First published in the Government Gazette, Electronic Edition, on 28 December 2017 at 5 pm.

No. S 776

ROAD TRAFFIC ACT (CHAPTER 276)

ROAD TRAFFIC (VEHICULAR EMISSIONS TAX) RULES 2017

ARRANGEMENT OF RULES

Rule

- 1. Citation and commencement
- 2. Definitions
- 3. Vehicular emissions tax
- 4. Method of determining emission level for carbon dioxide
- Method of determining emission level other than for carbon dioxide
 The Schedules

The Benedules

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;

"Commission Regulation (EU) No. 2017/1151" means the Commission Regulation (EU) 2017/1151 of 1 June 2017 supplementing Regulation (EC) No. 715/2007 of the European Parliament and of the Council on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No. 692/2008 and Commission Regulation (EU) No. 1230/2012 and repealing Commission Regulation (EC) No. 692/2008;

[S 881/2018 wef 01/01/2019]

"Commission Regulation (EU) No. 2017/1153" means the Commission Implementing Regulation (EU) 2017/1153 of 2 June 2017 setting out a methodology for determining the correlation parameters necessary for reflecting the change in the regulatory test procedure and amending Regulation (EU) No. 1014/2010;

[S 881/2018 wef 01/01/2019]

- "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;

[Deleted by S 881/2018 wef 01/01/2019]

- "Euro 6", in relation to any passenger car, means
 - (a) 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; or
 - (b) the test requirements as specified in Sub-Annex I of Commission Regulation (EU) No. 2017/1151,

but excluding the requirement to apply deterioration factors on the emission results;

[S 881/2018 wef 01/01/2019]

- "HC + NO_x" means the combined mass of hydrocarbons and oxides of nitrogen in grams per kilometre;
- "JPN2009", 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 of Land, Infrastructure and No. 15 July Announcement 619 dated (ANNOUNCEMENT THAT PRESCRIBES DETAILS 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;

[S 881/2018 wef 01/01/2019]

"JPN2018", in relation to any passenger car, means the test requirements for exhaust emission standard specified in paragraph 1(1), 1(3)B and 1(7)B of Article 41 of the Japanese Infrastructure Ministry ofLand. and **Transport** 15 Announcement No. 619 dated 2002 July (ANNOUNCEMENT THAT PRESCRIBES DETAILS OF SAFETY REGULATIONS FOR ROAD VEHICLES), as amended by the Japanese Ministry of Land, Infrastructure, Transport and Tourism Announcement No. 528 dated 30 March 2018;

[S 881/2018 wef 01/01/2019]

- "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;

[S 648/2020 wef 01/08/2020]

"WLTP Japan" means the provisions set out in TRIAS 08-002-02 and the provisions in "WLTC-MODE METHOD" of the attachment of "Measurement Procedure for Exhaust Emission of Light- and Medium-Duty Motor Vehicles, II. WLTC-mode Method" (otherwise known as Part II of Attachment 42) of the Japanese Ministry of Land, Infrastructure and Transport Announcement No. 619 dated 15 July 2002 (ANNOUNCEMENT THAT PRESCRIBES DETAILS OF SAFETY REGULATIONS FOR ROAD VEHICLES).

[S 648/2020 wef 01/08/2020]

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 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
 - (A) where the first registration is between 1 January 2018 and 30 June 2021 (both dates inclusive) \$20,000; or
 - (B) where the first registration is between 1 July 2021 and 31 December 2022 (both dates inclusive) \$25,000; and

- (ii) for a taxable vehicle that is a taxi
 - (A) where the first registration is between 1 January 2018 and 30 June 2021 (both dates inclusive) \$30,000; or
 - (B) where the first registration is between 1 July 2021 and 31 December 2022 (both dates inclusive) \$37,500;
- (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
 - (A) where the first registration is between 1 January 2018 and 30 June 2021 (both dates inclusive) \$10,000; or
 - (B) where the first registration is between 1 July 2021 and 31 December 2022 (both dates inclusive) \$15,000; and
 - (ii) for a taxable vehicle that is a taxi
 - (A) where the first registration is between 1 January 2018 and 30 June 2021 (both dates inclusive) \$15,000; or
 - (B) where the first registration is between 1 July 2021 and 31 December 2022 (both dates inclusive) \$22,500.

[S 1091/2020 wef 30/12/2020]

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, EC Directive 80/1268/EEC, Annex I of Commission Regulation (EU) No. 2017/1153, Commission Regulation (EU) No. 2017/1151 or WLTP Japan; and

[S 881/2018 wef 01/01/2019]
[S 648/2020 wef 01/08/2020]

- (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, EC Directive 80/1268/EEC, Annex I of Commission Regulation (EU) No. 2017/1153, Commission Regulation (EU) No. 2017/1151 or WLTP Japan; and

[S 881/2018 wef 01/01/2019]
[S 648/2020 wef 01/08/2020]

- (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, EC Directive 80/1268/EEC, Commission Regulation (EU) No. 2017/1151 or WLTP Japan; and

[S 648/2020 wef 01/08/2020]

(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.

[S 881/2018 wef 01/01/2019]

- (4A) The measurement of the emission level of particulate matter need not be from the same test cycle as the other prescribed vehicular emissions if
 - (a) the emission level of particulate matter may, in accordance with the second column of the Third Schedule, be tested using a different test method from the other prescribed vehicular emissions; and
 - (b) that different test method is so used.

[S 881/2018 wef 01/01/2019]

(5) For the purposes of these Rules, in the case of a petrol passenger car with an engine that does not employ Gasoline Direct Injection technology, if the emission level of particulate matter for the vehicle is not measured, then that emission level is deemed to be more than 2.0 mg/km.

[S 425/2018 wef 01/07/2018]

FIRST SCHEDULE

Rule 2

PRESCRIBED VEHICULAR EMISSIONS

- 1. Carbon dioxide (CO₂).
- 2. Carbon monoxide (CO).
- 3. Hydrocarbons (HC).
- 4. Oxides of nitrogen (NO_x).
- 5. Particulate matter (PM).

[S 425/2018 wef 01/07/2018]

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 ₂	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 _x	g/km	$0.013 < B \le 0.024$	$0.024 < C1 \le 0.030$	C2 > 0.030
PM	mg/km	$0.3 < B \le 0.5$	$0.5 < C1 \le 2$	C2 > 2

[S 425/2018 wef 01/07/2018]

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 ₂	Additional requirements
1. Petrol passenger car with engine employing Gasoline Direct Injection technology and equipped with NO _x storage reduction catalyst	(1) Euro 6 for all such emissions; or(2) JPN2009 or JPN2018 for all such emissions	For JPN2009 or JPN2018, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.8.
2. Petrol passenger car with engine employing Gasoline Direct Injection technology and not equipped with NO _x storage reduction catalyst	 (1) Euro 6 for all such emissions; (2) JPN2009 or JPN2018 for all such emissions; or (3) JPN2009 or JPN2018 for CO, HC and NO_x and Euro 6 for PM 	For JPN2009 or JPN2018, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.8.
3. Petrol passenger car with engine that does not employ Gasoline Direct Injection technology	 (1) Euro 6 for all such emissions; (2) JPN2009 or JPN2018 for all such emissions; (3) Euro 6 for CO, HC and NO_x and JPN2009 or JPN2018 for PM; or (4) JPN2009 or JPN2018 for CO, 	For JPN2009 or JPN2018, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.8.

THIRD SCHEDULE — continued

First column	Second column	Third column
Type of vehicle	Test method for prescribed vehicular emissions other than CO ₂	Additional requirements
	HC and NO _x and Euro 6 for PM	
4. Diesel passenger cars	(1) Euro 6 for all such emissions; or(2) JPN2009 or JPN2018 for all such emissions	For Euro 6, if "HC + NO _x " rather than HC is tested, HC to be obtained by subtracting the emission result of NOx from "HC + NO _x ". For JPN2009 or JPN2018, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.98.

[S 881/2018 wef 01/01/2019] [S 425/2018 wef 01/07/2018]

Made on 27 December 2017.

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

[MOT.LT.443.5.034.0.10; AG/LEGIS/SL/276/2015/69 Vol. 1]

(To be presented to Parliament under section 141(1) of the Road Traffic Act).