the most current version of Regulation No. 101, a Vehicle Regulation of the United Nations Economic Commission for Europe, available on the official website of the United Nations Economic Commission for Europe at http://www.unece.org.

### Vehicular emissions tax

- **3.**—(1) The vehicular emissions tax is chargeable in respect of the first registration on or after 1 January 2018 of any taxable vehicle, being a vehicle that
  - (a) whether new or secondhand, is a motor car or taxi; and
  - (b) has an emission level for any of its prescribed vehicular emissions that falls within Band C1 or Band C2 for that emission.
- (2) The amount of the tax chargeable for a taxable vehicle is as follows:
  - (a) if the emission level of any of the prescribed vehicular emissions from the vehicle falls within Band C2 for that emission
    - (i) for a taxable vehicle other than a taxi, \$20,000; and
    - (ii) for a taxable vehicle that is a taxi, \$30,000;
  - (b) if none of the emission levels of any of the prescribed vehicular emissions from the vehicle fall within Band C2 for that emission
    - (i) for a taxable vehicle other than a taxi, \$10,000; and
    - (ii) for a taxable vehicle that is a taxi, \$15,000.

## Method of determining emission level for carbon dioxide

- **4.**—(1) The emission level from a vehicle for carbon dioxide is determined in accordance with this rule.
- (2) For any vehicle excluding an electric vehicle or a plug-in hybrid electric vehicle, but including a conventional hybrid electric vehicle, the emission level is the amount
  - (a) measured in accordance with the provisions of UNECE Regulation No. 101 or EC Directive 80/1268/EEC; and
  - (b) submitted to the Registrar under section 41(a)(ii) of the Energy Conservation Act (Cap. 92C).

- (3) For an electric vehicle or a plug-in hybrid electric vehicle (excluding a conventional hybrid electric vehicle) the emission level is  $A + (B \times C)$  where
  - (a) A is the weighted carbon dioxide emission data for the vehicle
    - (i) that is
      - (A) for electric vehicles, zero; and
      - (B) for plug-in hybrid electric vehicles, measured in accordance with the provisions of UNECE Regulation No. 101 or EC Directive 80/1268/EEC; and
    - (ii) submitted to the Registrar under section 41(*a*)(ii) of the Energy Conservation Act;
  - (b) B is the weighted electric energy consumption data
    - (i) measured in accordance with the provisions of UNECE Regulation No. 101 or EC Directive 80/1268/EEC; and
    - (ii) submitted to the Registrar under section 41(a)(ii) of the Energy Conservation Act; and
  - (c) C is an emission factor of 0.4 grams of carbon dioxide per watt-hour.

# Method of determining emission level other than for carbon dioxide

- **5.**—(1) The emission level from a vehicle for a prescribed vehicular emission other than carbon dioxide, is determined in accordance with this rule.
- (2) For an electric vehicle, the amount is zero for each such prescribed vehicular emission.
- (3) For any vehicle other than an electric vehicle, the emission level for each such prescribed vehicular emission from a vehicle specified in the first column of the Third Schedule, is the amount —

- (a) measured for the emission using such test method specified in the second column of that Schedule against that vehicle, as is permitted under that column and subject to the additional requirements (if applicable) specified in the third column of that Schedule; and
- (b) submitted to the Registrar under section 41(a)(ii) of the Energy Conservation Act (Cap. 92C).
- (4) For the purpose of paragraph (3), the emission levels being measured must be of the prescribed vehicular emissions from the same test cycle.

### FIRST SCHEDULE

Rule 2

### PRESCRIBED VEHICULAR EMISSIONS

- 1. Carbon dioxide (CO<sub>2</sub>).
- 2. Carbon monoxide (CO).
- 3. Hydrocarbons (HC).
- 4. Oxides of nitrogen (NO<sub>x</sub>).

### SECOND SCHEDULE

Rule 2

### EMISSION BANDS FOR PRESCRIBED VEHICULAR EMISSIONS

First column	Second column	Third column	Fourth column	Fifth column
Prescribed vehicular emission	Unit of measurement of emission level	Band B (neutral emission band)	Band C1	Band C2
CO <sub>2</sub>	g/km	125 < B ≤ 160	160 < C1 ≤ 185	C2 > 185
СО	g/km	$0.190 < B \le 0.270$	$0.270 < C1 \le 0.350$	C2 > 0.350
НС	g/km	$0.036 < B \le 0.052$	$0.052 < C1 \le 0.075$	C2 > 0.075
NO <sub>x</sub>	g/km	$0.013 < B \le 0.024$	$0.024 < C1 \le 0.030$	C2 > 0.030

## THIRD SCHEDULE

Rule 5

## DETERMINATION OF EMISSION LEVELS FOR PRESCRIBED VEHICULAR EMISSIONS OTHER THAN CARBON DIOXIDE

First column	Second column	Third column	
Type of vehicle	Test method for prescribed vehicular emissions other than CO <sub>2</sub>	Additional requirements	
Petrol passenger car with engine employing Gasoline Direct Injection technology and equipped with NO <sub>x</sub> storage reduction catalyst	<ul><li>(1) Euro VI for all such emissions; or</li><li>(2) JPN 2009 for all such emission</li></ul>	For JPN 2009, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.8.	
Petrol passenger car with engine employing Gasoline Direct Injection technology and not equipped with NO <sub>x</sub> storage reduction catalyst	<ul><li>(1) Euro VI for all such emissions; or</li><li>(2) JPN 2009 for all such emissions</li></ul>	For JPN 2009, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.8.	
Passenger car with engine that does not employ Gasoline Direct Injection technology	<ul><li>(1) Euro VI for all such emissions; or</li><li>(2) JPN 2009 for all such emissions</li></ul>	For JPN 2009, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.8.	
Diesel passenger cars	(1) Euro VI for all such emissions; or (2) JPN 2009 for all such emissions	For Euro VI, if "HC + NO <sub>x</sub> " rather than HC is tested, HC to be obtained by subtracting the emission result of NO <sub>x</sub> from "HC + NO <sub>x</sub> ".  For JPN 2009, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.98.	

Made on 27 December 2017.

LOH NGAI SENG Permanent Secretary, Ministry of Transport, Singapore.

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