DENR Administrative Order

No. 98 - 47

June 29, 1998

SUBJECT: Implementing Rules and

Regulations (IRR) for Mandating the Phase-Out of Leaded Gasoline as One of the Means of Solving Air

Pollution.

Pursuant to Executive Order No. 446, series of 1997, entitled "Mandating the Phase-out of Leaded Gasoline As One of the Means of Solving Air Pollution," the Department of Environment and Natural Resources hereby adopts and promulgates the following Rules and Regulations:

Chapter I

General Provisions and Administrative Procedures

- **Section 1. Title -** These Rules and Regulations shall be cited as the "Implementing Rules and Regulations Mandating the Phase-Out of Leaded Gasoline as One of the Means of Solving Air Pollution (1998)."
- **Sec. 2 Scope** These Rules and Regulations shall govern the implementation and enforcement of Executive Order No. 446.
- **Sec. 3 Definition -** For the purpose of these Rules and Regulations, the following terms shall, unless the context otherwise indicates, have the following meanings:
- 3.1 Bulk Plant/Terminal/Depot refers to an intermediate gasoline distribution facility where delivery of gasoline to and from the facility

- is solely by trucks, ships, barges, pipes, and other modes of transport.
- 3.2 Department refers to the Department of Environment and Natural Resources.
- 3.3 Final distribution facility refers to the facility where the gasoline will be dispensed to the motor vehicles.
- 3.4 Gasoline refers to a volatile mixture of liquid hydrocarbons, generally containing small amounts of additives, suitable for use as a fuel in spark-ignition internal combustion engines.
- 3.5 Gross Vehicle Mass or "GVM" refers to the technically permissible maximum mass declared by the vehicle manufacturer.
- 3.6 Import facility refers to the facility which first receives the imported gasoline into the country.
- 3.7 Production facility refers to a facility that produces gasoline.
- 3.8 Refiner refers to any person who owns, leases, operates, controls or supervises a refinery.
- 3.9 Supply mean to provide or transfer a product to a physically separate facility, vehicle or transportation system.
- 3.10 Motor Vehicle means any vehicle propelled by a gasoline or diesel engine or any other means other than human or animal power, constructed and operated principally for the conveyance of persons on the transporting or property or goods on a public highway or street opened to public use.
- 3.11 Refinery refers to a facility which produces liquid fuels by distillation and other processes
- Sec. 4 Department of Environment and Natural Resources (DENR) as lead agency. The DENR, through the Environment Management Bureau (EMB) shall take the lead in implementing these rules and regulations, and shall in coordination and consultation with other government agencies, non-government organizations, private entities and institutions, pursuant to Sections 6 of Executive Order No. 446, enter into a Memorandum of Agreement (MOA) and/or other necessary and appropriate legally binding instruments for the effective administration and enforcement of these

Rules and Regulations. Copies of all pertinent reports, researches, studies, surveys, plans, programs and other documents to be submitted under these rules shall be furnished to the EMB-DENR for the centralization of all necessary data.

Sec. 5 Applicability of Standards

- 5.1 Beginning January 1, 2000, no person shall sell, offer for sale, supply or offer for supply, gasoline from bulk plant or final distribution facility in Metro Manila unless the gasoline complies with the latest issue of the Philippine National Standards (PNS): 1131 "Specifications of Unleaded Motor Gasoline." Nor shall any person import leaded gasoline and lead-containing fuel additives after December 31, 1999, except those that shall be used in areas outside of Metro Manila.
- 5.2 Beginning January 1, 2001, no person shall manufacture, sell, offer for sale, dispense, transport or introduce into commerce gasoline unless the gasoline complies with the latest issue of PNS: 1131. However, beginning October 1, 2000, no person shall import leaded gasoline and lead-containing fuel additives.

Chapter II

Fuel and Facilities Quality Standards

Sec. 6 Standards: Fuel Quality Standards

- 6.1 Scope: Standard for unleaded motor gasoline shall refer to the latest issue of PNS 1131.
- 6.2 The specifications for unleaded motor gasoline facilities such as but not limited to distribution pipes, storage tanks, dispensing units, shall be in accordance with the PNS for such facilities.

Chapter III

Monitoring, Evaluation and Assessment

- **Sec.** 7 **Scope.** This Chapter shall cover the provisions on the monitoring, evaluation and assessment of the lead phase-out activities and the corresponding institution to undertake the same.
- **Sec. 8** Functions, Duties and Responsibilities. In line with section 4 of these Rules and Regulations, and in order to ensure the effective monitoring, evaluation and assessment of these rules and regulations, the following shall be the functions, duties and responsibilities of the various relevant government agencies, which should not exclude however, all other functions, duties and responsibilities that are necessary and incidental to the implementation of these Rules and Regulations.

The DENR shall conduct ambient air sampling activities to determine the level of lead and other fuel-related emissions in the air; conduct statistical evaluation of the results of the ambient air sampling activities; monitor the full and strict compliance of gasoline manufacturers, suppliers, distributors or dealers of their duly approved phase-out programs; and monitor the reduction of greenhouse gases and other toxic gases emissions.

The Department of Energy (DOE) shall monitor compliance with PNS 1131 through periodic random sampling and testing of unleaded gasoline samples from various facilities nationwide such as manufacturers, suppliers, dealers and other sources. It shall also conduct studies on the effects of the phase-out to the relevant sectors but not limited to the gasoline manufacturers, dealers as well as the fuel users.

The Department of Transportation and Communication (DOTC) and the University of the Philippines/National Center for

Transport Studies (UP/NCTS) shall establish estimates on the type of vehicles using lead and unleaded gasoline.

The Department of Health (DOH) shall conduct monitoring activities on the health impacts of the ambient air quality levels.

The National Economic Development Authority (NEDA) shall conduct monitoring activities on the economic impacts of the phase-out of leaded gasoline.

The Department of Trade and Industry (DTI) shall act on complaints related to fuel quality and regulate importation of spare parts designed for leaded gasoline.

Chapter IV

Inspection/Maintenance and Emission Control System

- **Sec. 9 Scope:** This Chapter shall pertain to the control of exhaust emissions for gasoline-fueled motor vehicles emphasizing regular and proper vehicle maintenance and utilizing appropriate test procedures and equipment.
- **Sec. 10 Mandatory Periodic Inspection.** The mandatory periodic emission inspection for this type of vehicle shall be undertaken by the DOTC/Land Transportation Office (DOTC/LTO) in coordination with the DENR under the latter's pertinent rules and regulations.
- **Sec.** 11 The DTI, in coordination with the Chamber of Automotive Manufacturers of the Phil., Inc., (CAMPI) shall ensure that all newly-manufactured/assembled gasoline-fuelled motor vehicles, including motorcycles and mopeds to be introduced into the market or imported effective January 1, 2000 shall be designed to operate on unleaded gasoline.

Sec. 12 Effective January 1, 2000, all newly-manufactured/assembled vehicles, including motorcycles and mopeds shall be equipped with anti-pollution devices necessary to meet the standards on exhaust emission.

Chapter V

Public Information Dissemination

Sec. 13 The following shall be the duties and responsibilities of the various institutions concerned:

The Philippine Information Agency (PIA) shall coordinate the formulation and implementation of an integrated Communications Plan on unleaded gasoline, and produce the necessary information, education and communications materials of such Plan, which shall include but not be limited to the environmental, health, economic and social implications and effects of the lead phase-out, and the phase-out schedules, programs and specific requirements of gasoline manufacturers, suppliers, distributors and dealers. It shall also provide technical assistance in the conceptualization of IEC materials on unleaded gasoline and utilize its regional information centers in the dissemination of information on the environmental, health, economic and social benefits of unleaded gasoline.

The DENR/EMB, Public Affairs Office and the Regional Offices, shall support the Communications Plan implementation by producing IEC materials such as radio and television plugs, brochures giving particular emphasis on the environmental implications and effects of unleaded gasoline.

The Department of Education, Culture and Sports (DECS), the Communication on Higher Education (CHED) and the Technical Education and Skills Development Authority (TESDA) shall mandate in schools the inclusion of the teaching of the benefits of clean air and

unleaded gasoline in their curricula and teacher training programs. It shall also launch and initiate information dissemination campaigns on unleaded gasoline to the school system, in the formal and non-formal levels.

The Department of Interior and Local Government (DILG) shall support the Communications Plan implementation by producing IEC material on leaded gasoline phase-out.

All concerned agencies shall conduct public information campaigns in support of the Communication Plan on unleaded gasoline phase-out.

Chapter VI Research and Development

Sec. 14 Emission Control

The DOST, in coordination with the concerned agencies (DOTC/LTO, DENR/EMB, UP/COE, UP/College of Public Health (CPH), DOH and NCTS shall come up with a research/study on the emission control applicable to the unleaded gasoline. Likewise, in coordination with concerned agencies, it shall undertake research to assess the effectiveness of various air pollution gadgets (e.g. catalytic converter) in reducing greenhouse and toxic gases (carbon monoxide, nitrogen oxides, sulfur oxides, aromatics and benzene) emitted by unleaded gasoline-fed vehicles and assess the resulting environmental and health improvements of these gadgets.

The DOST and DOH shall undertake the quantitative analysis of volatile organics and benzene on ambient air in Metro Manila and appraise the potential health impacts of these substances.

The UP/College of Engineering (COE) shall undertake study on the engine performance (e.g. fuel combustion, accumulation of gasoline residues, etc.) on unleaded gasoline-fed vehicles.

The DOH and UP-CPH shall undertake research on the health impact of unleaded gasoline emissions.

Sec. 15 Fuel Additives

The DOST shall undertake research on the use of other octaneenhancer additives (e.g. methyl tertiary butyl ether etc. for unleaded gasoline); engine performance efficiency using the alternative additives in comparison with the leaded gasoline; and the quality and quantity of gas emitted using the alternative additives.

The DOST, in coordination with DOE and other concerned agencies shall conduct study/research on the alternative fuel additives for unleaded gasoline.

Chapter VII

Prohibited Acts and Penalties

Sec. 16 Prohibitions

- 16.1 No person shall import, sell, offer for sale, supply, or offer for supply gasoline and lead containing fuel additive, the specifications of which are not in conformity with those indicated in Sections (5) and (6) of these rules and regulations.
- 16.2 No person shall import, sell, register or operate any new imported or locally manufactured/assembled motor vehicle including motorcycle and moped that is not designed to use unleaded gasoline immediately upon the publication of these Rules and Regulations.

16.3 No person shall do other acts that are prohibited under these Rules and Regulations.

Sec. 17 Penalties

All acts and omissions in violation of the provisions of these rules and regulations shall be subject to the appropriate penalties provided for in the pertinent laws, Rules and Regulations of the concerned government agencies.

Chapter VIII

Final Provisions

- **Sec. 18 Separability Clause.** If any section or provision of these Rules and Regulations or part thereof, is declared unconstitutional or invalid by a competent court, other sections or provisions thereof, which are not thereby affected, shall continue to be in full force and effect as though the sections or provisions so annulled or voided had never been incorporated herein.
- **Sec. 19 Amendments.** These rules and regulations may be amended accordingly whenever deemed necessary and appropriate by the Department.
- **Sec. 20 Repealing Clause.** All other issuances, policies, rules and regulations inconsistent with these rules are hereby revised, amended, modified, and/or superseded accordingly.

Sec. 21 Effectivity. These rules and regulations shall take effect fifteen days after publication in a newspaper of general circulation.

(Sgd.) VICTOR O. RAMOS Secretary

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TODAY - July 13, 1998 - page 09