

**ENVIRONMENTAL QUALITY (CONTROL OF EMISSION FROM PETROL ENGINES)
REGULATIONS 1996 PU(A) 543/1996**

In exercise of the powers conferred by sections 21, 45 and 51 of the Environmental Quality Act 1974, the Minister, after consultation with the Environmental Quality Council, makes the following regulations:

PART I
PRELIMINARY

1. Citation and commencement.

These regulations may be cited as the **Environmental Quality (Control of Emission From Petrol Engines) Regulations 1996** and shall come into force on 1 November 1996.

2. Interpretation.

In these Regulations, unless the context otherwise requires —

"approved facility" means a facility or place approved by the Director General which is equipped with the necessary gaseous meter and trained personnel for carrying out gaseous emission test;

"authorised officer" means an officer appointed under section 3 of the Act, a road transport officer, police officer or any other officer to whom the Director General has delegated his power under section 49 of the Act.

"Director for Road Transport" means a Director for Road Transport appointed under section 3 of the Road Transport Act 1987;

"emission of pollutants" means the emission of any pollutants into the atmosphere from any portion of the petrol engine including the exhaust assembly, engine crankcase, ventilation or lubrication system;

"engine system" means a system consisting of the engine together with all devices essential for its operation and its appropriate intake and exhaust assembly;

"engine type" means a category of engines having similar emission characteristics and which do not differ in such essential aspects as may be designated by the Director General;

"motor vehicle" means a motor vehicle fitted with a petrol engine;

"new model" means a motor vehicle equipped with an engine type which is different from the previous model;

"new motor vehicle" means —

(a) a motor vehicle imported directly into Malaysia as a completely built-up ("CBU") unit and for the first instant was registered and assigned a registration number by the Director for Road Transport on or after 1 January 1997; or

(b) a motor vehicle imported into Malaysia as a completely knocked down ("CKD") pack and subsequently manufactured or assembled and for the first instant was registered and assigned a registration number by the Director for Road Transport on or after 1 January 1997;

"petrol engine" means an engine which works on the positive-ignition or spark-ignition principle.

PART II
CONTROL OF PETROL ENGINE ON MOTOR VEHICLE

3. Application of Part II.

This Part shall apply to a new motor vehicle registered after 1 January 1997 and to a motor vehicle which is already registered but which has a new engine system to replace an existing system.

4. Restriction on installation or replacing of engine system.

(1) Subject to subregulations (3) and (4), no person shall install, or replace the engine system of any motor vehicle with a petrol engine which emits pollutants in excess of the standard prescribed in the First Schedule.

(2) Vehicles having an engine capacity of 700 cubic centimetre and below and 1020 kilogram and below shall comply with the emission standard of pollutants as prescribed in the First Schedule.

(3) On or after 1 January 1997, any new model of motor vehicle shall comply with the emission standard of pollutants as prescribed in the Second Schedule.

(4) On or after 1 January 2000, any new model of motor vehicle shall comply with the emission standard of pollutants as prescribed in the Third Schedule.

5. Application of regulation 4.

Regulation 4 shall only apply to a motor vehicle intended to be used on the road, with or without bodywork, having at least four wheels but shall not apply to a motor vehicle used for racing purposes in designated racing circuits or in approved racing events.

6. Acceptance of equivalent or more stringent standards.

Notwithstanding regulation 4, the Director General may accept an engine type complying with such emission standards and test procedures which the Director General considers to be equivalent or more stringent than the test procedures and specifications as may be determined by him from time to time.

7. Tests to be conducted by assembler or manufacturer.

(1) For the purpose of verifying the exhaust emission of pollutants standard as prescribed in the First Schedule, the Director General may require any assembler or manufacturer to conduct such necessary tests as may be determined by the Director General, in the presence of an authorised officer, at any approved facility at the cost of the assembler or manufacturer.

(2) For the purpose of subregulation (1), samples of not more than one per centum of the annual projected number of motor vehicles shall be selected at random.

(3) Where the Director General has directed any assembler or manufacturer to conduct any test under this regulation, the assembler or manufacturer shall submit periodically the results of such tests to the Director General.

8. Certification by assembler or manufacturer.

Prior to the delivery of a new motor vehicle to its owner, the assembler or manufacturer shall issue a certificate to a motor vehicle which is finally assembled or manufactured stating that the motor vehicle has been correctly inspected, tested and adjusted to meet the requirements of regulation 4.

PART III
GASEOUS EMISSION CONTROL FROM MOTOR VEHICLE

9. Application of Part III.

This Part shall apply to every motor vehicle irrespective of whether it is in use or stationary, or in any bus terminus, taxi stand or private premises or on any private road.

10. Level of gaseous emission from petrol engine in use.

Every petrol engine which is in use, in operation or is capable of being operated shall not emit gaseous pollutant exceeding the emission standard as prescribed in the Fourth Schedule.

11. Emission test for petrol engine in use.

An emission test for a petrol engine which is in use shall be conducted in accordance with the methods as specified in the Fifth Schedule and the test result shall be recorded in the Test certificate as prescribed in the Sixth Schedule.

12. Prohibition order on vehicle.

The Director General or any authorised officer may issue a prohibition order as specified in the Seventh Schedule prohibiting the further operation of any motor vehicle that —

(a) has undergone an emission test in accordance with regulation 11; and

(b) as contravened the acceptable conditions specified in regulation 11 within the period of three months preceeding the gaseous emission test.

13. Vehicle under prohibition order not to be operated.

(1) The prohibition order shall be securely attached to a conspicuous spot on the windscreen of the motor vehicle.

(2) The motor vehicle shall not be operated until the prohibition period expires or until its defects have been remedied to the satisfaction of the Director General or the authorised officer after which the prohibition order may be withdrawn.

14. Prohibition order not to be removed.

The owner or the person operating the motor vehicle shall ensure that the prohibition order is not in any way obscured, rendered illegible or removed except with the written approval of the Director General.

15. Exhaust pipe to be straight.

The exhaust pipe installed in every motor vehicle shall be straight and free of any attachment for the last 150mm where the exhaust is finally discharged into the atmosphere.

16. Engine to be put off in enclosed area.

No person shall allow the engine of any motor vehicle to run while the motor vehicle is stationary for more than three minutes in an enclosed or a partially enclosed parking area or any terminus.

PART IV
REQUIREMENTS OF GASEOUS EMISSION TEST

17. Approved facility to carry out gaseous emission test required.

(1) Where a motor vehicle is required to undergo a gaseous emission test under section 48A of the Act the gaseous emission test shall only be carried out at an approved facility.

(2) A person who wishes to comply with the requirements of these Regulations or the provisions of any other written law in relation to the emission standard for his motor vehicle may, at his own expense, request for a gaseous emission test to be carried out at an approved facility.

18. Log book to be kept.

(1) For the purpose of regulation 17, a log book containing the motor vehicle registration number, the date, time and result of any gaseous emission test done shall be kept by the owner of the motor vehicle.

(2) The records in the log book shall be made available for inspection by the Director General or any authorised officer.

PART V
LICENCE FOR CONTRAVENTION OF ACCEPTABLE CONDITIONS

19. Grant of licence.

(1) Where the Director General is satisfied that —

(a) the motor vehicle is to be used solely for the purpose of assessing the durability or emission performance of the motor vehicle, or the motor vehicle is to be used for rallying with the prior written approval of the Director General as to the place of the rally and the person to be responsible for the custody of the vehicle for the period of the rally;

(b) the motor vehicle has been indented from the manufacturer and consigned for assembly in Malaysia or is already assembled or manufactured prior to the date of coming into force of these Regulations and has not at any time been registered under the Road Transport Act 1987;

(c) the motor vehicle is intended for military, combat or tactical purposes; or

(d) the motor vehicle is on transit through Malaysia,

he may grant a licence to contravene the conditions prescribed in these Regulations.

(2) An application for a licence under this regulation shall be made in the application form to be determined by the Director General together with a payment of the fee as prescribed in the Eighth Schedule.

PART VI
OFFENCES

20. Offences which may be compounded.

(1) The offences under these Regulations except the offence under regulation 4 may be compounded.

(2) The compounding of any offence under these Regulations shall be in accordance with the procedure prescribed in the Environmental Quality (Compounding of Offences) Rules 1978.

FIRST SCHEDULE

[Subregulations 4(1) and (2) and regulation 7]

EMISSION STANDARD OF POLLUTANTS

The emission of the gaseous pollutant of Carbon Monoxide and the combination of Hydrocarbons and Nitrogen Oxides shall not exceed the following standard:

Reference Mass(rw) (kg)	Carbon Monoxide(g/test)	Combined Emission of Hydrocarbons Nitrogen Oxides (g/test)
rw < 1020	58	19.0
1020 < rw < 1250	67	20.5
1250 < rw < 1470	76	22.0
1470 < rw < 1700	84	23.5
1700 < rw < 1930	93	25.0
1930 < rw < 2150	101	26.5
2150 < rw	110	28.0

as measured by the Economic Commission for Europe ("ECE") Regulation No. 15.04 annexed to the United Nations Agreement which was done at Geneva on March 20, 1958 Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts.

SECOND SCHEDULE

[Subregulation 4(3)]

EMISSION STANDARD OF POLLUTANT FOR NEW MODELS OF MOTOR VEHICLES ON OR AFTER 1 JANUARY 1997

1. For a petrol engine with a total mass less than 2.5 tonnes, the exhaust emission of the gaseous pollutant of Carbon Monoxide and the combination of Hydrocarbons and Nitrogen Oxides shall not exceed the following standard:

Mass of Carbon Monoxide (g/km.)	Combined Mass of Hydrocarbon and Nitrogen Oxides (g/km.)
2.72	0.97

as measured by the The Council Directive 91/441/EEC of June 26, 1991 amending Directive 70/220/EEC on the approximation of the Laws of the Member States relating to Measures to be Taken Against Air Pollution by Emissions from Motor Vehicles.

2. For a petrol engine used for carrying goods and having a maximum weight not exceeding 3.5 tonnes, the exhaust emission of the gaseous pollutant of Carbon Monoxide and the combination of Hydrocarbon and Nitrogen Oxides shall not exceed the following standard:

Reference Mass (rw) (kg)	Mass of Carbon Monoxide (g/km.)	Combined Mass of Hydrocarbons and Nitrogen Oxides (g/km.)
$rw \leq 1250$	2.72	0.97
$1250 < rw \leq 1700$	5.17	1.40
$1700 < rw$	6.90	1.70

as measured by the The Council Directive 93/59/EEC of June 28, 1993 amending Directive 70/220/EEC on the approximation of the Laws of the Member States relating to Measures to be Taken Against Air Pollution by Emissions From Motor Vehicles.

THIRD SCHEDULE

[Subregulation 4(4)]

EMISSION STANDARD OF POLLUTANT FOR NEW MODELS OF MOTOR VEHICLES ON OR AFTER 1 JANUARY 2000

1. For a petrol engine with a total mass less than 2.5 tonnes, the exhaust emission of the gaseous pollutant of Carbon Monoxide and the combination of Hydrocarbon and Nitrogen Oxides shall not exceed the following standard:

Mass of Carbon Monoxide (g/km.)	Combined Mass of Hydrocarbon (g/km.)
2.2	0.5

as measured by the Directive 94/12/EEC of The European Parliament and the Council of March 23, 1994 relating to Measures to be Taken Against Air Pollution by Emission from Motor Vehicles and amending Directive 70/220/EEC.

2. For a motor vehicle used for carrying goods and having a maximum weight not exceeding 3.5 tonnes, the exhaust emission of the gaseous pollutant of Carbon Monoxides and the combination of Hydrocarbon and Nitrogen Oxides shall not exceed the following standard:

Reference Mass (rw) (kg)	Mass of Carbon Monoxide (g/km.)	Combined Mass of Hydrocarbons and Nitrogen O xides (g/km.)
$rw \leq 1250$	2.72	0.97
$1250 < rw \leq 1700$	5.17	1.40
$1700 < rw$	6.90	1.70

as measured by The Council Directive 93/59/EEC of June 28, 1993 amending Directive 70/220/EEC on the approximation of the Member States Relating to Measures to be Taken Against Air Emission from Motor Vehicles.

FOURTH SCHEDULE

[Regulation 10]

EMISSION STANDARDS FOR PETROL ENGINE IN USE

	Carbon Monoxide (%)	Hydrocarbons (parts per million) (ppm)
Existing model	4.5	800
New model	3.5	600

FIFTH SCHEDULE

[Regulation 11]

EMISSION TEST FOR PETROL ENGINE IN USE

1. This test shall be carried out by using a Carbon Monoxide or Hydrocarbon analyser.
2. The test procedures shall be as follows:
 - (a) accelerate the engine to a moderate speed with no load, maintain for at least 15 seconds, then return the engine to idle speed;
 - (b) while the engine idles, insert the sampling probe into the exhaust pipe as deeply as possible but in any case for not less than 300mm;
 - (c) wait for at least 20 seconds and take the reading of Carbon Monoxide and Hydrocarbon as given by the analyser.

SIXTH SCHEDULE

[Regulation 11]

MOTOR VEHICLES EMISSION TEST CERTIFICATE FOR PETROL ENGINE IN USE

Serial No:

Motor Vehicle Registration No:

Make/Model:

Vehicle Type:

Date of Test:

Time of Test:

Meter used:

Date last calibrated:

RECORD OF GASEOUS TEST.

i. Carbon Monoxide : %

ii. Hydrocarbon : ppm.

I certified that the above-mentioned motor vehicle has been tested for its gaseous emission and found to emit:

i. Carbon Monoxide of % which exceeds the permissible limit of 3.5/* 4.5 %; and

ii. Hydrocarbon of ppm. which exceeds the permissible limit of 600/* 800 ppm,

under regulation 10 of the Environmental Quality (Control of Exhaust Emission From Petrol Engines) Regulations 1996.

Issued and Signed by:

Name of Officer:

Designation:

TEST CERTIFICATE ISSUED TO

Name of Owner/* Driver of motor vehicle:

Identity Card No:

of

(address):

.....

To whom issued: Owner/* Driver (signature):

Driving Licence No.: Expiring:

** Delete where inapplicable.*

SEVENTH SCHEDULE

[Regulation 12]

PROHIBITION ORDER.

1. Motor Vehicle Registration No:

2. Date and Time of Emission Test:

Location:

Results: Carbon Monoxide=%; Hydrocarbon= ppm.

Reference No.:

3. Date and Time of previous Emission Test:

Location:

Results: Carbon Monoxide=%; Hydrocarbon= ppm.

Reference No.:

4. In accordance with the provisions of regulation 12 the above-named motor vehicle is prohibited from operation on any road effective from:

.....

(time)

(date)

to

.....

(time)

(date)

5. For the purposes of remedy of defect, servicing and calibration this vehicle may proceed from:

.....

(place of test)

to:

..... only

(address of workshop of the person in charge/or workshop of registered owner's choice, provided it is not more than 50km away).

.....

Name of Officer:

Designation:

EIGHTH SCHEDULE

[Subregulation 19(2)]

FEES PAYABLE

- (a)* Application under paragraph 19(1)(a) - RM300 per vehicle
- (b)* Application under paragraph 19(1)(b) - RM50 per vehicle
- (c)* Application under paragraph 19(1)(c) - Nil
- (d)* Application under paragraph 19(1)(d) - Nil