

ARRANGEMENT OF REGULATIONS

[Rev. 2012]

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**ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION
(FOSSIL FUEL EMISSION CONTROL) REGULATIONS, 2007**

[L.N. 131/2006.]

1. Citation

These Regulations may be cited as the Environmental Management and Co-ordination (Fossil Fuel Emission Control) Regulations, 2006 and shall come into operation on 1st February, 2007.

2. Interpretation

In these Regulations, unless the context otherwise requires—

“air pollution control methods” means the mechanisms and technologies aimed at emission control or methods or processes that can be used separately or together to reduce emissions and improve air quality standards;

“air pollution” means the introduction by man, directly or indirectly, of substances in the air which results in harmful effects of such nature as to endanger human health, harm living resources and eco-systems, cause material damage, interfere with amenities and other legitimate uses of the environment;

“emissions inspection” means the determination of the level of emissions from a motor vehicle, plant or industry;

“fossil fuels” means petrol, diesel fuel oils and kerosene;

“fossil fuels emissions” means emissions causing air pollution from the use of any fossil fuel where the constituent properties are not properly combusted in an internal combustion engine and are emitted out as toxic carbon gases and particulates matter;

“fuel catalyst” means a liquid supplement added to refined fossil fuels for use in internal combustion engines to act in a manner that speeds up the fuel burning process, causes a more complete combustion of fuel by optimizing the molecular combustion process to significantly improve fuel economy as well as reduce harmful toxic emissions without altering the quality of fuel and is completely safe to use with no harm or damage to the environment, human health and the internal combustion engines;

“internal combustion engine” means any engine that is mobile (as in a vehicle) or stationary (as in a generator) that uses fossil fuels in order to derive their required energy and will emit the same properties and levels of pollution given its choice of fuel and application;

“polluter” means an individual or organization causing, or operating a source of, air pollution.

3. Emission inspection

(1) The Authority—

- (a) shall administer a system for emissions inspection of all internal combustion engines within Kenya; and
- (b) may require every internal combustion engine to be inspected at least once annually.

(2) The Authority may liaise with lead agencies dealing with internal combustion engine inspection and may delegate the responsibility of undertaking emission inspection to such agencies, and any power exercised by any such lead agencies as regards emission inspection will be deemed to have been exercised under these Regulations.

4. Emission standards

(1) Any internal combustion engine is subject to inspection under these Regulations and shall, as a condition of compliance with the inspection, pass such tests as may be required to demonstrate that the internal combustion engine complies with any standards and requirements for the control of air pollution or contamination as may be prescribed.

(2) The emission standards to be complied with by any internal combustion engine shall be those set out in the First Schedule to these Regulations.

(3) Any person who operates or owns an internal combustion engine and permits it to be operated upon any road, street, public highway or any premises, which emits smoke or other air contaminants in excess of emission standards set out in the First Schedule commits an offence and shall be liable, upon conviction, to the penalty prescribed in section 144 of the Act.

5. Environmental inspectors

The Authority may appoint such number of environmental inspectors as it may deem appropriate for purposes of carrying out emissions inspection under these Regulations and may, without prejudice to the foregoing, appoint any employee of a lead agency conducting inspection of internal combustion engines on behalf of the Government.

6. Power of inspectors

An environmental inspector shall, in the discharge of his functions under these Regulations, have such powers as are conferred on an inspector under sections 117 and 118 of the Act.

7. Approval of catalyst

(1) The Authority may approve any substance to be used as a fuel catalyst if, in the opinion of the Authority, the substance improves fuel economy, enhances combustion and reduces harmful emissions that adversely affect human, animal and plant health and degrade the environment.

(2) The Minister shall publish in the *Gazette*, on the recommendation of the Authority, any substance that has been approved as a fuel catalyst under these Regulations.

8. Fuel catalyst

(1) For the better control of toxic emissions, no internal combustion engine shall use any fuel other than fuel that has been treated using a fuel catalyst approved by the Authority.

(2) A person who knowingly offers for sale any fuel that has not been treated using an approved fuel catalyst commits an offence and shall be liable upon conviction, in addition to the penalty prescribed in section 144 of the Act, to confiscation of the fuel.

9. Application for approval of fuel catalyst

A person seeking approval of a substance as a fuel catalyst shall apply to the Authority in the prescribed Form 1 set out in the Second Schedule, and the application shall be accompanied by—

- (a) the prescribed fee;
- (b) details of the manufacturer of the substance;

- (c) manufacturer's authorisation in case of an application by an agent;
- (d) chemical composition of the substance; and
- (e) empirical evidence supporting use and effects of the substance on the environment.

10. Licensing of persons to treat fuel

(1) The Authority may issue a licence in the prescribed Form II set out in the Second Schedule to a person to sell or treat fuel through the addition of an approved fuel catalyst and may impose such conditions as it may deem appropriate.

(2) A person who offers for sale any fuel catalyst without a licence issued by the Authority commits an offence and shall be liable, upon conviction, to the penalty prescribed in section 144 of the Act.

11. Partnership with Authority

(1) The Authority may enter into a partnership arrangement with any person designed to provide—

- (a) a facility for internal combustion engine emission inspection; or
- (b) services to fuel marketers, vendors or producers for treatment of fuel by supplementing an approved fuel catalyst;
- (c) capacity building on air quality management with emission reduction methods, technologies and with real-time ambient air quality monitoring networking capacity.

(2) The Authority may enter into any partnership arrangement aimed at enhancing control of fossil fuel emissions and to this end, may train environmental inspectors, set up or license private emissions inspection workshops.

12. Cost of clearing pollution

The direct cost of clearing pollution through fuel emission shall be borne by the polluter.

13. Fees

The fees payable for the application for approval of a substance as a fuel catalyst under these Regulations shall be ten thousand shillings.

FIRST SCHEDULE

[Rule 4(2).]

A. – PETROL POWERED MOTOR VEHICLE EMISSION STANDARDS

<i>Vehicle Class and Model Year</i>	<i>Maximum Emission Concentration HP (ppm)</i>	<i>CO (percentage)</i>
Class I:		
Gross vehicle weight of 6000 pounds or less		
1975-1977	500	5.0
1978-1979	400	4.0

FIRST SCHEDULE—continued

Vehicle Class and Model Year	Maximum Emission Concentration HP (ppm)	CO (percentage)
1980	300	3.0
1981 +	220	1.2
Class II:		
Gross vehicle weight of 6001 pounds to 10,000 pounds		
1975-1977	750	6.5
1978-1979	600	5.5
1980	400	4.5
1981-1984	300	3.0
1985 +	220	1.2

B. – DIESEL POWERED MOTOR VEHICLE EMISSION STANDARDS

Standards and Procedures for Inspection of Diesel Fuelled Vehicles – Pass/Fail Criteria

1. **Dynamometer Conditions—**

- (a) A diesel-powered vehicle with a net weight greater than or equal to 6001 pounds and less than or equal to 10,000 pounds shall be tested on a loaded dynamometer by applying a single load of 30Hp (+ 2Hp) while being operated at a drive wheel speed of 50 mph (+ 2mph).
- (b) A diesel-powered vehicle with a net weight of 6000 pounds or less shall be tested on a loaded dynamometer by applying a single load of 9Hp (+ 2Hp) while being operated at a drive wheel speed of 30mph (+ 2mph).

2. **Opacity Standard**

No diesel-powered vehicle shall emit visible emissions in excess of 20% opacity for 5 consecutive seconds or more when under the applicable loading—

- (a) All diesel-powered motor vehicles shall be inspected with an opacity meter that meets the requirements of the Authority.
- (b) Separate measurements shall be made on each exhaust outlet on diesel-powered motor vehicles equipped with multiple exhaust outlets. For vehicles equipped with more than one exhaust pipe, the reading taken from the outlet giving the highest opacity reading shall be used for comparison with the standard. Exhaust tail pipes on diesel-powered motor vehicles shall allow for safe attachment of the opacity meter sensor unit. Dual or multiple exhaust motor vehicles will be tested by sampling all exhaust tail pipes simultaneously or individually.
- (c) Any diesel-powered motor vehicle not meeting the opacity standard shall fail the inspection.

3. **Idle Mode Test**

When it is necessary to omit the loaded mode test, as specified below, an opacity measurement shall be made while the vehicle is operating at idle under no load—

- (a) If the opacity measured during the idle mode test is greater than 5%, the vehicle shall fail the inspection.

FIRST SCHEDULE-continued

- (b) The loaded mode test shall be omitted on any motor vehicle if—
 - (i) the motor vehicle is in any condition that precludes loaded mode testing for reasons of health or safety, or both, or personnel, facility, equipment or vehicle;
 - (ii) the motor vehicle is unable to be tested because of the vehicle's inability to attain the speeds specified on the dynamometer;
 - (iii) the motor vehicle is equipped with a constant four-wheel drive.
- (c) Re-inspection stations shall not be allowed to perform the idle mode test for diesel-fuelled vehicles.

4. Inspection Rejection

The emissions inspector may refuse to perform the opacity test required by these Regulations for any motor vehicle if the motor vehicle has an obvious exhaust system leak or other condition that could affect the validity of the opacity reading, as determined by the emissions inspector.

SECOND SCHEDULE
FORMS

FORM I (NEMA/FC/1)

(Regulation 7)

Application Reference No.

Applicable Fee: KSh. 10,000

APPLICATION FOR LICENCE FOR FUEL CATALYST TO SUPPLEMENT THE SPECIFIED FOSSIL FUELS

Name of Applicant

Person Authorized to Act on behalf of Applicant (Name and Title)

Contact person (Name and Title)

National Identification Card/Passport No.

Contact Person's Physical and Postal Address (Business)

Company Name

Physical Address

Postal Address

Main Business Activity

Tel./Fax/E-mail contacts

Kenyan Business Registration Certificate No.

PIN Number hereby applies for approved fuel catalyst

Type of Fuel Catalyst	Scientific Formula of Fuel Catalyst	Kenya Bureau of Standards 'KS' Number
1.
2.
3.
4.
5.
6.

SECOND SCHEDULE, FORM I—continued

I declare that the information provided in this application is correct and accurate and that the applicant makes this application in support of a request for approval by NEMA of a fuel catalyst to be supplemented to the specified fossil fuels and in compliance with the provisions of these Regulations.

Dated , 20

Name Signature

Witness

Address

Occupation

FORM II (NEMA/FC2)

(Regulation 7)

LICENCE FOR APPROVED FUEL CATALYST

Licence No. FF/FC

Name

Address

The Authority has evaluated your application Ref. No. and a licence hereby issued for use of the following fuel catalyst:

Type of Fuel Catalyst	Scientific Formula of Fuel Catalyst	Kenya Bureau of Standards 'KS' Number
1.
2.
3.
4.
5.
6.

for use in specified fossil fuels and is granted subject to the following conditions:

CONDITIONS OF LICENCE

1. This Licence will be valid for the project period of from the date hereof.
2.
3.
4.
5.

.....
Director General
National Environment Management Authority
(Signature and official stamp)

FORM II (NEMA/FC2)

(Regulation 7)

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Licence No. FF/FC

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