



Republic of the Philippines
QUEZON CITY COUNCIL
Quezon City
17th City Council

PO2009-67

64th Regular Session

ORDINANCE NO. SP-**1958**, S-2009

AN ORDINANCE AMENDING ORDINANCE NO. SP 1906, S-2009 ENTITLED "AN ORDINANCE CREATING AND ADOPTING GUIDELINES AND PROCEDURES ON ANTI-SMOKE BELCHING FOR MOTOR VEHICLES IN QUEZON CITY."

Introduced by Councilor DOROTHY A. DELARMENTE.

Co-Introduced by Councilors Victor V. Ferrer, Jr., Joseph P. Juico, Winston "Winnie" T. Castelo, Voltaire Godofredo L. Liban III, Eden "Candy" A. Medina, Aiko S. Melendez, Jorge B. Banal, Jr., Wencerom Benedict C. Lagumbay, Diorella Maria G. Sotto, Jaime F. Borres, Antonio B. Intan, Jr., Jesus Manuel C. Suntay, Janet M. Malaya, Edecel B. Lagman, Jr., Vincent DG. Belmonte, Feyani V. Hipol and Concepcion S. Malangen.

WHEREAS, Ordinance No. SP-1906, S-2008, entitled, "An Ordinance Creating and Adopting Guidelines and Procedures on Anti-Smoke Belching for Motor Vehicles in Quezon City" was approved by the City Council on September 29, 2008;

WHEREAS, the said Ordinance No. SP-1906, S-2008, needs to be amended to incorporate relevant and pertinent suggestions made by the Department of Environment and Natural Resources, (DENR), Environmental Management Bureau to compliment consistency with the Clean Air Act;

WHEREAS, Section 36 of Republic Act No. 8749, otherwise known as the Philippine Clean Air Act of 1999, states that, "LGU's share the responsibility in the management and maintenance of air quality within their territorial jurisdiction";

WHEREAS, Section 16 of Republic Act No. 7160, otherwise known as the Local Government Code of 1991, specifically grants the LGUs the power to promote the general welfare of the people by enacting and supporting, among other things, promotion of health and safety and enhancement of the right of the people to a balanced ecology;

WHEREAS, Section 17 (4) (e) of Republic Act No. 7160, states that, "national agencies or offices concerned shall devolve to local government units the responsibility for the provision of basic services and facilities enumerated in this section x x x";

NOW THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF QUEZON CITY IN REGULAR SESSION ASSEMBLED:

SECTION 1. TITLE - This Ordinance shall be known and referred to as "ANTI - SMOKE BELCHING GUIDELINES AND PROCEDURES FOR MOTOR VEHICLES IN QUEZON CITY."

SECTION 2. DEFINITION OF TERMS - As used in this Ordinance, the following terms shall be defined as follows:

- A. Air-Pollutant - refers to any alteration of the physical, chemical and biological properties of the atmospheric air or any discharge thereto of any liquid, gaseous or solid substance that will or is likely to create or to render the air resources of the country harmful, detrimental, or injurious to public health, safety or welfare or which will adversely affect their utilization for domestic, commercial, industrial, agricultural, recreational or other legitimate purpose;
- B. Ambient Air Quality - means the general amount of pollution present in a broad area and refers to the atmosphere's average purity as distinguished from discharge measurements taken at the source of pollution;
- C. ASBU - refers to the Anti-Smoking Belching Unit of the Environmental Protection and Waste Management Department (EPWMD);
- D. CAA - refers to the Clean Air Act of 1999;
- E. Compression Ignition Engine - refers to an internal combustion engine in which atomized fuel temperature is raised through compression, resulting in ignition, e.g. diesel engines.

- F. Emission** - refers to any measurable air contaminant, pollutant, gas stream or unwanted sound from known source which is passed to the atmosphere;
- G. EPWMD** - refers to the Environmental Protection and Waste Management Department;
- H. In-use Vehicle** - refers to a motor vehicle duly registered with the LTO;
- I. Motorcycle** - refers to any two-wheeled motor vehicle with at least one headlight, taillight and stoplight and one or more saddle seats. For purposes of these rules, motorcycles shall include motorcycle with attached cars also known as "tricycles";
- J. Motor Vehicle** - refers to any vehicle propelled by a gasoline or diesel engine or by any other means other than human or animal power constructed and operated principally for the conveyance of persons or transportation of goods in a public highway or street open to public use
- K. Motor Vehicle Registration (MVR)** - refers to the official recording of motor vehicle by the Land Transportation Office (LTO) subject to the conformance of the vehicle to the safety and emission standards provided under Section 21 of Republic Act No. 8749 or the Clean Air Act, including the pre-evaluation of the documents/requirements pursuant to Section 5 of Republic Act No. 4136 as amended, otherwise known as the Land Transportation Code;
- L. Opacity** - refers to the amount of light obscured by particle pollution in the atmosphere;
- M. Operator** - refers to a person or entity that manages a transport business but not necessarily a vehicle owner;
- N. OVR** - refers to the Ordinance Violation Receipt;
- O. Owner** - refers to the person or entity identified as the motor vehicle owner in the motor vehicle registration or by a valid deed of sale;
- P. Particulate Matter** - refers to any material other than uncombined water which exists in a finely divided form as a solid or liquid;

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- Q. *Reference Weight* – refers to the weight of the vehicle in running order with a full fuel tank and including the set of tools and spare wheel, plus 100 kilograms but does not include the weight of the passengers and driver;
- R. *Smoke Capacity Meter (or Opacimeter)* – refers to an instrument which determines the smoke opacity in exhaust gases emitted by the engine system;
- S. *Spark-Ignition Engine* – refers to an internal combustion engine in which the air/fuel mixture is ignited by spark plug, e.g., a gasoline engine;
- T. *Toxic Fumes* – refers to any emission and fumes which do not conform to internationally-accepted standards, including but not limited to World Health Organization (WHO) guideline values;
- U. *Type Approval* – refers to the official ratification of the compliance of a vehicle type with applicable national or international regulations.

SECTION 3. APPLICABILITY – The Ordinance shall be made applicable within the entire territory and jurisdiction of Quezon City and shall be enforced and implemented by the Anti-Smoke Belching Unit (ASBU) of the Pollution Control Division of EPWMD.

SECTION 4. INSTITUTIONAL ARRANGEMENTS – As an enforcement unit, ASBU shall be manned by competent personnel that meet the government set qualification standards. They shall be properly trained by duly-deputized ASBU training staff on CAA-consistent roadside apprehension and other anti smoke belching procedures, and shall be equipped with CAA-compliant smoke opacity meters as evidenced by a certificate of conformity to standards by the EMB-DENR. The program shall include training in the correct use, maintenance and calibration of smoke-testing equipment. No individual shall be deputized without satisfactorily completing the training.

SECTION 5. EMISSION STANDARDS FOR MOTOR VEHICLES – The EPWMD shall implement the emission standards for motor vehicles pursuant to and as provided in Republic Act No. 8749. The following standards for the different types of motor vehicles shall be applied:



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**a. FOR IN-USE VEHICLES WITH COMPRESSION-IGNITION ENGINES:
 (Diesel Engines)**

	Naturally-Aspirated	Turbo Charged	1.000 m increase in elevation
Registered for the first time on or before December 31, 2002	2.5	2.5	2.5
Registered for the first time on or After January 1, 2003 but before January 1, 2008	2.5	2.5	2.5
Registered for the first time After December 31, 2007	2.0	2.0	2.0

Opacity under free acceleration should not exceed the approved level by more than 0.5 m^{-1} light absorption coefficient.

**b. FOR IN-USE VEHICLES WITH SPARK-IGNITION ENGINES:
 (Gasoline Engines) Except Motorcycles**

Vehicle Category	CO (% by Volume)	HPC (ppm as hexane)
Registered for the first time on or before December 31, 2002	4.5	800
Registered for the first time on or After January 1, 2003 but before January 1, 2008	3.5	600
Registered for the first time After December 31, 2007	0.5	250

SECTION 6. SITE LOCATION FOR THE CITY IN-HOUSE EMISSION CENTER - The designated site for the City In-House Emission Center shall be determined by the City General Services Office upon the recommendation of the EPWMD. The operation of the in-house emission center may be replicated by opening future sites at every congressional district of the City.

SECTION 7. EMISSION TEST FOR ALL PUBLIC UTILITY VEHICLES PRIOR TO REGISTRATION - All public utility vehicles (PUVs) such as, but not limited to, public utility buses (PUBs), public utility jeepneys (PUJs), owned and/or operated by organized transport groups whose terminals and garages are located within the territorial jurisdiction of Quezon City, shall be required to undergo emission tests to any accredited testing centers as requisite to the issuance of an environmental clearance and for renewal of annual vehicle registration with the Land Transportation Office (LTO). Upon request, emission tests can be conducted by ASBU at the respective garage terminals of the organized transport groups. As a DOTC/DTI-accredited and authorized emission testing agency, ASBU test results shall be deemed official and executory. Public utility vehicles that failed to meet the emission standards must undergo necessary repairs at any accredited repair shop of choice.

SECTION 8. FREE ACCELERATION TEST FOR IN-USE COMPRESSION-IGNITION MOTOR VEHICLES - The test is a smoke opacity measurement for in-use motor vehicles equipped with compression-ignition engines, using the free acceleration from low idle speed method.

8a. MOTOR VEHICLE TEST CONDITION:

8a.1. The test shall be carried out on a stationary vehicle and the engine shall be first brought to normal operating conditions during a road run or dynamic test. In particular, cooling water and oil should be at normal temperature.

8a.2. The combustion chamber should not have been cooled or fouled due to prolonged period of idling preceding the test.

8a.3. The exhaust system shall not have any orifice or leaks wherein gases emitted by the engine might be diluted.

8b. TEST EQUIPMENT - The light-absorption coefficient of the exhaust gases shall be measured with a Smoke Opacity Meter (Opacimeter) satisfying the conditions laid down in ECE Regulation No. 2, Revision 2E/ECE/TRANS 505, Rev 2, Annex 8: Characteristics of the Opacimeter.

8c. TEST PROCEDURE AND SMOKE OPACITY MEASUREMENT:

8c.1. Follow the Opacimeter manufacturer's instruction on the proper installation, operations/use and checking the accuracy and calibration before and after each test.

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8c.2. Set the vehicle gear-change control in the neutral position and the hand-brake effectively engaged;

8c.3. Start the engine and warm it up to its normal operating temperature;

8c.4. Accelerate the engine two (2) to three (3) times prior to smoke sampling in order to remove deposits of soot and other carbon particles in the tail pipe;

8c.5. With the engine idling, depress the accelerator quickly, but not violently to obtain maximum delivery from the injection pump. Maintain this position until maximum engine speed is reached for about two (2) to four (4) seconds and the governor comes into action. As soon as this speed is reached, release the accelerator until the engine resumes its idling speed. Record the maximum reading of the smoke meter;

8c.6. The operation described in paragraph 8c.5 shall be repeated not less than six (6) times in order to clear the exhaust system and to allow for any necessary adjustment of the apparatus.

The maximum opacity values read in consecutive readings are within a band width of 0.25 m^{-1} and do not form a decreasing sequence. The arithmetic mean of the four (4) stabilized values shall be the test result for the concerned vehicle;

8c.7. For motor vehicles designed with several exhaust outlets that are individually connected from paired exhaust ports, the free acceleration test shall be carried out on each outlet. In this case, the values used for calculating the correction to the absorption coefficient shall be arithmetical mean values recorded at each outlet and the test shall be valid only if the extreme values do not differ by more than 0.15-1.

For more vehicles designed with several exhaust outlets connected from one (1) exhaust pipe coming from the engine's exhaust manifold collector, the free acceleration test shall be carried out only on one exhaust outlet, the other outlets effectively blocked to prevent leaks.



8c.8. Seal the full load screw of the injection pump/delivery system of the motor vehicle after a pass-test to prevent tampering

SECTION 9. EMISSION TEST PROCEDURE FOR IN-USE VEHICLES EQUIPPED WITH SPARK IGNITION ENGINES - The test procedure is for the determination of the concentration of exhaust carbon monoxide (CO) and hydrocarbon (HC) emissions from in-use motor vehicles equipped with spark ignition engines running at idle speed.

9a. TEST EQUIPMENT (Reference: ISO-3930)

9a.1. Carbon Monoxide Analyzer - A NDIR (Non-Dispersive Infrared) CO Exhaust Gas Analyzer;

9a.2. Hydrocarbon Analyzer - A NDIR HC Exhaust Gas Analyzer, HC as hexane (C₆H₁₄);

9a.3. Tachometer - an easily-installed and operated tachometer to measure engine speed (RPM).

9b. VEHICLE PREPARATION

9b.1. Set the vehicle transmission at neutral with the hand-brake engaged;

9b.2. With the accelerator in the rest position, make sure that the idling speed or the engine rpm conforms with the vehicle manufacturer's recommendation;

9b.3. All accessories like rear window heating, air-conditioning system, air fan and other equipment necessary for the vehicle operation at idle should be switched-off;

9b.4. Check that the temperature of the engine is at least 70°C; otherwise run the vehicle for at least 15 minutes on a normal road before testing;

9b.5. Ensure that the vehicle exhaust system of the engine is reasonably leakproof and will allow the insertion of the sampling probe by at least 30 cm. from the tailpipe outlet. If this is not possible due to tailpipe configuration, use the appropriate correction factor;



9c. MEASUREMENT

9c.1. Immediately preceding the instrument, adjust the instrument to zero and accelerate the engine to about 2,500 rpm, using the tachometer, if available. Maintain this speed for ten (10) to fifteen (15) seconds, then release the pedal to return the engine at idle speed;

9c.2. While the engine idles, insert the sampling probe into the exhaust pipe as deeply as possible which shall not be less than 30 cm. Wait for twenty (20) seconds and take the CO/HC reading;

9c.3. If the vehicle has multiple exhaust outlets, the arithmetic average of the CO/HC readings in each exhaust outlet is taken as the final result;

9d. INSTRUMENT CALIBRATION, ADJUSTMENT (REFERENCE: ISO 3929)

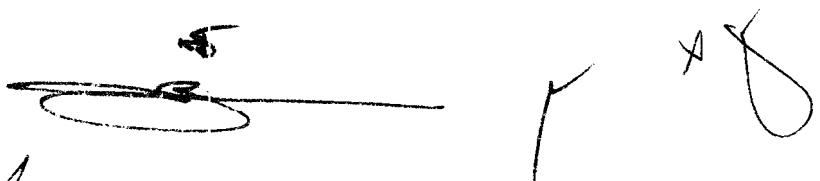
9d.1. Prepare, use and maintain the analyzer following the directions given in the instrument manufacturer's operation manual and service the instrument at such intervals as to ensure accuracy.

9d.2. Carry out a span and zero calibration within a period of four (4) hours before the instrument is moved or transferred to a new location. The calibration shall be performed well away from the exhaust of motor vehicles whose engines are running.

If the instrument is not self compensated for none-standard conditions of altitude and ambient temperature or not equipped with a manually controlled system of compensation. The scale calibration shall be performed using calibration gas.

9d.3. If the sample handling system is not integral with the analyzer, make certain that the effectiveness of the gas sampling system are leakproof. Check that filters are clean, that filter holders are fitted with their gaskets and that these are all in good condition.

9d.4. Ensure that the sample handling line are free from contaminants.



SECTION 10. ROADSIDE INSPECTION OF MOTOR VEHICLES AND APPREHENSION PROCEDURE:

10a. Any vehicle suspected of violation of emission standards through visual manifestations while operating in any public highway of the City shall be flagged down by the apprehending crew of the Anti-Smoke Belching Unit (ASBU) of the EPWMD;

10b. The apprehending crew shall conduct an emission test of the vehicle using a portable Emission Testing Equipment and using test procedures specified under Section 8 and Section 9 hereof to determine whether the vehicle complies with the emission standards;

10c. If the testing result indicated to have exceeded the emission standards on smoke-belching, the computerized print-out generated by the portable emission testing equipment shall serve as prima facie evidence of violation of the emission standards;

10d. An Ordinance Violation Receipt (OVR) shall be issued by ASBU personnel to the driver and his/her driver's license shall be confiscated pending the fulfillment of the undertaking by the owner/operator of the motor vehicle to make the necessary repairs so as to comply with the standards. Confiscated driver's license shall be stored for safekeeping at the ASBU designated storage area.

10e. Upon payment of the fine at the City Treasurer's Office, temporary pass shall be issued to the driver by ASBU allowing him the use of the motor vehicle within a specified period that shall not exceed seven (7) days for the sole purpose of making the necessary repairs on the said vehicle. The owner/operator of the vehicle shall be required to correct its defect and show proof of compliance to ASBU before the vehicle can be allowed to be driven on any public or subdivision roads.

10f. Failure of the driver/operator to comply and pay the corresponding fines and penalties within the prescribed period shall compel ASBU to initiate necessary action by forwarding the name/s of the violator/s to the City Legal Office for the appropriate legal action.

10g. Motor vehicles released for purposes of repairs shall not be operated or used in public roads except for purpose of transporting of the same to the calibration service center for repairs and to the authorized emission testing center for emission testing;

10h. When the repairs are made, the vehicle must undergo an emission test at the ASBU-designated emission testing center or any authorized and accredited emission testing center to ascertain if it already meets the emission standards;

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CITY OF PASADENA
LAW DEPARTMENT

10i. Once the vehicle meets the standards, the ASBU testing center or any authorized and accredited emission testing center shall issue a Certificate of Emission Compliance (CEC) to the driver of the vehicle.

10j. Upon presentation of Certificate of Emission Compliance (CEC), the driver shall recover his driver's license from ASBU which has custody over the driver's license.

10k. In the event the driver of the apprehended vehicle contests the apprehension and/or result of the emission standards, he may appeal the same to the City Legal Office where he will be given the opportunity to be heard and present his evidence;

Pending the creation of the City Adjudication Service, through a Local Executive Order, the City Legal Department shall function as such. The City Adjudication Service may adopt its rules and procedures in the conduct of its hearing.

SECTION 11. CITY IN-HOUSE EMISSION TESTING CENTER - When the repairs are made, the vehicle may undergo an emission test at the DOTC/DTI authorized and accredited emission testing center of EPWMD to ascertain if it already meets the standards. Once the vehicle meets the standards, ASBU shall issue a Certificate of Emission Compliance (CEC) to the driver of the vehicle.

SECTION 12. FEES/CHARGES - Motor vehicle owners and/or operators shall be charged corresponding fees for the in-house emission testing services rendered with fifty percent (50 %) discount of the prevailing market rates.

SECTION 13. FINES AND PENALTIES FOR VIOLATION OF EMISSION STANDARDS FOR MOTOR VEHICLES AND VIOLATION OF SECTION 7 OF THIS ORDINANCE - Vehicle found to have exceeded the emission standards for motor vehicles shall suffer the following penalties. (As provided for in Section 1 Part XIII RULE LV of the Clean Air Act - Fines and Penalties).

13a. Fines for violation of Section 7 hereof on Emission Limits for motorcycles/tricycles

- First Offense - One Hundred Pesos
- Second Offense - Three Hundred Pesos
- Third Offense - Five Hundred Pesos

13b. Fines for violation of Section 7 hereof on Emission Limits for Motorcycles/Tricycles

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First Offense - A fine in the amount of One Thousand Pesos (P1,000.00);

Second Offense - A fine in the amount of Three Thousand Pesos (P3,000.00);

Third Offense - A fine in the amount of Five Thousand Pesos (P5,000.00), and the offender must undergo a seminar on pollution control and management to be conducted by ASBU;

In case the third offense was committed within a year from the commission of the first offense, ASBU shall endorse to LTO for the suspension of the Motor Vehicle Registration (MVR) for a period of one (1) year.

In the case of Violation of Section 7 hereof (Emission Test for Public Utility Vehicle Prior to Registration), the imposition of a Closure Order shall be recommended to the Business Permits and Licensing Office (BPLO).

SECTION 14. COLLECTION AND DISPOSITION OF FINES - The City Treasurer's Office shall receive all payment of fines for violation of this Ordinance.

SECTION 15. SEPARABILITY CLAUSE - If for any reason, any provision, section, or part of this Ordinance is declared not valid by a court of competent jurisdiction, such judgment shall not affect or impair the remaining provisions, sections, or parts hereof which shall continue to be in force and effect.

SECTION 16. APPLICABILITY CLAUSE - All other matters relating to the impositions in this Ordinance shall be governed by pertinent provisions of existing laws and other ordinances.

SECTION 17. REPEALING CLAUSE - All ordinances, rules and regulations, or parts thereof, in conflict with, or inconsistent with any of the provisions of this Ordinance are hereby repealed or amended accordingly.

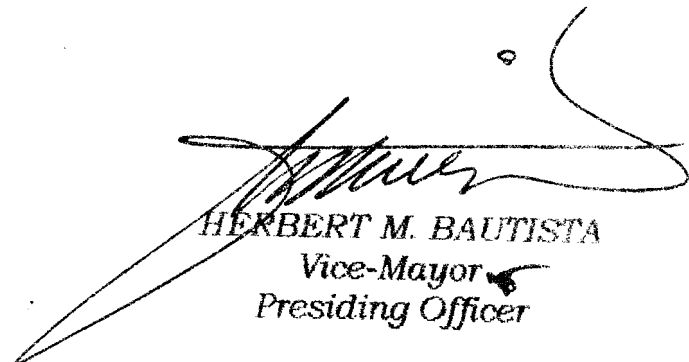
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SECTION 18. EFFECTIVITY - There shall be a grace period of three (3) months from the date of enactment of this ordinance for the conduct of massive information campaign and another three (3) months for a warning violation with no penalties and other charges. Hereafter, this Ordinance shall take effect after publication in a newspaper of general circulation.

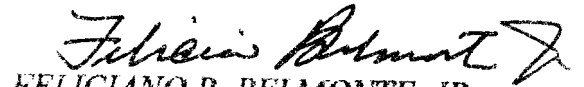
ENACTED: July 20, 2009


HERBERT M. BAUTISTA
Vice-Mayor
Presiding Officer

ATTESTED:

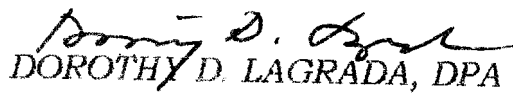

DOROTHY D. LAGRADA, DPA
City Secretary

APPROVED: Oct. 8, 2009


FELICIANO R. BELMONTE, JR.
City Mayor

CERTIFICATION

This is to certify that this Ordinance was APPROVED by the City Council on Second Reading on July 20, 2009 and was finally PASSED on Third/Final Reading on August 3, 2009.


DOROTHY D. LAGRADA, DPA
City Secretary