



# **APPLICATION GUIDELINES**

## **FOR MOTOR VEHICLE EXHAUST GAS AND NOISE EMISSION TYPE APPROVAL**

**JUNE 2017**

## DEPARTMENT OF ENVIRONMENT MALAYSIA

All new or existing models of motor vehicles that seeking type approval in Malaysia will have to comply with the requirements of the exhaust emission and noise emission standards;

### EXHAUST EMISSION STANDARDS FOR PETROL ENGINE

PETROL			
EXHAUST EMISSION	EURO II	EURO IV	
CATEGORY OF VEHICLE	M and N1	M and N1	
IMPLEMEN- TATION	NEW MODEL	Current implementation since 01 January 2000	1) 18 months grace period after the availability of RON95 Euro4M fuel nationwide; or 2) Tentative date: 1 April 2020
	EXISTING MODEL	Current implementation since 01 November 1996.	1) 36 months grace period after the availability of RON95 Euro4M fuel nationwide; or 2) Tentative date: 1 Oct 2021
REGULATION STANDARD	(1) UN R83-03 or (2) Directive 94/12/EC, or (3) Directive 96/69/EC	(1) UN R83-05, or <b>(2)</b> Directive 70/220/EEC as amended by 98/69/EC and 2003/76/EC	
TEST REQUIREMENT	Type I (Refer to Table 1)	(1) Type I (UN R83-05(B) limit values) (Refer to Table 2)  (2) Type II (applicable to vehicles having a maximum mass > 3.5t) (Refer Table 3)  (3) Type III (Refer to Table 4) (4) Type V (Refer to Table 5)	
On Board Diagnostic (OBD)	Not Applicable	Optional	
COP	Not Applicable	Yes  DOE and MAA to have a discussion with SIRIM QAS to set up a mechanism similar to green diesel engine to verify the engine components	

**Table 1**  
**Euro II Exhaust Emission Limit Values for Petrol Engine**  
 Type I – Verifying the average exhaust emission after a cold start:

Category of vehicle	Vehicle Class	Reference Mass, (RW)	Limit values	
			Mass of Carbon Monoxide (CO)	Combined mass of Hydrocarbons and Nitrogen Oxides (HC + NO <sub>x</sub> )
M (Maximum mass ≤ 2.5 tonnes)	–	All	2.2 g/km	0.5 g/km
M (Maximum mass > 2.5 tonnes, ≤ 3.5 tonnes),  N1	Class I	RW ≤ 1250 kg	2.72 g/km	0.97 g/km
	Class II	1250 kg ≤ RW ≤ 1700 kg	5.17 g/km	1.4 g/km
	Class III	1700 kg < RW	6.9 g/km	1.7 g/km

**Table 2**  
**Euro IV Exhaust Emission Limit Values for Petrol Engine**  
 Type I – Verifying the average exhaust emission after a cold start:

Category of vehicle	Vehicle Class	Reference Mass, (RW)	Limit values		
			Mass of Carbon Monoxide (CO)	Mass of Hydrocarbons (HC)	Mass of Oxides of Nitrogen (NO <sub>x</sub> )
M (Maximum mass ≤ 2.5 tonnes)		All	1.0 g/km	0.10 g/km	0.08 g/km
M (Maximum mass > 2.5 tonnes, ≤ 3.5 tonnes)  N1	Class I	RW ≤ 1305 kg	1.0 g/km	0.10 g/km	0.08 g/km
	Class II	1305 kg ≤ RW ≤ 1760 kg	1.81 g/km	0.13 g/km	0.10 g/km
	Class III	1760 kg < RW	2.27 g/km	0.16 g/km	0.11 g/km

**Table 3**  
**Euro IV Exhaust Emission Limit Values for Petrol Engine**  
 Type II – Carbon monoxide emission test at Idling Speed

Scope	Limit
a) This test is carried out on all vehicles powered by positive-ignition engines having maximum mass exceeding 3.5 tonnes. (Follows item 5.3.2.1 of R83-05.) b) Vehicles that can be fuelled either with petrol or LPG or NG should be tested in Type II test on both fuels. (Follows item 5.3.2.1.1 of R83-05.) c) Vehicle that can be fuelled with either petrol or a gaseous fuel but where the petrol system is fitted for emergency purposes or starting only and which the petrol tank cannot contain more than 15 litres of petrol will be regarded for the test Type II as vehicles that can only run on a gaseous fuel. (Follows item 5.3.2.1.2 of R83-05.)	Carbon monoxide (CO) content by volume of the exhaust gases emitted with the engine idling shall not exceed 3.5% at the setting specified by the manufacturer and shall not exceed 4.5% within the range of adjustments specified in Annex 5 of R83.05

**Table 4**  
**Euro IV Exhaust Emission Limit Values for Petrol Engine**  
 Type III – Verifying emission of crankcase gases:

Scope	Requirement
a) Vehicles that can be fuelled either with petrol or LPG or NG should be tested in Type III test on both fuels; b) Vehicle that can be fuelled with either petrol or a gaseous fuel but where the petrol system is fitted for emergency purposes or starting only and which the petrol tank cannot contain more than 15 litres of petrol will be regarded for the test Type II as vehicles that can only run on a gaseous fuel;	When tested in accordance with Annex 6 of R83-05, the engine's crankcase ventilation system shall not permit the emission of any of the crankcase gases into the atmosphere.

**Table 5**  
**Euro IV Exhaust Emission Limit Values for Petrol Engine**  
 Type V – Durability of pollution control devices:

Scope	Requirement
a) The test shall be carried out on all vehicles having a maximum mass not exceeding 3.5 tonnes b) Vehicles that can be fuelled either with petrol or with LPG or NG should be tested in Type V test on petrol only. In that case the deterioration factor found with unleaded petrol will also be taken for LPG and NG	The test shall be carried out according to the procedure and limit specified in Type I test. This test represents an ageing test of 80,000 km driven in accordance with the programme described in relevant Annex of ECE Regulation No.83.05 on a test track, on the road or on a chassis dynamometer <sup>(5)</sup> .

Note:

<sup>(1)</sup>A manufacturer may choose to have the Deterioration Factors (DF) from the following table used as an alternative to Type V test.

	CO	HC	NOx
Deterioration Factors (DF) for Positive-Ignition Engine	1.2	1.2	1.2

**EXHAUST EMISSION STANDARDS FOR DIESEL ENGINE**

DIESEL					
EXHAUST EMISSION		EURO II		EURO IV	
CATEGORY OF VEHICLE		M (Maximum Mass $\leq$ 3.5 tonnes) and N1	M (Maximum Mass $>$ 3.5 tonnes); N2;  N3	M (Maximum Mass $\leq$ 3.5 tonnes) and N1	M (Maximum mass $>$ 3.5 tonnes); N2;  N3
IMPLEMENTATION	NEW MODEL	1 January 2017		1) 18 months grace period after the availability of Euro 5 diesel nationwide; or 2) Tentative date: 1 March 2022	
	EXISTING MODEL	Not applicable		1) 36 months grace period after the availability of Euro 5 diesel nationwide; or 2) Tentative date: 1 Sep 2023	
REGULATION STANDARD		(1) UN R83-03; Or (2) Directive 94/12/EC; Or (3) Directive 96/69/EC	(1) UN R49-02 (B); Or (2) Directives 88/77/EEC as amended by 91/542/EEC and 96/1/EEC	(1) UN R83-05 (B); Or (2) Directive 70/220/EEC as amended by 98/69/EC and 2003/76/EC	(1) UN R49-05 (B1); Or (2) Directive 1999/96/EC; Or (3) Directives 2005/55/EC; Or (4) Directives 2005/78/EC; Or (5) Directives 2006/51/EC
TEST REQUIREMENT		Type I Refer to <b>Table 6</b>	13-mode steady-state diesel engine test (To follow R49-02(B) limit values) Refer to Table 7	(1) Type I (To follow R83-05(B) limit values Refer to Table 8  (2) Type V Refer to Table 9	(1)* European Steady- State Cycle (ESC); and (2)* European Load Response (ELR) Test Cycle; and [(1)* and (2)* to follow UN R49-05 (B1) limit values] refer to <b>Table 10</b> (3)* European Transient Cycle (ETC) [(3)* to follow UN R49-05 (B1) limit values] refer to Table 11

On Board Diagnostic (OBD)	No	No	Optional
COP	No	No	Follow the SIRIM inspection report of green diesel engine (need further discussion).

**Table 6**  
**Euro II Exhaust Emission Limit values for Diesel Engine**  
**Type I – Verifying the average exhaust emission after a cold start**

Category of vehicle	Vehicle Class	Reference Mass, (RW)	Limit values				
			Mass of Carbon Monoxide (CO)	Combined mass of Hydrocarbons and Oxides of Nitrogen (HC + NO <sub>x</sub> )		Mass of Particulates	
				Direct Injection	Indirect Injection	Direct Injection	Indirect Injection
M (Maximum Mass ≤ 2.5 tonnes)	-	All	1.0 g/km	0.9 g/km	0.7 g/km	0.10 g/km	0.08 g/km
M (Maximum Mass > 2.5 tonnes, ≤ 3.5 tonnes)	Class I	RW ≤ 1250 kg	1.0 g/km	0.9 g/km	0.7 g/km	0.10 g/km	0.08 g/km
	Class II	1250 kg ≤ RW ≤ 1700 kg	1.25 g/km	1.3 g/km	1.0 g/km	0.14 g/km	0.12 g/km
N1	Class III	1700 kg < RW	1.5 g/km	1.6 g/km	1.2 g/km	0.20 g/km	0.17 g/km

**Table 7**  
**Euro II Exhaust Emission Limit values for Diesel Engine**  
**13-mode steady-state diesel engine test (vehicle's maximum mass > 3.5 tonnes)**

Parameters	Mass of carbon monoxide (CO)	Mass of hydrocarbons (HC)	Mass of oxides of nitrogen (NO <sub>x</sub> )	Mass of particulates
Limit values	4.0 g/kWh	1.1 g/kWh	7.0 g/kWh	0.15 g/kWh

**Table 8**  
**Euro IV Exhaust Emission Limit values for Diesel Engine**  
 Type I – Verifying the average exhaust emission after a cold start

Category of vehicle	Vehicle Class	Reference Mass, (RW)	Limit values			
			Mass of Carbon Monoxide (CO)	Mass of Oxides of Nitrogen (NOx)	Combined mass of Hydrocarbons (HC+NOx)	Mass of particulates
M (Maximum Mass ≤ 2.5 tonnes)	–	All	0.50 g/km	0.25 g/km	0.03 g/km	0.025 g/km
M (Maximum Mass > 2.5 tonnes ≤ 3.5 tonnes)	Class I	RW ≤ 1305 kg	0.50 g/km	0.25 g/km	0.03 g/km	0.025 g/km
	Class II	1305 kg ≤ RW ≤ 1760 kg	0.63 g/km	0.33 g/km	0.39 g/km	0.04 g/km
N1	Class III	1760 kg < RW	0.74 g/km	0.39 g/km	0.46 g/km	0.06 g/km

**Table 9**  
**Euro IV Exhaust Emission Limit values for Diesel Engine**  
 Type V – Durability of pollution control devices:

Scope	Requirement
The test shall be carried out on all vehicles having a maximum mass not exceeding 3.5 tonnes	The test shall be carried out according to the procedure and limit specified in Type I. This test represents an ageing test of 80,000 km driven in accordance with the programme described in Annex 9 of UN Regulation No.83.05 on a test track, on the road or on a chassis dynamometer <sup>(10)</sup> .

Note:

- <sup>(2)</sup> A manufacturer may choose to have the Deterioration Factors (DF) from the following table used as an alternative to Type V.

	CO	HC	NOx	HC + NOx	Particulates
Deterioration Factors for Compression-Ignition Engines	1.1	-	1	1	1.2



**Table 10**  
**Euro IV Exhaust Emission Limit values for Diesel Engine**  
**European Steady-State Cycle (ESC) and European Load Response (ELR) Test Cycle**

Parameters	Mass of carbon monoxide (CO)	Mass of hydrocarbons (HC)	Mass of oxides of nitrogen (NOx)	Mass of particulates	Smoke,
Limit values as specified by UN R49-05(B1)	1.5 g/kWh	0.46 g/kWh	3.5 g/kWh	0.02 g/kWh	0.5 m <sup>-1</sup>

**Table 11**  
**Euro IV Exhaust Emission Limit values for Diesel Engine**  
**European Transient Cycle (ETC)**

Parameters	Mass of carbon monoxide (CO)	Mass of Non-methane Hydrocarbons (NMHC)	Mass of Methane (CH <sub>4</sub> ) <b>(Applicable to natural gas engine only)</b>	Mass of oxides of nitrogen (NOx)	Mass of particulates <b>(Not applicable to gas fuelled engine)</b>
Limit values as specified by UN R49-05(B1)	4.0 g/kWh	0.55 g/kWh	1.1 g/kWh	3.5 g/kWh	0.03 g/kWh

**NOISE EMISSION STANDARDS FOR NEW MODEL MOTOR VEHICLES  
WITH MORE THAN THREE-WHEELED  
(VEHICLE IN MOTION)**

**Implementation date for grace period from the gazette date,  
18 months for new models and 36 months for existing models**

	Vehicle Categories	Maximum Sound Levels	Test Methods <sup>a</sup>
(1)	Used for the carriage of passengers and comprising not more than 9 seats (including the driver's seat)	74 dB (A) <sup>b</sup>	UN R51-02
(2)	Used for the carriage of passengers having more than 9 seats, including the driver's seat, and a maximum authorized mass of more than 3.5 tonnes metric	(a) with an engine power less than 150 kw	80 dB (A) <sup>c</sup>
		(b) with an engine power of 150 kw or more	83 dB (A) <sup>c</sup>
(3)	Used for the carriage of passengers and goods, having more than 9 seats, including the driver's seat	(a) with a maximum authorized mass not exceeding 2 tonnes metric	76 dB (A) <sup>b</sup>
		(b) with a maximum authorized mass greater than 2 tonnes metric but not exceeding 3.5 tonnes metric	77 dB (A) <sup>b</sup>
(4)	Used for transport of goods with a maximum authorized mass exceeding 3.5 tonnes metric	with an engine power less than 75 kW	81 dB (A) <sup>c</sup>
		with an engine power of 75kW or above but less than 150kW	83 dB (A) <sup>c</sup>
		with an engine power of 150kW or above	84 dB (A) <sup>c</sup>

Note:

- For Item (1) and Item (3), equipped with a compression-ignition engine and direct-ignition internal combustion engine, the limit values shall be increased by 1dB(A).
- For vehicle type designated for off-road use and with a maximum authorised mass above 2 t, the limit values shall be increased:
  - By 1 dB(A) if they are equipped with an engine having a power of less than 150kW (ECE); or
  - By 2 dB(A) if they are equipped with an engine having a power of 150kW (ECE) and above
- For vehicle types mentioned in Item (1), fitted with gearbox having more than four forward gears and equipped with an engine developing a maximum power greater than 140kW (ECE) and having a maximum-power/maximum-mass greater than 75 kW/t, the limit value shall be increased by 1dB(A), if the speed at which the rear of the vehicle passes the Line BB in third gear is greater than 61km/h.

<sup>a</sup> The department may accept UN R51-03 certificate or UN R51-03 test report which is based on the noise test method prescribed by UN R51-03.

<sup>b</sup> UN R51-02 limit value

<sup>c</sup> UN R51-01 limit value



## **APPLICATION FOR MOTOR VEHICLES EXHAUST AND NOISE EMISSION TYPE APPROVAL**

*(Exhaust and noise emission type approval for pure electric motor vehicle is not required)*

### **1. Application form**

The application form consists of PART I, PART II and PART III. PART I is the applicant's information, PART II is information about the motor vehicle model and PART III is the Emission and Noise test results for which type approval is sought. Please note that both exhaust and noise emission type approval for pure electric motor vehicle is not required. The applicant should complete relevant items and provide all necessary information in supporting the application, including original emission and noise test report from technical service.

### **2. Authorized signature**

The application form must have authorized signatures of the motor vehicle manufacturer to certify that the information about the motor vehicle model under application is correct and complete.

### **3. Checklist**

The information in the checklist is essential for your application. The applicant's may provide other information to support the application.

### **4. Submission of Application**

The completed application form together with all supporting documents can be submitted via online, by post or in person to:

Department of Environment Malaysia  
Level 4, Podium 2 & 3  
Wisma Sumber Asli  
No. 25, Persiaran Perdana, Presint4  
**62574 PUTRAJAYA**

Tel : +603-8871 2000/ 8871 2200  
Fax : +603-8888 4151



**APPLICATION FORM FOR MOTOR VEHICLE EXHAUST EMISSION AND NOISE  
EMISSION TYPE APPROVAL**

**PART I  
DETAILS OF APPLICANT**

1. Name of Applicant (an Individual or a Company) : \_\_\_\_\_

2. Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Contact Person :

i. Name : \_\_\_\_\_ ii. Position: \_\_\_\_\_

iii. Telephone Number : \_\_\_\_\_ iv. Fax Number : \_\_\_\_\_

v. H/P Number : \_\_\_\_\_ vi. Email : \_\_\_\_\_

**Declaration:**

*I hereby declare that the information given in this application form and the submitted documents is correct and true to the best of my knowledge and belief.*

Signature of Applicant: \_\_\_\_\_ Application Date : \_\_\_\_\_

Company Stamp :

*For Official Use Only*

Ref. Number : \_\_\_\_\_

Application Form Verified by: \_\_\_\_\_

Position : \_\_\_\_\_

Date : \_\_\_\_\_

Stamp:

**PART II****INFORMATION OF THE MOTOR VEHICLE MODEL FOR TYPE APPROVAL***(Details of the Motor Vehicle, Engine, Air-Intake and Exhaust and Emission Control Systems)***1. DESCRIPTION OF MOTOR VEHICLE**

Make : \_\_\_\_\_

Model (Sales Designation): \_\_\_\_\_

Category: \_\_\_\_\_ (M/ N/ Others\* (please specify)

Model Code: \_\_\_\_\_

No. of seats (including the driver): \_\_\_\_\_

Number of wheels: \_\_\_\_\_

Number of Exhaust Pipe: \_\_\_\_\_

Exhaust Pipe Position :Left/ Centre / Right

Kerb Weight: \_\_\_\_\_ kg

Gross vehicle weight: \_\_\_\_\_ kg

Name and address of Manufacturer/ Assembly plant:

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**Tyre Specifications:-**

Tyre Dimensions : Front : \_\_\_\_\_ Rear : \_\_\_\_\_

**2. DESCRIPTION OF ENGINE**

Make : \_\_\_\_\_

Model / Code: \_\_\_\_\_

Displacement : \_\_\_\_\_ cc

Rated Max. Engine Power Output : \_\_\_\_\_ kW at \_\_\_\_\_ (rpm)

Transmission : \_\_\_\_\_

Fuel Type : \_\_\_\_\_

Euro Standard : II / III / IV / V / VI

Working principle: positive ignition/compression ignition/ Others\* (please specify):

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Name and address of Manufacturer/ Assembly plant:

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## **DESCRIPTION AND DRAWINGS OF THE AIR-INTAKE AND EMISSIONS CONTROL SYSTEM**

### **1. Air-Intake System**

Description and drawings (showing in a plan view and a lateral view) of the air-intake system indicating the location of the intake silencer(s) and the air filter(s)

### **2. Exhaust & Pollution Control Device System**

Description and drawings (showing in a plan view and a lateral view) of the exhaust system indicating the location of the muffler(s), the catalytic converter(s) and the oxygen sensor(s) and description of the:

- i) Device for Recycle Crankcase Gases
- ii) Exhaust Gas Recirculation
- iii) Air Injection
- iv) Other Anti-Pollution Devices
- v) Description and Diagram of motor vehicle with Overall Dimensions

*Note: Attach separate sheet(s) showing a plan view, a front view and a lateral (side) view*

### PART III TEST RESULT

Type Approval application for exhaust emission and noise emission must be attached together with third-party test reports or certificates from recognised Approve Authority.  
(Please fill in the information with the related form according to the Euro II or IV and vehicle categories)

#### (A) EXHAUST EMISSION TEST RESULT FOR PETROL ENGINE

- 1) Test report no. : \_\_\_\_\_
- 2) Name and Address of the Approved Test Laboratory: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 3) Test / Witness by (recognised Approve Authority or Technical Service):  
\_\_\_\_\_  
\_\_\_\_\_

#### Euro II Standards

Type I – Verifying the average exhaust emission after a cold start:

Mass of Carbon Monoxide (CO)  g/km	Combined mass of Hydrocarbons and Nitrogen Oxides (HC + NO <sub>x</sub> ) g/km

**If the type I test has been conducted base on EURO III standards, please add the individual testing result for HC and NO<sub>x</sub>, and report as (HC + NO<sub>x</sub>).**

;or

**Euro IV Standards**

Type I – Verifying the average exhaust emission after a cold start:

Mass of Carbon Monoxide (CO) g/km	Mass of Hydrocarbons (HC) g/km	Mass of Oxides of Nitrogen (NOx) g/km

Type II – Carbon monoxide emission test at idling speed:

CO value (% vol)	
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Type III – Verifying emission of crankcase gases:

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Type V – Durability of pollution control device:

Type of durability	80,000 / not applicable		
Deterioration factor DF	Calculated / assigned		
Specify the values(DF)	CO	HC	NOx



**PART III  
TEST RESULT**

Type Approval application for exhaust emission and noise emission must be attached together with third-party test reports or certificates from recognised Approve Authority.  
(Please fill in the information with the related form according to the Euro II or IV and vehicle categories)

**(B) EXHAUST EMISSION TEST RESULT FOR DIESEL ENGINE  
(M and N1 ≤ 3500 kg)**

- 1) Test report no. : \_\_\_\_\_
- 2) Name and Address of the Approved Test Laboratory: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 3) Test / Witness by (recognised Approve Authority or Technical Service):  
\_\_\_\_\_  
\_\_\_\_\_

**Euro II Standards**

Type I – Verifying the average exhaust emission after a cold start:

Mass of Carbon Monoxide (CO) g/km	Combined mass of Hydrocarbons and Nitrogen Oxides (HC + NOx) g/km	Mass of particulates  g/km

If the type I test has been conducted base on EURO III standards, please add the individual testing result for HC and NOx, and report as (HC + NOx).

;or

**Euro IV Standards**

Type I – Verifying the average exhaust emission after a cold start:

Mass of Carbon Monoxide (CO)	Mass of Oxides of Nitrogen (NOx)	Combined mass of Hydrocarbons (HC + NOx)	Mass of particulates
g/km	g/km	g/km	g/km

Type V – Durability of pollution control device:

Type of durability	80,000 / not applicable			
Deterioration factor DF	Calculated / assigned			
Specify the values(DF)				
	CO	NOx	HC + NOx	Particulates

### PART III TEST RESULT

Type Approval application for exhaust emission and noise emission must be attached together with third-party test reports or certificates from recognised Approve Authority.

(Please fill in the information with the related form according to the Euro II or IV and vehicle categories)

#### (C) EXHAUST EMISSION TEST RESULT FOR DIESEL ENGINE (Maximum Mass > 3500 kg)

1) Test report no. : \_\_\_\_\_

2) Name and Address of the Approved Test Laboratory: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3) Test / Witness by (recognised Approve Authority or Technical Service):

\_\_\_\_\_

\_\_\_\_\_

#### Heavy Duty Vehicle (M > 3.5t and all N)

##### Euro II Standards – 13 mode steady-state diesel engine test

Mass of carbon monoxide (CO)	Mass of hydrocarbons (HC)	Mass of oxides of nitrogen (NOx)	Mass of particulates
g/kWh	g/kWh	g/kWh	g/kWh

If the type I test has been conducted base on EURO III standards, please report the results as follow in the table above. Smoke, m-1 is not compulsory for EURO II standards compliant.

; Or

**Euro IV Standards**

European Steady-State Cycle (ESC) and European Load Response (ELR) Test Cycle:

Mass of carbon monoxide (CO) g/kWh	Mass of hydrocarbons (HC) g/kWh	Mass of oxides of nitrogen (NO <sub>x</sub> ) g/kWh	Mass of particulates g/kWh	Smoke, m <sup>-1</sup>

European Transient Cycle (ETC) :

Mass of carbon monoxide (CO) g/kWh	Mass of Non-methane Hydrocarbons (NMHC) g/kWh	Mass of Methane <sup>(a)</sup> (CH <sub>4</sub> ) g/kWh	Mass of oxides of nitrogen (NO <sub>x</sub> ) g/kWh	Mass of particulates <sup>(b)</sup> g/kWh

Remark:

- (a) For Natural Gas Engines only.  
 (b) Not applicable for gas filled engines.

### PART III TEST RESULT

Type Approval application for exhaust emission and noise emission must be attached together with third-party test reports or certificates from recognised Approve Authority.

#### (D) NOISE TEST RESULTS

The noise of the motor vehicle submitted for approval shall be measured by  
in moving and stationary method

1) Test report no. : \_\_\_\_\_

2) Name and Address of the Approved Test Track: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3) Test / Witness by (recognised Approve Authority or Technical Service):

\_\_\_\_\_

\_\_\_\_\_

#### **NOISE LEVEL OF MOTOR VEHICLE IN MOVING**

i) Ambient Noise : \_\_\_\_\_ dB(A)

ii) Wind Speed : \_\_\_\_\_ m/s

iii) Test result : \_\_\_\_\_ dB(A)

#### **NOISE LEVEL OF MOTOR VEHICLE IN STATIONARY**

i) Ambient Noise : \_\_\_\_\_ dB(A)

ii) Wind Speed : \_\_\_\_\_ m/s

iii) Test result : \_\_\_\_\_ dB(A) at \_\_\_\_\_ min<sup>-1</sup>

**DECLARATION BY APPLICANT**

**I CERTIFY THAT**

- (a) the Information of the Motor Vehicle Model for Type Approval is the correct description of the Motor Vehicle or engine model under the application; and
- (b) adequate arrangements and prepared documented quality control plans with certification to international standard such as EN ISO 9002, or EN ISO 9001 or an equivalent standard acceptable by the Department of Environment Malaysia has been set up to ensure all vehicles and engines produced and offered for Malaysia market comply with the exhaust emission and noise emission standards;

Authorised Homologation Staff (Signature) : \_\_\_\_\_

Name and Position : \_\_\_\_\_

Company Name: \_\_\_\_\_

Date : \_\_\_\_\_

Company Stamp :

## CHECKLIST

<b>Please tick the relevant boxes</b>	
	<b>One copies of PART I – Applicant’s information</b>
	<b>One copy of PART II – Information of the Motor Vehicle Model for Type Approval</b>
	Description of motor vehicle
	Description of engine
	Description and drawings of the air-intake and exhaust or emission and noise
	<b>One copy of PART III – Information of the Emission and Noise Test Result</b>
	Emission and noise Test result summary
	One hard or soft copy (sent via online/email/post/by hand) of third party Test report (TR) for exhaust emission
	One hard or soft copy (sent via online/email/post/by hand) of third party Test report (TR) for noise emission
	Other supporting documents, please specify

**CARTA ALIR PERMOHONAN  
KELULUSAN JENIS KENDERAAN/  
VEHICLE TYPE APPROVAL (VTA)  
JABATAN ALAM SEKITAR MALAYSIA**

