Existing industries, which are proven to exceed emission rates established by the Department, in consultation with stakeholders, after a thorough, credible and transparent measurement process shall be allowed a grace period of eighteen (18) months for the establishment of an environmental management system and the installation of an appropriate air pollution control device: *Provided*, That an extension of not more than twelve (12) months may be allowed by the Department on meritorious grounds.

SEC. 20. Ban on Incineration. — Incineration, hereby defined as the burning of municipal, bio- medical and hazardous wastes, which process emits poisonous and toxic fumes, is hereby prohibited: Provided, however, That the prohibition shall not apply to traditional small-scale method of community/neighborhood sanitation "siga," traditional, agricultural, cultural, health, and food preparation and crematoria: Provided, further, That existing incinerators dealing with bio-medical wastes shall be phased out within three (3) years after the effectivity of this Act: Provided, finally, That in the interim, such units shall be limited to the burning of pathological and infectious wastes, and subject to close monitoring by the Department.

Local government units are hereby mandated to promote, encourage and implement in their respective jurisdiction a comprehensive ecological waste management that includes waste segregation, recycling and composting.

With due concern on the effects of climate change, the Department shall promote the use of state-of-the-art, environmentally-sound and safe non-burn technologies for the handling, treatment, thermal destruction, utilization, and disposal of sorted, unrecycled, uncomposted municipal, bio-medical and hazardous wastes.

### ARTICLE FOUR POLLUTION FROM MOTOR VEHICLES

SEC. 21. *Pollution from Motor Vehicles*. – (a) The DOTC shall implement the emission standards for motor vehicles set pursuant to and as provided in this Act. To further improve the emission standards, the Department shall review, revise and publish the standards every two (2) years, or as the need arises.

It shall consider the maximum limits for all major pollutants to ensure substantial improvement in air quality for the health, safety and welfare of the general public.

The following emission standards for type approval of motor vehicles shall be effective by the year 2003:

(a) For light duty vehicles, the exhaust emission limits for gaseous pollutants shall be:

# Emission Limits for Light Duty Vehicles Type Approval (Directive 91/441/EEC)

CO (g/km)	$HC + NO_{X}$ $(g/km)$	PM <sup>a</sup> (g/km)
2.72	0.97	0.14

a for compression-ignition engines only

(b) For light commercial vehicles, the exhaust emission limit of gaseous pollutants as a function of the the given reference mass shall be:

# Emission Limits for Light Commercial Vehicles Type Approval (Directive 93/59/EEC)

	Reference Weight (RW) (kg)	CO (g/km)	HC + NO <sub>X</sub> (g/km)	PM <sup>3</sup> (g/km)
Category 1	1250< RW	2.72	0.97	0.14
Category 2	1250< RW < 1700	5.17	1.4	0.19
Category 3	RW>1700	6.9	1.7	0.25

a for compression-ignition engines only

(c) For heavy duty vehicles, the exhaust emission limits of gaseous pollutants shall be:

### Emission Limits for Heavy Duty Vehicles Type Approval (Directive 91/542/EEC)

CO	HC	NO <sub>X</sub>	PM
(g/kWh)	(g/kWh)	(g/kWh)	(g/kWh)
4.5	1.1	8.0	0.36 <sup>a</sup>

<sup>a</sup> In the case of engines of 85 kW or less, the limit value for particular emissions is increased by multiplying the quoted limit by a coefficient of 1.7

Fuel evaporative emission for spark-ignition engines shall not exceed 2.0 grams hydrocarbons per test. Likewise, it shall not allow any emission of gases from crankcase ventilation system into the atmosphere.

- (b) The Department, in collaboration with the DOTC, DTI and LGUs, shall develop an action plan for the control and management of air pollution from motor vehicles consistent with the Integrated Air Quality Framework. The DOTC shall enforce compliance with the emission standards for motor vehicles set by the Department. The DOTC may deputize other law enforcement agencies and LGUs for this purpose. To this end, the DOTC shall have the power to:
  - (1) Inspect and monitor the emissions of motor vehicles;
- (2) Prohibit or enjoin the use of motor vehicles or a class of motor vehicles in any area or street at specified times; and
- (3) Authorize private emission testing centers duly accredited by the  $\operatorname{DTI}$ .

- (c) The DOTC, together with the DTI and the Department, shall establish the procedures for the inspection of motor vehicles and the testing of their emissions for the purpose of determining the concentration and/or rate of emission of pollutants discharged by said sources.
- (d) In order to ensure the substantial reduction of emissions from motor vehicles, the Department of Trade and Industry (DTI), together with the DOTC and the Department, shall formulate and implement a national motor vehicle inspection and maintenance program that will promote efficient and safe operation of all motor vehicles. In this regard, the DTI shall develop and implement standards and procedures for the certification of training institutions, instructors and facilities and the licensing of qualified private service centers and their technicians as prerequisite for performing the testing, servicing, repair and the required adjustment to the vehicle emission system. The DTI shall likewise prescribe regulations requiring the disclosure of odometer readings and the use of tamper-resistant odometers for all motor vehicles including tamper-resistant fuel management systems for the effective implementation of the inspection and maintenance program.

SEC. 22. Regulation of All Motor Vehicles and Engines. — Any imported new or locally-assembled new motor vehicle shall not be registered unless it complies with the emission standards set pursuant to this Act, as evidenced by a Certificate of Conformity (COC) issued by the Department.

Any imported new motor vehicle engine shall not be introduced into commerce, sold or used unless it complies with emission standards set pursuant to this Act.

Any imported used motor vehicle or rebuilt motor vehicle using new or used engines, major parts or components shall not be registered unless it complies with the emission standards set pursuant to this Act.

In case of non-compliance, the importer or consignee may be allowed to modify or rebuild the vehicle or engine so that it will be in compliance with applicable emission standards.

No motor vehicle registration (MVR) shall be issued unless such motor vehicle passes the emission testing requirement promulgated in accordance with this Act. Such testing shall be conducted by the DOTC or its authorized inspection centers within sixty (60) days prior to date of registration.

The DTI shall promulgate the necessary regulations prescribing the useful life of vehicles and engines including devices in order to ensure that such vehicles will conform to the emissions which they were certified to meet. These regulations shall include provisions for ensuring the durability of emission devices.

SEC. 23. Second-Hand Motor Vehicle Engines. – Any imported second-hand motor vehicle engine shall not be introduced into commerce, sold or used unless it complies with emission standards set pursuant to this Act.

## ARTICLE FIVE POLLUTION FROM OTHER SOURCES

SEC. 24. *Pollution from Smoking*. – Smoking inside a public building or an enclosed public place including public vehicles and other means of transport or in any enclosed area outside of one's private residence, private place of work or any duly designated smoking area is hereby prohibited under this Act. This provision shall be implemented by the LGUs.

SEC. 25. Pollution from Other Mobile Sources. – The Department, in coordination with appropriate agencies, shall formulate and establish the necessary standards for all mobile sources other than those referred to in Section 21 of this Act. The imposition of the appropriate fines and penalties from these sources for any violation of emission standards shall be under the jurisdiction of the DOTC.

#### CHAPTER 3

### FUELS, ADDITIVES, SUBSTANCES AND POLLUTANTS

#### ARTICLE ONE

FUELS, ADDITIVES AND SUBSTANCES

SEC. 26. Fuels and Additives. – Pursuant to the Air Quality Framework to be established under Section 7 of this Act, the Department of Energy (DOE), co-chaired by the Department of Environment and Natural Resources (DENR), in consultation with the Bureau of Product Standards (BPS) of the DTI, the DOST, the representatives of the fuel and automotive industries, academe and the consumers shall set the specifications for all types of fuel and fuel-related products, to improve fuel composition for increased efficiency and reduced emissions: Provided, however, That the specifications for all types of fuel and fuel-related products setforth pursuant to this section shall be adopted by the BPS as Philippine National Standards (PNS).

The DOE, shall also specify the allowable content of additives in all types of fuels and fuel-related products. Such standards shall be based primarily on threshold levels of health and research studies. On the basis of such specifications, the DOE shall likewise limit the content or begin the phase-out of additives in all types of fuels and fuel-related products as it may deem necessary. Other agencies involved in the performance of this function shall be required to coordinate with the DOE and transfer all documents and information necessary for the implementation of this provision.

Consistent with the provisions of the preceding paragraphs under this section, it is declared that:

(a) not later than eighteen (18) months after the effectivity of this Act, no person shall manufacture, import, sell, supply, offer for sale, dispense, transport or introduce into commerce unleaded premium gasoline fuel which has an anti-knock index (AKI) of not less than 87.5 and Reid vapor pressure of not more than 9 psi. Within six (6) months after the effectivity of this Act, unleaded gasoline fuel shall contain aromatics not to exceed forty-

five percent (45%) by volume and benzene not to exceed four percent (4%) by volume: Provided, That by year 2003, unleaded gasoline fuel should contain aromatics not to exceed thirty-five percent (35%) by volume and benzene not to exceed two percent (2%) by volume;

- (b) not later than eighteen (18) months after the effectivity of this Act, no person shall manufacture, import, sell, supply, offer for sale, dispense, transport or introduce into commerce automotive diesel fuel which contains a concentration of sulfur in excess of 0.20% by weight with a cetane number or index of not less than forty-eight (48): *Provided*, That by year 2004, content of said sulfur shall be 0.05% by weight; and
- (c) not later than eighteen (18) months after the effectivity of this Act, no person shall manufacture, import, sell, supply, offer for sale, dispense, transport or introduce into commerce industrial diesel fuel which contains a concentration of sulfur in excess of 0.30% (by weight).

Every two (2) years thereafter or as the need arises, the specifications of unleaded gasoline and of automotive and industrial diesel fuels shall be reviewed and revised for further improvement in formulation and in accordance with the provisions of this Act.

The fuels characterized above shall be commercially available. Likewise, the same shall be the reference fuels for emission and testing procedures to be established in accordance with the provisions of this Act.

Any proposed additive shall not in any way increase emissions of any of the regulated gases which shall include, but not limited to carbon monoxide, hydrocarbons, and oxides of nitrogen and particulate matter, in order to be approved and certified by the Department.

SEC. 27. Regulation of Fuels and Fuel Additives. – The DOE, in coordination with the Department and the BPS, shall regulate the use of any fuel or fuel additive. No manufacturer,