



WELLINGTON, NEW ZEALAND

PURSUANT to *section 155(a) and (b)* of the Land Transport Act 1998

I, *Harry James Duynhoven*, Minister for Transport Safety,

HEREBY make the following ordinary Rule:

Land Transport Rule: Vehicle Exhaust Emissions

SIGNED AT Wellington

This 27th day of November 2007

Hon *Harry James Duynhoven*

Minister for Transport Safety

Land Transport Rule
Vehicle Exhaust Emissions 2007

Rule 33001/2007

As at 1 December 2016

Land Transport Rule

Vehicle Exhaust Emissions 2007

As at 1 December 2016

Contents

| | |
|--|-----------|
| Compilation notes | i |
| Part 1 Rule requirements | 1 |
| Section 1 Application | 1 |
| 1.1 Title | 1 |
| 1.2 Scope of Rule | 1 |
| 1.3 Date when Rule comes into force | 1 |
| 1.4 Application of Rule provisions | 2 |
| Section 2 Entry requirements | 2 |
| 2.1 Scope of <i>section 2</i> | 2 |
| 2.2 Vehicle emissions standards | 2 |
| 2.3 Used vehicles or modified new vehicles | 4 |
| Section 3 Metered test | 4 |
| 3.1 Scope of <i>section 3</i> | 4 |
| 3.2 Metered test | 4 |
| Section 4 Visible smoke check | 4 |
| 4.1 Scope of <i>section 4</i> | 4 |
| 4.2 Visible smoke check | 5 |
| Section 5 Responsibilities | 5 |
| 5.1 Responsibilities of repairers and modifiers | 5 |
| 5.2 Responsibilities of vehicle inspectors and inspecting organisations | 5 |
| 5.3 Functions and powers of the Agency | 6 |
| Section 6 Transitional and savings provisions | 6 |
| 6.1 Transitional and savings provision | 6 |
| Part 2 Definitions | 7 |
| Table A—Vehicle classes | 18 |
| Part 3 Schedules | 22 |
| Schedule 1 Approved emissions standards | 22 |
| Table 2.1—Vehicle exhaust emissions requirements for used petrol, LPG and CNG vehicles | 22 |
| Table 2.2—Vehicle exhaust emissions requirements for new petrol, LPG and CNG vehicles | 23 |
| Table 2.3—Vehicle exhaust emissions requirements for used diesel vehicles | 25 |

| | |
|---|----|
| Table 2.4—Vehicle exhaust emissions requirements for new diesel vehicles | 26 |
| Schedule 2 Metered test | 28 |
| Table 3.1—Limits for carbon monoxide and hydrocarbon emissions for petrol or LPG vehicles | 28 |
| Schedule 3 US 2007—Additional requirements | 36 |
| Table 4.1—Emission limit options for US Transient and Steady State tests | 36 |
| Schedule 4 Immigrants' vehicles | 38 |
| Application for identification of vehicle as immigrant's vehicle | 38 |
| Identification of immigrant's vehicle | 39 |
| Conditions of use | 39 |
| Interpretation | 39 |

Compilation notes

1 General

This is a compilation of *Land Transport Rule: Vehicle Exhaust Emissions 2007* that incorporates all the amendments to that Rule as at the date of the last amendment to it.

2 Format changes

Format changes to compilations are made so that the format of the compilation is consistent with current drafting practice, including:

- changes to the setting out of provisions, tables, and schedules:
- the repositioning of headings or notes:
- changes to typeface and type size:
- the addition or removal of boldface, italics, and similar textual attributes:
- the addition or removal of quote marks and rules:
- changes to the case of letters or words:
- addition of history and editorial notes.

3 Amendments incorporated in this reprint

Land Transport Rule: Vehicle Exhaust Emissions Amendment 2016

Land Transport Rule: Vehicle Exhaust Emissions Amendment 2013

Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012

Land Transport Rule: Vehicle Exhaust Emissions Amendment 2011

Land Transport Rule: Vehicle Exhaust Emissions Amendment 2010

Land Transport Rule: Vehicle Standards Compliance Amendment 2010

Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009

Part 1

Rule requirements

Section 1 Application

1.1 Title

This Rule is *Land Transport Rule: Vehicle Exhaust Emissions 2007*.

1.2 Scope of Rule

1.2(1) This Rule applies to petrol, diesel, LPG and CNG motor vehicles.

1.2(2) This Rule does not apply to ancillary engines that do not power the vehicle's wheels.

1.2(3) *Section 2* specifies requirements:

- (a) with which a motor vehicle must comply before it may be certified for entry into service in New Zealand under *Land Transport Rule: Vehicle Standards Compliance 2002*; and
- (b) that are, for the purposes of *Land Transport Rule: Vehicle Standards Compliance 2002*, the applicable requirements for the exhaust emissions systems and exhaust control equipment of motor vehicles certified for entry into service in New Zealand.

1.2(4) *Sections 3 and 4* specify requirements:

- (a) with which a motor vehicle must comply so as to be operated on a road; and
- (b) that are, for the purposes of *Land Transport Rule: Vehicle Standards Compliance 2002*, the applicable requirements for inspection and certification of exhaust emissions systems and exhaust control equipment.

1.3 Date when Rule comes into force

1.3(1) This Rule revokes and replaces *Land Transport Rule: Vehicle Exhaust Emissions 2006*, which came into force on 27 October 2006.

1.3(2) Except as provided in *1.3(3)*, this Rule comes into force on 3 January 2008.

- 1.3(3) The following provisions come into force on 1 May 2008:
- (a) *paragraph 2.1(2)(c)*; and
 - (b) *paragraphs 2.2(3)(a) and (b)*; and
 - (c) *clause 2.3*; and
 - (d) *paragraph 3.1(2)(c)*.

1.4 Application of Rule provisions

If there is a conflict between a provision of this Rule and a provision of *Land Transport Rule: Vehicle Standards Compliance 2002*, the provision of *Land Transport Rule: Vehicle Standards Compliance 2002* applies.

Section 2 Entry requirements

2.1 Scope of section 2

- 2.1(1) Except as provided in 2.1(2), this section applies to vehicles of Classes MA, MB, MC, MD1, MD2, MD3, MD4, ME, NA, NB and NC in *Table A* in *Part 2* that are:
- (a) required by *Land Transport Rule: Vehicle Standards Compliance 2002* to be certified for entry into service; and
 - (b) certified for entry into service on or after 3 January 2008.
- 2.1(2) This section does not apply to:
- (a) a motor vehicle first registered outside of New Zealand, or manufactured, twenty years or more before its date of certification for entry into service; or
 - (b) tractors; or
 - (c) Class MA or Class MC motor sport vehicles.

Clause 2.1(2)(a): replaced, on 1 January 2013, by *clause 2.1(1)* of *Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012*.

2.2 Vehicle emissions standards

- 2.2(1) Except as provided in 2.2(2) and 2.2(3), a vehicle to which this section applies must have complied when manufactured or modified with:
- (a) an approved vehicle emissions standard:
 - (i) specified in *Table 2.1*, *Table 2.2*, *Table 2.3* or *Table 2.4* of *Schedule 1*;
 - (ii) that is relevant to its class and fuel type;

(iii) to the extent that the standard applies to the exhaust emissions system and emissions control equipment;
or

(b) a more recent version of the standard; or

(c) a higher standard.

Note: 'Higher standard' is a defined term.

2.2(1A) Compliance with 2.2(1) must be established by production of a declaration, by a person authorised to do so in accordance with the requirements of the relevant standard-setting jurisdiction, that the vehicle:

(a) has been tested in accordance with all procedures and testing requirements set out in the approved vehicle emissions standard; and

(b) complies with the full standard.

2.2(1B) A determination of whether a vehicle has been manufactured or modified to a standard in 2.2(1) must not be made solely on the result of that vehicle undergoing the metered test prescribed in *Schedule 2*.

2.2(2) A vehicle used exclusively by the New Zealand Defence Force may be fitted with a defeat device to override an exhaust emissions control on the vehicle.

2.2(3) This clause does not apply to:

(a) immigrants' vehicles; or

(b) Class MA special interest vehicles; or

(c) mobile cranes; or

(d) vehicles specified in *paragraph (a)* of the definition of 'low volume vehicle' that comply with the emissions requirements of the *Low Volume Vehicle Code*.

Clause 2.2(1A): inserted, on 1 January 2013, by *clause 2.1(2)* of *Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012*.

Clause 2.2(1B): inserted, on 1 January 2013, by *clause 2.1(2)* of *Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012*.

Clause 2.2(3)(a): amended, on 1 April 2010, by *clause 2.1* of *Land Transport Rule: Vehicle Exhaust Emissions Amendment 2010*.

Clause 2.2(3)(b): amended, on 7 May 2009, by *clause 2.1* of *Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009*.

Clause 2.2(3)(d): amended, on 1 October 2011, by *clause 2.1* of *Land Transport Rule: Vehicle Exhaust Emissions Amendment 2011*.

2.3 Used vehicles or modified new vehicles

A vehicle to which this section applies must pass the metered test prescribed in *Schedule 2* on entry into service if it is:

- (a) a used vehicle; or
- (b) a new vehicle that has been modified such that the modification might prevent the vehicle being able to pass the test.

Section 3 Metered test

3.1 Scope of *section 3*

3.1(1) Except as provided in 3.1(2), this section applies to vehicles of Classes MA, MB, MC, MD1, MD2, MD3, MD4, ME, NA, NB and NC in *Table A* in *Part 2* that:

- (a) are required by *Land Transport Rule: Vehicle Standards Compliance 2002* to be certified for entry into service; and
- (b) were certified for entry into service on or after 1 May 2008.

3.1(2) This section does not apply to:

- (a) a motor vehicle first registered outside of New Zealand, or manufactured, twenty years or more before its date of certification for entry into service; or
- (b) tractors; or
- (c) Class MA or Class MC motor sport vehicles.

Clause 3.1(2)(a): replaced, on 1 January 2013, by clause 2.1(3) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.

3.2 Metered test

A vehicle's exhaust emissions system or exhaust control equipment must not be modified so as to prevent the vehicle being able to pass the metered test prescribed in *Schedule 2*.

Section 4 Visible smoke check

4.1 Scope of *section 4*

This section applies to all motor vehicles that:

- (a) must be certified for operation in service under *section 7* of *Land Transport Rule: Vehicle Standards Compliance 2002*; and

- (b) are powered by an internal combustion engine.

4.2 Visible smoke check

4.2(1) A vehicle to which this section applies must not emit clearly visible smoke when the vehicle's engine is running at its normal operating temperature, under either of the following conditions:

- (a) for a continuous period of five seconds when the engine is idling;
- (b) as the engine is being accelerated rapidly to approximately 2500 revolutions per minute or approximately half the maximum engine speed (whichever is lower).

4.2(2) *Subclause 4.2(1)* does not apply if the driver of the vehicle produces documentation that proves that:

- (a) the engine is original equipment for the vehicle; and
- (b) the engine's design does not allow the vehicle to reasonably comply.

Section 5 Responsibilities

5.1 Responsibilities of repairers and modifiers

A person who repairs or modifies a vehicle's exhaust emissions system or exhaust control equipment must ensure that:

- (a) if the vehicle is one to which *section 3* applies, the vehicle is able to pass the metered test prescribed in *Schedule 2*; and
- (b) if the vehicle is one to which *section 4* applies, the repair or modification does not prevent the vehicle from complying with that section.

5.2 Responsibilities of vehicle inspectors and inspecting organisations

A vehicle inspector or inspecting organisation must not certify a motor vehicle under *Land Transport Rule: Vehicle Standards Compliance 2002* if the inspector or inspecting organisation has reason to believe that the vehicle does not comply with this Rule.

5.3 Functions and powers of the Agency

- 5.3(1) The Agency may identify in writing, in accordance with *Schedule 4*, a vehicle as an immigrant's vehicle for the purposes of 2.2(3)(a).
- 5.3(2) The Agency may, by notice in the *Gazette*, appoint an organisation or organisations to process applications for specific motor vehicles to be identified as immigrants' vehicles for the purposes of 2.2(3)(a).

Clause 5.3: inserted, on 1 April 2010, by clause 2.2 of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2010.

Section 6 Transitional and savings provisions

6.1 Transitional and savings provision

- 6.1(1) A vehicle that was inspected at the border before 1 February 2008 is deemed to comply with 2.2(1) if it would have complied with *section 2 of Land Transport Rule: Vehicle Exhaust Emissions 2006* had that Rule not been revoked.
- 6.1(2) For the purpose of 2.2(1) and *Table 2.1 of Schedule 1*, a vehicle that complied when manufactured or modified with the Japan 98 Idling Standard, and has the Japanese emission code GF, HK, GG or HL, is deemed to have complied when manufactured or modified (as appropriate) with Japan 98.

Part 2

Definitions

ADR 30/01 is an abbreviation for *Australian Design Rule 30/01, Diesel Engine Exhaust Smoke Emissions*.

ADR 79/00 is an abbreviation for *Australian Design Rule 79/00, Emission Control for Light Vehicles*.

ADR 79/01 is an abbreviation for *Australian Design Rule 79/01, Emission Control for Light Vehicles*.

ADR 79/02 is an abbreviation for *Australian Design Rule 79/02, Emission Control for Light Vehicles*.

ADR 79/03 is an abbreviation for *Vehicle Standard (Australian Design Rule 79/03 – Emission Control for Light Vehicles) 2011*.

ADR 79/04 is an abbreviation for *Vehicle Standard (Australian Design Rule 79/04 – Emission Control for Light Vehicles) 2011*.

ADR 80/00 is an abbreviation for *Australian Design Rule 80/00, Emission Control for Heavy Vehicles*.

ADR 80/01 is an abbreviation for *Australian Design Rule 80/01, Emission Control for Heavy Vehicles*.

ADR 80/02 is an abbreviation for *Australian Design Rule 80/02, Emission Control for Heavy Vehicles*.

ADR 80/03 is an abbreviation for *Australian Design Rule 80/03, Emission Control for Heavy Vehicles*.

Approved vehicle emissions standard means a vehicle emissions standard specified in *Table 2.1, 2.2, 2.3 or 2.4* and, to avoid doubt, an approved vehicle emissions standard is an approved vehicle standard for the purposes of *Land Transport Rule: Vehicle Standards Compliance 2002*.

BAR-97 means the California Bureau of Automotive Repair's *BAR-97 Emissions Inspection System Specifications*.

Compressed natural gas or CNG means compressed gas consisting of more than 50% methane by volume.

CNG vehicle means a vehicle that operates, or is designed to operate, on compressed natural gas or a CNG mixture.

Diesel means a refined petroleum distillate:

- (a) having a viscosity and distillation range that is intermediate between those of kerosene and light lubricating oil, whether or not it contains additives; and

- (b) that is intended for use as fuel in internal combustion engines ignited by compression.

Diesel vehicle means a vehicle that operates, or is designed to operate, on diesel or a diesel mixture.

Emissions control equipment includes on-board diagnostics.

Enter service in relation to a vehicle, means to begin to be operated in service on the road in New Zealand for the first time in compliance with registration requirements of the *Transport (Vehicle and Driver Registration and Licensing) Act 1986* and **entry into service** shall be construed accordingly.

Euro 2 (or, for heavy vehicles, **Euro II**)—

- (a) for a Class MA, MB, MC, MD1 or MD2 vehicle, means:
- (i) *UN/ECE Regulation No. 83, uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements (E/ECE/324E/ECE/TRANS/505/Rev.1/Add.82/Rev.1/Amend.2) incorporating the 03 series of amendments; or*
 - (ii) *Council Directive 70/220/EEC as amended by Council Directive 94/12/EC; or*
- (b) for a Class NA vehicle means:
- (i) *UN/ECE Regulation No. 83, uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements (E/ECE/324E/ECE/TRANS/505/Rev.1/Add.82/Rev.1/Amend.4) incorporating the 04 series of amendments; or*
 - (ii) *Council Directive 70/220/EEC as amended by Council Directive 96/69/EC; or*
- (c) for a heavy vehicle, means:
- (i) *UN/ECE Regulation No. 49 – uniform provisions concerning the approval of compression-ignition (CI) and natural gas (NG) engines as well as positive-ignition (PI) engines fuelled with liquid petroleum gas (LPG) and vehicles equipped with CI and NG engines and PI engines fuelled with LPG, with regard to the emissions of pollutants by the engine (E/ECE/324E/ECE/TRANS/505/Rev.1/Add.48/Rev.3), incorporating the 02 series of amendments, as per the limit values in row B of the Table in section 5.2.1; or*
 - (ii) *Council Directive 88/77/EEC of 3 December 1987 on the approximation of the laws of the Member States relating to measures to be taken against the emission of gaseous pollutants from diesel*

engines for use in vehicles, as amended by Council Directive 96/1/EC, as per the limit values in row B of the Table in section 6.2.1; and

- (d) for a diesel vehicle, also includes:
- (i) *UN/ECE Regulation No. 24, uniform provisions concerning:*
 - (A) *the approval of compression ignition (C.I.) engines with regard to the emission of visible pollutants;*
 - (B) *the approval of motor vehicles with regard to the installation of C.I. engines of an approved type;*
 - (C) *the approval of motor vehicles equipped with C.I. engines with regard to the emission of visible pollutants by the engine;*
 - (D) *the measurement of power of C.I. engine, (E/ECE/324E/ECE/TRANS/505/Rev.1/Add.23/Rev.2) incorporating the 03 series of amendments; or*
 - (ii) *Council Directive 72/306/EEC of 2 August 1972 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of pollutants from diesel engines for use in vehicles as amended by Council Directive 89/491/EC.*

Euro 3 (or, for heavy vehicles, **Euro III**)—

- (a) means:
- (i) *UN/ECE Regulation No. 83, uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements (E/ECE/324E/ECE/TRANS/505/Rev.1/Add.82/Rev.2) incorporating the 05 series of amendments, as per the limit values in row A of the table to clause 5.3.1.4; or*
 - (ii) *Council Directive 70/220/EEC as amended by Council Directive 98/69/EC as per the limit values in row A of the table to clause 5.3.1.4 of Annex I of 98/69/EC; or*
 - (iii) *UN/ECE Regulation No. 49 – uniform provisions concerning the approval of compression-ignition (CI) and natural gas (NG) engines as well as positive-ignition (PI) engines fuelled with liquid petroleum gas (LPG) and vehicles equipped with CI and NG engines and PI engines fuelled with LPG, with regard to the emissions of pollutants by the engine (E/ECE/324E/ECE/TRANS/505/Rev.1/Add.48/Rev.3/Amend.1), incorporating the 03 series of amendments, as per the limit values in row A or C of Table 1 and/or 2 (as appropriate), in section 5.2.1; or*
 - (iv) *Council Directive 88/77/EEC of 3 December 1987 on the approximation of the laws of the Member States relating to measures*

to be taken against the emission of gaseous pollutants from diesel engines for use in vehicles, as amended by Council Directive 1999/96/EC as per the limit values in row A or C of Table 1 and/or 2 (as appropriate), in section 6.2.1; or

- (v) *Council Directive 2005/55/EC of 28 September 2005 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines for use in vehicles, and the emission of gaseous pollutants from positive ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles as per the limit values in row A or C of Table 1 and/or 2 (as appropriate), in section 6.2.1; and*
- (b) for a diesel vehicle, also includes:
 - (i) *UN/ECE Regulation No. 24, uniform provisions concerning:*
 - (A) *the approval of compression ignition (C.I.) engines with regard to the emission of visible pollutants;*
 - (B) *the approval of motor vehicles with regard to the installation of C.I. engines of an approved type;*
 - (C) *the approval of motor vehicles equipped with C.I. engines with regard to the emission of visible pollutants by the engine;*
 - (D) *the measurement of power of C.I. engine,*
(E/ECE/324E/ECE/TRANS/505/Rev.1/Add.23/Rev.2) incorporating the 03 series of amendments; or
 - (ii) *Council Directive 72/306/EEC of 2 August 1972 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of pollutants from diesel engines for use in vehicles as amended by Council Directive 97/20/EC.*

Euro 4 (or, for heavy vehicles, **Euro IV**)—

- (a) means:
 - (i) *UN/ECE Regulation No. 83, uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements (E/ECE/324E/ECE/TRANS/505/Rev.1/Add.82/Rev.2) incorporating the 05 series of amendments, as per the limit values in row B of the table to clause 5.3.1.4; or*
 - (ii) *Council Directive 70/220/EEC as amended by Council Directive 98/69/EC as per the limit values in row B of the table to clause 5.3.1.4 of Annex I of 98/69/EC; or*

- (iii) *UN/ECE Regulation No. 49 – uniform provisions concerning the approval of compression-ignition (CI) and natural gas (NG) engines as well as positive-ignition (PI) engines fuelled with liquid petroleum gas (LPG) and vehicles equipped with CI and NG engines and PI engines fuelled with LPG, with regard to the emissions of pollutants by the engine
(E/ECE/324E/ECE/TRANS/505/Rev.1/Add.48/Rev.3/Amend.1) incorporating the 03 series of amendments, as per the limit values in row B1 or C of Table 1 and/or 2 (as appropriate), in section 5.2.1; or*
 - (iv) *Council Directive 88/77/EEC of 3 December 1987 on the approximation of the laws of the Member States relating to measures to be taken against the emission of gaseous pollutants from diesel engines for use in vehicles, as amended by Council Directive 1999/96/EC as per the limit values in row B1 or C of Table 1 and/or 2 (as appropriate), in section 6.2.1; or*
 - (v) *Council Directive 2005/55/EC of 28 September 2005 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines for use in vehicles, and the emission of gaseous pollutants from positive ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles as per the limit values in row B1 or C of Table 1 and/or 2 (as appropriate), in section 6.2.1; and*
- (b) for a diesel vehicle, also includes:
- (i) *UN/ECE Regulation No. 24, uniform provisions concerning:*
 - (A) *the approval of compression ignition (C.I.) engines with regard to the emission of visible pollutants;*
 - (B) *the approval of motor vehicles with regard to the installation of C.I. engines of an approved type;*
 - (C) *the approval of motor vehicles equipped with C.I. engines with regard to the emission of visible pollutants by the engine;*
 - (D) *the measurement of power of C.I. engine,
(E/ECE/324E/ECE/TRANS/505/Rev.1/Add.23/Rev.2) incorporating the 03 series of amendments; or*
 - (ii) *Council Directive 72/306/EEC of 2 August 1972 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of pollutants from diesel engines for use in vehicles as amended by Council Directive 97/20/EC.*

Euro 5 (or, for heavy vehicles, **Euro V**) means:

- (a) *Commission Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 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, as amended by Commission Regulation (EC) No 692/2008 of 18 July 2008, as per Euro 5 emissions limits set out in Annex I; or*
- (b) *UN/ECE Regulation No. 83, uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements (E/ECE/324E/ECE/TRANS/505/Rev. 1/Add.82/Rev.4) incorporating the 06 series of amendments; or*
- (c) *UN/ECE Regulation No. 49 – uniform provisions concerning the approval of compression-ignition (CI) and natural gas (NG) engines as well as positive-ignition (PI) engines fuelled with liquid petroleum gas (LPG) and vehicles equipped with CI and NG engines and PI engines fuelled with LPG, with regard to the emissions of pollutants by the engine (E/ECE/324E/ECE/TRANS/505/Rev.1/Add.48/Rev.5) incorporating the 05 series of amendments, as per the limit values in row B2 or C of Table 1 and/or 2 (as appropriate), in section 5.2.1.*

Existing model means, in relation to a vehicle, not a new model vehicle.

Heavy vehicle means a vehicle that is either:

- (a) of Class MD3, MD4, ME, NB, NC, TC or TD; or
- (b) a vehicle (not of a class specified in *Table A: Vehicle classes*) with a gross vehicle mass that exceeds 3500 kg.

Higher standard means an approved vehicle emissions standard that would have applied to the vehicle:

- (a) in the case of *Table 2.2* or *2.4*, if the vehicle was manufactured at a later date; or
- (b) in the case of *Table 2.1* or *2.3*, if the vehicle was certified for entry into service during a later period.

Immigrant's vehicle means a motor vehicle that has been identified in writing, under *Land Transport Rule: Frontal Impact 2001*, or in accordance with *Schedule 4* by the Agency or by an organisation appointed by the Agency under *5.3(2)*.

Inspected at the border means, in relation to a vehicle, inspected at the time of its importation into New Zealand.

Inspecting organisation has the same meaning as in *Land Transport Rule: Vehicle Standards Compliance 2002*.

ISO 3930 means ISO Standard 3930:2000 *Instruments for measuring vehicle exhaust emissions*.

Japan 98 means

- (a) *Japan Safety Regulations for Road Vehicles, Article 31 – Emission Control Device*, as revised by Japanese Ministry of Transport Ordinance 22 issued on 31 March 1997, as established by the relevant *Japan Safety Regulations for Road Vehicles* test procedures, technical standards and circulars; or
- (b) *the Mean Value Standards for Motor Vehicle Exhaust Emissions, Circular of Chigi No. 129 of April 4, 1985*, as amended by *Circulars of Chigi No. 56 of April 2, 1986, Chigi No. 9 of January 23, 1987, Chigi No. 108 of May 29, 1989, Chigi No. 161 of June 28, 1991, Jikan No. 344 of December 17, 1993 and Jikan No.102 of April 11, 1997*,

as evidenced by the Japanese emissions codes ‘GD’, ‘HG’, ‘GC’, ‘HH’, ‘GE’, ‘HJ’, ‘BA’, ‘BB’.

Japan 98 Idling Standard means Paragraph 8 (Idling Operation for CO of Gasoline- or LPG-fueled Motor Vehicles) and Paragraph 9 (Idling Operation for HC of Gasoline- or LPG-fueled Motor Vehicles) of *Japan Safety Regulations for Road Vehicles, Article 31 – Emission Control Device*, as revised by Japanese Ministry of Transport Ordinance 22 issued on 31 March 1997, as established by the relevant *Japan Safety Regulations for Road Vehicles* test procedures, technical standards and circulars

Japan 00/02 means *Japan Safety Regulations for Road Vehicles, Article 31 – Emission Control Device*, as revised by Japanese Ministry of Transport Ordinance 67 issued on 30 September 1998, as established by the relevant *Japan Safety Regulations for Road Vehicles* test procedures, technical standards and circulars.

Japan 02/04 means *Japan Safety Regulations for Road Vehicles, Article 31 – Emission Control Device*, as revised by Japanese Ministry of Transport Ordinance 31 issued on 5 September 2000, as established by the relevant *Japan Safety Regulations for Road Vehicles* test procedures, technical standards and circulars.

Japan 05 means *Japan Safety Regulations for Road Vehicles, Article 31 – Emission Control Device*, as revised by the Ministry of Land Infrastructure and Transport Notification No. 1317 of 26 September 2003, as established by the relevant *Japan Safety Regulations for Road Vehicles* test procedures, technical standards and circulars.

Japan 09 means *Japan Safety Regulations for Road Vehicles, Article 31 – Emission Control Device*, as revised by the Ministry of Land Infrastructure and Transport Announcement No. 348 of 2008, as established by the relevant *Japan Safety Regulations for Road Vehicles* test procedures, technical standards and circulars.

Light vehicle means a vehicle that is not a heavy vehicle.

Liquefied petroleum gas or **LPG** means propane, propylene, butane, butylene or isobutene; and includes a mixture consisting wholly or principally of any such substance, whether or not the mixture contains any other hydrocarbon.

LPG vehicle means a vehicle that operates, or is designed to operate, on liquefied petroleum gas or an LPG mixture.

Low volume vehicle has the same meaning as in *Land Transport Rule: Vehicle Standards Compliance 2002*.

Low volume vehicle code means the code of the Low Volume Vehicle Technical Association Incorporated.

Mobile crane does not include a truck mounted with crane apparatus.

Modify in relation to a vehicle, means to change the vehicle from its original state by altering, substituting, adding or removing any structure, system, component or equipment; but does not include repair.

Motor vehicle has the same meaning as in *section 2(1)* of the *Land Transport Act 1998*.

Motor sport vehicle has the same meaning as in *Land Transport Rule: Frontal Impact 2001*.

New vehicle means a vehicle that:

- (a) has not been registered and operated in New Zealand or any other country; and
- (b) has not been operated on a road in New Zealand or any other country as a demonstration or courtesy vehicle; and
- (c) has not been used for training or testing purposes; and
- (d) is not a low volume vehicle that contains components that have been fitted to a vehicle that has been operated on the road in New Zealand or in any other country.

New model vehicle means, in relation to a vehicle, manufactured in the calendar year in which the vehicle model was first manufactured.

OIML R99 means Organisation Internationale de Métrologie Légale Recommendation OIML R99 *Instruments for measuring vehicle exhaust emissions*.

Original equipment means equipment that is:

- (a) fitted by the vehicle manufacturer when the vehicle is manufactured; or
- (b) approved by the vehicle manufacturer for use in a specific vehicle type for a specific purpose.

Petrol means a refined petroleum distillate:

- (a) normally boiling within the limits of 30°C to 220°C;

- (b) whether or not it contains additives;
- (c) that is intended for use as a fuel in spark-ignition internal combustion engines.

Petrol vehicle means a vehicle that operates, or is designed to operate, on petrol or a petrol mixture.

Repair means to restore a damaged or worn vehicle, its structure, systems, components or equipment; and includes the replacement of damaged or worn structures, systems, components or equipment with equivalent undamaged or new structures, systems, components or equipment.

Smoke does not include water vapour.

Special interest vehicle has the same meaning as in *Land Transport Rule: Frontal Impact 2001*.

Tractor means a motor vehicle (other than a traction engine) constructed principally for towing an agricultural trailer or powering agricultural implements.

UN/ECE is an abbreviation for United Nations Economic Commission for Europe.

US 98D means:

- (a) *Federal Regulation 40 CFR Part 86, Control of Emissions from New and In-Use Highway Vehicles and Engines – Subpart 86.098-11 Emission standards for 1998 and later model year diesel heavy-duty engines and vehicles* as established by the relevant *Federal Regulation 40 CFR Part 86* certification and test procedures; or
- (b) *Title 13 of the California Code of Regulations* in force in California on 31 December 1998.

US 98P means:

- (a) *Federal Regulation 40 CFR Part 86, Control of Emissions from New and In-Use Highway Vehicles and Engines – Subpart 86.098-10 Emission standards for 1998 and later model year Otto-cycle heavy-duty engines and vehicles* as established by the relevant *Federal Regulation 40 CFR Part 86* certification and test procedures; or
- (b) *Title 13 of the California Code of Regulations* in force in California on 31 December 1998.

US 2001 means:

- (a) *Federal Regulation 40 CFR Part 86, Control of Emissions from New and In-Use Highway Vehicles and Engines –*
 - (i) *Subpart 86.1811-01 Emission standards for light-duty vehicles;*
 - (ii) *Subpart 86.1812-01 Emission standards for light-duty trucks 1;*

- (iii) *Subpart 86.1813-01 Emission standards for light-duty trucks 2;*
- (iv) *Subpart 86.1814-01 Emission standards for light-duty trucks 3;*
- (v) *Subpart 86.1815-01 Emission standards for light-duty trucks 4,*
in each case as established by the relevant *Federal Regulation 40 CFR Part 86* certification and test procedures; or
- (b) *Title 13 of the California Code of Regulations* in force in California on 31 December 2001.

US 2004 means:

- (a) *Federal Regulation 40 CFR Part 86, Control of Emissions from New and In-Use Highway Vehicles and Engines – Subpart 86.1811-04 Emission standards for light-duty vehicles, light-duty trucks and medium-duty passenger vehicles* as established by the relevant *Federal Regulation 40 CFR Part 86* certification and test procedures; or
- (b) *Federal Regulation 40 CFR Part 86, Control of Emissions from New and In-Use Highway Vehicles and Engines – Subpart 86.004-11 Emission standards for 2004 and later model year diesel heavy-duty engines and vehicles* as established by the relevant *Federal Regulation 40 CFR Part 86* certification and test procedures; or
- (c) *Title 13 of the California Code of Regulations* in force in California on 31 December 2004.

US 2007 means *Federal Regulation 40 CFR Part 86, Control of air pollution from new and in-use motor vehicles and new and in-use motor vehicle engines certification and test procedures – Subpart A 40 CFR 86.007-11* as supplemented by the requirements of *Schedule 3* to this Rule.

Used vehicle means a vehicle, including a vehicle that has been used for the purpose of demonstration in connection with the sale of a similar vehicle, that has, at any time before being offered or displayed for sale, been:

- (a) registered under:
 - (i) the *Transport Act 1962*; or
 - (ii) the *Transport (Vehicle and Driver Registration and Licensing Act) 1986*; or
 - (iii) any corresponding legislation in any other country; or
- (b) used for a purpose not connected with its manufacture or sale.

Vehicle has the same meaning as in *section 2(1)* of the *Land Transport Act 1998*.

Vehicle inspector has the same meaning as in *Land Transport Rule: Vehicle Standards Compliance 2002*.

Vehicle standard means a technical specification with which a motor vehicle, its structure, systems, components or equipment must comply, and which is adopted by:

- (a) the New Zealand Standards Council; or
- (b) any international, national or regional organisation with functions similar to the New Zealand Standards Council.

*Part 2, Definitions, **ADR**: inserted, on 7 May 2009, by clause 2.2(1) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009.*

*Part 2, Definitions, **ADR 79/03**: inserted, on 1 January 2013, by clause 3.1(1) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.*

*Part 2, Definitions, **ADR 79/04**: inserted, on 1 January 2013, by clause 3.1(1) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.*

*Part 2, Definitions, **Euro 2**: inserted, on 7 May 2009, by clause 2.2(2) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009.*

*Part 2, Definitions, **Euro 2**: amended, on 1 January 2013, by clause 3.1(2) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.*

*Part 2, Definitions, **Euro 3**: replaced, on 7 May 2009, by clause 2.2(3) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009.*

*Part 2, Definitions, **Euro 3**: amended, on 1 January 2013, by clause 3.1(3) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.*

*Part 2, Definitions, **Euro 4**: replaced, on 7 May 2009, by clause 2.2(4) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009.*

*Part 2, Definitions, **Euro 4**: amended, on 1 January 2013, by clause 3.1(4) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.*

*Part 2, Definitions, **Euro 5**: inserted, on 1 April 2010, by clause 3.1 of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2010.*

*Part 2, Definitions, **Euro 5**: replaced, on 1 January 2013, by clause 3.1(5) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.*

*Part 2, Definitions, **immigrant's vehicle**: replaced, on 1 April 2010, by clause 3.2 of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2010.*

*Part 2, Definitions, **Japan 09**: inserted, on 1 January 2013, by clause 3.1(6) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.*

*Part 2, Definitions, **low volume production vehicle**: revoked, on 1 October 2011, by clause 3.1 of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2011.*

*Part 2, Definitions, **low volume vehicle**: inserted, on 1 October 2011, by clause 3.2 of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2011.*

*Part 2, Definitions, **new vehicle**: amended, on 1 January 2014, by clause 2.1 of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2013.*

*Part 2, Definitions, **scratch-built vehicle**: revoked, on 1 January 2014, by clause 2.2 of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2013.*

*Part 2, Definitions, **US 2008**: revoked, on 1 January 2013, by clause 3.1(7) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.*

Table A—Vehicle classes

| Class | Description |
|---------------------------------|--|
| AA (Pedal cycle) | A vehicle designed to be propelled through a mechanism solely by human power. |
| AB (Power-assisted pedal cycle) | A pedal cycle to which is attached one or more auxiliary propulsion motors having a combined maximum power output not exceeding 300 watts. |
| LA (Moped with two wheels) | A motor vehicle (other than a power-assisted pedal cycle) that: <ul style="list-style-type: none"> (a) has two wheels; and (b) either: <ul style="list-style-type: none"> (i) has an engine cylinder capacity not exceeding 50 ml and a maximum speed not exceeding 50 km/h; or (ii) has a power source other than a piston engine and a maximum speed not exceeding 50 km/h. |
| LB (Moped with three wheels) | A motor vehicle (other than a power-assisted pedal cycle) that: <ul style="list-style-type: none"> (a) has three wheels; and (b) either: <ul style="list-style-type: none"> (i) has an engine cylinder capacity not exceeding 50 ml and a maximum speed not exceeding 50 km/h; or (ii) has a power source other than a piston engine and a maximum speed not exceeding 50 km/h. |
| LB 1 | A Class LB motor vehicle that has one wheel at the front and two wheels at the rear. |
| LB 2 | A Class LB motor vehicle that has two wheels at the front and one wheel at the rear. |
| LC (Motor cycle) | A motor vehicle that: <ul style="list-style-type: none"> (a) has two wheels; and (b) either: <ul style="list-style-type: none"> (i) has an engine cylinder capacity exceeding 50 ml; or (ii) has a maximum speed exceeding 50 km/h. |
| LD (Motor cycle and side-car) | A motor vehicle that: <ul style="list-style-type: none"> (a) has three wheels asymmetrically arranged in relation to the longitudinal median axis; and (b) either: <ul style="list-style-type: none"> (i) has an engine cylinder capacity exceeding 50 ml; or (ii) has a maximum speed exceeding 50 km/h. |
| Side-car | A car, box, or other receptacle attached to the side of a motor cycle and supported by a wheel. |
| LE (Motor tri-cycle) | A motor vehicle that: <ul style="list-style-type: none"> (a) has three wheels symmetrically arranged in relation to the longitudinal median axis; and (b) has a gross vehicle mass not exceeding one tonne; and |

| Class | Description |
|--|--|
| | (c) either: (i) has an engine cylinder capacity exceeding 50 ml; or (ii) has a maximum speed exceeding 50 km/h. |
| LE 1 | A Class LE motor vehicle that has one wheel at the front and two wheels at the rear. |
| LE 2 | A Class LE motor vehicle that has two wheels at the front and one wheel at the rear. |
| Passenger vehicle | A motor vehicle that: (a) is constructed primarily for the carriage of passengers; and (b) either: (i) has at least four wheels; or (ii) has three wheels and a gross vehicle mass exceeding one tonne. |
| MA (Passenger car) | A passenger vehicle (other than a Class MB or Class MC vehicle) that has not more than nine seating positions (including the driver's seating position). |
| MB (Forward control passenger vehicle) | A passenger vehicle (other than a Class MC vehicle): (a) that has not more than nine seating positions (including the driver's seating position); and (b) in which the centre of the steering wheel is in the forward quarter of the vehicle's total length. |
| MC (Off-road passenger vehicle) | A passenger vehicle, designed with special features for off-road operation, that has not more than nine seating positions (including the driver's seating position), and that: (a) has four-wheel drive; and (b) has at least four of the following characteristics when the vehicle is unladen on a level surface and the front wheels are parallel to the vehicle's longitudinal centre-line and the tyres are inflated to the vehicle manufacturer's recommended pressure: (i) an approach angle of not less than 28 degrees; (ii) a breakover angle of not less than 14 degrees; (iii) a departure angle of not less than 20 degrees; (iv) a running clearance of not less than 200 mm; (v) a front axle clearance, rear axle clearance, or suspension clearance of not less than 175 mm. |
| Omnibus | A passenger vehicle that has more than nine seating positions (including the driver's seating position). An omnibus comprising two or more nonseparable but articulated units shall be considered as a single vehicle. |
| MD (Light omnibus) | An omnibus that has a gross vehicle mass not exceeding 5 tonnes. |
| MD 1 | An omnibus that has a gross vehicle mass not exceeding 3.5 tonnes and not more than 12 seats. |

| Class | Description |
|---------------------------|---|
| MD 2 | An omnibus that has a gross vehicle mass not exceeding 3.5 tonnes and more than 12 seats. |
| MD 3 | An omnibus that has a gross vehicle mass exceeding 3.5 tonnes but not exceeding 4.5 tonnes. |
| MD 4 | An omnibus that has a gross vehicle mass exceeding 4.5 tonnes but not exceeding 5 tonnes. |
| ME (Heavy omnibus) | An omnibus that has a gross vehicle mass exceeding 5 tonnes. |
| Goods vehicle | <p>A motor vehicle that:</p> <p>(a) is constructed primarily for the carriage of goods; and</p> <p>(b) either:</p> <p>(i) has at least four wheels; or</p> <p>(ii) has three wheels and a gross vehicle mass exceeding one tonne.</p> <p>For the purpose of this description:</p> <p>(a) a vehicle that is constructed for both the carriage of goods and passengers shall be considered primarily for the carriage of goods if the number of seating positions multiplied by 68 kg is less than 50% of the difference between the gross vehicle mass and the unladen mass;</p> <p>(b) the equipment and installations carried on special purpose vehicles not designed for the carriage of passengers shall be considered to be goods;</p> <p>(c) a goods vehicle that has two or more non-separable but articulated units shall be considered to be a single vehicle.</p> |
| NA (Light goods vehicle) | A goods vehicle that has a gross vehicle mass not exceeding 3.5 tonnes. |
| NB (Medium goods vehicle) | A goods vehicle that has a gross vehicle mass exceeding 3.5 tonnes but not exceeding 12 tonnes. |
| NC (Heavy goods vehicle) | A goods vehicle that has a gross vehicle mass exceeding 12 tonnes. |
| Trailer | A vehicle without motive power that is constructed for the purpose of being drawn behind a motor vehicle. |
| TA (Very light trailer) | A single-axled trailer that has a gross vehicle mass not exceeding 0.75 tonnes. |
| TB (Light trailer) | A trailer (other than a Class TA trailer) that has a gross vehicle mass not exceeding 3.5 tonnes. |
| TC (Medium trailer) | A trailer that has a gross vehicle mass exceeding 3.5 tonnes but not exceeding 10 tonnes. |

| Class | Description |
|--------------------|--|
| TD (Heavy trailer) | A trailer that has a gross vehicle mass exceeding 10 tonnes. |

*Part 2, Table A, item relating to **Class AB (power-assisted pedal cycle)**: amended, on 1 April 2010, by clause 3.1 of *Land Transport Rule: Vehicle Standards Compliance Amendment 2010*.*

Part 3 Schedules

Schedule 1 Approved emissions standards

Table 2.1—Vehicle exhaust emissions requirements for used petrol, LPG and CNG vehicles

| Certified for entry into service | Approved vehicle emissions standard | |
|--|---|---|
| | Used petrol, LPG and CNG vehicles | |
| | Light vehicles | Heavy vehicles |
| On or after 3 January 2008 and before 1 January 2009 | ADR 79/00; Euro 2; Japan 98; or US 2001 | ADR 80/02; Japan 00/02; or US 98P |
| On or after 1 January 2009 and before 1 January 2012 | ADR 79/01; Euro 3; Japan 00/02; or US 2001 | ADR 80/02 Japan 00/02; or US 98P |
| On or after 1 January 2012 | ADR 79/02; Euro 4; Japan 05; or US 2004 | ADR 80/02; Euro IV; Japan 05; or US 2004 |

Table 2.2—Vehicle exhaust emissions requirements for new petrol, LPG and CNG vehicles

| Date of manufacture | Approved vehicle emissions standards | | | |
|---|---|---|--|--|
| | New petrol, LPG and CNG vehicles | | | |
| | Light vehicles | | Heavy vehicles | |
| | New model | Existing model | New model | Existing model |
| Before 3 January 2008 | ADR 79/01; Euro 3; Japan 00/02; or US 2001 | ADR 79/01; Euro 3; Japan 00/02; or US 2001 | ADR 80/01; Japan 00/02; or US 98P | ADR 80/01; Japan 00/02; or US 98P |
| On or after 3 January 2008 and before 1 January 2009 | Manufactured before 1 July 2008 ADR 79/01; Euro 4; Japan 05; or US 2004 | ADR 79/01; Euro 3; Japan 00/02; or US 2001 | ADR 80/02; Euro IV; Japan 05; or US 2004 | ADR 80/02; Euro IV; Japan 00/02; or US 98P |
| | Manufactured on or after 1 July 2008 ADR 79/02; Euro 4; Japan 05; or US 2004 | | | |
| On or after 1 January 2009 and before 1 January 2010 | ADR 79/02; Euro 4; Japan 05; or US 2004 | ADR 79/01; Euro 4; Japan 05; or US 2004 | ADR 80/02; Euro IV; Japan 05; or US 2004 | ADR 80/02; Euro IV; Japan 05; or US 2004 |
| On or after 1 January 2010 and before 1 January 2011 | ADR 79/02; Euro 4; Japan 05; or US 2004 | Manufactured before 1 July 2010 ADR 79/01; Euro 4; Japan 05; or US 2004 | ADR 80/03; Euro IV; Japan 05; or US 2004 | ADR 80/02; Euro IV; Japan 05; or US 2004 |
| | | Manufactured on or after 1 July 2010 ADR 79/02; Euro 4; Japan 05; or US 2004 | | |
| On or after 1 January 2011 and before 1 January 2012 | ADR 79/02; Euro 4; Japan 05; or US 2004 | ADR 79/02; Euro 4; Japan 05; or US 2004 | ADR 80/03; Euro V; Japan 05; or US 2004 | ADR 80/03; Euro IV; Japan 05; or US 2004 |
| On or after 1 January 2012 and before 1 November 2013 | ADR 79/02; Euro 4; Japan 05; or US 2004 | ADR 79/02; Euro 4; Japan 05; or US 2004 | ADR 80/03; Euro V; Japan 05; or US 2004 | ADR 80/03; Euro V; Japan 05; or US 2004 |

As at 1 December 2016

| Date of manufacture | Approved vehicle emissions standards | | | |
|---|---|---|---|---|
| | New petrol, LPG and CNG vehicles | | | |
| | Light vehicles | | Heavy vehicles | |
| | New model | Existing model | New model | Existing model |
| On or after 1 November 2013 and before 1 January 2014 | ADR 79/03; Euro 5; Japan 05; or US 2004 | ADR 79/02; Euro 4; Japan 05; or US 2004 | ADR 80/03; Euro V; Japan 05; or US 2004 | ADR 80/03; Euro V; Japan 05, or US 2004 |
| On or after 1 January 2014 and before 1 January 2015 | ADR 79/03; Euro 5; Japan 05; Japan 09; or US 2007 | ADR 79/02; Euro 4; Japan 05; or US 2004 | ADR 80/03; Euro V; Japan 05; Japan 09; or US 2007 | ADR 80/03; Euro V; Japan 05; or US 2004 |
| On or after 1 January 2015 and before 1 November 2016 | ADR 79/03; Euro 5; Japan 05; Japan 09; or US 2007 | ADR 79/02; Euro 4; Japan 05; Japan 09; or US 2007 | ADR 80/03; Euro V; Japan 05; Japan 09; or US 2007 | ADR 80/03; Euro V; Japan 05; Japan 09; or US 2007 |
| On or after 1 November 2016 | ADR 79/04; Euro 5; Japan 05; Japan 09; or US 2007 | ADR 79/04; Euro 5; Japan 05; Japan 09; or US 2007 | ADR 80/03; Euro V; Japan 05; Japan 09; or US 2007 | ADR 80/03; Euro V; Japan 05; Japan 09; or US 2007 |

Table 2.3—Vehicle exhaust emissions requirements for used diesel vehicles

| Certified for entry into service | Approved vehicle emissions standard | |
|--|---|--|
| | Used diesel vehicles | |
| | Light vehicles | Heavy vehicles |
| On or after 3 January 2008 and before 1 January 2009 | ADR 30/01 and ADR 79/01; Euro 4; Japan 02/04; or US 2004 | ADR 30/01 and ADR 80/00 Euro III; Japan 02/04; or US 2004 |
| On or after 1 January 2009 and before 1 January 2010 | ADR 30/01 and ADR 79/01; Euro 4; Japan 02/04; or US 2004 | ADR 30/01 and ADR 80/02; Euro IV; Japan 02/04; or US 2004 |
| On or after 1 January 2010 | ADR 30/01 and ADR 79/01; Euro 4; Japan 05; or US 2004 | ADR 30/01 and ADR 80/02; Euro IV; Japan 05; or US 2004 |

Table 2.4—Vehicle exhaust emissions requirements for new diesel vehicles

| Date of manufacture | Approved vehicle emissions standard | | | |
|---|--|--|--|--|
| | New diesel vehicles | | | |
| | Light vehicles | | Heavy vehicles | |
| | New model | Existing model | New model | Existing model |
| Before 3 January 2008 | ADR 79/01 and ADR 30/01; Euro 4; Japan 02/04; or US 2004 | ADR 79/01 and ADR 30/01; Euro 4; Japan 02/04; or US 2004 | ADR 80/00 and ADR 30/01; Euro III; Japan 02/04; or US 2004 | ADR 80/00 and ADR 30/01; Euro III; Japan 02/04; or US 98D |
| On or after 3 January 2008 and before 1 January 2009 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 79/01 and ADR 30/01; Euro 4; Japan 02/04; or US 2004 | ADR 80/02 and ADR 30/01; Euro IV; Japan 05; or US 2004 | ADR 80/00 and ADR 30/01; Euro III; Japan 02/04; or US 2004 |
| On or after 1 January 2009 and before 1 January 2010 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 80/02 and ADR 30/01; Euro IV; Japan 05; or US 2007 | ADR 80/02 and ADR 30/01; Euro IV; Japan 02/04; or US 2004 |
| On or after 1 January 2010 and before 1 January 2011 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 80/03; Euro IV; Japan 05; or US 2007 | ADR 80/02 and ADR 30/01; Euro IV; Japan 05; or US 2004 |
| On or after 1 January 2011 and before 1 January 2012 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 80/03; Euro V; Japan 05; or US 2007 | ADR 80/03; Euro IV; Japan 05; or US 2004 |
| On or after 1 January 2012 and before 1 November 2013 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 80/03; Euro V; Japan 05; or US 2007 | ADR 80/03; Euro V; Japan 05; or US 2004 |
| On or after 1 November 2013 and before 1 January 2014 | ADR 79/03; Euro 5; Japan 05; or US 2004 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 80/03; Euro V; Japan 05; or US 2007 | ADR 80/03; Euro V; Japan 05; or US 2004 |
| On or after 1 January 2014 and before 1 January 2015 | ADR 79/03; Euro 5; Japan 05; Japan 09; or US 2007 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; or US 2004 | ADR 80/03; Euro V; Japan 05; Japan 09; or US 2007 | Manufactured before 1 July 2014 ADR 80/03; Euro V; Japan 05; or US 2004 Manufactured on or after 1 July 2014 ADR 80/03; |

| Date of manufacture | Approved vehicle emissions standard | | | |
|---|---|---|---|---|
| | New diesel vehicles | | | |
| | Light vehicles | | Heavy vehicles | |
| | New model | Existing model | New model | Existing model |
| | | | | Euro V; Japan 05; or US 2007 |
| On or after 1 January 2015 and before 1 November 2016 | ADR 79/03; Euro 5; Japan 05; Japan 09; or US 2007 | ADR 79/01 and ADR 30/01; Euro 4; Japan 05; Japan 09; or US 2007 | ADR 80/03; Euro V; Japan 05; Japan 09; or US 2007 | ADR 80/03; Euro V; Japan 05; Japan 09; or US 2007 |
| On or after 1 November 2016 | ADR 79/04; Euro 5; Japan 05; Japan 09; or US 2007 | ADR 79/04; Euro 5; Japan 05; Japan 09; or US 2007 | ADR 80/03; Euro V; Japan 05; Japan 09; or US 2007 | ADR 80/03; Euro V; Japan 05; Japan 09; or US 2007 |

Schedule 1, Table 2.1: amended, on 1 January 2013, by clause 4.1(1) and (2) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.

Schedule 1, Table 2.2: replaced, on 1 January 2013, by clause 4.1(3) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.

Schedule 1, Table 2.2: amended, on 1 December 2016, by clause 2.1(1) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2016.

Schedule 1, Table 2.3: amended, on 1 January 2013, by clause 4.1(4) and (5) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.

Schedule 1, Table 2.4: replaced, on 1 January 2013, by clause 4.1(6) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2012.

Schedule 1, Table 2.4: amended, on 1 December 2016, by clause 2.1(2) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2016.

Schedule 2 Metered test

Part A Metered test standards

1.0 Petrol, LPG and CNG vehicles

A petrol, LPG or CNG vehicle must not exceed the applicable maximum carbon monoxide and hydrocarbon emissions limits in *Table 3.1*, when it is tested in accordance with the procedures and equipment prescribed in *Part B* of this *Schedule*.

Table 3.1—Limits for carbon monoxide and hydrocarbon emissions for petrol or LPG vehicles

| Vehicle | Carbon monoxide | Hydrocarbons (parts per million) |
|---|-----------------|----------------------------------|
| A motor vehicle powered by a four-stroke or rotary engine | 1% | 300 |
| A motor vehicle powered by a two-stroke engine | 4.5% | 7800 |

2.0 Diesel vehicles

2.1 A diesel vehicle must be tested in accordance with:

- (a) the procedures and equipment prescribed in *Part C* of this *Schedule*; or
- (b) the alternative procedure and equipment prescribed in *Part D* of this *Schedule*.

2.2 If a vehicle is tested in accordance with *Part C*, it must not exceed 25% opacity.

2.3 If a vehicle is tested in accordance with *Part D*:

- (a) the first or second measurement must result in an optical absorption coefficient of less than or equal to 0.64m^{-1} ; or
- (b) the average of three measurements must result in an optical absorption coefficient of less than or equal to 0.8m^{-1} .

Part B Procedure for measuring petrol, LPG or CNG, CO and HC exhaust emissions

1.0 Scope

This part prescribes the procedure and equipment for measuring exhaust emissions of carbon monoxide (CO) and hydrocarbons, from petrol, LPG or CNG vehicles tested in idle condition.

2.0 Procedure

2.1 Pre-testing

2.1.1 The apparatus for measuring carbon monoxide or hydrocarbons must be warmed up and calibrated before use, in accordance with the manufacturer's directions.

2.1.2 The sampling probe (ie, the exhaust gas sampling part of the measuring apparatus) must be inserted sufficiently into the exhaust pipe so as to prevent the admission of open air, assuring sampling of exhaust gas only.

2.2 During the test

2.2.1 For the duration of the test:

- (c) the vehicle's engine must be idling;
- (d) the acceleration pedal must be released;
- (e) the handbrake must be applied; and
- (f) the vehicle's transmission must be:
 - (i) in neutral; or
 - (ii) if the vehicle is an automatic, in park.

2.3 Re-testing

2.3.1 If a vehicle fails the test, it may be necessary to ensure that it has reached normal operating temperature as recommended by the manufacturer.

2.3.2 The vehicle's operating temperature must be measured using a temperature measuring probe.

2.3.4 The temperature measuring probe should be thoroughly checked, maintained, calibrated and used in accordance with the manufacturer's instructions.

3.0 Equipment (Exhaust emission analysers)

3.1 The instruments used for analysing exhaust emissions must be:

- (a) capable of testing carbon monoxide and hydrocarbon emissions; and
 - (b) comply with:
 - (i) *BAR-97 Emissions Inspection System Specifications*; or
 - (ii) *OIML R99/ISO 3930 Instruments for measuring vehicle exhaust emissions, Class 1 Standards*; or
 - (iii) *Japan Safety Regulations for Road Vehicles, Technical Standard - Machinery Equipment for Vehicle Inspection* as specified by the Minister for Transport in Announcement No. 375 of 14 June 1995.
- 3.2 The instruments should be thoroughly checked, maintained and calibrated in accordance with the respective manufacturers' instructions.

Part C Procedure for measuring diesel smoke during rapid acceleration under no-load condition

1.0 Scope

This part prescribes the procedure, standards and equipment for measuring vehicle exhaust smoke emitted from diesel engines when the engine is accelerated rapidly from idle condition.

2.0 Approved procedure for testing

The vehicle's exhaust smoke must be measured using the procedure in Japanese Industrial Standard *JIS D 1101:1985, Diesel Engine Smoke Measurement*.

3.0 Testing standards

Correct procedures must be followed during the testing and measuring process to ensure that the required testing standards are achieved.

3.1 Pre-testing

The following procedures must be carried out before testing of the vehicle begins.

- 3.1.1 Residual smoke must be purged. The purge (or sweep of residual smoke) must be performed before the sampling of diesel smoke.

- 3.1.2 The equipment to be used must be warmed up and calibrated in accordance with the manufacturer's direction.
- 3.1.3 The measuring probe (the exhaust emission part of the diesel smoke measuring system) must be inserted sufficiently into the exhaust pipe to prevent open air from entering the pipe and ensure that only exhaust gas is sampled.
- 3.2 *Operation of the vehicle during testing*
- 3.2.1 The vehicle must be stationary, with the handbrake applied and the transmission:
- (a) in neutral; or
 - (b) if the vehicle is an automatic, in park.
- Racing (purge)* (see diagram 1)
- 3.2.2 When the engine is idling the accelerator must be depressed rapidly to the full governed revolutions per minute (RPM).
- 3.2.3 Immediately after the engine reaches its maximum (governed) RPM, the accelerator must be released to return the engine to idling. This operation must be repeated twice.
- Idling* (see diagram 1)
- 3.2.4 The engine must run in idling for five or six seconds.
- 3.3 *Measuring* (see diagram 1)
- 3.3.1 The accelerator must be fully depressed, and keep it in this state for two seconds.
- 3.3.2 The accelerator must then be released for 13 seconds, during which time the diesel smoke must be sampled. This operation must be repeated twice.

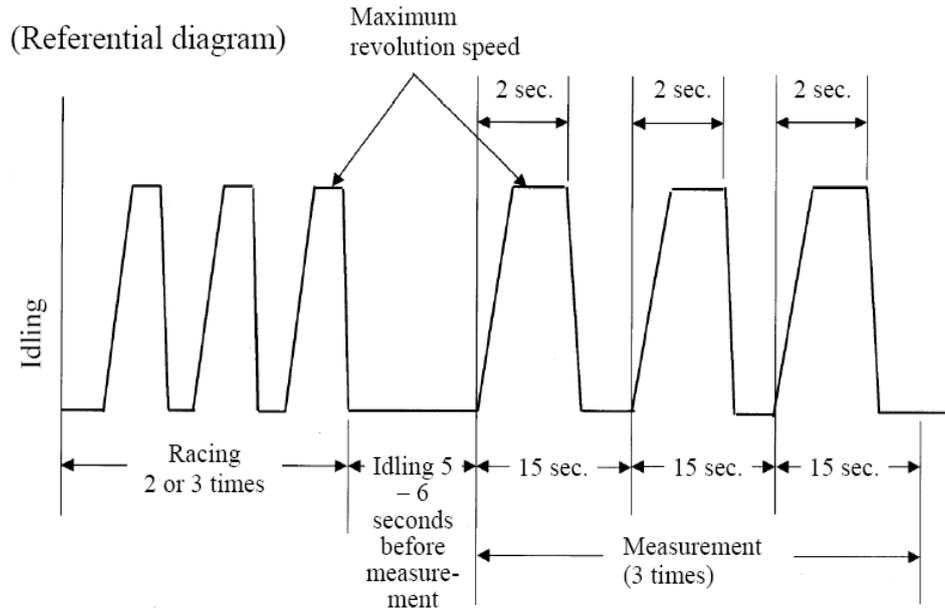


Diagram 1—Diesel emissions test cycle using a filter paper test

- 3.4 *Sampling of diesel smoke*
- 3.4.1 A sample of 0.33 litres must be absorbed through a filter paper by means of a pump-type exhaust smoke sampling device.
- 3.4.2 The degree to which the filter paper is polluted, due to the smoke contained in the vehicle's exhaust emissions, must be measured by the exhaust smoke analyser measurement device.
- 3.5 *Handling of measured values*
- 3.5.1 The degree of pollution must be an average of three measured values.
- 4.0 Equipment (Exhaust smoke analyser)**
- 4.1 The equipment prescribed in Japanese Industrial Standard *JIS D 8004, Reflection Type Smokemeters for Automobile Diesel Engines* must be used for analysing exhaust emissions.
- 4.2 The equipment used in testing must be used in accordance with the manufacturer's directions.
- Part D Alternative procedure for measuring exhaust emissions of diesel vehicles (using an opacimeter)**
- 1.0 Scope**
- This part prescribes an alternative procedure for measuring vehicle exhaust smoke emitted from diesel engines.

2.0 Testing**2.1 Pre-testing**

- 2.1.1 The vehicle must be brought to the normal operating temperature.
- 2.1.2 The equipment must be readied before use, in accordance with the equipment manufacturer's instructions.

2.2 During testing

For the duration of the test:

- (a) the vehicle must be stationary; and
- (b) the handbrake must be applied; and
- (c) the vehicle's transmission must be:
 - (i) in neutral; or
 - (ii) if the vehicle is an automatic, in park.

2.3 Operation of the vehicle

- 2.3.1 During the test procedure, the vehicle operation cycle must follow these phases (see diagram 2)

Purge

- 2.3.2 Residual smoke must be purged from the vehicle's exhaust system before the vehicle's diesel smoke is sampled.

Idling before testing

- 2.3.3 The engine must be run at idle for five or six seconds before the first test cycle.

Inserting probe

- 2.3.4 The probe (the exhaust gas sampling part of the measuring equipment) must be inserted sufficiently into the exhaust pipe to prevent outside air from entering the probe and to ensure that only exhaust gas is sampled.

Test cycle

- 2.3.5 The accelerator pedal must be fully and rapidly depressed for a period of two seconds, then released for 3 seconds (see diagram 2).
- 2.3.6 Despite 2.3.5, if the opacimeter has a function allowing the measurement of engine RPM, the accelerator pedal should only be depressed until the highest engine RPM is indicated by the opacimeter (rather than for the fixed period of two seconds).

2.3.7 The exhaust emission must be sampled throughout this (five-second) period.

Idling between test cycles

2.3.8 The engine must be run at idle for 4-10 seconds between each test cycle that is performed.

2.4 Measured values

2.4.1 One, two or three test cycles must be performed as necessary.

2.4.2 If the result of measurement 1 is:

- (a) less than or equal to an optical absorption coefficient (OAC) of 0.64m^{-1} , the vehicle passes the test;
- (b) more than an OAC of 0.64m^{-1} , the test cycle must be repeated.

2.4.3 If the result of measurement 2 is:

- (a) less than or equal to an OAC of 0.64m^{-1} , the vehicle passes the test;
- (b) more than an OAC of 0.64m^{-1} , the test cycle must be repeated.

2.4.4 If the average of the three measurements is:

- (a) less than or equal to an OAC of 0.8m^{-1} , the vehicle passes the test;
- (b) more than an OAC of 0.8m^{-1} , the vehicle fails the test.

2.4.5 To avoid doubt, if the vehicle does not meet the prescribed standard after three test cycles, the vehicle fails the test.

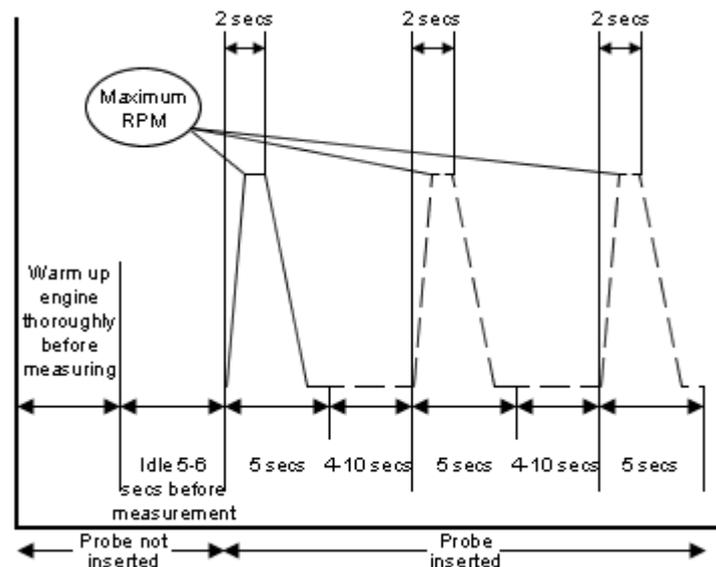


Diagram 2—Diesel emissions test cycle using an opacimeter

3.0 Equipment (Exhaust smoke analyser)

- 3.1 The instruments used for analysing exhaust emissions must comply with ISO 11614:1999 *Reciprocating internal combustion compression-ignition engines – Apparatus for measurement of the opacity and for determination of the light absorption coefficient of exhaust gas*.
- 3.2 The equipment must be thoroughly checked, maintained, calibrated, and used in accordance with the manufacturer's directions.

Schedule 2, Part A, clause 2.0: replaced, on 7 May 2009, by clause 2.3(1) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009.

Schedule 2, Part C, heading above paragraph 3.2.2: amended, on 7 May 2009, by clause 2.3(2)(a) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009.

Schedule 2, Part C, heading above paragraph 3.2.4: amended, on 7 May 2009, by clause 2.3(2)(b) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009.

Schedule 2, Part C, heading above paragraph 3.3: amended, on 7 May 2009, by clause 2.3(2)(c) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009.

Schedule 2, Part C, heading to Diagram 1: amended, on 7 May 2009, by clause 2.3(3) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009.

Schedule 2, Part D: inserted, on 7 May 2009, by clause 2.3(4) of Land Transport Rule: Vehicle Exhaust Emissions Amendment 2009.

Schedule 3

US 2007—Additional requirements

Vehicles certified as compliant with US 2007 must also meet the following additional requirements:

- 1.0 Except as provided in subclauses 1.1 and 1.2, engines shall meet the emission limits specified in 40 CFR Part 86 Sections 86.007-11(a)(1) (i)(A), (ii)(A), (iii)(A) and (iv)(A) and 86.007-11(a)(3)SET(i).
- 1.1 Engines need not comply with the nitrogen oxides and particulate limits specified in §86.007-11 (a)(1)(i)(A) and (iv)(A) if the emissions of nitrogen oxides and particulates from the engine do not exceed the limits specified for the transient test under either Option 1 or Option 2 in Table 4.1 when tested in accordance with the transient test cycle specified in Subpart N 86.1333-2007.
- 1.2 Engines need not comply with the weighted average emission limits specified in §86.007-11 (a)(3)SET(i), provided the emissions of nitrogen oxides and particulates from the engine do not exceed the limits specified for the steady state test under either Option 1 or Option 2 in Table 4.1 when tested to the supplemental emissions test specified in Subpart N §86.1360-2007.

Table 4.1—Emission limit options for US Transient and Steady State tests

| | | Emission limits (g/kWh) | |
|-------------------|----------|-------------------------|--------------|
| | | Oxides of nitrogen | Particulates |
| Transient test | Option 1 | 2.0 | 0.03 |
| | Option 2 | 3.0 | 0.01 |
| Steady State test | Option 1 | 2.0 | 0.02 |
| | Option 2 | 3.0 | 0.01 |

- 2.0 Engines must be tested in accordance with the applicable test procedures specified in *Subpart N 40 CFR 86.1300 series – Emission Regulations for new Otto-cycle and diesel heavy duty engines; gaseous and particulate exhaust test procedures.*
- 3.0 Engines that operate on diesel or liquefied petroleum gas must satisfy the relevant useful life provisions not to exceed test requirements and rules regarding use of auxiliary emission

control devices applicable to 2007, 2008 and 2009 model year diesel heavy-duty engines and vehicles under CFR Part 86.

4.0 Engines that operate on diesel or liquefied petroleum gas and require the use of a consumable reagent in order to achieve the emission limits specified in US 2007, must be equipped with an on-board diagnostics (OBD) system that complies with the Stage 2 requirements described in section 6.5 of Annex I and section 3.3 of Annex IV of European Commission Directive 2005/78/EC¹ as amended by Directive 2006/51/EC².

5.0 Engines must not be equipped with a defeat device or utilise a defeat strategy.

¹ Commission Directive 2005/78/EC of 14 November 2005 implementing Directive 2005/55/EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines for use in vehicles, and the emission of gaseous pollutants from positive ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles and amending Annexes I, II, III, IV and VI thereto.

² Commission Directive 2006/51/EC of 6 June 2006 amending for the purposes of adapting to technical progress Annex I to Directive 2005/55/EC of the European Parliament and of the Council and Annexes IV and V to Directive 2005/78/EC as regards requirements for the emission control monitoring system for use in vehicles and exemptions for gas engines.

Schedule 4 Immigrants' vehicles

ref 5.3(1)

Application for identification of vehicle as immigrant's vehicle

1. To have a vehicle identified as an immigrant's vehicle, an applicant must:
 - (a) apply to the Agency, or to an organisation appointed by the Agency under 5.3(2), before the vehicle is certified for entry into service in New Zealand; and
 - (b) pay the appropriate fee or fees (if any) specified in accordance with regulations made under the Act.
2. The applicant must:
 - (a) be a New Zealand citizen, a New Zealand resident or a person entitled under the *Immigration Act 2009* to take up permanent residence; and
 - (b) have lived outside New Zealand for a period of not less than 21 months before the date of his or her arrival or return to New Zealand; and
 - (c) unless the vehicle was border inspected before 1 April 2010, apply within 18 months of the applicant's arrival in or return to New Zealand; and
 - (d) personally own the vehicle; and
 - (e) have personally owned and registered the vehicle for personal use in a country outside New Zealand for a period of at least one year before the applicant's arrival in or return to New Zealand; and
 - (f) never had any other vehicle identified as an immigrant's vehicle; and
 - (g) not have imported or be importing the vehicle on behalf of, or for, a third party; and
 - (h) make a declaration declaring that:
 - (i) the applicant has resided outside New Zealand for a period of not less than 21 months before the applicant's arrival in or return to New Zealand; and
 - (ii) the applicant has personally owned the vehicle, and has registered it for personal use in a country outside New Zealand, for a period of at least one year before the applicant's arrival in or return to New Zealand; and
 - (iii) the applicant has never had any other vehicle identified as an immigrant's vehicle; and

- (iv) the applicant has not imported the vehicle on behalf of, or for, a third party; and
- (v) the applicant will not sell or lease the vehicle to a third party for at least a year after the date on which the vehicle is first registered in New Zealand; and
- (vi) the applicant will not operate the vehicle in a transport service.

Identification of immigrant's vehicle

3. The Agency, or an organisation appointed by the Agency under 5.3(2), may identify a vehicle in writing as an immigrant's vehicle if the vehicle is a motor vehicle to which *section 2* would otherwise apply and the applicant:
 - (a) is a New Zealand citizen, a New Zealand resident or a person entitled under the *Immigration Act 2009* to take up permanent residence; and
 - (b) has never had any other vehicle identified as an immigrant's vehicle; and
 - (c) makes a declaration in accordance with *paragraph 2(h)*; and
 - (d) has paid the appropriate fee or fees (if any) specified in accordance with regulations made under the Act.

Conditions of use

4. The vehicle must be registered in New Zealand in the applicant's name for at least one year after the date on which the vehicle is first registered in New Zealand (although additional names may also appear on the registration documents).
5. The applicant may not operate the vehicle in a transport service.

Interpretation

6. To avoid doubt, in this Schedule, "arrival in or return to New Zealand" means arrival in or return to New Zealand after having lived outside New Zealand for a period of not less than 21 months.

Schedule 4: inserted, on 1 April 2010, by *clause 4.2* of *Land Transport Rule: Vehicle Exhaust Emissions Amendment 2010*.

Schedule 4, clause 2(a): amended, on 1 December 2016, by *clause 2.2(1)* of *Land Transport Rule: Vehicle Exhaust Emissions Amendment 2016*.

Schedule 4, clause 3(a): amended, on 1 December 2016, by *clause 2.2(2)* of *Land Transport Rule: Vehicle Exhaust Emissions Amendment 2016*.