DENR Administrative Order
No. 2000 – 02
January 06, 2000

SUBJECT : Chemical Control Order For Asbestos.

Section 1. Legal Authority

This Chemical Control Order (CCO) is issued on the basis of authority given to the Department of Environment and Natural Resources under the Republic Act 6969 of 1990 and DENR Administrative Order (DAO) 29, Series of 1992, specifically, Title II, Toxic Chemical Substances (Chapter IV, Section 20) and Title III, Hazardous and Nuclear Wastes (Chapter VII, Section 25).

The requirements and procedures presented in this CCO are in addition to all the other requirements of Title II and Title III of DAO 29 as they pertain to the importation, manufacture and use of asbestos and the storage, transport and disposal of their wastes.

Section II. Rationale and Policy

Asbestos is a naturally occurring fibrous hydrated mineral silicates that have been used in a wide variety of products and various uses over the years. Its unique properties of fire resistance and insulation have made its use common in a variety of products including friction materials, fire proof clothing, insulation, construction materials, fire and heat shielding equipment, mechanical packings and gaskets, textiles, and other products. Epidemiological studies have linked prolonged exposure to certain varieties of asbestos fibers to forms of lung cancer. Asbestos is considered as known human carcinogen by the Intentional Agency for Research on Cancer. Several countries have prohibited and/or regulated the manufacture, export and import of

asbestos and asbestos containing materials, particularly, friable asbestos materials and low density products.

This CCO is meant to control and regulate the use and disposal of asbestos into the environment to avoid the aforesaid adverse consequences. It is the policy of the DENR to minimize the hazard to human health and the environment from the improper use, management, disposal and subsequent release, and exposure to harmful substances.

Section III. Definition

In this CCO, unless inconsistent with the context or subject matter, the following definitions apply:

(1) "DAO 29" means Implementing Rules and Regulations of Republic Act 6969.

(2) "Department" means the Department of Environment and Natural Resources.

(3) "Bureau" means the Environmental Management Bureau.

(4) "Asbestos" means the fibrous forms of varieties of mineral silicates belonging to rock forming minerals of the serpentine group, i.e. chrysotile (white asbestos); and the amphibole group i.e. actinolite, amosite (brown asbestos, cumming/tonite /grunerite), anthophyllite, crocidolite (blue asbestos) and tremolite.

(5) "Friable asbestos material" means any material containing more than one percent (1%) asbestos, as determined using standard polarized light microscopy techniques, which when dry can be crumbled, pulverized, or reduced to powder by hand pressure thereby, releasing airborne fibers.

(6) "Non-friable asbestos containing material" means any material containing more than one percent (1%) asbestos, as determined by using standard polarized light microscopy techniques, which when dry, can not be crumbled, pulverized, or reduced to powder by hand pressure.

(7) "Importer" means any person or corporation that undertakes the entry of a product or substance into the country which is intended for direct consumption, warehousing or distribution to manufacturers or end users.

(8) "Storage" means supply or stock reserved, put away for future use, safekeeping or disposal.

(9) "Disposal" means throwing away, destroying or getting rid of waste materials.

(10) "Manufacturer" means any person or corporation that undertakes the mechanical or chemical transformation of substances into new products performed either by power-driven machines or by hand.

(11) "Asbestos Containing Wastes" means process residues from manufacturing operations and consumer discards of manufactured products.

(12) "Adequately wet asbestos" means to sufficiently moisten or saturate with water the friable asbestos containing materials that will be exposed during removal or demolition activities to prevent the possible release of asbestos fibers into the air.

(13) "Premises" shall include but not limited to building or part of a building, a tent, stall or other structures whether permanent or temporary, land, vehicle or ship.

(14) "Equipment" shall include but not limited to tools, devices, furnishings, apparatus, and materials for any undertaking such as hoods, enclosures, ducts, dust suppressant, among others.

Section IV. Scope and Coverage

This CCO applies to the importation and manufacturing of asbestos. It also addresses the treatment, storage, disposal of asbestos containing materials and asbestos containing wastes in the Philippines. This order will cover the following interest groups:

(1) Importers;
(2) Manufacturers;
(3) Transporters;
(4) Industrial facility owners/operators and contractors;
(5) Shipbuilders;
(6) Waste management service providers:

(i) demolition contractors (haulers, transporters and disposers)
(ii) shipbreakers
(iii) owner/operator of a demolition or renovation activity

Section V. Objectives

(1) General Objective:

Control and regulate the use and disposal of asbestos to minimize hazards to human health and the environment.

(2) Specific Objectives:

(a) Increase awareness on the safe and responsible use of asbestos.

(b) Develop the framework for the proper management of asbestos raw material, products and wastes.

(c) Define the requirements and procedures for importation, manufacturing and proper treatment, storage and disposal of asbestos.

(d) Establish limitation of use of certain variety of asbestos and asbestos containing materials and products,

(e) Establish a compliance monitoring program to enforce the tenets and covenants of this Order.

Section VI. General Requirements and Procedures

In addition to the general requirements under Title II and III of R.A. 6969, DAO 29, the following requirements and procedures are hereby provided:

(1) Registration and Permitting

(a) Any person or entity who imports and manufactures asbestos or asbestos containing products in the Philippines must register with the Bureau.

(b) Any person or entity who imports asbestos and asbestos containing products must get an importation clearance from the Bureau.

(c) Any person or entity involved in the treatment, storage, demolition, transport and disposal of asbestos and friable asbestos containing wastes must register with the Bureau.

(d) Existing industrial, commercial and institutional structures with sprayed on asbestos and friable asbestos containing materials shall register with the Bureau.

(2) Reports and Records

(a) Any importer and manufacturer of asbestos and asbestos containing products must submit an annual report to the Bureau and retain records of imports and manufactured products in accordance with this CCO.

(b) All the reports submitted to the Bureau and records retained at the premise must include, among others, the names and addresses of importer, manufacturer, end-use category of asbestos or asbestos containing products, quantity of wastes produced as a result of manufacturing, in accordance with the reporting format(s) issued by the Department under this CCO.

(c) Records retained at the premises must be available for inspection at any time by authorized DENR-EMB personnel upon proper request, during emergency cases when conditions presenting a clear and present hazard to health and environment actually exists.

(3) Limitations, Prohibitions and Regulations of Use

It is the intention of this CCO to control and regulate the use of asbestos and asbestos containing products.

(a) The use of asbestos and asbestos containing materials and high-density products shall be strictly limited to the following:

(i) Fire proof clothing;
(ii) Roofing felts or related products;
(iii) Asbestos cement roofing;

(iv) Asbestos cement flat sheet;
(v) Friction materials;
(vi) High temperature textiles products;
(vii) Gaskets;
(viii) Mechanical packing materials;
(ix) High-grad electrical paper;
(x) Battery separators; and
(xi) Other high density products.

(b) The use of Amosite (Brown) and Crocidolite (Blue) Asbestos fibers and of products containing these fibers is strictly prohibited.

(c) No spraying of all forms of asbestos in buildings shall be allowed.

(d) No new use of asbestos.

(e) Other products where new use of all forms of asbestos are prohibited:

(i) Toys;
(ii) Pipe and boiler lagging;
(iii) Low density jointing compounds;
(iv) Corrugated and commercial paper;
(v) Untreated textiles;
(vi) Flooring felt and covering;
(vii) Rollboard;
(viii) Specialty paper; and
(ix) Other low density products.

Section VII. Information, Education, Communication and Training Requirements

(1) The Department, in conjunction with the Association of Asbestos Industries of the Philippines, Inc., concerned government agencies, and non-government organizations, shall promote industry and public awareness of the ways and means, including technologies, on the safe and responsible use of asbestos.

(2) The importers and manufacturers of asbestos fibers and friable asbestos containing products shall be responsible for informing and training transporters and users on the precautionary measures in the transit, use, handling and disposal of asbestos and asbestos wastes.

Section VIII. Compliance Monitoring Procedure

Compliance with the requirements established, in this CCO will be monitored through review of reports or other related documents and on-site inspection by authorized personnel of the Department.

Section IX. Specific Requirements and Standards

All persons, entities and premises covered by this CCO shall comply with the following specific requirements and standards for implementation of the general requirements stated in Section VI of this CCO.

(1) Annual Report

The report will be submitted in accordance with the Asbestos Annual Report Form provided by the Bureau, which includes the following information:

(a) General Information

Name, address, location of importer, manufacturer and others;
Type of premises;

(b) Production and management information

Quantity of bulk asbestos (in kilos), type or variety of asbestos; and kind of asbestos containing products imported and/or manufactured;

(c) Number and category of employees that may be exposed to asbestos releases, if any;

(d) Description of any pollution control and safety devices as well as preventive measures used to prevent or reduce the releases of asbestos to the environment;

(e) Asbestos waste generated and categorized into friable and non-friable asbestos waste materials; and

(f) Treatment, storage, and disposal information (type of treatment, storage facilities, and land disposal premises, their locations, and methods of TSD, among others).

(2) Manifest

All the regulated premises must comply with the manifest requirements specified under Title III of DAO 29 and those to be prescribed by the Bureau for the transportation and treatment, storage and disposal of asbestos wastes off-site.

(3) Labeling Requirements

(a) All manufacturers, TSD facilities and premises, transporter, haulers, and disposers of asbestos containing materials and asbestos containing waste must comply with the labeling requirements as hereinafter stated.

(b) Visible signs will be required on all packaging for all asbestos and abestos containing products as described in (a) above, after the lapse of one (1) year from the effective date of this Order. The signs must clearly mark that the product contains asbestos and disposal of friable asbestos containing wastes is regulated under this CCO.

(4) Handling Requirements

(a) Manufacturers of products containing asbestos must report to the Bureau and retain records of friable asbestos containing wastes that are: (i) stored and disposed on-site-, (ii) transported off-site; (iii) treated, stored, and disposed off-site.

(b) Prior to the issuance of the Bureau's clearance and permit, the importers and manufacturers are required to identify in detail the quantity and methods of storage and disposal of friable asbestos containing wastes, containers, and discarded materials generated as a result of handling of asbestos.

(c) The importer and manufacturer must comply with proper storage, labeling and transport of asbestos containing materials as required by this CCO, other requirements under Titles II and III of DAO 29, and the standards adopted by the Department of Transportation and Communication regarding transport and shipping.

(d) Removal and ultimate disposal of friable asbestos and non-friable asbestos that has become friable in any industrial and commercial activities will be limited to persons who are accredited by the Bureau to handle these materials subject to Occupational Safety and Health standards,

(5) Manufacturing Requirements

(a) Appropriate engineering and dust control, preventive measures, work practices and housekeeping program should be provided to ensure safety.

(b) Workers should be provided with appropriate respiratory protective equipment and be well-informed on possible exposure to asbestos.

(c) No visible emissions to the outside air from any manufacturing operations are permitted.

(d) Air monitoring of the workplaces to an airborne concentration of asbestos should not exceed 2 fibers per cubic centimeter of air as an eight-hour time weighted average by Light Microscopy or an equivalent reference method.

(e) Regular inspections of each potential source of emissions from any part of the manufacturing premises, including air cleaning device and ventilation system at least once a week during day light hours for emissions to the outside air.

(6) Renovation, Removal and Demolition Requirements

(a) The duly authorized owner or operator of a renovation or demolition activity shall thoroughly inspect and assess the facility or part of the facility where the activity will occur to verify the presence of any friable asbestos containing materials or non-friable asbestos containing materials that have become friable prior to the commencement of any renovation or demolition activity.

(b) Each person or entity that will undertake demolition, removal or renovation activity will provide the Bureau with the following information:

(i) A written notice of the intention to demolish or renovate, a structure with friable asbestos containing materials at least 30 days before any activity begins on the project that will disturb asbestos material and which may cause unwarranted releases of asbestos fibers into the air.

(ii) Name, address, and telephone number of-
Premises owner,
Premises operator;
Renovation, removal or demolition Contractor; and
Location of the premises to be demolished or renovated.

(iii) The transporter and the disposal facility to be used for the removed, renovated or demolished material.

(iv) Estimate of the amount of friable asbestos containing materials to be removed from the building in terms of linear meters of pipe, square meters of surface area, and cubic feet of facility components.

(v) Schedule of start and completion date for the removal, demolition, or renovation activity.

(vi) Description of the planned work to be performed and methods to be employed, including any controls and measures to be used to comply with this Order.

(vii) Name and location of the disposal site to be used for the friable asbestos containing wastes.

(c) Remove all friable asbestos and non-friable asbestos containing materials that have become friable prior to other renovation and demolition activities.

(d) Adequately wet all friable asbestos containing materials that will be exposed during removal or demolition activities. If wetting presents a safety hazard or damage to equipment, then an exemption must be requested from the Bureau. However, if other emission control devices are used to ensure no emissions of asbestos, wetting the material is not required.

(e) Air monitoring must be conducted in the area during and after the demolition to ensure that asbestos level in the air is within the Permissible Exposure Limit (PEL) of 2 fibers per cubic centimeter of air on an eight-hour time weighted average.

(7) Storage Requirements

(a) On the ground level, asbestos must be managed to ensure proper storage and no fiber releases will occur.

(b) The asbestos fibers must be placed in a heavy duty polyethylene bags approximately 0.2 mm. thick or other approved containers

(8) Disposal Requirements

(a) All friable asbestos and friable asbestos containing wastes must be placed in a special waste disposal site, the plans and specifications of which are in accordance with the DENR standards and criteria. During the disposal operations there should be no visible emissions of asbestos fibers. Materials for disposal should be transported and handled in accordance with the requirements of Section IX (4).

(b) Once asbestos-containing waste material has been placed in the disposal site at the end of the operating day, it must be covered with at least 15 centimeters of compacted non-asbestos-containing material or dust suppression agent that effectively binds dust and controls emissions from wind erosion.

(c) The waste disposal premises and facilities must maintain records of all shipments received. The information includes the following:

(i) Name and address of the waste generator;
(ii) Name and address of the transporter;
(iii) Quantity of the asbestos containing waste material in cubic meters; and
(iv) Date of receipt of the waste.

This information will be submitted to the Bureau as part of the Annual Report due March 31 of the following year.

(d) The owners/operators of on-site landfill sites shall submit an abandonment plan as part of the plans and specifications mentioned under Section (a) hereof to be similarly approved and registered with the Bureau.

(e) Non-friable asbestos containing waste materials can be disposed of in any authorized municipal or industrial landfills.

Section X. Revision of Requirements

The Department may amend, modify, and/or supplement the requirements and standards in this CCO after prior consultation with stakeholders and after proper notice and hearing to the public on matters to be revised.

Section XI. Penalty Provision

Any violation of the requirements specified in this CCO will subject those person or persons responsible therefore to administrative and criminal sanctions as specified under Title V, Chapter XI, Sections 41 and 42 of DAO 29, Series of 1992.

Section XII Effectivity

These Rules and Regulations shall take effect six (6) months after formal publication of this CCO in the Official Gazette and in two (2) newspapers of general circulation.

(Sgd.) ANTONIO H. CERILLES
Secretary

Published at:

TODAY	-	January 17, 2000
MANILA STANDARD	-	January 17, 2000

DENR Administrative Order
No. 2000 – 03
January 07, 2000

SUBJECT : Interim Implementing Rules And Regulations Of Republic Act No. 8749, "The Philippine Clean Air Act Of 1999".

Pursuant to the provisions of Section 51 of RA 8749 mandating the Department to promulgate the Implementing Rules and Regulations (IRR) of this Act within one (1) year from its enactment, and in view of Section 55 of the said law repealing Presidential Decree No. 1181 and partly modifying Presidential Decree Nos. 984, 1152 and 1586 thereby correspondingly repealing and modifying their respective IRRs, the Department therefore, hereby temporarily adopts the DENR Administrative Orders (DAOs). indicated below with modified provisions to conform with the requirements of RA 8749, to wit:

1. DENR Administrative Order No. 14, Series of 1993
2. DENR Administrative Order No. 98-46

Pursuant to the provisions of Section 21 of R.A. 8749 the Department of Transportation and Communication (DOTC) shall enforce and implement the following provisions:

a. Section 4 - Item Nos. b, e, g and j (Annex "I")
b. Section 8 (Annex "2")
c. Section 29-33,41 and 42 (Annex "2")

Pursuant to Section 34 of RA 8749 the Environmental Management Bureau (EMB) of the Department shall provide technical assistance, training and continuing capability-building program to DOTC. To ensure proper and effective enforcement of RA 8749, the EMB shall certify the conformity to standards of emission control

technology or equipment, and emission test equipment before it can be used and introduced into commerce.

All other provisions of the above-mentioned Administrative Orders not indicated herein and are likewise not in conformity with R.A. 8749 are hereby repealed and modified accordingly.

This Order takes effect fifteen (15) days after its publication in at least two (2) newspapers of national circulation in the Philippines or submission of three copies hereof to the UP Law Center.

(Sgd.) ANTONIO H. CERILLES
Secretary

Published at:

TODAY	-	January 17, 2000
MANILA STANDARD	-	January 17, 2000

Section 4. *Administration and Enforcement.* These Rules and Regulations shall be administered by the Department and/or by its authorized representative(s) as the primary government agency responsible for the effective administration and enforcement of these Rules. As such, it shall have the following functions, powers and responsibilities:

a) Establish emission standards after due consultation with the concerned sectors;
b) ***Prepare and implement an integrated framework and annual action plans for the management of motor vehicles emissions;***
c) Update itself on the advanced and modern methods of combating and minimizing air pollution from motor vehicles;
d) Coordinate with the Department of Science and Technology (DOST) and the Department of Energy (DOE) in finding alternative sources of fuel and transport systems that would rely less on fossil fuel;
e) ***Establish a cooperative effort among the national government, local government units, non-governmental organizations*** (NGOs), ***people's organizations (POs) and the private sector in order to effectively implement these Rules;***
f) Issue policy guidelines, instructions or procedures, design criteria governing the preparation of plans and specifications for pollution control devices;
g) ***Call on the on the Department of Transportation and Communication (DOTC), Department of Trade and Industry (DTI), DOST, DOE pursuant to section*** 7 ***and 9 of PD 1181; and other concerned government agency, corporation, institution, and other instrumentalities, should they approve, for assistance in the form of personnel, facilities, and other resources, as the need arises in the discharge of its functions,***

h) Disseminate information and conduct educational awareness campaigns on the effects of air pollution from motor vehicles on health and the environment, with particular emphasis to the concerns on climate change;
i) Encourage, participate in, and conduct continuing studies, investigations, research and demonstrations on the effective means of controlling, preventing and managing air pollution including improvement in the implementation strategy, technology or instrumentation to rationalize the basis emission standards for motor vehicles;
j) **Issue order against any person or entity and impose the appropriate fines, penalties and other administrative or penal sanctions as provided by our motor vehicle pollution control laws to compel compliance with emission regulations and the provisions of these Rules; and**
k) Exercise such powers and perform such other functions as may be necessary to carry out its duties and responsibilities under PD 1181 and these Rules.

Section 8. ***Deputization.*** - The Department, through the Secretary may deputize in writing as many agents as it shall deem necessary for the effective implementation and enforcement of these Rules. The Secretary shall also designate hearing officers to hear and decide cases of violation of the motor vehicle pollution control laws, PD 1181 and the provisions of these Rules.

Section 29. ***Scope****:* This Chapter shall apply to the control of exhaust emissions for in-use motor vehicles and unregistered rebuilt vehicles including imported used vehicles emphasizing regular and proper vehicle maintenance and utilizing appropriate test procedures and equipment. The objective is to bring about significant reduction in exhaust emissions by:

a) Bringing about the repair of vehicles that fail the tests due to excessive emissions of carbon monoxide, hydrocarbons and visible emissions;

b) Assisting the LTO and other concerned agencies in the proper inspection and maintenance of vehicles to insure that they conform to prescribed emission standards; and

c) Deterring Owners/drivers from tampering the adjustment of engine system, Pollution control devices and misfuelling of vehicles.

Section 30. ***Mandatory Periodic Emission Inspection***

a) Gasoline-Powered Motor Vehicles

The mandatory periodic emission inspection for this type of vehicle shall include the measurement of CO and HC concentration at low idle and raised idle speed in accordance with Annex I of these regulation.

b) Diesel-Powered Motor Vehicles

The mandatory periodic emission inspection of motor vehicles powered by compression ignition engines shall include measurement of smoke opacity by the free acceleration method from low idle speed in accordance with Annex 2.

c) Schedule of Mandatory Periodic Emission Inspection

The frequency or schedule of mandatory periodic emission inspection is based on the Gross Vehicle Mass and intended use of such motor vehicles, under the basic assumption that for hire, public utility and heavier vehicles should undergo more frequent emission inspection. The following schedule of mandatory emission inspection is hereby adopted:

i. For privately owned vehicles and those not for hire and not considered public utility vehicles such as passenger cars, owner-type jeeps, diplomatic and government vehicles, motor cycles and light duty vehicles of not more than 4.5 T gross vehicle mass, the first emission inspection shall commence on the fourth registration year and subsequently, will be biennial until the twelfth year and annually thereafter. For vehicles that are rebuilt or imported used, the first emission inspection shall commence on the first registration year; and

ii. For hire and public utility and other vehicles with gross vehicle mass of more than 4.5T not included in A above, the mandatory emission inspection shall be annually starting from the second to fourth registration year and semi-annually thereafter. For vehicles that are rebuilt or imported used, the first emission inspection shall commence on the first registration year.

Section 31. ***Random Road Inspections***

a) The random roadside inspection shall be undertaken when a motor vehicle is emitting visible emission and shall consist of two types:

   i) Roadside pull-overs with portable emission test equipment. This is applicable to both gasoline- and diesel-powered vehicles; and

   ii) Roadside pull-overs and applicable to diesel-powered vehicles only where no test equipment is available but using only the Ringelmann Chart and/or inspectors expertise for visually determining the smoke density.

b) Under the type (i) random inspection system, an emission test for CO and HC is conducted using a non-dispersive infra-red (NDIR)

instrument (Annex 2) for spark-ignition engines and a duly approved opacimeter or smoke meter for diesel engines (Annex 1) to determine vehicle compliance with the pertinent smoke opacity standards.

After passing the emission test, a Certificate of Emission Compliance sticker is issued for attachment to either the front windshield or the glass window at the rear of the driver. If the vehicle fails the test, this shall be deemed as a prima facie evidence of violation and shall cause the monitoring team/unit to issue a charge and subpoena ticket in accordance with Section 13 of PD 1181.

c) Similarly under the Type (ii) random inspection system, the inspecting team shall issue an order for emission testing to be done at a duly accredited testing center or repair shop.

If the results of the emission test indicate compliance with the standard, the driver/owner shall be issued a Certificate of Emission Compliance,

However, if the test results indicate non-compliance with the standards, the head of the testing station shall issue a repair order to be undertaken by any accredited repair shop within a period of two weeks, with instructions to the driver/owner to submit the vehicle for a retest at the same station within forty-eight (48) hours after completion of the repair. The said vehicle shall be prohibited from being operated on any public road or highway until issued a Certificate of emission Compliance. The repair order shall be attached to the front windshield of the vehicle.

Section 32. ***Agencies Authorized to Perform Emission Inspection***

The agencies or special units that shall conduct mandatory periodic inspection and random roadside inspection are the following:

a) For Mandatory Periodical Inspection, Prior to Renewal of Registration

- Land Transportation Office (LTO), in addition to the inspection of safety and road worthiness, in accordance with RA 4136,

- Special Testing Centers that may be accredited or authorized by DENR, LTO and DTI, whenever necessary.

b) For Random Roadside Inspection

- DENR Regional Offices
- LTO and its Law Enforcement Service Offices
- Metro Manila. Development Authority
- Local Government Units
- Philippine National Construction Corporation Special Team for the North and South Expressway
- Other duly authorized agencies or entities such as Non-Government Organizations

Section 33. ***Authorized/Accredited Repair Shops***

The repair of motor vehicle engines, exhaust system and pollution control devices shall preferably be done by automotive repair shops or service stations that are duly accredited by the DTI. These facilities shall be equipped with standard automotive repair tools, standard spare parts and pollution test equipment conforming to applicable ECE, ISO or SAE standards. It is also required that these repair shops or service stations shall have highly skilled mechanics an/or technicians who have on-the-job training certificates from DTI, local assemblers and manufacturers of motor vehicles. The DENR, DTI and DOTC shall establish the criteria for accreditation of automotive repair

shops and service stations in consultation with motor vehicle assemblers within sixty (60) days from the effectivity of these Rules.

Section 41. ***Prohibitions.***

(a) No owner or operator of a vehicle shall be allowed to discharge air pollutants at levels greater than the pollutant concentration standards prescribed in these Rules,

(b) No owner or operator of a motor vehicle shall use or cause or allow such vehicle to be used unless it meets the emission standards established in these Rules and Regulations.

(c) No person shall sell, register or operate any new imported or locally manufactured motor vehicle without any certification from the Department that it meets the emission standards prescribed in these Rules.

(d) No person shall do any other act that is prohibited in these Rules and Regulations.

Section 42. ***Penalties.*** Any person violating PD 1181 and/or any provision of these Rules and Regulations involving the same vehicle shall, for the first offense be liable to a fine of not exceeding P 200.00, for the second offense to a fine of not exceeding P 500.00 and for the third and succeeding offense to a fine of not exceeding P 1,000.00 plus the suspension of his vehicle's certificate of registration, until such time as there shall be compliance with the requirements of these Rules.

DENR Administrative Order
No. 2000 – 05
January 06, 2000

SUBJECT : Revising DENR Administrative Order (DAO) No. 94-11, Supplementing DAO No. 96-37 And Providing For Programmatic Compliance Procedures Within The Environmental Impact Statement (EIS) System

ARTICLE I

POLICY OBJECTIVES AND DEFINITION OF TERMS

SECTION 1.0 BASIC POLICY

1.1.1 Supplementing DENR Administrative Order No. 37, Series of 1996 on the implementation of the EIS System, the Department also assure environmentally and socially acceptable development of industrial areas within the Philippines in furtherance of, among other provisions, Art. 1, Section 8, Rules and Regulations Implementing the Intent and Provisions of PD 1586 Establishing the Environmental Impact Statement (EIS) System in Relation to Presidential Decree No. 1151 Promulgating the Philippine Environmental Policy.

SECTION 2.0 POLICY OBJECTIVES

1.2.1 To identify environmental constraints and opportunities of natural systems in order to guide the planning and development of industrial projects that have multiple stages or components.

1.2.2 To incorporate incentives for industrial siting in regional industrial centers.

1.2.3 To incorporate cost-effective environmental management systems in compliance with Philippine environmental standards.

1.2.4 To assess the carrying capacity of the natural environment in areas designated for industrial development.

1.2.5 To assure environmentally sensitive development of industrial projects and programs.

1.2.6 To assess the induced effects on the social and natural environment of concentrated industrialization programs.

1.2.7 To streamline the procedures for environmental compliance for industries locating in regional industrial centers.

1.2.8 To encourage industries to locate in geographic areas which are environmentally and socially suitable to their activities.

1.2.9 To ensure transparency through wide participation of concerned sectors, especially the local communities, in compliance monitoring of development programs.

SECTION 3.0 DEFINITION OF TERMS

1.3.1 For the purpose of these rules and regulations, whenever any of the following words and terms are used therein, they shall have the meaning ascribed in this section:

1. **Ambient levels or standards** - refers to the allowance of maximum levels of selected pollutants in a water body or the surrounding air, with an adequate margin of safety, that will protect public health and the environment.

2. **Carrying Capacity** - refers to the capacity of natural and human environments to accommodate and absorb change without experiencing conditions of instability and attendant degradation.
3. **CENRO** - refers to the Community Environment and Natural Resources Officer of the DENR.
4. **Compliance Monitoring** - refers to the activity, usually through inspection, sampling, or other means of evaluation, designed to gauge the level of compliance with the discharge permit-related conditions stipulated in the ECC and permits issued by other environmental statutory authorities.
5. **DENR** - refers to the Department of Environment and Natural Resources.
6. **Discharge Allocations** - refers to pollution loadings that may be borne by the carrying capacity of a given airshed or waterbody and which may be assigned to one or a number of industrial sources to ensure that ambient levels are not exceeded.
7. **Eco-profile** - or ecological profile, refers to geographic-based instruments for planners and decision-makers which present an evaluation of the environmental quality and carrying capacity of an area. They are the result of the integration of primary and secondary data and information on natural resources and anthropogenic activities on the land which are evaluated by various environmental risk assessment and forecasting methodologies that enable DENR to anticipate the type of development control necessary in the planning area-. The technical detail is of particular use in the formulation of an EIS for a project or program.
8. **Economic incentive** - refers to an administrative instrument founded in law or regulation that endeavors to stimulate the achievement of an environmental benefit through the economic system without primary reliance on conmmand-and-control

regulations. These are sometimes referred to as "market-based incentives".

9. **Ecozone** - refers to a Special Economic Zone (see definition of Special economic Zone below)
10. **EMB** - refers to the Environmental Management Bureau.
11. **Environmental Compliance Certificate (ECC)** - refers to the document issued by the Secretary of the Department of Environmental and Natural Resources or his duly authorized representative certifying that the proposed project or program under consideration will not bring about unacceptable environmental impacts and that the proponent has complied with the requirements of the Environmental Impact Statement (EIS) System for programmatic compliance; it is usually issued with conditionalities;
12. **Environmental Impact Assessment (EIA)** - refers to the process of predicting the likely environmental consequences of implementing project or program activities.
13. **Environmental Impact Statement Review Committee (EIARC)-** refers to the body of experts from various fields organized by DENR whose main task is to assist the DENR in evaluating EIS and other documents from time to time.
14. **Environmental Impact Statement/Study (EIS)** - refers to the documentation of studies on the environmental impacts of a project or program including the discussions on direct and indirect consequences upon human welfare and ecological and environmental integrity. The EIS may vary in its specific application to differing projects and programs, but shall contain in every case all the relevant information and details about the project to enable the DENR and other concerned parties to make judicious decisions regarding the carrying capacity of certain areas and systems to support projects or programs.
15. **Environmental Impact Statement Programmatic Compliance (EISPC)** refers to the entire EIS system as it applies to programmatic compliance.

16. **Environmental Impact Statement (EIS) System** - refers to the entire process of organization, administration and procedure institutionalized for the purpose of assessing the significance of the effects of physical developments on the quality of the environment.
17. **Environmental Monitoring Fund** - refers to an ECC conditionality created to support the activities of the Multisectoral Monitoring Teams and a reasonable environmental information program.
18. **Export Processing Zone (EPZ) -** a type of industrial estate. It is a customs-controlled manufacturing enclave where industries are allowed to import raw materials and export finished goods without duty and tax charges and import restrictions. The rationale is to encourage the processing of imported raw materials for re-export while freeing the importer/exporter of the bureaucratic procedure and red tape normally associated with such operations. EPZs are designed mainly to attract foreign investments although local entrepreneurs may also establish enterprises in this area.
19. **Industrial Development Area (IDA)** - refers to an area, such as an ecozone, regional Agro-industrial Growth Center (RGC), or industrial estate, that contains several facilities or a cluster of enterprises co-located in a designated area which may have significant impact on the environment.
20. **Industrial Estate (IE)** - refers to a tract of land subdivided and developed according to a comprehensive plan , under a unified and continuous management, with provisions for basic infrastructure and utilities with or without prebuilt standard factory buildings and common service facilities, for the use of a community of industries.
21. **Locator Firm** - refers to an industrial facility that locates or is sited within the geographic boundaries, of an industrial development area (IDA).
22. **Market or Market-based Incentive** - an administrative instrument founded in law or regulation that endeavors to

stimulate the achievement of an environmental benefit through the market system without primary reliance on command-and-control regulations.

23. Methodologies to forecast environmental impacts, ambient levels, and discharge allocation - refers to such techniques as:

    a. **Delphi Technique** - uses the opinions of knowledgeable experts and through a repetitive process, converges toward group consensus.
    b. **Mathematical Modeling** - principal cause-effect relationships of a proposed action are described in terms of mathematical functions and combined to yield a mathematical model capable of predicting future environmental conditions. It is particularly helpful in assessing ambient levels.
    c. **Simulation** - generally used to assess the probabilities of various classes of events, or to forecast environmental changes from existing general trends. For example, the Monte Carlo Method may be used to estimate how frequently the concentration of the contaminant in the discharge might exceed a particular value.
    d. **Geographical Information Systems (GIS)** - are essentially computerized graphical overlays and interacting data files. If environmental features are "mapped" systematically, information acquired on specific projects can be combined, and the GIS database becomes more detailed over time.
    e. **Cost-Benefit Analysis** - a formalized accounting of the anticipated costs and benefits of an action of particular use when comparing alternative forms of an action. It is not limited to economic costs, but includes risks to long-term environmental quality and public health.
    f. **Environmental Risk Assessment** - a category of analyses by which the potential risk of harm to individuals,

communities and ecosystems can be evaluated. It is expected to be of significant value in the EIS process.

24. **Multi-Sectoral Monitoring Team** - refers to a team of project or program stakeholders from representative sectors, most particularly local communities, organized and chaired by DENR for the purpose of providing general oversight over ECC conditionalities.
25. **PENRO** - refers to the Provincial Environment and Natural Resources Officer of the DENR.
26. **Permit** - refers to a license issued by DENR to project or program facilities that limits emission/effluent discharges of individual sources in accordance with environmental standards.
27. **Pollution Management Appraisal (PMA)** an analytical technique for identifying methods by which industrial firms can reduce the amount or hazard of wastes generated, through methods such as source reduction, recycling/reclamation/reuse or pollution control measures.
28. **Program** - refers to activities and actions of an undertaking consisting of a series of similar projects or enterprises, or a project subdivided into several phases and/or stages of determinable duration; whether situated in a contiguous area or geographically dispersed, which may have significant impact on the environment.
29. **Programmatic Compliance** - refers to activities undertaken by a proponent to comply with the policies and procedures established by this regulation to secure an ECC for its project or program.
30. **Project** - refers to activities and actions of an undertaking characterized by several components or a cluster of enterprises co-located in a designated area which may have significant impact on the environment.
31. **Project Profile (PP)** - refers to the document submitted by the project proponent substantially describing the proposed

project or program and containing sufficient descriptive detail of the environmental aspects of a proposed project or program to enable DENR to determine whether the project or program is subject to programmatic procedures.

32. **Project or Program Administrator** - refers to the operational representative of the proponent who is vested with the authority and responsibility to manage the compliance of the project or program with permitted discharges and emission allocations which are subject to DENR's regulatory authority and approval.
33. **Proponent** - refer to any person, group, authority, association, public corporation, private corporation, or other body undertaking or intending to undertake a project or program and duly vested with administrative authority and responsibility, over the project or program.
34. **Public Hearing** - refers to the activity undertaken by DENR to gather facts and elicit all issues, concerns and apprehensions and at the same time provide the proponent with the opportunity to present the project or programs to the people/community who would be affected by such.
35. **RED** - refers to the Regional Executive Director of DENR.
36. **Regional Agro-Industrial Center (RGC)** - refers to an industrial development area identified by the Regional Development Council and the RGC Task Force as priority area where government can rationalize the distribution of public and private investments in industrial infrastructure to support its efforts of hastening the growth and development of lagging regions and at the same time effect dispersal of industries.
37. **Remediation Plan** - refers to the formulation of measures or a methodology for achieving mitigation of one or more ECC conditionality violations.
38. **RTD** - refers to the Regional Technical Director for Environmental Management and Protected Areas Service of the DENR regional offices.

39. **Social Acceptability** - refers to the process, respected by both DENR and a proponent, which ensures that the concerns of affected communities are incorporated into the decision-making process for programmatic compliance.
40. **Special Economic Zone (Ecozone)** - refers to areas under the administration of the Philippine Economic Zone Authority, created pursuant to R.A. 7916 (1994), with potential to be developed, or already developed, into agro-industrial, industrial, tourist/recreational, commercial, banking, investment, and financial centers, and which have been designated for development in accordance with EISPG procedures.

ARTICLE II
SCOPE OF THE EIS PROGRAMMATIC COMPLIANCE

SECTION 1.0 PROJECTS AND PROGRAMS COVERED

2.1.1 Projects that fall into the following categories are within the purview of programmatic compliance, and are required to submit a programmatic EIS

a. A project subdivided into several phases and/or stages situated in a contiguous area

b. A project consisting of several components or a cluster of projects co-located in a designated area such as an industrial estate or export processing zone.

2.1.2 A locator firm in an IDA holding a single-project ECC that pre-exists a proponent's ECC under programmatic compliance is not exempt from the conditionalities of the proponent's ECC. The IDA administrator will assign a portion of its discharge allocation, as identified in its ECC, to the locator firm, which will immediately supersede the locator firm's single-project ECC and permit

regarding discharges. For the five-year period following issuance of the IDA ECC, the IDA Administrator, with DENR's concurrence, may negotiate with the locator firm regarding the locator's adoption of the other conditionalities in the IDA's ECC. Upon expiration of the five-year period, the IDA ECC will supersede the locator firm's pre-existing ECC conditionalities in all respects.

SECTION 2 PROJECTS AND PROGRAMS NOT COVERED

2.2.1 Undertakings that are determined to be outside the purview of programmatic compliance pursuant to Section 2.1.1 above, may be subject, however, to the requirements of the individual project EIS as provided under DEN.R Administrative Order No. 37, Series of 1996.

2.2.2 A new locator in an IDA (with ECC) that does not conform to the original specifications of the programmatic EIS is required to submit a single-project EIS, but may use the eco-profile data for its discharge allocations. Under such circumstances, DENR must consider this as a separate ECC application.

ARTICLE III
PROCEDURAL FLOW

The EMB shall be responsible for processing EIS programmatic compliance documents. The flow chart showing the processing steps set out in the EISPC guidelines is attached.

SECTION 1 SCREENING

3.1.1 ECC applications for Projects or Programs that falls within the categories described in Article 11 Section 1, item 2.1.1 shall proceed with scoping and shall follow procedures as detailed in the EISPC guidebook.

3.1.2 A proponent, if unsure whether it falls within programmatic compliance guidelines, may submit a Project Profile (PP) to the EMB . For these purposes, the PP shall contain sufficient detail of the project or program elements, or the expansion thereof, to enable a procedural assessment to be made as to whether the undertaking is subject to programmatic compliance procedures. In that connection, an environmental description of sources and emissions, rather than an analysis of their impacts, will constitute sufficient accompanying technical detail.

3.1.3 Project and programs shall not be developed within the Integrated Protected Areas System of the Philippines, as designed by DENR, unless such areas are designated by the President or his duly appointed representative to accommodate such projects and programs, as the public interest may warrant.

SECTION 2 SCOPING

3.2.1 Scoping shall be initiated by the project proponent at the earliest possible stage of project development to define the range of actions, alternatives and impacts to be examined as well as the area for ecoprofiling. Following are the main objectives of the scoping activity :

a. Provide an early link between the DENR and the proponent to ensure that the EIA addresses relevant issues and presents results in a form consistent with the EIS programmatic compliance requirements

b. Allow the stakeholders to make their concerns known to ensure that the EIA adequately addresses the relevant issues;

c. Address issues on carrying or assimilative capacity of the environment and identify possible legal constraints or requirements regarding the project proposal; and

d. Determine and agree on the assessment methodologies and process of dealing with issues relating to social acceptability.

3.2.2 The EMB shall identify reviewers who will be invited to join the scoping sessions and eventually review the results of the ecoprofiling and EIA study for the particular project or undertaking whenever possible.

3.2.3 Based on the scoping process, the proponent shall submit a scoping report to the EMB. The scoping report should include among others the proposed scope of the ecoprofiling activity and the EIA study. This shall be reviewed and approved by the EMB and shall serve as basis for the studies to be conducted and a basis for the review of the EIS.

3.2.4 The agreed-upon scope may be adjusted during the course of the study to take into account new information or changing conditions.

SECTION 3 EIS PREPARATION

3.3.1 A proponent having a project or program, or expansion thereof, that is subject to programmatic compliance shall secure a copy of the procedural guidelines published by EMB for its guidance. On the basis of the regulations hereunder and the procedural guidelines, the proponent shall prepare and submit a programmatic environmental impact statement (PEIS) to the EMB. The EIS may be prepared by the proponent's technical staff or be commissioned to a competent contractor, at the option of the proponent.

3.3.2 DENR shall require the proponent to involve the broadest range of stakeholders in the project or program in specifically formulating and focusing the scope of the EIA study, prior to its commencement, with a view toward initiating and conducting the EIA process on an open, inclusive and transparent manner.

SECTION 4 SUBMISSION OF THE EIS

3.4.1 Upon the completion of the study, the proponent shall submit a copy of the EIS to EMB for completeness screening prior to its official acceptance as an ECC application. The submitted document shall be evaluated within seven (7) working days for completeness and decide whether the information contained in the EIS is sufficient for a thorough evaluation of the subject environmental impacts. The EMB shall then inform the proponent of any additional information that may be needed for further evaluation of the EIS, and may also recommend and conduct an ocular inspection of the proposed site or sites in question in order to check the veracity of the information contained therein.

3.4.2 If found acceptable, the EMB shall require the proponent to submit at least fifteen (15) legible copies of the EIS.

3.4.3 The proponent of such project seeking programmatic compliance shall pay the necessary fees in accordance with the schedule of fees.

3.4.4 The proponent shall likewise furnish a copy of the EIS to the Offices of the concerned Regional Executive Director, PENRO, CENRO and local government units. A laymanized version of the EIS Executive Summary must also be made available for the public.

SECTION 5 REVIEW OF THE EIS

3.5.1 After the evaluation for completeness, the EMB, at its discretion, may convene the EIA Review Committee to assist in the review process.

3.5.2 The EIA Review Committee shall be selected from a pool technical experts and subject area specialists both from within DENR and from outside sources such as the academic community, other government agencies and the private sector. EMB shall supplement the Committee's pool of experts when occasion demands.

3.5.3 The EMB shall schedule the holding of a public hearing, subject to the process stipulated in Article V, Section 3, and may likewise require the proponent to submit additional information, if necessary. The proponent will also be expected to demonstrate social acceptability of the project or program

SECTION 6 GRANTING OR DENIAL OF THE ECC APPLICATION

3.6.1 EIARC Recommendation

Within fifteen (15) days from the completion of the review, the EIARC shall submit a report to the EMB Director containing the results of its review/evaluation and its recommendations with respect to the issuance or non-issuance of the ECC.

3.6.2 Recommendation of the EMB Director

Within fifteen (15) days from the receipt of the EIARC report, the EMB Director shall make his/her own recommendations to the Office of the Secretary for final decision. Copies of the EIARC report and other pertinent documents shall be attached to the EMB Director's recommendations.

3.6.3 The Decision

The DENR Secretary shall either grant or deny the issuance of the ECC. In granting or denying the issuance of the ECC, the Secretary shall take into account the social and environmental cost implications relative to the judicious utilization, development and conservation of the country's natural resources

In case the decision is to grant the ECC the following conditionalities shall be highlighted:

1. Scope and delineation of the project or program and site(s), including, as appropriate, approval of phased program elements

2. Pre-operational and construction activities

3. Implementation of the Environmental Management and Monitoring Plan

4. Multi-sectoral monitoring of ECC general conditionalities

5. Discharge permits required under all relevant media programs and the emission allocations recommended therefor (for submission to the relevant DENR Regional permitting and monitoring units for operationalization)

6. Completion of Memorandum of Agreement for Multi-sectoral Monitoring Team and Environmental Monitoring Fund

7. Financial liability/responsibility where warranted by public risk

8. Relocation Plan, including compensation packages, as needed

9. Construction of infrastructure facilities

10. Use of economic incentives, pollution management appraisals and compliance audits, as necessary.

3.6.4 Transmittal of EIS Records and ECCs

The Office of the Secretary, shall cause the transmittal of the decision the EIS, all pertinent records and documents to the EMB within five (5) days from the date of such issuance. The offices of the concerned Regional Executive Director, PENRO, CENRO, the municipal/City mayor and the proponent shall also be furnished with a copy of the decision within the same period by the Office of the Secretary

ARTICLE IV
CONTENTS OF THE PROGRAMMATIC EIS

At the minimum, the EIS for programmatic compliance should contain the following

1. Project Description

2. Scoping Report

3. Eco-profiling of Air, Water, Land, and People Sectors

   - includes the application of analytical forecasting techniques for assessing environmental carrying capacity, impacts, and discharge allocations, mathematical modeling, simulation, Delphi techniques and geographical information systems (GIS).

4. Impact Analysis

   - includes project siting and alternatives

- alternative techniques
- mitigation of industrial impacts and infrastructure burdens
- including health impact analysis

5. Environmental Risk Assessment (if found necessary during scoping)

   - individual locators risk assessment
   - consequential/cumulative risk assessment

6. Environmental Management Plan

   - includes discharge allocation programs with offset provisions if the project is located in a non-attainment area
   - mitigation and enhancement measures
   - framework for the operation of economic incentives
   - allocation of monitoring responsibilities
   - environmental monitoring fund provisions
   - financial responsibility procedures and options

7. Proposals for environmental monitoring and guarantee funds

8. Post Operation/Abandonment Plan

9. Accountability statements of preparer and proponent

10. Other supporting documents

ARTICLE V
PUBLIC PARTICIPATION AND SOCIAL ACCEPTABILITY

SECTION 1.0 PUBLIC INFORMATION

a. All information about the proposed project or program shall be presented by the proponent to the public in a language and manner that are easily understood.

b. A notice of the submission of the EIS for programmatic compliance shall be posted by the proponent in the barangay and municipal halls and other conspicuous places in the affected community, together with a summary of the proposed project or undertaking.

   Evidence demonstrating compliance with this requirements shall form part of the supporting documents to be submitted with the EIS.

SECTION 2.0 PUBLIC CONSULTATION

Proponents of projects or undertakings required to undergo an EIA shall initiate the conduct of public consultations to ensure that the public's concerns are fully integrated into the EIA process

SECTION 3.0 PUBLIC HEARINGS

Public hearing(s), whose number shall be at the discretion of the EMB, shall be held to promote a wide and timely exchange of views, information, and concerns among the affected parties, communities, and the proponent. At a minimum, the proponent will present the tentative conclusions of the draft EIS and their technical justification for the public's benefit and information. Copies of the EIS shall be made available to the affected communities by the proponent either at the DENR Regional Office, if convenient, or at a local school(s) or library(ies).

5.3.1 Notice of Public Hearing

A notice of public hearing shall be published once a week for two (2) consecutive weeks in any newspaper of general circulation and in the area(s) of the project or activity at least fifteen (15)

calendar days prior to a scheduled hearing. Notices shall likewise be posted in conspicuous places in the municipality or barangays where the project or projects are to be located. Expenses for the notices shall be borne by the proponent.

5.3.2 Designation of Hearing Officers

The EMB Director or his duly designated representative shall appoint hearing officers for the conduct of public hearings.

5.3.3 Powers and Duties of Hearing Officers

Hearing Officers shall have the power and authority to conduct proceedings with the aim of eliciting further information and more pertinent facts.

They will ensure that all responsible positions/concerns are afforded an opportunity to be heard.

The Hearing Officers shall submit a report of their findings to the EMB, as appropriate, within five (5) working days after the hearing.

5.3.4 Nature of Proceedings

Public hearings shall be summary in nature and need not strictly adhere to the technical rules of evidence,

Copies of the report shall be considered as public documents and shall be made available to all concerned parties and other interested entities, upon request.

5.3.5 Process Documentation Report

The proponent shall prepare a process documentation report on the public consultation, public hearing, alternative dispute resolution processes which shall be validated by the EMB.

SECTION 4.0 SOCIAL ACCEPTABILITY

DENR shall guarantee that the EIA process shall be open, transparent, and accessible. The proponent shall be principally responsible for initiating these meetings and consultations called for social acceptability, and shall attach to its EIS copies of minutes or other appropriate documentation of such meetings and consultations as a demonstration of its responsibility to promote wide public understanding of its project or program.

ARTICLE VI
MONITORING

SECTION 1.0 COMPLIANCE MONITORING

6.1.1 The Multi-Partite Monitoring Team

A multi-partite monitoring team (MMT) shall be formed immediately after the issuance of an ECC. The composition of the Multisectoral Monitoring Team shall broadly represent the sectoral stakeholders of the project or program, and most particularly the local communities. The specific tasks of the members of the MMT shall be provided in a Memorandum of Agreement (MOA) negotiated by the proponent, the DENR and the major stakeholders.

6.1.2 Responsibilities of the MMT

The MMT shall be principally tasked to undertake monitoring of compliance with the ECC conditions, the EMP and applicable laws, rules and regulations. It shall also be tasked to validate impacts predicted in the EIS.

6.1.3 The project or program administrator shall allow duly credentialed monitoring personnel entry to its premises at all reasonable times during normal business hours to inspect, monitor, and obtain sample

SECTION 2 DISCHARGE ALLOCATIONS

Discharge Allocations of sources in the project or program will become operationalized through permits issued by the appropriate DENR Regional Office and administered by the project or program administrator. EIS documentation will establish the discharge levels to be permitted. The Regional Office will also conduct compliance monitoring in order to assure the integrity of the permit limitations and discharge allocations of the project or program.

ARTICLE VII
ENVIRONMENTAL MONITORING AND GUARANTEE FUNDS

SECTION 1 ENVIRONMENTAL MONITORING FUND

Proponents required to submit a programmatic EIS are mandated to include in their EIS a commitment to establish an environmental monitoring fund (EMF) when an ECC is eventually issued. The EMF shall be established not later than the initial construction phase of its project or undertaking. The amount to be allocated for the EMF shall be determined on the basis of the estimated cost of approved post-assessment monitoring and environmental information programs.

SECTION 2 ENVIRONMENTAL GUARANTEE FUND

An environmental guarantee fund (EGF) shall be established for all - projects or programs that have been determined by the DENR to pose significant public risk, or where a project or program requires rehabilitation or restoration. DENR is authorized to enter into negotiations with a proponent to ensure its financial responsibility to respond to contingent events should a response be ordered by any lawful authority such as corrective action for damage to the environment and/or damage to person or property, through exposure to toxic substances or waste. Mechanisms that may be used to demonstrate such financial responsibility include, but are not limited to, commercial insurance, self-insurance through a financial test, surety bond, letter of credit, and trust fund, or a combination of these instruments.

ARTICLE VIII
ECONOMIC INCENTIVES

DENR shall promulgate guidelines on a range of economic incentives that are available to proponents to promote environmental improvement for any project or any incentive mechanisms, through pricing signals that can influence a facility's investment decisions for pollution prevention and control strategies, raw material use, and process technology. Among the incentive mechanisms that will be made available to proponents and their successors (IDA administrators) are offsets, tradeable allowances, pollution charges, user fees, and waste exchange.

The use of economic incentives under EISPC is voluntary. They may be employed for the following purposes:

1. maintain a program or project area within its established pollutant loading limits as defined by the eco-profile
2. provide a means to bring a program or project area that has exceeded its pollutant loading limits into compliance as defined by the eco-profile
3. generate revenues to support an overall environmental management program for the program or project area.

Pollution Management Appraisals (PMAs) are highly recommended procedures to identify opportunities for source reduction or waste minimization. Proponents and IDA administrators shall encourage the widespread use of PMAs among locator firms in the development of economic incentive strategies.

ARTICLE IX
MEMORANDUM OF AGREEMENT WITH LOCAL GOVERNMENT UNITS

SECTION 1.0 BRIEFING

After the eco-profile of each RIC has been completed pursuant to Section 2.3.4, DENR shall meet with all of the affected Local Government Units (LGU) at the barangay, municipal, and provincial level, together with other organized sectors, and brief them on its technical findings, pursuant to the spirit of Art. 3, Section (c) and (d), Rules and Regulations Implementing the Local Government Code of 1991.

SECTION 2.0 EXECUTION

After consultations have taken place between DENR and the appropriate LGUs, and appropriate interest is expressed on the part. of the LGUs, DENR shall undertake to enter into a Memorandum of Agreement,(MOA) with the LGUs, either jointly or severally, with a view -toward incorporating, either originally or by amendment, the eco-profile for each RIC into the Comprehensive Land Use Plan required of the LGUs pursuant to Art. 41, Ibid., with particular reference to the requirement therein that "ecological balance" be considered in the Plan.

ARTICLE X
DUTIES AND RESPONSIBILTIES OF ACTORS IN THE

EIS PROGRAMMATIC COMPLIANCE PROCESS

SECTION 1.0 PROPONENTS

10.1.1 Conduct an Environmental Impact Assessment (EIA) of the proposed project and submit its findings to DENR in accordance with the prescribed guidelines.

10.1.2 Ecoprofile the project area and its vicinities.

10.1.3 Involve the public in project scoping and other appropriate opportunities.

10.1.4 Provide a true, complete and accurate EIS (with Accountability Statement attached).

10.1.5 Publish the notice of public hearing

10.1.6 Provide resource persons to make presentations and answer questions during public meetings and hearings

10.1.7 Ensure that appropriate post-assessment permits are in place and that monitoring and reporting are carried out as required

10.1.8 Comply with the conditionalities of the ECC

10.1.9 Submit the required reports to the DENR

SECTION 2.0 DENR

10.2.1 Office of the Secretary

1. Approves and issues EIA policies, plans, programs, and guidelines

2. Advises the President and Congress on the need to enact and modify laws relative to the EIS System

3. Issues or denies issuance of Environmental Compliance Certificate (ECC) for EIS documents

10.2.2 EMB

1. Formulates, recommends, and coordinates the implementation of EIA policies, plans, programs and guidelines relative to the EIS System

2. In coordination with regional offices, conducts assessments and evaluations of the EIS to serve as basis for recommending the issuance/denial of the ECC and/or advises the proponent that its project as planned needs modification and correction

3. Develops procedural assessment and eco-profile guidelines and prescribes the appropriate scoping guidelines for projects and programs undertaking programmatic compliance

4. Validates or may conduct eco-profiles of areas and natural systems.

5. Serves as the administrative body which carries out certain support procedures of the EIS System

6. Process applications for programmatic ECC.

7. In cooperation with the Regions, solicits in writing comments from other government agencies and per-sons with expertise or regulatory powers over the proposed projects and programs

8. Conduct on-site inspections for EIS purposes and make necessary recommendations.

9. Initiate the conduct of public hearing

10. Coordinates with the DENR field offices, local government units (LGUs), non-governmental organizations (NGOs), people's organizations (POs), proponents and other government agencies in the conduct of actual compliance and multisectoral monitoring of projects and programs granted ECC under programmatic compliance
11. Initiate consultations with Local Government Units, and other sectors, with a view toward entering into a Memorandum of Agreement designed to incorporate eco-profiles into LGU Comprehensive Land Use Plans.

12. Recommend approval or denial of the ECC for EIS programmatic compliance under Section 2.4.9.

10.2.3 Regional Offices

1. Implement the laws, policies, plans, programs, projects, rules and regulations of the DENR relative to the EIS System.

2. Investigate EIS-related complaints.

3. Assist EMB in the conduct of the site inspection for EIS purposes and make necessary recommendation.

4. Conduct actual compliance monitoring of projects granted ECCs and prepare the necessary reports.

5. Coordinate with other government agencies, non-governmental organizations, local government units, private offices and proponents in the region in the implementation and enforcement of EIS System rules and regulations and in public information campaigns.

6. Initiate the formation of and chair Multisectoral Monitoring Teams for programmatic compliance.

7. Encourage pollution prevention programs through economic incentives in coordination with project and program administrators through pollution management appraisals and other means.

10.2.4 PENRO and CENRO

1. Coordinate with local government units, barangay officials, NGOs, POs and local residents relative to the EIS System.
2. Conduct public information campaign regarding the EIS System.
3. Assist the Regional Office in the conduct of on-site inspections and monitoring.

10.2.5 EIA Review Committee

1. Whenever convened, in the discretion of the EMB, assist the EIA unit in the evaluation and review of EIS documents.
2. Make recommendations regarding the issuance of non-issuance of Environmental Compliance Certificate of proposed projects or programs under review.

ARTICLE XI
SCHEDULE OF FEES

Section 1.0 Payment of Fees

All proponents upon submission of the Programmatic EIS, shall pay a filing fee of PhP 310.00, a processing fee of PhP 100.00 per ha of development area and a legal research fee of PhP 70.00.

Section 2.0 Additional Costs

The proponent shall be responsible for the payment of all costs relating to the review of its EIS, in accordance with the existing Implementing Rules and Regulations.

ARTICLE XII
PENALTIES, GROUND FOR CANCELLATION OF ECC AND ADMINISTRATIVE SANCTION

In general, the project or program administrator shall be responsible and accountable for compliance with the ECC issued to his project or program and those of the locator firms. The individual component facilities under a project or program may be held accountable under other authorities for compliance with their individual permits and for appropriate corrective action. ' The program administrator and locator firms shall assume liabilities in case of violations/non-compliance or accidents as a result of negligence . Accordingly, the Secretary of the Department of Environment and Natural Resources or his duly authorized representative shall impose penalties upon project or program administrators found violating provisions of PD 1586 or its implementing rules and regulations. Nothing herein contained, however, shall prevent the imposition of any sanctions, whether civil or criminal, against a project/program's individual component facilities (and their managers) that may be authorized under any other pollution control law or regulation of the Republic of the Philippines that regulates discharges, effluents, emissions, conditions, or procedures to which such individual component facilities are subject.

SECTION 1.0 SCOPE OF VIOLATIONS

12.1.1 Projects or programs defined under Section 2.1.1 found operating without an ECC

12.1.2 Projects or programs found violating ECC conditions

SECTION 2.0 IMPOSITION OF PENALTIES

12.2.1 A report which will serve as the basis for the imposition of fine must be prepared by EMB or its Regional Office. The report will include the following information, at a minimum:

1. Brief background of the project or program including any previous violation, if any.
2. Nature of the violation and/or the ECC conditions violated.
3. Results and discussion on any measurement, sampling or monitoring activities conducted either by EMB, Regional Environmental Management Protected Areas (EMPAS) or DENR accredited research institutions, academic and or technical organizations.
4. Discussion on the results obtained and the corresponding adverse impacts caused by the violations.
5. Recommended amount of fine to be imposed in accordance with this Order.

12.2.2 The Report shall be submitted to the Director of EMB of the Regional Executive Director (RED), as the case may be, for appropriate action.

12.2.3 The EMB Director or RED shall issue an order for the imposition of penalties.

12.2.4 Corresponding Fines for specific violation types
The violation of ECC requirements is categorized as follows:

A. Project or program which are established and/or are operating without an ECC

Any project or program which has been classified or is classifiable under Section 2.1.1 and has been established and/or is operating without an ECC shall be liable to penalty.

Any project or program that is subject to programmatic compliance and is operating without an ECC shall be informed by DENR about the nature of the violation and the corresponding amount of fine to be imposed.

The DENR shall evaluate the merits of the explanation submitted by the proponent or the duly authorized representatives of the violating project or program and decide whether or not a fine and the submission of EIS shall be imposed.

The amount of fine shall not exceed P100,000 for each IDA plus P50,000 for every locator established/operating without ECC, at the discretion of the DENR.

The violator shall settle all requirements within forty -five (45) days following notification. A separate violation occurs for each day that extends beyond such forty-five (45) day period without having settled all requirements. The fine shall not exceed P50, 000 for each such separate violation. Failure to comply with these requirements also constitutes ground for issuance of an order for the cessation of project or program operation.

B. Project or programs violating ECC Conditions

1. First Violation

The proponent (or the project or program administrator) shall be informed about the nature of the violation by the Director of the EMB or the RED, and shall be asked to explain, within seven (7) days following receipt of notification, why it should not be penalized. The Director of the EMB or the RED shall decide within seven (7) days following receipt of explanation whether the justification is meritorious or a violation has been committed.

The Director of EMB or RED, upon determination that a fine is warranted, shall impose a fine and require the proponent (or the project or program administrator) to submit a remediation plan that will address the violations. The Plan will also contain a time frame for completion of the remediation. The Plan shall be approved by the Director of EMB or RED . If the violator does not submit a Plan within five (5) days of the order to do so by the Director of EMB or RED, the latter shall impose a Plan.

The amount of fine for each violation of the ECC conditions shall not exceed P100,000, which shall be set at the discretion of the DENR. A separate violation occurs for each day that extends beyond the time frame for remediation completion established in the remediation Plan. The fine shall not exceed P100,000 for each such separate violation, Failure to comply with these requirements also constitutes grounds for the summary suspension or revocation of the ECC.

2. Subsequent Violations-

Upon further violation of any ECC condition by any proponents (or project or program administrator), the EMB or Regional Office may order, in addition to the imposition of fines as provided in subsection B. 1 (above) of this Sec. 4.2.4 or such other sanctions as may be available under applicable pollution control laws, the cessation of operations and the revocation of the violator's ECC, and shall pursue these remedies under any legal authority available to DENR whether intrinsic or extrinsic to PD 1586 and its rules.

SECTION 3.0 IMPLEMENTING BODY

The EMB and DENR Regional Offices shall be responsible for determining whether there has been any violation of PD 1586, and its implementing rules and regulations.

SECTION 4.0 MOTION FOR RECONSIDERATION

All Motions for Reconsideration by the proponent (or the project or program administrator) shall be submitted to the EMB Director or RED within fifteen (15) days following receipt of the DENR order. The EMB Director or the RED shall issue a decision on the Motion for Reconsideration within thirty (30) days following receipt of the motion. The decision of the EMB Director or the RED, as the case may be, shall be final, A Motion for Reconsideration shall not stay the daily accumulation of penalties for non-compliance with a remediation plan.

SECTION 5.0 APPEALS

Any appeal from the decision/order of the EMB Director or RED shall be filed by the proponent (or the project or program administrator) with the Office of the Secretary within fifteen (15) days following receipt of the said order or devisor. The Secretary shall issue a decision on the

appeal within a period of thirty (30) days following the receipt of the said appeal. The decision of the Secretary shall be final and executory.

ARTICLE XIII
SUPPLEMENTAL RULES AND REGULATIONS

13.1.1 An application for an ECC which has been inactive on the part of the proponent for at least a year shall be returned to the proponent. The DENR shall notify the proponent one month before the application is terminated.

13.1.2 If, after termination, the proponent decides to proceed with its project, it is considered a new application and the proponent shall pay the corresponding fee.

ARTICLE XIV
TRANSITORY PROVISION

Considering the technical details needed to operationalize this order, the EMB shall prepare the appropriate blueprint plans of action that will prepare the implementation of the order within a period not to exceed one year from the effectivity of the said order.

ARTICLE XV
EFFECTIVITY

This Administrative Order shall take effect thirty (30) days after its publication in any newspaper of general circulation.

ARTICLE XVI
REPEALING CLAUSE

All rules and regulations found inconsistent herewith shall be superseded by this Administrative order.

(Sgd.) ANTONIO H. CERILLES
Secretary

RECOMMENDING APPROVAL:

(Sgd.) PETER ANTHONY A. ABAYA
Director, EMB

Published at:
MALAYA January 14, 2000

DENR Administrative Order
No. 2000 – 07
January 13, 2000

SUBJECT : Provisional Guidelines for Environmental Impact Assessment of Forestry Projects

Pursuant to Article VII, Section 3 (I) of DAO 96-37, DAO 97-18, MC 96-04, and pending the finalization and issuance of scoping guidelines for forestry projects, the following guidelines are hereby issued:

Section 1. Requirements

All applications for Integrated Annual Operational Plans (IAOP) shall now be processed, subject to the following conditions:

a) Submission of Initial Environmental Examination (IEE) and a checklist conforming with the format hereto attached;

b) Indorsement of the Local Government Unit (LGU) where the area of operation is located;

c) Certification from the Philippine Wood Products Association (PWPA) that the company is of good standing; and

d) Certification from the CENRO concerned that the company has no pending forestry account.

Sec. 2 Effectivity - This Order shall take effect 15 days after its publication in a newspaper of general circulation and upon acknowledgement by the UP Law Center.

(Sgd.) ANTONIO H. CERILLES
Secretary

Published at:

The Philippine Post - February 07, 2000

DENR Administrative Order
No. 2000 –18
February 23, 2000

SUBJECT : Chemical Control Order For Ozone Depleting Substances (ODS)

Pursuant to the Provisions *of Executive Order No. 192*, Series of 1987, Republic Act *No*. 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990), Section 30 of Republic Act No. 8749 (The Philippine Clean Air Act Of 1999) and *Resolution No. 25 dated 10 March 1993* of the Senate of the Republic of the Philippines ratifying the *Montreal Protocol on Substances that Deplete the Ozone Layer* as adjusted and amended by the Second Meeting of the Parties in *London, 27-29 June 1990* and further amended by the Third Meeting of the Parties in *Nairobi, 19-21 June 1991,* the Department hereby promulgates the following Chemical Control Order, hereinafter referred to as CCO:

SECTION 1. DECLARATION OF POLICY. It is the policy of the State to regulate, restrict or prohibit the import, export, use, manufacture, transport, processing, storage, possession or sale of ozone-depleting substances to abate or minimize their risks and hazards tot he stratospheric ozone, public health, and the environment.

SECTION 2. COVERAGE. This CCO covers the ban, limit and/or regulate the use, manufacture, import, export, transport, processing, storage, possession or sale of the following chemical substances, to wit:

2.1 Groups I and II of Annex A, and Groups I, II and III of Annex B of the Montreal Protocol. Regardless of source, these substances listed below can be in forms defined under Article I, paragraph 4 of the Montreal Protocol as clarified under Decision 1/12A of the First Meeting of the Parties and Decision II/4 of the Second Meeting of the Parties, herein enclosed as Appendix 1.

In general, these substances can be existing alone or in mixtures, can be contained in bulk for transport and/or storage, part of a use system or equipment, or used and/or contained in a manufactured product, to wit:

Group	Substance	Ozone-Depleting Potential[1]
ANNEX A: CONTROLLED SUBSTANCES		
	Group I	
$CFCl_3$	(CFC-11)	1.0
$CF_2\ CL_2$	(CFC- 12)	1.0
$C_2F_3Cl_3$	(CFC. 113)	0.8
$C_2F_4Cl_2$	(CFC- 114)	1.0
C_2F_5CI	(CFC- 115)	0.6
	Group II	
CF_2BrCl	(halon-1211)	3.0
CF_3Br	(halon-1301)	10.0
$C_2F_4Br_2$	(halon-2402)	6.0

[1] ODP is an index pertaining to the extent to which a chemical product may cause ozone depletion using the reference level of 1, which is the OPD, assigned to CFC-11 and CFC-12. It is calculated from mathematical models that take into account factors such as the stability of the product, the rate of diffusion, the quantity of depleting atoms per molecule, and the effect of ultraviolet light and other radiation on the molecules.

Group	Substance	Ozone-Depleting Potential

ANNEX B: CONTROLLED SUBSTANCES

Group I

CF_3Cl	(CFC-13)	1.0
C_2FCl_5	(CFC-111)	1.0
$C_2F_2C1_4$	(CFC-112)	1.0
C_3FCI_7	(CFC-211)	1.0
$C_3F_2Cl_6$	(CFC-212)	1.0
$C_3F_3Cl_5$	(CFC-213)	1.0
$C_3F_4Cl_4$	(CFC-214)	1.0
$C_3F_5Cl_3$	(CFC-215)	1.0
$C_3F_6Cl_2$	(CFC-216)	1.0
C_3F_7Cl	(CFC-217)	1.0

Group II

CCl_4	(carbon tetrachloride)	1.1

Group III

$C_2H_3Cl_3$	(1,1,1 trichloroethane/ methyl chloroform)	0.1

2.2 The substances listed below as Annex C and Annex E are not covered by Section 3 of this CCO until such time that the Senate of the Philippines ratifies the amendments and adjustments to the Montreal Protocol starting on the agreements of the Fourth Meeting of the Parties *(Copenhagen, 23-25 November 1992)* onwards.

However, any importation of these substances is subject to Pre-Shipment Importation Clearance as required under Section 6 hereof except for Group I of Annex E *(methyl bromide) which* is being

regulated b, the Fertilizer and Pesticide Authority of the Department of Agriculture.

Group	Substance	# of Isomers	Ozone-Depleting Potential[2]

ANNEX C

Group I

$CHFCl_2$	(HCFC-21)	1	0.04
CHF_2Cl	(HCFC-22)	1	0.055
CH_2FCI	(HCFC-31)	1	0.02
C_2HFCI_4	(HCFC-121)	2	.01-0.04
$C_2HF_2CI_3$	(HCFC-122)	3	.02-0.08
$C_2HF_3CI_3$	(HCFC-123)	3	.02-0.06
$CHCl_2CF_3$	(HCFC-123)	-	0.02
C_2HF_4Cl	(HCFC-124)	2	.02-0.04
$CHFCIF_3$	(HCFC-124)	-	0.022
$C_2H_2FCl_3$	(HCFC- 131)	3	.007-0.05
$C_2H_2F_2C1_2$	(HCFC-132)	4	0.008-0.05
$C_2H_2F_3Cl$	(HCFC-133)	3	.02-0.06
$C_2H_3FCI_2$	(HCFC- 141)	3	.005-0.07
CH_3CFCI_2	(HCFC- 141b)	-	0.11
$C_2H_3F_2CI$	(HCFC- 142)	3	.008-0.07
CH_3CF_2Cl	(HCFC-142b)	-	0.065
C_2H_4FCl	(HCFC- 151)	2	.003-.005
C_3HFC1_6	(HCFC-221)	5	0.015-0.07
$C_3HF_2Cl_5$	(HCFC-222)	9	0.01-0.09

2 Where a range of OPD is indicated, the highest value in that range shall be used for the purpose of the Montereal Protocol. The ODPs listed as a single value have been determined from calculations based on laboratory requirements. Those listed as a range are based on estimates and are less certain. The range pertains to an isometric group. The upper value is the estimate of the ODP of the isomer with the highest ODP, and the lower value is the estimate of the ODP of the isomer with the lowest ODP.

$C_3HF_3Cl_4$	(HCFC-223)	12	0.01-0.08

Group	Substance	# of Isomers	Ozone-Depleting Potential[2]
$C_3HF_4Cl_3$	(HCFC-224)	12	0.01-0.09
$C_3HF_2Cl_2$	(HCFC-225)	9	0.02-0.07
$CF_3CF_2CHCI_2$	(HCFC-225ca)	-	0.025
CF_2CICF_2CHCIF	(HCFC-225cb)	-	0.033
C_3HF_6Cl	(HCFC-226)	5	0.02-0.10
$C_3H_2FC1_5$	(HCFC-231)	9	0.05-0.09
$C_3H_2F_2C1_4$	(HCFC-232)	16	008-0.10
$C_3H_2F_3Cl_3$	(HCFC-233)	18	0.007-0.23
$C_3H_2F_4Cl_2$	(HCFC-234)	16	0.01-0.28
$C_3H_2F_5Cl$	(HCFC-235)	9	0.03-0.52
$C_3H_3FCl_4$	(HCFC-241)	12	0.004-0.09
$C_3H_3F_2Cl_3$	(HCFC-242)	18	0.005-0.13
$C_3H_3F_3Cl_2$	(HCFC-243)	18	0.007-0.12
$C_3H_3F_4Cl$	(HCFC-244)	12	0.009-0.14
$C_3H_4FCl_3$	(HCFC-251)	12	0.001-0.01
$C_3H_4F_2Cl_2$	(HCFC-252)	16	0.005-0.04
$C_3H_4F_3CI$	(HCFC-253)	12	0.003-0.03
$C_3H_5FCI_2$	(HCFC-261)	9	0.002-0.02
$C_3H_5F_2CI$	(HCFC-262)	9	0.002-0.02
C_3H_6FCI	(HCFC-271)	5	0.001-0.03
Group 11			
$CHFBr_2$		1	1.00
CHF_2BR	(HBFC-22B 1)	1	0.74
CH_2FB,		1	0.73
C_2HFBr_4		2	0.0-0.8
$C_2HF_2Br_3$		3	0.5-1.8
$C_2HF_3Br_2$		3	0.4-1.6

C_2HF_4Br		2	0.7-1.2
$C_2H_2FBr_3$		3	0.1-1.1
$C_2H_2F_2Br_2$		4	0.2-1.5
Group	Substance	# of Isomers	Ozone-Depleting Potential[2]
$C_2H_2F_3Br$		3	0.7-1.6
C_2H_2FBr		3	0.1-1.7
$C_2H_3F_2Br$		3	0.2-1.1
C_3HFBr_6		5	0.3-1.5
$C_3HF_2Br_5$		9	0.2-1.9
$C_3HF_3Br_4$		12	0.3-1.8
$C_3HF_4Br_3$		12	0.5-2.2
$C_3HF_5Br_2$		9	0.9-2.0
C_3HF_6Br		5	0.7-3.3
$C_3H_2FBr_5$		9	0.1-1.9
$C_3H_2F_2Br_4$		16	0.2-2.1
$C_3H_2F_3Br_3$		18	0.2-5.6
$C_3H_2F_4Br_2$		16	0.3-7.5
$C_3H_2F_5Br$		8	0.9-1.4
$C_3H_3FBr_4$		12	0.08-1.9
$C_3H_3F_2Br_3$		18	0.1-3.1
$C_3H_3F_3Br_2$		18	0.1-2.5
$C_3H_3F_4Br$		12	0.3-4.4
$C_3H_4FBr_3$		12	0.03-0.3
$C_3H_4F_2Br_2$		16	0.1-1.0
$C_3H_4F_3Br$		12	0.07-0.8
$C_3H_5FBr_2$		9	0.04-0.4
$C_3H_5F_2Br$		9	0.07-0.8
C_3H_6FBr		5	0.02-0.7

ANNEX E

Group I

CH_3BR	methyl bromide	0.6

SECTION 3. CONTROL MEASURES AND PHASE-OUT SCHEDULES

3.1 BAN ON THE MANUFACTURE OF SUBSTANCES LISTED UNDER SECTION 2.1 AND THEIR USE IN THE MANUFACTURE OF PRODUCTS

3.1.1 Starting 01 January 2000, no person, natural or juridical, will be allowed to locally manufacture these substances in whatever quantity, either alone or in mixtures. Further, the use of these substances in the manufacture of products shall also be prohibited *unless otherwise duly certified as for essential uses* by the DENR-EMB pursuant to Section 3.2.2 hereof

3.1.2 The use of these substances in the manufacture of products that are certified as for essential uses will be allowed only until 31 December 2010. This deadline may be moved forward by the DENR-EMB, *motu proprio,* as may be deemed necessary.

3.2 PROHIBITIONS'AND CONTROLS OF IMPORTATION

3.2.1 This CCO affirms the previous ban on imports in any amount of the *following* substances whether alone or in mixtures:

(a) CFC 11 and CFC 12 banned for importation for use on new equipment and/or products stating 01 January 1999. Importation of these substances will

only be allowed to service existing products and/or equipment.

(a) CFC 113 since 01 January 1997 and CFC 114 and CFC 115 since 01 January 1999

(b) Group 11 Annex A since 01 January 1999

(c) Group I Annex B starting 01 January 2000

(d) Group II Annex B since 01 January 1997

For mixtures or blends containing any of the substances above, the ban will be imposed starting 01 January 2000.

3.2.2 The DENR-EMB will accept importation of these substances solely for essential uses (medical application such as in metered dose inhalers, laboratory and analytical uses, quarantine and pre-shipment) and for the servicing requirements of existing equipment/products.

3.2.3 Consistent with Section 3.2.1 (a) hereof, individual annual import quota per substance of Group I of Annex A shall be determined by the DENR-EMB for each registered importer.

3.2.4 In case of mixtures or blends containing any of the substances under Group I of Annex A and/or Group I of Annex B, the calculation of import quota shall be based on the percent content by weight of these substances.

3.2.5 The 1996 estimated consumption (based on the Updated Philippine Country Program) shall be used as baseline

level[3]. The annual import quota is *non-cumulative*[4]. The total annual imports shall strictly follow the phase-out schedule below:

(a) At the year ending 31 December 1999, imports shall not exceed ninety per cent (90%) of 1996 recorded imports by weight;

(b) At the year ending 3 1 December 2000, imports shall not exceed eighty per cent (80%) of 1996 recorded imports by weight;

(c) At the year ending 31 December 2001, imports shall not exceed seventy-five per cent (75%) of 1996 recorded imports by weight;

(d) At the year ending 31 December 2002 imports shall not exceed seventy per cent (70%) of 1996 recorded imports by weight;

(e) At the year ending 31 December 2003, imports shall not exceed sixty-five per cent (65%) of 1996 recorded imports by weight;

(f) At the year ending 31 December 2004, imports shall not exceed sixty per cent (60%) of 1996 recorded imports by weight;

(g) At the year ending 31 December 2005, imports shall not exceed fifty per cent (50%) of 1996 recorded imports by weight;

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3 the 1996 levels were only estimated consumption based on available data. An allowance of 75% is added to consider unaccounted imports.

4 at the end of every calendar year, any remainder of the allowable quota for a particular substance is deemed consumed.

(h) At the year ending 31 December 2006, imports shall not exceed forty-five per cent (45%) of 1996 recorded imports by weight;

(i) At the year ending 31 December 2007, imports shall not exceed fifteen per cent (15%) of 1996 recorded imports by weight;

(j) At the year ending 31 December 2008, imports shall not exceed ten per cent (10%) of 1996 recorded imports by weight;

(k) At the year ending 31 December 2009, imports shall not exceed five per cent (5%) of 1996 recorded imports by weight; and,

(l) At the year ending 31 December 2010, imports shall not exceed five per cent (5%) of 1996 recorded imports by weight.

3.2.6 Beginning 01 January 201 1, all kinds of importation of substances (alone or in mixtures) under Section 2.1 hereof either *for servicing or for essential uses as* provided under Section 3.2.2 will be absolutely prohibited. The DENR-EMB, through the issuance of an appropriate policy instrument, may accelerate the phase-out schedules for servicing and essential uses as may be deemed necessary,

3.2.7 With regard to applications for Pre-Shipment Importation Clearances for Group I of Annex A substances received by the DENR-EMB before the closing of regular office hours on 31 December 2010, only those where actual shipment is undertaken on or before 3 0 June 2 01 I may be approved.

3.3 CONTROLS MEASURES ON IMPORTS OF SUBSTANCES UNDER SECTION 2.1CONTAINED IN USE SYSTEM OR EQUIPMENT

3.3.1 In case these substances are contained in a use system or equipment, the control measures for importation under Section 3.2 hereof does not apply.

3.3.2 After the conduct of appropriate studies in coordination with the Bureau of Custom' and Department of Trade and Industry, the DENR shall issue separate procedures not later than I year after the effectivity of this CCO, by which to realize the target reductions in imports of these use systems and equipment. However, these use systems or equipment shall not be imported beyond 31 December 2010.

SECTION 4. REGISTRATION OF IMPORTERS

4.1 Any person, natural or juridical, who imports ozone-depleting substances (regardless of source as allowed under the agreements of the Montreal Protocol) in any of the forms mentioned under Sections 2 hereof, and with respect to any industry or activity listed under APPENDIX II must be duly registered with the DENR-EMB. A Certificate of Registration may be granted only upon showing proof of the following

4.1.1 Understanding and appreciation of the role of these substances in depleting the stratospheric ozone, and its consequences.

4.1.2 Capability to take effective measures, including the necessary equipment, technology, training and infrastructure, for the

purpose of effectively handling ozone-depleting substances, minimizing their emissions, and ultimately phasing out their use by replacing with substitutes/alternatives duly recognized and certified by the DENR-EMB.

4.1.3 Did not violate any provisions of RA 6969 and its implementing rules and regulations and other pertinent environmental laws and regulations.

4.2 Application for registration must include the following information, to wit:

4.2.1. Duly accomplished registration form;

4.2.2 Copy of the Environmental Compliance Certificate issued by the appropriate office of the DENR, if warranted;

4.2.3 Whether the applicant is an Importer-Distributor or an Importer-End-user;

4.2.4 Certified copy of the SEC, CDA or DTI Registration and updated list of its officers; and,

4.2.5 Such other information and/or documents as may be required by the DENR-EMB.

4.3 Certificates of Registration are valid only for one year. It is therefore required that the same be renewed every year.

4.4 The foregoing requirements for registration do not preclude other requirements and conditions already prescribed by Administrative Order 98-58.

4.5 In case an importer is also a service provider, the Certificate of Registration will suffice and is deemed accredited pursuant to

Section 5 hereof, provided that the services offered are so declared in the registration form.

4.6 The DENR-EMB shall, upon evaluation of application, determine the annual quota per substance for every importer pursuant to Section 3.2 hereof.

4.7 Violation of the provisions of this CCO, DAO 92-29, DAO 98-58, RA 6969 and other relevant environmental laws and regulations shall constitute grounds for the cancellation of the certificate of registration.

SECTION 5. ACCREDITATION OF DEALERS, RETAILERS AND SERVICE PROVIDERS

5.1 There is hereby a system of accreditation established to determine the capability of any person, natural or juridical, in handling ozone depleting substances who provides the servicing requirements for individuals and industries using these substances in any of the forms and with respect to any industry or activity listed under APPENDIX II. The DENR-EMB shall grant a certificate of accreditation to applicants only upon showing proof of the following:

5.1.1 Understanding and appreciation of the role of these substances in depleting the stratospheric ozone, and its consequences.

5.1.2 Capability to take effective measures, including the necessary equipment, technology, training and infrastructure, for the purpose of effectively handling ozone-depleting substances, minimizing their emissions, and ultimately *phasing out* their use by replacing with substitutes/altematives duly recognized and certified by the DENR-EMB.

5.2 Application for accreditation must include the following information, to wit:

5.2.1 Duly accomplished accreditation form;

5.2.2 Copy. of the Environmental Compliance Certificate issued by the appropriate office of the DENR, if warranted;

5.2.3 Certified copy of the SEC, CDA or DTI Registration and updated list of its officers;

5.2.4 Such other information and/or documents as may be required by the DENR-EMB.

5.3 Certificates of Accreditation are valid only for one year. It is therefore required that the same be renewed every year.

5.4 The foregoing requirements for accreditation do not preclude other requirements and conditions already prescribed by Administrative Order 98-58.

SECTION 6. PRE-SHIPMENT IMPORTATION CLEARANCE

6.1 Under allowable circumstances, any person, natural or juridical, duly registered with the DENR-EMB who engages in the importation of ozone-depleting substances listed under Section 2 pursuant to Section 3 hereof, must secure importation clearance from the DENR-EMB prior to the entry of these substances in any area within the Philippine Territory. As such, any shipment not covered by an importation clearance shall be deemed illegal import and shall be confiscated and forfeited in favor of the Government.

6.2 Applications for importation clearance must observe the following, to wit:

6.2.1 For alternative or substitute substances for halons, the applicant shall secure a certification from the Bureau of Product Standards (DTI-BPS) on the conformance of the same to established product standards.

6.2.2 Any application for importation clearance for substances under Section 2 must be within the prescribed quota pursuant to Section 3.2.3 hereof.

6.2.3 Duly accomplished application forms shall only be received for processing after payment of prescribed application fees and charges.

6.2.4 Application forms are accomplished in two (2) copies -- i.e., the original copy shall be filed with the DENR-EMB for assessment and evaluation, and duplicate copy which serve as reference document of the applicant.

6.2.5 Application forms shall only be processed until the following information are provided, to wit:

(a) Commercial name or the trade/brand, name of the substance as usually promoted/marketed by the manufacturers;

(b) Generic name of the substance;

(c) Name of the manufacturing company;

(d) Port of loading or the country or port immediately before the substance enters into the Philippine territory;

(e) Exporting company or any entity that transacts or brokers the chemical substance from the manufacturer to the importing company;

(f) Current inventories of the substance that is the subject of the application for importation clearance, including the area/building within which the same is stored either for further transshipment or distribution.

6.2.6 All accomplished application forms must include the following documents:

(a) Proof that application fees are paid;

(b) Copy of the Material Safety Data Sheet (MSDS) from the manufacturing firm every time an importer applies for clearance of a new chemical;

(c) Photocopy of the Pro-forma Invoice;

(d) Description of the applicant's handling procedure, safety precautions and emergency response for the chemical;

(e) Original accomplished copy of the Record of Actual Arrival of Shipment accompanied by a photocopy of the Bill of Lading issued by the Carrier (shipping/transport contractor) of the most recent importation of the chemical made by the applicant[5];

(f) Summary of Transactions of the most recent importation clearance issued on the same chemical applied for (not applicable to new importers); and

(g) List of Intended Buyers and/or End-Users.

[5] This requirement is not applicable to first-time importer.

6.3 Pursuant to Section 3 hereof, importers shall distribute these substances only to accredited Service Providers pursuant to Section 5 hereof or those entities utilizing these substances for essential uses duly certified by the DENR-EMB.

6.4 Clearances shall only be issued on a per substance per shipment basis.

6.5 Clearances shall be issued in three copies, one each for the DENR, the Bureau of Customs, and the importer.

6.6 The validity of a Pre-Shipment Importation Clearance must not exceed six consecutive calendar months from the date of issuance. Any transaction not covered under the terms and conditions of the Pre-Shipment Importation Clearance shall be considered a violation of this CCO.

SECTION 7. RECORDS KEEPING. Those issued various importation clearance must keep records of all transactions. These records are requisites for applying subsequent clearances or must be submitted to the DENR-EMB annually whichever is earlier. However, the same shall be available for inspection any time, upon request, by an authorized officer of the DENR-EMB or by other authorized government agency.

SECTION 8. CONFIDENTIAL BUSINESS FNFORMATION

8.1 Any person, natural or juridical, submitting a report under this CCO may assert a business confidentiality claim for all or part of the report, pursuant to Section 40(l) of DAO 92-29s It is the burden of the reporting person to justify the confidentiality claim. The Department may consider that the information is confidential and treat the reported information accordingly.

8.2 When confidentiality is not applied for, the report shall be considered as a public document, provided that any disclosure of

information subject to this section and Sections 40(1) and 40(2) of DAO 92-29, shall be done only in cases allowed under Section 40(3)

SECTION 9. FINES AND PENALTIES. Any person, natural or juridical, who violates any provision of this CCO, shall be administratively and criminally liable pursuant to Sections 43 and 44 of DAO 92-29 and Section 13, 14 &ad 15 of RA 6969.

SECTION 10. SEPARABILITY CLAUSE. If any provision of this CCO is declared void or. unconstitutional, by a competent court, the other provisions hereof shall continue to be in force and effect as if the section or provision so declared void or unconstitutional had never been incorporated herein.

SECTION 11. EFFECTIVITY. This CCO shall take effect 15 days after its publication in the Official Gazette or in at least two- (2) newspaper of general circulation.

(Sgd.) ANTONIO H. CERILLES
Secretary

Published at:

TODAY - March 20, 2000

DENR Administrative Order
No. 2000 - 28
March 14, 2000

SUBJECT : "Implementing Guidelines on Engineering Geological and Geohazard Assessment as Additional Requirement for ECC

Applications covering Subdivision, Housing and other Land Development and Infrastructure Projects"

Pursuant to the objectives of the Government to ensure the suitability and safety of a project site proposed for development, the following implementing guidelines on engineering geological and geohazard assessment are hereby promulgated:

Section 1. Rationale

The Philippines, by reason of its geographic, geologic and tectonic, setting, is prone to several geologic and natural hazards. The recognition of such hazards, however, is often overlooked by land developers/planners, project proponents and the general public except when a dramatic and devastating incident occurs, such as a strong earthquake, massive landslide or heavy flooding event that causes great loss of life and destruction to property.

To therefore adequately and comprehensively address and mitigate the possible effects/ impacts of geologic hazards, it is hereby required that, in addition to the requirement for the issuance of an Environmental Compliance Certificate (ECC) as provided for under *Presidential Decree No. 1586, Presidential Proclamation No. 2146* and its *implementing rules and regulations*, all proponents of subdivision development projects, housing projects and other land development and infrastructure projects, private or public, shall undertake an Engineering Geological and Geohazard Assessment.

Section 2. Definition of Terms

The following terms as used in these guidelines shall mean:

a) "Engineering Geology" - refers to the branch of Geology that applies geologic fundamentals and principles in the investigation and

evaluation of naturally occurring rock soil for the use in the design of civil works.

b) **"Environmental Compliance Certificate (ECC)"** - refers to the document issued by the Secretary or the Regional Executive Director certifying that based on the representations of the proponent and as reviewed and validated by the Environmental Impact Assessment Review Committee (EIARC), the proposed project or undertaking will not cause a significant negative environmental impact; that the proponent has complied with all the requirements of the Environmental Impact System; and that the proponent is committed to implement its approved Environmental Management Plan in the Environmental Impact Statement or mitigation measures in the Initial Environmental Examination.

c) **"Geologic Hazards or Geohazards"** - refer to natural and man-induced geological processes that have potential to cause destruction and pose a threat or risk to man's life and property.

d) **"Geotechnical Engineering"** - refers to the application of the principles of soils and rock mechanics in the investigation, evaluation and design of civil works involving the use of earth materials and the inspection and/or testing of the construction thereof; **but herein only limited to the assessment of physical and index properties of soils.**

e) **"Structural Geology" –** refers to the branch of' Geology that studies the architecture of' the earth's crust and addresses its structure, form, symmetry, geometry and deformation processes, including the assessment of the strength and mechanical properties of crustal materials.

Section 3. Types of Geological Assessment

All Developers/Project Proponents, public or private, of subdivision, housing and other land development and infrastructure

projects falling within the scope of the ECC requirement shall undertake Engineering Geological and Geohazard Assessment as follows:

3.1 Geological Site Scoping

This shall be undertaken by a Licensed Government Geologist of' the Department of' Environment and Natural Resources, - Mines and Geosciences Bureau (DENR-MGB). The geological site scoping shall consist of' a preliminary site geological inspection of' the proposed project area or land development area. A **Geological Site Scoping Report (GSSR)** on the above inspection shall be provided by DENR-MGB to the Developer/Project Proponent. This report shall include recommendations on the scope of' work to be undertaken by the Developer/Proponent in terms of detailed engineering geological, structural geological and geohazard assessment and geotechnical engineering tests, including specialized studies, if necessary, for submission to the DENR-MGB and transmittal to the Environmental Management Bureau (DENR-EMB) in the form of an **Engineering Geological and Geohazard Assessment Report (EGGAR).**

3.2 Engineering Geological and Geohazard Assessment

This shall be undertaken by a licensed professional Geologist with a minimum experience of five (5) years or by a licensed Engineer with the same number of years or experience and with training or post-graduate diploma in Engineering Geology/Structural Geology.

For this type of assessment, a duly signed and sealed **EGGAR** shall be submitted by the licensed Geologist/Engineer who conducted the required scope of work to DENR-MGB. The **EGGAR** shall include the results of all engineering geological, structural geological and geohazard assessment and geotechnical tests, with any other specialized studies undertaken, as prescribed in

the corresponding GSSR previously prepared by DENR-MGB. The **EGGAR** shall be subject to review/verification by DENR-MGB and for appropriate transmittal or endorsement to the DENR-EMB and other concerned Government Agencies.

The DENR-MGB, upon the request of a Government Agency/Entity, may also conduct an engineering geological and geohazard assessment and geotechnical engineering tests, including any specialized studies, if necessary, in connection with a Government development project: *Provided*, That said assessment work and specialized studies are subject or a ***Memorandum*** of ***Agreement (MOA)*** between the DENR-MGB and the concerned Government Agency/Entity. As to be provided for in the ***MOA***, an EGGAR shall be prepared by DENR-MGB.

The technical checklist and guide on the Preparation of an EGGAR shall be formulated by DENR-MGB.

3.3 Geological Review and Verification

In cases wherein an **EGGAR,** or an equivalent technical report, has already been prepared prior to the effectivity of this **Order** or prior to the conduct of scoping, and that no geological site scoping report has been prepared by the DENR-MGB, the Developer or Project Proponent may still submit the said **EGGAR/technical report** to DENR-MGB for appropriate technical review and verification. For this purpose, a corresponding **Geological Verification Report (GVR)** shall be prepared by DENR-MGB and submitted to the DENR-EMB and other concerned government agencies.

Project Proponent may still submit the said **EGGAR/technical report** to DENR-MGB for appropriate technical review and verification. For this purpose, a corresponding **Geological Verification Report (GVR)** shall be prepared by DENR-MGB

and submitted to the DENR-EMB and other concerned government agencies.

Section 4. Fees and Charges

The following fees and charges shall be payable to the DENR-MGB for services rendered:

4.1 Geological Site Scoping - Geological Review and Verification Fees

For the conduct or a **Geological Site Scoping** or a **Geological Review and Verification,** the concerned Developer or Project Proponent shall pay the standard fees as prescribed under the **PAID INVESTIGATION** scheme adopted from Item C, Annex 4-A (Administrative fees and Other Charges, as revised) of the Philippine Mining Act of 1995 and its implementing Rules and Regulations.

4.2 Engineering Geological and Geohazard Assessment Fees/Funds

For the conduct of an **Engineering Geologica1 and Geohazard Assessment** and the preparation of a corresponding **EGGAR** by the DENR-MGB in relation to Government development projects, the concerned Government Agency/Entity of a Government development project shall enter into a ***MOA*** with DENR-MGB and shall provide the funds necessary for the conduct of the assessment **and** any other required specialized studies.

Section 5. Creation of Urban Geology Units

To implement these guidelines effectively throughout the country, each Regional Office of DENR-MGB shall organize an **Urban**

Geology Unit from its existing personnel complement. The members of the Urban Geology Unit shall be responsible for geological site scoping, review and verification/validation of the **EGGAR** and shall provide technical expertise to the EIA Review Committee of the concerned DENR-EMB Regional Office. The **Urban Gecology Units** may also obtain technical advise from other experts with respect to geotechnical engineering aspects and other specialized studies, as necessary.

The DENR-MGB Central Office shall provide the technical checklists, guidelines and standards for the engineering geological and geohazard assessment, review and verification/validation.

Section 6. Repealing and Amending Clause

All orders, rules and regulations inconsistent with or contrary to the provisions of' these implementing rules and regulations are hereby repealed or modified accordingly.

Section 7. Effectivity

This order shall take effect fifteen (15) days after its complete publication in a newspaper of general circulation and fifteen (15) days after registration with the Office of the National Administrative Register.

(Sgd.) ANTONIO H. CERILLES
Secretary

Published at

MALAYA March 23,2000

DENR Administrative Order
No. 2000 - 37
April 10, 2000

Subject : Addendum to Article VIII Section 1.0 of DAO 96-37 re: Standard Costs and Fees for Various Services of the Environmental Management Bureau Relative to the Implementation of the Philippine EIS System.

Pursuant to Executive Order No. 192 and Presidential Decree No. 1586, following are the addendum to Article VIII, Section I of the DENR Administrative Order No. 96-37 concerning the standard costs and fees for various services rendered by the Environmental Management Bureau (EMB) relative to the implementation of the Philippine EIS System..

	FEES AND CHARGES (In Philippine Pesos/Non-refundable
A. Application for ECC	
A.1 Environmentally Critical Project (ECP)	Php 6,000.00
Single Project ECC	
A.1.1 Procedural Screening Fee	600.00/project
A.1.2 Filing Fee	1,560.00
A.1.3 Processing Fee	3,600.00
A.1.4 Legal Research Fee	240.00

A.2 Non-Environmentally Critical Project (Non-ECP)	Php 3,000.00
Requiring Regular IEE/IEE Checklist	
A.2.1 Procedural Screening Fee	200.00/project
A.2.2 Filing Fee	460.00
A.2.3 Processing Fee	2,100.00
A.2.4 Legal Research Fee	240.00
Application for Certificate of Non-Coverage (CNC)	
Filing Fee and Processing Fee	600.00/Application
C. Post-ECC Processing Services	
C.1 Request for ECC Amendment	1,200.00/requested condition
C.2 Request for Transfer/Change of ECC Grantee	500.00
C.3 Motion for Reconsideration/ Appeal filed against decision	*500.00/ motion
C.4 Review of Post-ECC Technical Requirements	1,200.00/submission
C.5 Legal Research Fee	240.00
D. Other Services	
D.1 Request for Certification	*25.00/certification
D.2 Request for Certified True/Photocopy	*50.00/document

- **Note that Article VIII Section 2.00 which states that "The proponent shall be responsible for the payment of all cost relating to the review of EIS/IEE..." still holds**

*Based on Administrative Order No. 2000-16, Rates of Fees for Certain Administrative Services Rendered, dated February 11, 2000.

This Order shall take effect immediately and shall remain in force unless otherwise revoked in writing.

(Sgd.) ANTONIO H. CERILLES
Secretary

Recommending Approval:

(Sgd.) PETER ANTHONY A. ABAYA
Director, EMB

Published At:

MALAYA May 10, 2000

DENR Administrative Order
No. 2000 – 38
April 10, 2000

SUBJECT : Establishing The Support System For The GEF/UNDP/IMO Regional Programme "Partner-ship In Environmental Manage-ment For The Seas Of East Asia"

In consonance, with the Department's commitments under the Project Document on "Building Partnership for Environmental Protection and Management for the Seas of East Asia", implemented through the Programme known as "PEMSEA" (Partnerships in Environmental Management for the Seas of East Asia), and following the "Guidelines for National Participation and Implementation of Project Activities", a DENR support system is hereby instituted:

National Focal Point - The Undersecretary for International Commitment and Local Government Affairs shall be designated as the National Focal Point, with the following responsibilities.

1. Set up the National Coordinating Committee which shall coordinate national inputs to PEMSEA activities, assess PEMSEA outputs, etc as described in the Terms of Reference of the NCC;

2. Facilitate the final selection of the ICM parallel site;

3. Explain to the concerned local government and stakeholders the objective of the ICM parallel site, its operational procedure, expectations, particularly in demonstrating the working model to other coastal areas within the country and the region at large;

4. Facilitate the adoption of Manila Bay as a pollution 'hot spot' and preparation of concept paper on the establishment of a coordinating mechanism for the project;

5. Give directions to the Project Management Office, described below through channels, and;

6. Identify sources of funds required by activities related herein.

The National Focal Point may designate any of the DENR Central Office Directors to assist him in his role as Focal Point.

PEMSEA Project Management Office (PPMO) - A Project Management Office is created under the Coastal Environment Program and shall be composed of regular DENR personnel. It shall be DENR's counterpart of the Program Development and Management Office (PDMO) of PEMSEA which has the following responsibilities:

1. Manage the project in accordance with the objectives set out in the project document;

2. Prepare a project coordination and management framework and guidelines, and develop a detailed work plan for implementation of project activities, including milestones, counterpart, budgets, timeframe, monitoring strategies and evaluation criteria;

3. Ensure timely GEF/UNDP inputs and delivery of outputs from each ICM site or sub-regional pollution 'hot spot' activity;

4. Maintain a close working relationship and communications with the GEF/UNDP/IMO and any other related national and regional projects;

5. Prepare annual progress reports for approval by the National Coordination Committee,

6. Assist in organizing and monitoring progress of project activities at each ICM site or sub-regional 'hot spot' location;

7. Serve as Secretariat of the NCC;

8. Prepare a database of local experts and specialists for participation in project and programme-related activities;

9. Coordinate the activities of intentional consultants and national professionals, review reports and submissions and assist in the implementation of recommendations when accepted; and

10. Review project outputs, prepare technical reports and organize workshops to distill lessons learned from the ICM demonstration sites and sub-regional pollution "hot spot" locations, and package the information into working models for dissemination.

Regional PEMSEA Project Management Offices/Desk in concerned DENR Regions shall be created immediately after the identification of ICM parallel sites and/or hotspots. The functions of these RPPMO/Ds shall be issued by the NCC.

This Order shall take effect immediately.

(Sgd.) ANTONIO H. CERILLES
Secretary

DENR Administrative Order
No. 2000 – 68
September 14, 2000

SUBJECT : Institutionalization Of The Directorate On Special Projects For Water And Integrated Ecosystems Management And Development (DSPWIEMD) And Related Functions.

In the interest of the service and consistent with the ongoing DENR organizational development, the programs/projects and related functions of the Directorate on Special Projects for Water and Integrated Ecosystems Management and Development (DSPWIEMD) are hereby realigned/institutionalized as follows:

1. Coastal and Marine Programs and Projects

A. The Coastal Environment Project (CEP) created under DENR Administrative Order No. 19, Series of 1993 is hereby renamed as **Coastal and Marine Environment Program (CMEP).**

B. The CMEP shall be the overall and lead program of the DENR for coastal and marine management and development and shall be institutionalized under the Protected Areas and Wildlife Bureau (PAWB).

C. All other coastal and marine programs and projects shall be coordinated and managed within the ambit of CMEP. More particularly, the following programs and projects are hereby realigned under CMEP:

1. The Coastal Resources Management (Project) component of the Natural Resources Management Program (NRMP);

2. The Southern Mindanao Integrated Coastal Zone Management Project (SMICZMP);

3. The DENR Project Management Office (PMO) of the Partnership in Environmental Management for the Seas of East Asia (PEMSEA);

4. The Manila Bay Environmental Management Project (MBEMP);

5. The Executive Office/Secretariat of the Presidential Commission on Integrated Conservation and Development of the Sulu Celebes Seas (PCICDSC);

6. The Coordinating Office of the International Coral Reef Initiative (ICRI); and

7. All other national and site-specific coastal and marine management and development programs, projects, and activities within the DENR.

D. The CMEP shall likewise serve as National Focal Point/Office for the GEF/UNDP/IMO Regional Partnership in Environmental Management for the Seas of East Asia. It shall therefore coordinate the support services committed by the Philippines as host country to the said Regional Programme.

E. As the overall coastal and marine management and development program of the DENR, CMEP shall be supervised by a Steering Committee under the Office of the Secretary. The CMEP Steering Committee, which shall (a) provide the policy directions; (b) define and approve the activities, work

and financial plan; and (c) assess and review the performance of CMEP, shall be chaired by the Undersecretary for Policy and Technical Services and composed of the following as members:

1. The Director, Environmental Management Bureau (EMB)
2. The Director, Protected Areas and Wildlife Bureau (PAWB)
3. The Director, Mines and Geo-Sciences Bureau (MGB)
4. The Director, Forest Management Bureau (FMB)
5. The Director, Lands Management Bureau (LMB)
6. The Director, Ecosystems Research and Development Bureau (ERDB)
7. The General Manager, Laguna Lake Development Authority (LLDA)
8. The Director, Bureau of Coast and Geodetic Surveys, National Mapping and Resources Information Authority (BCGS-NAMRIA)
9. The Director, Management Information and Decision Support Service
10. The Coastal and Marine Environment Program Director (Secretariat)

II. Water Resources Development and Management

A. The policy directions prescribed under Executive Order No. 374 dated October 15, 1996, as amended, shall continue to be the DENR's mandate on water resources management and development until a new law on water resources is passed by Congress.

B. The Executive Office/Secretariat of the Presidential Task Force on Water Resources Development and Management (PTFWPDM) shall be Supervised by the Undersecretary for International Commitment and Local Government Affairs (ICLGA).

C. The PTFWRDM Executive office/Secretariat shall, among others, continue to work for the rationalization/institutionalization of the water resources management and development programs/functions and the passage of the concerned bill(s) in Congress, in coordination with the DENR Legislative Liaison's office.

D. The PTFWRDM shall continue to utilize the support services of the HydroGeology and Environmental Geology Office (Section) which shall remain with the Mines and Geosciences Bureau (MGB).

III. Biodiversity Programs and Projects

A. All biodiversity programs, projects and activities being wholly or partly managed and/or coordinated by the DSPWIEMD including the Center for Integrated Ecosystems Management and Biodiversity Conservation and Development (CIEMBIOCAD) and the BRP Biodiversity Research Vessel (MV Kalikasan), are hereby institutionalized under and/or incorporated into the regular functions of PAWB.

B. The ASEAN Regional Center for Biodiversity Conservation (ARCBC) shall be directly supervised, in coordination with PAWB, by the Philippines' ASEAN Senior Official on Environment (ASOEN-Philippines). The ASOEN-Philippines shall report to the DENR Secretary and the ARCBC Steering Committee (the ASOEN) presently chaired by Thailand.

IV. Decision Support System Office (DSSO)

A. The Directorate for Decision Support System which is currently an adjunct of the DSPWIEMD is hereby segregated, strengthened and remained as Management Information and

Decision Support Service (MIDSS). It shall be institutionalized within the Planning, Policy Studies and Economic Affairs Office (PPEAO), under the Office of the Secretary (OSEC).

B. As a separate Service, MIDSS shall absorb the Management Information Systems Division (MISD) and perform among others, the overall data/information management and development, including the GIS-based data-management system and similar functions. It shall strongly link/coordinate with the other Services within PPEAO and other DENR Offices and relevant agencies/entities for the development and management of an efficient and effective data/information system. Said system shall be in placed nationwide within three (3) months from the date of this Order.

All other collateral functions and activities of DSPWIEMD including those of the Water Quality Police are hereby transferred to Environmental Management Bureau (EMB) and other appropriate Bureaus/Offices within the DENR.

In the light of the foregoing, the Director on Special Projects for Water and Integrated Ecosystems Management and Development (DSPWIEMD) is hereby **abolished.** The Foreign Assisted and Special Projects Office (FASPO), consistent with its functions, shall continue to monitor and evaluate the performance of the foregoing institutionalized programs and projects.

All necessary administrative arrangements for the implementation of this Order shall be carried out and completed by all concerned officials/employees within ten (10) days from the date of this Order.

This Order shall take effect immediately and supersede, amend or revoke all previous Orders and Instructions inconsistent herewith.

(Sgd.) ANTONIO H. CERILLES
Secretary

DENR Administrative Order
No. 2000 - 81
November 07, 2000

SUBJECT : IMPLEMENTING RULES AND REGULATIONS FOR RA 8749

Pursuant to the provisions of Section 51 of Republic Act No. 8749, otherwise known as the "Philippine Clean Air Act of 1999," and by virtue of Executive Order No. 192, Series of 1987, the Department of Environment and Natural Resources hereby adopts and promulgates the following rules and regulations:

PART I GENERAL PROVISIONS

RULE I PRELIMINARY PROVISIONS

Section 1. Title

These Rules shall be known and cited as the "Implementing Rules and Regulations of the Philippine Clean Air Act of 1999."

Section 2. Purpose

The purpose of these Rules is to provide guidelines on the operationalization of the Philippine Clean Air Act of 1999.

Section 3. Scope

These Rules shall lay down the powers and functions of the Department of Environment and Natural Resources, the Department of Transportation and Communication, the Department of Trade and Industry, the Department of Energy and all other concerned agencies, the rights and obligations of stakeholders and the rights and duties of the people with respect to the Air Quality Management and Control Program.

Section 4. Construction

These Implementing Rules and Regulations shall be liberally construed to carry out the national policy of balancing development and environmental

protection through the pursuance of the framework of sustainable development. Sustainable development shall refer to development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

RULE II DECLARATION OF STATE POLICY

Section 1. Declaration of Policy

It is the policy of the State to protect and advance the right of people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.

It is also the policy of the State to attain and maintain a balance between development and environmental protection.

Finally, it is the policy of the State to maintain a quality of air that protects human health and welfare.

RULE IIIAIR QUALITY PRINCIPLES

Section 1. Air Quality Principles

a) The State shall promote and protect the global environment to attain sustainable development while recognizing the primary responsibility of local government units to deal with environmental problems.
b) The State recognizes that the responsibility of cleaning the habitat and environment is primarily area-based and that air quality management and control is most effective at the level of airsheds.
c) The State recognizes the principle that “polluters must pay” and the important role of economic instruments in air quality management and control.
d) The State recognizes that a clean and healthy environment is for the good of all and should therefore be a concern of all.

RULE IV AIR QUALITY POLICIES

Section 1. Air Quality Policies

It is the policy of the State to:

a) Formulate a comprehensive national program of air pollution management that shall be implemented by the government through proper delegation and effective coordination of functions and activities;
b) Encourage cooperation and self-regulation among citizens and industries through the application of market-based instruments;
c) Focus primarily on pollution prevention rather than on control and provide for a comprehensive management program for air pollution, such as the promotion of non-motorized transport, emphasis on public transport, and travel demand measures;
d) Promote public information and education and to encourage the participation of an informed and active public in air quality planning and monitoring; and
e) Formulate and enforce a system of accountability for short and long-term adverse environmental impact of a project, program or activity. This shall include the setting up of a funding or guarantee mechanism for clean-up and environmental rehabilitation and compensation for personal damages.

RULE V RIGHTS

Section 1. Recognition of Rights

Pursuant to the above-declared principles, the following rights of citizens are hereby sought to be recognized and the State shall seek to guarantee their enjoyment:

a) The right to breathe clean air;
b) The right to utilize and enjoy all natural resources according to the principles of sustainable development;
c) The right to participate in the formulation, planning, implementation and monitoring of environmental policies and programs and in the decision-making process;
d) The right to participate in the decision-making process concerning development policies, plans and programs projects or activities that may have adverse impact on the environment and public health;
e) The right to be informed of the nature and extent of the potential hazard of any activity, undertaking or project and to be served timely notice of any significant rise in the level of pollution and the accidental or deliberate release into the atmosphere of harmful or hazardous substances;
f) The right of access to public records which a citizen may need to exercise his or her rights effectively under this Act;
g) The right to bring action in court or quasi-judicial bodies to enjoin all activities in violation of environmental laws and regulations, to compel the rehabilitation and clean-up of affected area, and to seek the imposition of penal sanctions against violators of environmental laws; and

h) The right to bring action in court for compensation of personal damages resulting from the adverse environmental and public health impact of a project or activity.

RULE VI DEFINITION OF TERMS

Section 1. Definitions

The following terms as used in these Implementing Rules and Regulations shall be defined as follows:

"Act" refers to Republic Act No. 8749, otherwise known as the "Philippine Clean Air Act of 1999";

"Air pollutant" means any matter found in the atmosphere other than oxygen, nitrogen, water vapor, carbon dioxide, and the inert gases all in their natural or normal concentrations, that is detrimental to health or the environment, which includes but not limited to smoke, dust, soot, cinder, fly ash, solid particles of any kind, gases, fumes, chemical mists, contaminated steam and radioactive substances;

"Air pollution" means any alteration of the physical, chemical and biological properties of the atmosphere, or any discharge thereto of any liquid, gaseous or solid substances 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 purposes;

"Air quality performance rating" refers to a rating system to be developed by the Department through the Bureau. The air quality performance ratings will be grouped by industry, and will compare emissions data for industrial sources to the relevant National Ambient Air Quality Standards and the relevant National Emissions Standards for Source Specific Air Pollutants;

"Airshed" refers to areas with common weather or meteorological conditions and sources of air pollution which affect the interchange and diffusion of pollution in the surrounding atmosphere.

"Ambient air quality" refers to the atmosphere's average purity in a broad area as distinguished from discharge measurements taken at the source of pollution or the present characteristic or nature of the surrounding atmosphere;

"Ambient air quality guideline values" refers to the concentration of air over specified periods classified as short-term and/or long-term which are intended to serve as goals or objectives for the protection of health and/or public welfare. These values shall be used for air quality management purposes such as determining time trends, evaluating stages of deterioration or enhancement of the air quality. In general, used as a basis for taking positive action in preventing, controlling, or abating health impacts from air pollution;

"Ambient air quality standard" means the concentration of an air pollutant which, in order to protect public health and/or public welfare, shall not be exceeded in the breathing zone, at any time. Standards are enforceable and must be complied with by the owner or person in-charge of an industrial operation, process or trade;

"Authority to Construct" refers to the legal authorization granted by the Bureau to install a new source or modify an existing source.

"Best Available Control Technology" refers to approaches, techniques or equipment which when used, result in lower air emissions but in a cost-effective manner. BACT results in lower emission rates than those specified in the National Emission Standards for Source Specific Air Pollutants

"Bio-medical waste" refers to pathological wastes, pharmaceutical wastes, chemical wastes and sharps defined as follows:

"Pathological wastes" include all human tissue (whether infected or not) such as limbs, organs, fetuses and body fluid; animal carcasses and tissue, together with all related swabs and dressings;

"Pharmaceutical wastes" include pharmaceutical products; drugs and chemicals that have been returned from wards; have been spilled or soiled; are expired or contaminated; or are to be discarded for any reason;

"Chemical wastes" include discarded solid, liquid or gaseous chemicals from laboratories or other sources such as diagnostic work, environmental work, cleaning, housekeeping and disinfecting procedures;

"Sharps" include needles, syringes, scalpels, blades and any other items that could cut or puncture;

"Bureau" refers to the Central Office of the Environmental Management Bureau and its Regional Offices under the Department;

"Cease and Desist Order" refers to the ex parte Order directing the discontinuance of the operation resulting in the emission or discharge of pollutants exceeding the emission standards or whenever such emission or discharge constitutes imminent threat to human, animal or plant life, public health or public safety. Non-compliance with an undertaking or agreement submitted to the Department shall likewise be a ground for issuance of a CDO;

"Certificate of Compliance to Emission Standard" refers to a certificate issued by DOTC to a rebuilt vehicle(s) or second hand vehicle(s) imported into the country based on an inspection by the DOTC MVIS in accordance with the emission standards of these Implementing Rules and Regulations, and as a requirement for initial registration of the subject vehicle(s).

"Certificate of Conformity" refers to the certificate issued by the Department to a vehicle manufacturer/assembler or importer certifying that a particular new vehicle or vehicle type meets the requirements provided under this Act and its Implementing Rules and Regulations;

"Certificate of Emission Compliance" refers to a certificate issued by the DOTC or its authorized emission testing center(s) for a vehicle apprehended during roadside inspection, certifying that the particular vehicle meets the emission requirements of these Implementing Rules and Regulations, and which shall have no validity period.

"Completely Built-up Unit (CBU)" refers to vehicles imported into the country either brand new or used and ready for operation;

"Compliance Plan" refers to a plan submitted to the Bureau for approval which details how an existing stationary air emissions source will be brought into compliance. The owner of the facility must submit the plan within two months of notification of non-compliance by the Bureau. The plan must include a schedule that will be enforceable.

"Compression Ignition Engine" means an internal combustion engine in which atomized fuel temperature is raised through compression, resulting in ignition, e.g. diesel engines;

"Completely Knocked-Down" (CKD) refers to new parts and components and/or engines that are imported in disassembled condition for purposes of assembly. It may include not only parts and components but also sub-assemblies and assemblies, e.g. engines, transmissions, axle assemblies, chassis and body assemblies;

"Conformity of Production" refers to the verification of the production units' conformity with the requirements of the Clean Air Act and these Implementing Rules and Regulations.

"Continuous Emission Monitoring System" means the total equipment, required under these Implementing Rules and Regulations or as directed by the Bureau, used to sample and condition (if applicable), analyze, and provide a permanent record of emissions or process parameters. Such record shall be the basis of the firm's compliance with the emission standards. Further, it may be an approved monitoring system for continuously measuring the emission of a pollutant from an affected source or facility and as such, may be used in computing annual emission fees;

"Criteria Pollutants" are air pollutants for which National Ambient Air Quality Guideline Values have been established;

"Department" refers to the Department of Environment and Natural Resources;

"Detoxification process" refers to the process of diminishing or removing the poisonous quality of any substance using chelating agents to prevent or reverse toxicity particularly for those substances (e.g., heavy metals) that are cumulative or persistent in the body;

"Director" means the Director of the Bureau;

"Eco-profile" shall refer to the geographic-based instrument for planners and decision-makers which presents an evaluation of the environmental quality and carrying capacity of an area. It is the result of the integration of various primary and secondary data and information on natural resources and anthropogenic activities on the land which are evaluated by various environmental risk assessment and forecasting methodologies. This will enable the Department to anticipate the type of development control that is necessary in the planning area;

"Emission" means any measurable air contaminant, pollutant, gas stream or unwanted sound from a known source which is passed into the atmosphere;

"Emission averaging" is a technique whereby a facility having more than one source of a given pollutant may, under certain circumstances and with Bureau approval, reduce emissions from one or more sources sufficiently so that the average of all the facility's source emissions is equal to or below the applicable standard for a particular pollutant. Emission averaging is computed on an annual potential ton per year basis.

"Emission Charge" refers to a fee corresponding to the quality, quantity, volume and toxicity of emissions from an industrial or mobile source;

"Emission Credits" are generated by sources that reduce their annual mass emissions below the equivalent minimum regulatory level by either installing and operating pollution control devices or by using other Bureau approved methods. The equivalent minimum regulatory level is based upon the lowest annual emissions in tons that results when the source operates at its permitted emission rate for its typical annual operating hours. Sources that are subject to different allowable emission rates, such as National Emission Standards and Ambient Air Quality Standards, must estimate the minimum regulatory level on the standard that provides the lowest annual allowable tonnage. An emission credit is equal to one ton of an air pollutant;

"Emission factor" refers to a representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. Emission factors may be used to calculate emission fees, as indicated in Rule XVI, Section 5. These factors are usually expressed as the weight of pollutant divided by a unit weight, volume, distance, or duration of the activity emitting the pollutant (e. g., kilograms of particulate emitted per megagram of coal burned). Such factors facilitate estimation of emissions from various sources of air pollution. In most cases, these factors are simply averages of all available data of acceptable quality. The general equation for emission estimation is: E = A x EF x (1-ER/100) where: E = emissions; A = activity rate; EF = emission factor; and ER= overall emission reduction efficiency. %ER is further defined as the product of the control device destruction or removal efficiency and the capture efficiency of the control system. When estimating emissions for a long time period (e. g., one year), both the device and the capture efficiency terms should account for upset periods as well as routine operations;

"Emission offset" refers to an emission reduction credit that compensates for an emission increase of an affected pollutant from a new or modified source.

"Emissions Trading" refers to a market-based approach to air pollution control which allows for transferring emission credits between different facilities for use as a form of regulatory compliance;

"Environmental Management Systems" that part of the overall, management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.

"Environmental Management Plan/Program" this is the plan or program for achieving the environmental objectives and targets of a project or undertaking. It includes the designation of responsibility for achieving objectives and targets and the means and time-frame by which they are to be achieved. It details the prevention, mitigation, compensation, contingency and monitoring measures to enhance positive impacts and minimize negative impacts of a project or undertaking.

"Environmental Management Systems Audit" a systematic and documented verification process of objectively obtaining and evaluating evidence to determine whether an organization's EMS conforms to the EMS audit criteria set by the organization and for communication of the results of this process to management.

"Episode" means a series of short-term air pollution events that significantly alter the ambient air quality of an affected area;

"Equivalent Method" refers to any technique or procedure for sampling and/or analyzing an air pollutant which has been approved by the Bureau and demonstrated to have a consistent and quantitatively known relationship with the designated standard method.;

"Existing Source" means any source already erected, installed, and in operation; or any source for which construction has been offered for bidding or actual construction has commenced prior to the date of effectivity of these Implementing Rules and Regulations. Any existing source which in the opinion of the Department has undergone a modification after the date of adoption of an applicable rule and regulation, shall be reclassified and considered a new source;

"Governing Board" refers to a multi-sectoral body created under Section 9 of the Act to effectively carry out and implement the air quality action plan of an airshed;

"Greenhouse gases" refers to those gases such as carbon dioxide, methane, and oxides of nitrogen, chlorofluoro-carbons, and the others that can potentially or can reasonably be expected to induce global warming;

"Gross Vehicle Mass or Weight" means the sum of the vehicle mass or weight and the allowable maximum payload as declared by the vehicle manufacturer;

"Guideline" means an official recommendation or guidance on the protection of human beings or receptors in the environment from the adverse effects of air pollutants;

"Hazardous substances" refers to those substances which present either: (1) short-term acute hazards such as acute toxicity by ingestion, inhalation, or skin absorption, corrosivity or other skin or eye contact hazard or the risk of fire explosion; or (2) long-term toxicity upon repeated exposure, including carcinogenicity (which in some cases may result in acute exposure but with a long latent period), resistance to the detoxification process, or the potential to pollute underground or surface waters, whether shipped into the country or generated locally;

"Hazardous wastes" are hazardous substances that are without any safe commercial, industrial, agricultural or economic usage and are shipped, transported or brought from the country of origin for dumping or disposal into or in transit through any part of the territory of the Philippines. Hazardous wastes shall also refer to hazardous substances that are by-products, side-products, process residues, spent reaction media, contaminated plant or equipment or other substances from manufacturing operations, and as consumer discards of manufactured products.

"Imported Used/Second-Hand Vehicle" means any used or second-hand motor vehicle imported and registered in the country of origin;

"Incineration" means the burning of municipal, bio-medical and hazardous wastes which process emits toxic and poisonous fumes;

"Infectious waste" refers to soiled surgical dressings, swabs and other contaminated waste from treatment areas; materials which have been in contact with persons or animals suffering from infectious diseases; cultures and stocks of infectious agents from laboratory work; dialysis equipment; apparatus and disposable gowns, aprons, gloves, towels, etc; waste from dialysis treatment area; waste from patients in isolation wards; all materials which may contain pathogens in sufficient concentration or quality that exposure to could result in disease;

"Installation" means any structure, equipment, facility or appurtenances thereto, operation of which may be a source of pollution or a means to control the same;

"In-Use Vehicle" means a motor vehicle duly registered with the LTO;

"Light Duty Vehicles" are motor vehicles whose gross vehicle weight is equal to or less than 3,500 kgs, in accordance with the definition contained in Philippine National Standards (PNS) 1891. This also refers to "Light Commercial Vehicles;"

"Lowest Achievable Emission Rate" refers to any technology or combination of technologies and process controls that result in the lowest possible emissions of a given air pollutant. Cost is not a consideration in determining applicable LAER for a given source; however, technical feasibility is. The technology must be reasonably demonstrated to be appropriate and reliable for each application;

"Mandatory Inspection" refers to the interval between testing and the tests performed, as partial pre-condition for the renewal of registration of in-use motor vehicles;

"Manufacturer or Assembler" means any entity or person who manufactures or assembles motor vehicles, for eventual use in the Philippines;

"Medical waste" means any solid waste that is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals;

"Medium/Heavy Duty Vehicles" refers to motor vehicles whose gross vehicle weight is greater than 3,500 kgs, in accordance with the definition contained in PNS 1891;

"Mobile source" means any vehicle/machine propelled by or through oxidation or reduction reactions, including combustion of carbon-based or other fuel, constructed and operated principally for the conveyance of persons or the transportation of property or goods, that emit air pollutants as a reaction product;

"Modification" means any physical change or alteration in the method of operation of an existing source which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that source, or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously permitted. The following are exempted from the said definition:

Routine maintenance, repair and replacement shall not be considered physical changes if not intended to extend the useful life beyond the equipment manufacturer's design;

An increase in the production rate provided the facility is permitted to operate at the increased level and such increase does not exceed the designed capacity of the existing source; and

An increase in hours of operation provided that the facility is permitted to operate for the increase in hours.

"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 motorcycles with attached cars also known as "tricycles".

"Motor Vehicle" means any vehicle propelled by a gasoline or diesel engine or by any means other than human or animal power constructed and operated principally for the conveyance of persons or the transportation of goods;

"Motor Vehicle Registration" refers to the official recording of a 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 the Act, including the pre-evaluation of the documents/requirements pursuant to Section 5 of Republic Act 4136, as amended, otherwise known as the Land Transportation Code;

"Municipal waste" refers to the waste materials generated from communities within a specific locality;

"National Ambient Air Quality Guideline Values" are limits on criteria air pollutant concentrations published by the Department, intended for the protection of public health, safety, and general welfare;

"National Motor Vehicle Inspection and Maintenance Program" refers to the set of projects and other activities and efforts all designed to reduce the damaging impact of air pollution and unsafe vehicles on health and safety of the people, through adoption of standards for emission and vehicle safety, and a series of measures to ensure compliance with them;

"New Motor Vehicle" means a vehicle constructed entirely from new parts that has never been sold or registered with the DOTC or with the appropriate agency or authority, and operated on the highways of the Philippines, any foreign state or country;

"New Source" means any plant, equipment, or installation in any trade, business or establishment which generates, emits or disposes air emissions into the atmosphere and constructed after the date of effectivity of these Implementing Rules and Regulations. This includes any existing stationary source transferred or moved to a different location or site for the purpose of installation, operation or use after such date;

"Normal Cubic Meter" (Ncm) means the volume of dry gas which occupies a cubic meter measured at twenty five degrees Celsius (25^{o}) at an absolute pressure equivalent to seven hundred sixty (760) mm Hg;

"Octane Rating" or the "Anti-Knock Index" (AKI) means the rating of the anti-knock characteristics of a grade or type of automotive gasoline as determined by dividing by two (2) the sum of the Research Octane Number (RON), plus the Motor Octane Number (MON). The octane requirement, with respect to automotive gasoline for use in a motor vehicle or a class thereof, whether imported, manufactured, or assembled by a manufacturer, refers to the minimum octane rating or such automotive gasoline which such manufacturer recommends for the efficient operation of such motor vehicle, or substantial portion of such class, without knocking;

"Opacity" means the amount of light obscured by particle pollution in the atmosphere;

"Operator" means a person or entity that manages a transport business but not necessarily a vehicle owner;

"Owner" means the person or entity identified as the motor vehicle owner in the motor vehicle registration or by a valid deed of sale;

"Ozone Depleting Substances" (ODS) refers to those substances that significantly deplete or otherwise modify the ozone layer in a manner that is likely to result in adverse effects on human health and the environment such as, but not limited to, chlorofluorocarbons, halons, and the like;

"Particulate Matter" or "Suspended Particulates" means any material, other than uncombined water, which exists in a finely divided form as a liquid or solid;

"Passenger Car" refers to a four-wheeled motor vehicle used for the carriage of not more than six passengers including the driver and having a gross vehicle mass not exceeding 2,500 kg in accordance with the defnition contained in PNS 1891.

"Permit" refers to the legal authorization to engage in or conduct any construction, operation, modification or expansion of any installation, operation or activity which will be reasonably expected to be a source of pollution;

"Permittee" refers to the owner, operator or entity who owns, leases, operates, controls or supervises any source, facility, machine or equipment;

"Permit to Operate" refers to the legal authorization granted by the Bureau to operate or maintain any installation for a specified period of time;

"Permit Condition" refers to a statement or stipulation issued with a permit, compliance with which is necessary for continued validity of the permit;

"Persistent Organic Pollutants" (POPs) means organic compounds that persist in the environment, bio-accumulate through the food web, and pose a risk of causing adverse effects to human health and the environment. These compounds resist photolytic, chemical and biological degradation, and include but are not limited to dioxin, furan, Polychlorinated Biphenyls (PCBs), organochlorine pesticides, such as aldrin, dieldrin, DDT, hexachlorobenzene, lindane, toxaphene and chlordane;

"Poisonous and toxic fumes" means any emission and fumes which do not conform to internationally-accepted standards, including but not limited to, World Health Organization (WHO) guideline values;

"Pollution control device" refers to any device or apparatus that is used to prevent, control, or abate the pollution of air caused by emissions from identified sources at levels within the air pollution standards established by the Department;

"Pollution control technology" refers to pollution control devices, production processes, fuel combustion processes or other means that effectively prevent or reduce emissions or effluents;

"Potential to emit" refers to the annual mass emissions that would result from a source when operating 8,760 hours per year. Actual emissions are based on the actual hours of operation per year;

"Rebuilt Motor Vehicle" means a locally assembled vehicle using new or used engine, major parts or components;

"Reference Mass or Weight" means the mass or 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 mass or weight of the passengers and driver;

"Regional Director" means the Regional Director of any Regional Office;

"Regional Office" means one of the Regional Offices of the Bureau;

"Ringelmann Chart" means the chart described in the U.S. Bureau of Mines, Information Circular No. 8333 and No. 7718, and used for measuring smoke opacity;

"Siga" means the traditional small scale method of burning of wastes resulting from cleaning the backyard such as fallen leaves, twigs, stems, and other similar matter from plants and trees in the backyard where the burning is done;

"Smoke Opacity Meter (or Opacimeter)" means an instrument which determines the smoke opacity in exhaust gases emitted by the engine system.

"Spark-Ignition Engine" means an internal combustion engine in which the air/fuel mixture is ignited by a spark plug, e.g., a gasoline engine;

"Standard of performance" means a standard for emission of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction, taking into account the cost of achieving such reduction and any non-air quality health and environment impact and energy requirement as determined by the Department through the Bureau;

"Stationary source" refers to any building or fixed structure, facility or installation that emits or may emit any air pollutant;

"Type Approval" refers to the official ratification of the compliance of a vehicle type with applicable national or international regulations;

"Useful Life of Vehicles and Engines" refers to the period of time a vehicle and/or engine can be used, and meet standards of road worthiness and engine emissions;

"Vehicle Type" means a category of power-driven vehicles which do not differ in such essentials as reference mass or weight, engine type, number of cylinders, body configuration, manner of transmission, fuel used and similar characteristics;

PART II
NATIONAL AMBIENT AIR QUALITY GUIDELINES

RULE VII National air quality

Section 1. National Ambient Air Quality Guideline Values

(a) Pursuant to Section 12 of Republic Act 8749, the initial set of National Ambient Air Quality Guideline Values necessary to protect public health and safety and general welfare shall be as follows:

Table 1
National Ambient Air Quality Guideline Values

Pollutants	Short Term[a]			Long Term[b]		
	mg/Ncm	ppm	Averaging Time	mg/Ncm	ppm	Averaging Time
Suspended Particulate Matter[c] – TSP PM-10	230[d] 150[f]		24 hours 24 hours	90 60		1 year[e] 1 year[e]
Sulfur Dioxide[c]	180	0.07	24 hours	80	0.03	1 year
Nitrogen Dioxide	150	0.08	24 hours			
Photochemical Oxidants as Ozone	140 60	0.07 0.03	1 hour 8 hours			
Carbon Monoxide	35 mg/Ncm 10 mg/Ncm	30 9	1 hour 8 hours			
Lead[g]	1.5		3 months[g]	1.0		1 year

[a] Maximum limits represented by ninety-eight percentile (98%) values not to exceed more than once a year.
[b] Arithmetic mean.
[c] SO_2 and Suspended Particulate matter are sampled once every six days when using the manual methods. A minimum of twelve sampling days per quarter or forty-eight sampling days each year is required for these methods. Daily sampling may be done in the future once continuous analyzers are procured and become available.
[d] Limits for Total Suspended Particulate Matter with mass median diameter less than 25-50 μm.
[e] Annual Geometric Mean.
[f] Provisional limits for Suspended Particulate Matter with mass median diameter less than 10 μm and below until sufficient monitoring data are gathered to base a proper guideline.
[g] Evaluation of this guideline is carried out for 24-hour averaging time and averaged over three moving calendar months. The monitored average value for any three months shall not exceed the guideline value.

(b)The applicable methods for sampling and measurement of the above pollutants are as follows:

TSP - High Volume – Gravimetric, USEPA 40 CFR, Part 50, Appendix B

PM-10 - High Volume with 10 micron particle-size inlet; Gravimetric, USEPA 40 CFR, Part 50, Appendix J

Sulfur Dioxide - Gas Bubbler and Pararosaniline Method (West and Gaeke Method), or Flame Photometric Detector, USEPA 40CFR, Part 50, Appendix A

Nitrogen Dioxide - Gas Bubbler Griess-Saltzman, or Chemiluminescence Method, USEPA 40 CFR, Part 50, Appendix F

Ozone - Neutral Buffer Potassium Iodide (NBKI), or Chemiluminescence Method, USEPA 40 CFR, Part 50, Appendix D

Carbon Monoxide - Non-dispersive Infra-red Spectrophotometry (NDIR), USEPA 40 CFR, Part 50, Appendix C

Lead - High Volume and Atomic Absorption Spectrophotometry, USEPA 40 CFR, Part 50, Appendix G

(c) An analyzer based on the principles and methods cited above will be considered a reference method only if it has been designated as a reference method in accordance with 40 CFR, Part 53.

(d) Other equivalent methods approved by the Bureau may be adopted.

Section 2. Review of Air Quality Guideline Values

The Department through the Bureau shall, on a routine basis, in coordination with other concerned agencies and programs such as the National Research and Development Program for the Prevention and Control of Air Pollution, review the list of Hazardous Air Pollutants and Guideline Values and recommend to the Secretary of the Department the revision thereof whenever necessary to protect public health and safety, and general welfare, consistent with the requirements of Rule XVII, Section 3.

Section 3. Publication of Revised Values

Upon approval by the Secretary, the revised Ambient Air Quality Guideline Values shall be published in one (1) newspaper of general circulation and shall be posted on a public Internet website.

Section 4. Air Quality Indices

The Department through the Bureau, and in conjunction with the Department of Health (DOH) may formulate a pollution standard index of air quality to protect public health, safety and general welfare. Implementation and enforcement of corrective actions contained in the index will be at the local government unit (LGU) level. Annex A contains the air quality indices and recommended actions that each LGU may opt to follow.

PART III
MAINTENANCE OF ATTAINMENT AREAS

RULE VIII ATTAINMENT AREAS - GENERAL

Section 1. Designation of Attainment Areas

The Bureau shall delineate areas where the existing ambient air quality is at or below (that is, complies with) National Ambient Air Quality Guideline Values given in Part II, and shall designate such areas as "attainment areas." Designation of attainment areas will be based on monitoring data collected using the reference methods in Part II and/or other relevant information, including meteorological data, and data covering existing nearby sources. The Department through the Bureau will designate attainment and non-attainment areas, and will review and revise these designations from time to time as relevant data become available.

Section 2. Review of Area Designation

The Bureau shall revise area designations as additional data, whether monitoring, source or general knowledge, become available. Results from reviews of area designations will be made available for public comment.

RULE IX EXISTING SOURCES IN ATTAINMENT AREAS

Section 1. Standards

Existing sources must comply with National Emission Standards for Source Specific Air Pollution and Ambient Air Quality Standards pertaining to the source.

Section 2. Non-compliance

Sources not in compliance with Section 1 above must submit a Compliance Plan to the Bureau for approval, which details how the source will be brought into compliance. The owner of the facility must submit the plan within two (2) months of notification of non-compliance by the Bureau. The plan must include a schedule that will be enforceable and may provide for as long as eighteen (18) months to meet the applicable standards after notice of non-

compliance by the Bureau. The Bureau may grant an extension of up to twelve (12) months for good-faith actions from the source owner.

Section 3. Emission Averaging and Emission Trading

Compliance plans submitted under Section 2 above may include use of emission averaging and emission trading as approved by the Bureau and described in Rules XXI and XXII respectively.

Section 4. Modification of Sources

Any existing source in an attainment area making a change or modification to its process or production which results in an increase of POTENTIAL emissions equal to or greater than the following shall be considered significant and subject to Rule X for the affected pollutant(s).

Carbon Monoxide	100 tons per year
Nitrogen Oxides	40 tons per year
Sulfur Dioxide	40 tons per year
TSP	25 tons per year
PM10	15 tons per year
Volatile Organic Compounds	40 tons per year
Hydrogen Sulfide	10 tons per year

RULE X NEW/MODIFIED SOURCES IN ATTAINMENT AREAS

Section 1. Standards

New or modified sources must comply with National Emission Standards for Source Specific Air Pollution and Ambient Air Quality Standards pertaining to the source.

Section 2. Best Available Control Technology

Sources subject to this Rule shall, in addition to meeting the requirements of Section 1 of this Rule, install and operate Best Available Control Technology for each regulated pollutant with the potential to be emitted in quantities equal to or greater than 100 tons per year. Selection of the appropriate control technology will be made in consultation and with the approval of the Bureau but in no case shall it result in non-compliance with requirements of

Section 1. Installation of the control equipment will be at the time of source construction or modification.

Section 3. Increment Consumption

No new source may be constructed or existing source modified if emissions from the proposed source or modification will, based on computer dispersion modeling, result in;

Exceedance of the National Ambient Air Quality Guideline Values; or An increase in existing ambient air levels above the levels shown below

PM-10, annual arithmetic mean	17 micrograms per cubic meter
PM-10, 24-hr maximum	30 micrograms per cubic meter
Sulfur Dioxide, annual arithmetic mean	20 micrograms per cubic meter
Sulfur Dioxide, 24-hr maximum	91 micrograms per cubic meter
Nitrogen Dioxide, annual arithmetic mean	25 micrograms per cubic meter

In the case of multiple point sources at a single facility, the net emissions from all affected sources shall be included in a single increment analysis.

Section 4. Emission Averaging and Emission Trading

Sources subject to provision of this Rule shall not be eligible for emission averaging however they may generate emission credits for purposes of an acceptable emission trading program.

Section 5. Continuous Emission Monitoring

New and modified sources shall install and operate, according to manufacturer specifications, continuous emission monitoring systems (CEMS) for each applicable pollutant listed in Section 4, Rule IX that the source has the POTENTIAL to emit in quantities equal to or greater than 100 tons per year. TSP and PM-10 fractions are not differentiated for purposes of this section; therefore, applicability will be determined by the total particulate matter expected to be emitted for new sources, or as collected by 40 CFR Part 60, Appendix A, Method 5 for modified sources. CEMS shall be applied as follows:

All sources subject to this section: Sources shall install and operate a CEMS for carbon dioxide and oxygen that meets criteria provided in USEPA 40

CFR Part 60 Appendix B, Performance Specification 3. Additionally, each source shall, as appropriate meet the following requirements;

a) Particulate matter: Sources shall install and operate a CEMS for opacity that meets criteria provided in USEPA 40 CFR Part 60 Appendix B, Performance Specification 1. The owner shall have the additional requirement of establishing a calibration curve showing the relationship between opacity as measured by the CEMS and mass particulate emission rate as determined by Method 5. The calibration curve shall cover the full range of reasonably expected operating conditions and/or process rates of the source and shall consist of at least three data points, one at maximum permitted operations, one at maximum design capacity, and one at 80% of the maximum permitted rate. The Bureau may waive one test point if the permitted rate and maximum design capacity rate are the same.

b) Sulfur Dioxide and Nitrogen Oxides: Sources shall install and operate a CEMS for these parameters that meet criteria provided in USEPA 40 CFR Part 60 Appendix B, Performance Specification 2.

c) Carbon Monoxide: Sources shall install and operate a CEMS for this parameter that meets criteria provided in USEPA 40 CFR Part 60 Appendix B, Performance Specification 4 or 4A.

d) Hydrogen Sulfide: Sources shall install and operate a CEMS for this parameter that meets criteria provided in USEPA 40 CFR Part 60 Appendix B, Performance Specification 7.

The CEMS requirements under this Section shall not apply to refinery flares, as well as to volatile organic compounds, unless a specific provision requires CEMS for volatile organic compounds is included in the facility's permit to operate.

PART IV
MANAGEMENT OF NON-ATTAINMENT AREAS

RULE XI NON-ATTAINMENT AREAS - GENERAL

Section 1. Designation of Non-Attainment Areas

The Bureau shall designate and delineate areas where the existing ambient air quality is not in conformance with National Ambient Air Quality Guideline values given in Part II as "non-attainment areas." Designation of non-attainment areas will be based on monitoring data collected using the reference

methods in Part II or as may be reasonably expected from existing nearby sources and meteorological conditions. Special consideration will be given to populated areas where greater numbers of people may be exposed to unhealthy air. The Department through the Bureau will designate attainment and non-attainment areas, and will review and revise these designations from time to time as relevant data becomes available.

An area may be designated as non-attainment for one or more criteria pollutants, and may be an attainment area for the remaining criteria pollutants.

Section 2. Review of Area Designation

The Bureau shall revise and/or confirm area designations as additional data, whether monitoring, sampling, source specific or general knowledge, becomes available. Results from reviews of area designations will be made available for public comment/review.

RULE XII EXISTING SOURCES IN NON-ATTAINMENT AREAS

Section 1. Standards

Existing sources must comply with all National Emission Standards for Source Specific Air Pollution and Ambient Air Quality Standards pertaining to the source.

Section 2. Non-compliance

Sources not in compliance with Section 1 above must submit a Compliance Plan to the Bureau for approval which details how the source will be brought into compliance. The owner of the facility must submit the plan within two (2) months of notification of non-compliance by the Bureau. The plan must include a schedule that will be enforceable and may provide for as long as eighteen (18) months to meet the applicable standards after notice of non-compliance by the Bureau. Extensions or grace periods will not be allowed in non-attainment areas.

Should the source failed to comply with its commitment within the specified period in the compliance plan, the Bureau shall impose penalties and fines to be computed retroactive from the time the notification of non-compliance was served.

Section 3. Emission Averaging and Emission Trading

Existing sources located in non-attainment areas will be allowed to use emission averaging for compliance purposes however, they will not be allowed to participate in emission trading for the pollutant or pollutants for which the area is designated as a non-attainment area, except as a generator (not user) of emission reduction credits.

Section 4. Modification of Sources

Any existing source located in a non-attainment area and making a change in process or production which increases POTENTIAL emissions from the source of the pollutant for which the area is designated non-attainment, shall be classified as modified and subject to Rule XIII. Equipment overhaul, refurbishment, or upgrade to extend the life of the equipment beyond its normal useful life is considered to be a modification if it result in the increase of POTENTIAL emissions for purposes of this Section.

Section 5. Emission Fee Surcharge

Sources subject to the non-attainment provisions will be assessed a 50% surcharge (i.e., 150% of base) on the annual emission fees for the pollutant(s) for which the area is designated non-attainment.

Section 6. Penalty and Fine Surcharge

Sources subject to the non-attainment provisions will be subject to a 100% surcharge (i.e., 200% of base) for any penalties or fines relating to a violation of the non-attainment provisions.

RULE XIII NEW/MODIFIED SOURCES IN NON-ATTAINMENT AREAS

Section 1. Standards

New or modified sources must comply with all National Emission Standards for Source Specific Air Pollution and Ambient Air Quality Standards pertaining to the source.

Section 2. Lowest Achievable Emission Rate

New and modified sources (as defined in Section 4 of Rule XII) shall install and operate air pollution control technology which will provide the lowest achievable emission rate (LAER) of the pollutant for which the area is designated non-attainment. The affected firm will propose technologies it believes will meet the intent of this regulation. The Bureau will approve the use of lowest achievable emission rate control technologies on a case-by-case basis.

Section 3. Emission Offsets

New and modified sources must provide offsets in existing actual emission within the non-attainment area in a ratio of 1:1.2 to the POTENTIAL emission level of the proposed new or modified source. The offsets may be made from any existing source in the non-attainment area but must be actual, demonstrable, enforceable and permanent. The proposed offsets are subject to approval by the Bureau.

Section 4. Emission Averaging and Emission Trading

New and modified sources subject to the non-attainment provisions may not use emission trading or emission averaging for compliance purposes.

Section 5. Continuous Emission Monitoring

New and modified sources must install and operate, according to manufacturer specifications, continuous emission monitoring devices for each pollutant for which the area is in non-attainment and which the source emits. Application, installation and operation of the CEMS shall meet criteria provided in Rule X Section 5.

Section 6. Emission Fee, Penalty and Fine Surcharge

Sections 5 and 6 of Rule XII above shall apply to new and modified sources in non-attainment areas.

PART V
AIR QUALITY MANAGEMENT SYSTEM

RULE XIV AIR QUALITY MANAGEMENT INFORMATION SYSTEM

Section 1. Ambient Air Monitoring Network

The Bureau shall, within two (2) years from the effectivity of these Rules, design and establish an Ambient Air Monitoring Network for the assessment of ambient air quality. The Ambient Air Monitoring Network shall be expanded gradually to cover the entire country.

Section 2. Emissions Inventory

The Bureau shall, within three (3) years from the date of effectivity of these Rules, and every three (3) years thereafter, make an inventory of emissions from stationary, mobile and area sources. Where possible, the Bureau shall coordinate with the Governing Boards.

Section 3. Air Quality Database

The Bureau and the National Statistical Coordination Board shall design the Air Quality Database which shall be computerized and stored in a manner accessible to the public and shall contain data collected from the Ambient Air Monitoring Network and the Emissions Inventory. The Bureau shall maintain and update the Air Quality Database.

Section 4. National Air Quality Status Report

The Bureau, shall prepare the Annual National Air Quality Status Report which shall contain:

(a) A summary of the extent of air pollution in the country, per type of pollutant and per type of source;
(b) An analysis and evaluation of the current state, trends and projections of air pollution;
(c) An identification of critical areas, activities, or projects which will need closer monitoring or regulation;
(d) Recommendations for necessary executive and legislative action; and
(e) Other pertinent qualitative and quantitative information concerning the extent of air pollution and the air quality performance rating of industries in the country.

Upon approval by the Secretary of the Department, the National Air Quality Status Report shall be submitted to the Office of the President and to Congress on or before March 31 of every year and shall cover the preceding calendar year. The National Air Quality Status Report and other related reports shall be made available to the public.

RULE XV AIRSHEDS

Section 1. Authority

The Secretary of the Department, upon the recommendation of the Bureau, shall divide the geo-political regions of the country into airsheds.

Section 2. Designation of Airsheds

Designation of airsheds shall be on the basis of, but not limited to, areas with similar climate, weather, meteorology and topology which affect the interchange and diffusion of pollutants in the atmosphere, or areas which share common interest or face similar development programs, prospects or problems. Designation of airsheds shall be revised as additional data, needs or situations arise.

For a more effective air quality management, a system of planning and coordination shall be established and a common action plan shall be formulated for each airshed.

Section 3. Initial Designation of Airsheds

The Department through the Bureau will designate the airshed, determine the attainment and non-attainment areas, and will review and revise these designations from time to time as relevant data becomes available.

Section 4. Governing Board

Pursuant to Section 9 of the Act, a Governing Board will be created for each airshed, to effectively carry out the formulated action plans.

Section 5. Composition and Organizational Set-up of the Board

Each Governing Board shall be headed by the Secretary of the Department as Chairman. The members shall be as follows:

(a) Provincial Governors from areas belonging to the airshed;
(b) City/Municipal Mayors from areas belonging to the airshed or the MMDA Chairman in the case of Metro Manila;
(c) A representative from each concerned government agency;
(d) Representatives from people's organizations;
(e) Representatives from non-government organizations; and

(f) Representatives from the private sector.

There shall be two Deputy Chairpersons, namely, the Department's Regional Executive Director and the Bureau's Regional Director in the region where the airshed is located. The ratio of Board representatives from government agencies to those from the private sector and from civil society shall be on the order of 5:2:2.

Within six (6) months from the designation of a particular airshed, concerned POs, NGOs and private business sector in the airshed or with recognized interests in the airshed shall choose their representatives by and among themselves through sectoral assemblies convened for the purpose.

Members of the governing board shall serve for a term of three (3) years (or such lesser time as may be permitted by the term of office if publicly-elected officials) without compensation, except for actual and necessary expenses (i.e. traveling) incurred in the performance of their duty. When a vacancy occurs during the term of a member from a PO, NGO or the private business sector, a new member shall be appointed by the Governing Board for the remainder of the unfinished term.

Section 6. Functions of the Board

Each Governing Board shall perform the following functions within its jurisdiction (airshed):

(a) Formulation of policies and standard-setting subject to laws of national application;

(b) Preparation of a common action plan;

(c) Coordination of functions among its members; and

(d) Submission and publication of an annual Air Quality Status Report for each airshed.

Section 7. Executive Committee

An Executive Committee will be formed, for the purpose of carrying out the day-to-day functions of the Governing Board, consisting of nine (9) persons: the Chairperson, two (2) Deputy Chairpersons and six (6) members while respecting the ratio of government representatives to representatives from the private sector and civil society of 5:2:2. The members of the Committee shall be elected by the governing board at large for a term of two (2) years. Where

possible, members of the Committee will be selected for their expertise in the subject area. Representatives will be selected from the appropriate region.

Section 8. Technical Working Groups

Technical working groups will be formed to ensure broad-based participation in the work of the Governing Boards.

Section 9. Technical-Administrative Secretariat

The Bureau shall serve as the technical-administrative secretariat for each Governing Board.

Section 10. Meetings

The Department shall provide basic funding from the Air Quality Management Fund for the conduct of regular meetings of the Governing Boards, the Executive Committee, Technical Working Groups and other activities to be conducted in the implementation of the Act. Additional funding shall be made available to support civil society activities aligned with the implementation of the Act provided these activities are included in the common action plan of the concerned airshed.

Section 11. Governing Rules

Governing rules shall be formulated by and for the individual Governing Boards. These governing rules shall be submitted for review and comments by the Department to advise the Governing Boards of conflict in policies and laws of national application.

Section 12. Re-designation of Airshed Boundaries

Upon consultation with appropriate local government authorities, the Secretary of the Department, upon recommendation of the Bureau shall, from time to time, revise the designation of airsheds utilizing eco-profiling techniques and undertaking scientific studies.

RULE XVI AIR QUALITY MANAGEMENT FUND

Section 1. Air Quality Management Fund

An Air Quality Management Fund (AQMF) to be administered by the Department through the Bureau as a special account in the National Treasury is hereby established to finance containment, removal, and clean-up operations of the Government in air pollution cases, guarantee restoration of ecosystems and rehabilitate areas affected by the acts of violators of this Act, to support research, enforcement and monitoring activities and capabilities of the relevant agencies, as well as to provide technical assistance to the relevant agencies. Such fund may likewise be allocated per airshed for the undertakings herein stated.

Section 2. Uses of Fund

The AQMF will be used for activities that are in direct support of objectives outlined in the Air Quality Action Plan of the airsheds. The AQMF will be reserved for national purposes and will be allocated among the airsheds. This can mean support, grant, finance or otherwise assist activities such as, but not limited to:

(a) purchase of equipment related to air quality monitoring, reporting or management;
(b) running costs for special campaigns, monitoring, enforcement or public awareness raising;
(c) costs for special events related to air quality monitoring, enforcement etc.
(d) funding of temporary staff positions in accredited organizations, of persons who have a TOR directly related to implementation of AQAP;
(e) research on air related issues; and
(f) running costs of Governing Boards and their Technical Secretariats

Section 3. Sources for the Air Quality Management Fund

Sources for the AQMF shall include:

(a) air emission charges from industrial facilities;
(b) air emission charges from motor vehicles;
(c) fines and penalties for non-compliance with environmental standards. This relates to both vehicular and industrial related air pollution;
(d) grants from both private sector and donor organizations.; and
(e) a limited percentage (5-10%) of the proceeds of the Program Loan for the Metro Manila Air Quality Improvement Sector Development Program.

Section 4. Decision Making on the Use of the Air Quality Management Fund (AQMF)

The Department through the Bureau shall formulate a detailed set of criteria (project design, project management, project reporting and project accounting) of qualified or eligible projects and activities to be supported by the AQMF. Individual Governing Boards shall follow these criteria in allocating those funds that are put at their disposal by the Department. Individual Governing Boards shall set up special committees for this purpose with members drawn from both the government, private sector and civil society members of each Governing Board.

In order to promote transparency and accountability, the Department will formulate business standards, which will describe the scrutiny mechanisms of proposals as well as maximum response times. The Department will ensure the publication of an Annual Report which specifies income and expenditure of the AQMF, together with a summary of initiatives supported and refused. This Annual Report will be available within two (2) months after the end of the fiscal year.

Section 5. Air Emission Fees For Stationary Sources and For Mobile Sources

Air emission fees will initially be determined based on the amount of revenue necessary to assure the successful implementation of the Act as described in these Implementing Rules and Regulations. The air emission fees shall then be apportioned to stationary and mobile sources based on estimated annual mass emissions.

The Bureau shall use data contained in a facility's operating permit to estimate annual mass emissions. Other data sources such as annual fuel consumption and/or production rates may also be used as well as appropriate emission factors. Facility owners may, at their option, install CEMS to determine actual emission rates for purposes of calculating annual emission fees. CEMS used for this purpose must be installed and operated as per criteria provided in Rule X Section 5.

The base air emission fee may be adjusted in later years as new data becomes available regarding the success of individual components of the Act.

RULE XVII AIR POLLUTION RESEARCH AND DEVELOPMENT PROGRAM

Section 1. National Research and Development Program for the Prevention and Control of Air Pollution

The Department through the Bureau, in coordination with the Department of Science and Technology (DOST), other agencies, the private sector, the academe, NGOs and POs shall, establish a National Research and Development Program for the Prevention and Control of Air Pollution.

Section 2. Development of Industry-Wide Applicable Methods

The Bureau shall give special emphasis to research on and the development of improved methods having industry-wide application for the prevention and control of air pollution.

Section 3. Development of Air Quality Guidelines

The National Research and Development Program for the Prevention and Control of Air Pollution shall develop air quality guidelines values in addition to internationally-accepted standards. It shall consider the socio-cultural, political and economic implications of air quality management and pollution control.

RULE XVIII EMISSION QUOTAS

Section 1. Emission Quotas

Subject to approval of the Department through the Bureau, each regional industrial center designated as a special airshed can allocate emission quotas to pollution sources within its jurisdiction that qualify under an environmental impact assessment system programmatic compliance program pursuant to the implementing rules and regulations of Presidential Decree No. 1586. However, such sources shall remain subject to the requirements of these Implementing Rules and Regulations.

Prior to implementation thereof, the Department through the Bureau shall consider, among others, the emission inventory and the mass rate emission standards.

PART VI
AIR POLLUTION CLEARANCES AND PERMITS FOR STATIONARY SOURCES

RULE XIX PERMIT REGULATIONS

Section 1. Permits Required

All sources of air pollution subject to these Implementing Rules and Regulations must have a valid Permit to Operate issued by the Director. New or modified sources must first obtain an Authority to Construct issued by the Director.

Section 2. Filing Fees for Applications

A fee to be determined by the Department through the Bureau shall be paid upon the filing of any of the following applications:

(a) Authority to Construct;
(b) Permit to Operate;
(c) Transfer of an existing and valid Permit to Operate by reason of transfer of location of the installation or change of permittee or both;
(d) Revision of any existing and valid Authority to Construct or Permit to Operate involving alteration or replacement of the installation;
(f) Renewal of an expired Authority to Construct or Permit to Operate;
(g) Any other application for a permit not otherwise enumerated above.

Filing fees for applications which have been denied shall not be refunded nor applied to subsequent applications.

Section 3. Authority to Construct

All proposed or planned construction or modification of sources that has the potential to emit 100 tons per year or more of any of the regulated pollutants are hereby required an Authority to Construct approved by the Bureau before construction or modification activities can take place.

Applications shall be filed in four (4) copies and supported by the official receipt of the filing fees and by such documents, information and data as may be required by the Bureau, including the following:

An engineering report covering the plant description and operations, the estimated types, concentrations and quantities of all emissions to the atmosphere, the proposed control facilities, the emission rate and annual mass emission objectives, the design criteria for air pollution control equipment to be used, and other relevant information. The design criteria, if warranted, shall be based on the results of laboratory and pilot plant scale studies. The design efficiencies of the proposed air control equipment and the quantities and types of pollutants in the final emissions shall be indicated. Where confidential records are involved, the Bureau may limit the full disclosure of the same after discussions with the applicant;

(a) The plans and specifications of the installation and its control facilities (in standard size of 50 cm by 90 cm) duly certified by a registered professional mechanical engineer, sanitary engineer or chemical engineer or a combination of any two or all of them as may be required by the Bureau depending upon the nature of the construction, operation or activity sought to be covered by the Authority to Construct. The plans shall clearly show in adequate detail the proposed arrangement, location and size of the pollution control equipment or facilities, including their accessories, cross-sections and construction details. The specifications shall be in sufficient detail so that, when read in conjunction with the plans, they clearly reveal the proposed means and methods for the control of pollution and their expected performance efficiency.

(b) The project proponent shall conduct an air quality impact analysis using Bureau-approved computer dispersion models and techniques. The impact analysis shall estimate the resulting ambient air concentrations for all significant pollutants from the facility, and shall include the existing ambient air concentrations as a baseline. The impact analysis will be used by the Bureau, together with other relevant information, to determine if the proposed construction or modification will result in a violation of an applicable air quality standard.

(c) A vicinity map adequately identifying the street address, if any, of the location or premises of the installation.

The Bureau shall, within a reasonable time, act on the application for Authority to Construct either by issuing the corresponding Authority to Construct or by denying the application in writing stating the reason or reasons thereof.

The Authority to Construct shall be issued subject to such conditions as the Department through the Bureau may deem reasonable to impose and upon payment of the fees in accordance with the schedule to be prepared by the Bureau.

In case the application is denied, the applicant may, within ten (10) days from notice of such denial, file only one written petition for reconsideration. The decision on said petition shall become final after ten (10) days from receipt thereof.

Section 4. Conversion of Authority to Construct to Permit to Operate

Once new source construction or modification is completed the source owner shall, within sixty (60) days of startup, request the authorizing agency (generally the Department through the Bureau) to convert the Authority to Construct to a Permit to Operate. A valid Permit to Operate will be issued once the owner has demonstrated to the satisfaction of the authorizing agency that all permit conditions have been or will be met and that no air quality standards or guidelines will be exceeded. The owner shall conduct source testing using methods and techniques approved by the Bureau as part of the demonstration.

Section 5. Application for Permit to Operate

An application for a Permit to Operate shall be filed for each source emitting regulated air pollutants. Facilities having more than one source may group the sources under a single permit application, provided the requirements below are met for each individual source. Applications shall be made in a format prescribed by the Department through the Bureau, filed in triplicate copies, together with a copy of the official receipt of the filing fees and including the following:

(a) The information listed in Section 3 of this Rule;
(b) A statement of compliance or non-compliance with Rule XXV (or, in the case of incinerators, a statement of compliance or non-compliance with Rule XXVIII). The statement of compliance shall be supported with actual test data (such as stack sampling test data), or data gathering techniques acceptable to the Bureau.
(c) A statement of compliance or non-compliance with Rule XXVI, Ambient Air Quality Standards. The statement of compliance shall be supported by dispersion modeling data using modeling techniques and sampling approved by the Bureau. For cases in which source sampling and analysis is not practical, the Bureau may approve the use of actual ambient air test data to demonstrate compliance with the Ambient Air Quality Standards, so long as

the location and conditions of the testing conform to a "worst case" scenario as demonstrated by air dispersion modeling.

(d) A compliance action plan for sources not meeting regulatory requirements. The Compliance Plan may include provision for use of emission averaging and/or trading as allowed under Parts III and IV.

(e) A certification signed by the applicant attesting to the accuracy and completeness of the application.

(f) A signed copy of the appointment or designation of the pollution control officer of the applicant; and

(g) Other documents, information and data as may be required by the Department through the Bureau.

Requirements in the Permit to Operate will be based on operating conditions at the time of the test. For example, if the facility passes the stack sampling test at 50% operating capacity, then the Permit to Operate will require the facility to operate at or below 50% operating capacity.

Section 6. Action on the Application for Permit to Operate

Within thirty (30) days from submission of the complete requirements, the Department through the Bureau shall act on the application for Permit to Operate by approving or denying the same in writing. The Department through the Bureau may deny an application having incomplete requirements when the applicant fails or refuses to complete the same despite being given reasonable time to do so.

The Permit to Operate shall be issued or renewed every year subject to such conditions as the Department through the Bureau may deem reasonable to impose, and upon payment of the permit fees for air pollution source and control facilities.

In case the application is denied, the applicant may, within ten (10) days from notice of such denial file only one written petition for reconsideration. The decision on said petition shall become final after ten (10) days from receipt thereof.

Applications for a Permit to Operate shall be available for public review at the Department Regional Office for the Region in which the applicant's facility is located. Any interested person may oppose the application for a Permit to Operate in writing before its approval. In such a case, the Bureau may conduct a public hearing on the application.

Section 7. Temporary Permit to Operate

For purposes of sampling, planning, research and other similar purposes, the Department through the Bureau, upon submission of satisfactory proof, may issue a Temporary Permit to Operate not to exceed ninety (90) days, provided that the applicant has a pending application for a Permit to Operate under Section 5.

Section 8. Life and General Conditions of Permit

A permit duly issued by the Department through the Bureau shall be valid for the period specified therein but not beyond one (1) year from the date of issuance unless sooner suspended or revoked. It may be renewed by filing an application for renewal at least thirty (30) days before its expiration date and upon payment of the required fees and compliance with requirements.

Issuance of the permit shall not relieve the permittee from complying with the requirements of the Act and these Rules and that commencement of the work or operation under such permit shall be deemed acceptance of all the conditions therein specified.

Section 9. Grounds for Modification of Permit Conditions

After due notice and public hearing, the Department through the Bureau may modify any existing and valid permit by imposing new or additional conditions, provided that the permittee is given reasonable time to comply with such new or additional conditions, upon showing:

That an improvement in emission quality or quantity can be accomplished because of technological advance without unreasonable hardship;

(a) That a higher degree of treatment is necessary to effect the intents and purposes of the applicable provisions of these Rules and Regulations;

(b) That a change in the environment or surrounding conditions requires a modification of the installation covered by a permit to conform to applicable air quality standards, as the case may be;

(c) That the area in which the permitted facility is located has been changed from an undesignated area or an attainment area to a non-attainment area for one or more criteria pollutants, or;

(d) That the Act or these Rules and Regulations requires the modification of the permit conditions.

Section 10. Grounds for Suspension or Revocation of Permits

After due notice and hearing, the Department through the Bureau may suspend or revoke any existing and valid permit on any of the following grounds:

Non-compliance with, or violation of any provision of Act, these Rules and Regulations, and/or permit conditions;

(a) False or inaccurate information in the application for permit that led to the issuance of the permit;
(b) False or inaccurate information in the monitoring data or in reports required by the Permit to Operate;
(c) Refusal to allow lawful inspection conducted by the Department through the Bureau of duly authorized personnel;
(d) Non-payment of the appropriate fees;
(e) Other valid purposes.

Section 11. Posting of Permit

The permittee shall display the permit upon the installation itself in such manner as to be clearly visible and accessible at all times. In the event that the permit cannot be so placed, it shall be mounted in an accessible and visible place near the installation covered by the permit.

No person shall willfully deface, alter, forge, counterfeit, or falsify any permit.

Section 12. Transfer of Permits

In case of sale or legal transfer of a facility covered by a permit, the permittee shall notify the Department through the Bureau of such and the name and address of the transferee within thirty (30) days from the date of sale or transfer. In case of failure to do so, he shall be liable for any violation of these Rules and Regulations that the transferee may commit by reason of such transfer. It shall be the duty of the transferee to file an application for transfer of the permit in his name within ten (10) days from notification of the Department through the Bureau.

Section 13. Plant Operational Problems

In the event that the permittee is temporarily unable to comply with any of the conditions of the Permit to Operate due to a breakdown of the installation covered by the permit for any cause, he or his pollution control officer shall immediately notify within 24 hours from occurrence of such breakdown the Department through the Bureau of such cause(s), and the steps being taken to solve the problem and prevent its recurrence, including the estimated duration of the breakdown, the intent toward reconstruction or repair of such installation and such other relevant information or data as may be required by the Department through the Bureau. The Department through the Bureau shall be immediately notified when the condition causing the failure or breakdown has been corrected and such source equipment or facility is again in operation

In such a case, the permittee may be subject to the payment of fines or penalties as provided under Part XIII of these Implementing Rules and Regulations.

Section 14. Monitoring and Reporting

The owner or the pollution control officer in charge of the installation subject to the provisions of these Implementing Rules and Regulations shall keep a record of its operational data and control test indicating its operational efficiency, and shall furnish a copy of the same to the Department through the Bureau quarterly in accordance with the procedures and/or programs approved by the Department through the Bureau for this purpose.

A permit issued by the Department through the Bureau will generally contain source-specific monitoring and reporting requirements for air pollutant concentrations at the point of emission, for determination of compliance with the requirements of Rule XXV. These requirements may include, where applicable, a provision that sample results for particulate matter shall be corrected to standard operating (or combustion) conditions such as 12% carbon dioxide.

RULE XX FINANCIAL LIABILITY FOR ENVIRONMENTAL REHABILITATION

Section 1. Financial Guarantee Mechanisms

As part of the environmental management plan attached to the environmental compliance certificate (ECC) pursuant to Presidential Decree No. 1586 and its rules and regulations, the Bureau shall require program and project proponents to put up financial guarantee mechanisms to finance the needs for emergency response, clean-up or rehabilitation of areas that may be damaged during the program or actual project implementation. Liability for damages shall continue even after the termination of a program or project, where such damages are clearly attributable to that program or project and for a definite period to be determined by the Bureau and incorporated into the ECC.

The Bureau may promulgate guidelines for the effective implementation of said financial guarantee mechanisms.

Section 2. Financial Liability Instruments

Financial liability instruments may be in the form of a trust fund, environmental insurance, surety bonds, letters of credit, as well as self-insurance. The choice of the guarantee instrument or combinations thereof shall depend, among others, on the assessment of risks involved. Proponents required to put up guarantee instruments shall furnish the Bureau with evidence of availment of such instruments.

RULE XXI EMISSION AVERAGING

Section 1. Applicability

Facilities having multiple sources within a contiguous property and owned by the same entity may use emission averaging for compliance purposes if provided for in either Part III or Part IV.

Section 2. Approach

Facility owners wishing to use emission averaging for compliance purposes must do so through an enforceable Compliance Plan submitted as a part of the operating permit application. The Bureau must approve the Compliance Plan and application of emission averaging for it to be effective.

Section 3. Requirements

Facilities must install a CEMS approved by the Bureau for the pollutant(s) to which emission averaging is being applied. The continuous emission monitoring system must be installed on each source subject to emission averaging. Application, installation and operation of the CEMS shall meet criteria provided in Rule X Section 5.

RULE XXII EMISSIONS TRADING

Section 1. Applicability

Emissions trading may be allowed among pollution sources within an airshed as provided in Parts III and IV. Facilities located in different airsheds may use trading as approved by the Bureau.

Section 2. Approach

Facility owners wishing to use emission trading for compliance purposes must do so through an enforceable Compliance Plan submitted as a part of the operating permit application of each facility. The Bureau must approve the Compliance Plan and application of emission trading for it to be effective.

Section 3. Requirements

Facilities must install a CEMS approved by the Bureau for the pollutant(s) to which emission trading is being applied. The continuous emission monitoring system must be installed on each source that is being used to generate the emission reduction credits. Application, installation and operation of the CEMS shall meet criteria provided in Rule X Section 5.

RULE XXIII SYSTEM OF INCENTIVES

Section 1. Tax Incentives

Industries, which shall install pollution control devices or retrofit their existing facilities with mechanisms that reduce pollution, shall be entitled to tax incentives such as but not limited to tax credits and/or accelerated depreciation deductions. The Department in coordination with the DTI, DOF, NEDA and other concerned agencies shall develop the guidelines on tax incentives.

RULE XXIV RECORD-KEEPING, INSPECTION, MONITORING AND ENTRY

Section 1. Required Relevant Reports and Records

The Bureau or its duly accredited entity shall, after proper consultation and notice, require any person who owns or operates any emissions source or who is subject to any requirement of this Act to : (a) establish and maintain relevant records; (b) make relevant reports; (c) install, use and maintain monitoring equipment or methods; (d) sample emission, in accordance with the methods, locations, intervals and manner prescribed by the Environmental Management Bureau; (e) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; and (f) provide such other information as the Environmental Management Bureau may reasonably require.

Section 2. Right of Entry, Inspection and Testing

Pursuant to the Act, the Bureau, through its authorized representatives, shall have the right of:

(a) entry or access to any premises including documents and relevant materials as referred to in the herein preceding paragraph;
(b) inspect any pollution or waste source, control device, monitoring equipment or method required; and
(c) test any emission.

Section 3. Records Available to the Public

Any record, report or information obtained under this section shall be made available to the public, except upon a satisfactory showing to the Bureau by the entity concerned that the record, report or information, or parts thereof, if made public, would divulge secret methods or processes entitled to protection as intellectual property. Such record, report or information shall likewise be incorporated in the Bureau's industrial rating system.

PART VII
POLLUTION FROM STATIONARY SOURCES

RULE XXV STATIONARY SOURCES - GENERAL

Section 1. National Emission Standards for Source Specific Air Pollutants

For any trade, industry, process, fuel-burning equipment or industrial plant emitting air pollutants, the concentration at the point of emission shall not exceed the limits set in Table 2.

Table 2
National Emission Standards for Source Specific Air Pollutants (NESSAP)

POLLU-TANT	STANDARD APPLICABLE TO SOURCE	MAXIMUM PERMIS-SIBLE LIMITS (mg/Ncm)	METHOD OF SAMPLING[a]	METHOD OF ANALY-SIS[a]
Antimony and its Cmpds.	Any source	10 as Sb	USEPA Methods 1 through 5 or 29	AAS[b] or per sampling method
Arsenic and its Cmpds.	Any source	10 as As	USEPA Methods 1 through 5 or 29	AAS[b] or per sampling method
Cadmium and its Cmpds.	Any source	10 as Cd	USEPA Methods 1 through 5 or 29	AAS[b] or per sampling method
Carbon Monoxide	Any industrial source	500 as CO	USEPA Method 3 or 10	Orsat Analysis or NDIR
Copper and its Cmpds.	Any industrial source	100 as Cu	USEPA Methods 1 through 5 or 29	AAS[b] or per sampling method
Hydrofluoric Acid and Fluoride Com-pounds	Any source other than manufacture of Aluminum from Alumina	50 as HF	USEPA Method 13 or 14 as appropriate	As per sampling method
Hydrogen Sulfide	i) Geothermal power plants ii) Geothermal Exploration And Well Testing iii) Any source other than (i) and (ii)	[c], [d] [e] 7 as H_2S	USEPA Method 11, 15 or 16 as appropriate	Cadmium Sulfide Method or per sampling method
Lead	Any trade, industry or process	10 as Pb	USEPA Methods 1 through 5or 12 or 29	AAS[b] or per sampling method

POLLU-TANT	STANDARD APPLICABLE TO SOURCE	MAXIMUM PERMIS-SIBLE LIMITS (mg/Ncm)	METHOD OF SAMPLING[a]	METHOD OF ANALY-SIS[a]
Mercury	Any source	5 as elemental Hg	USEPA Methods 1 through 5 or 29 or 101	AAS[b] / Cold-Vapor Technique or Hg Analyzer
Nickel and its Cmpds. Except Nickel Carbonyl[f]	Any source	20 as Ni	USEPA Methods 1 through 5 or 29	AAS[b] or per sampling Method
NO_x	1) Manufac-ture of Nitric Acid 2) Fuel burning steam generators a) Existing Source b) New Source i) Coal-fired ii) Oil-fired 3) Diesel-powered electricity generators	2,000 as acid & NO_2 calculated as NO_2 1,500 as NO_2 1,000 as NO_2 500 as NO_2 2,000 as NO_2	USEPA Methods 1 through 4 and Method 7	Phenol-disulfonic acid Method or per sampling method
	4) Any source other than (1), (2) and (3) a) Existing Source b) New Source	1,000 as NO_2 500 as NO_2		

POLLUTANT	STANDARD APPLICABLE TO SOURCE	MAXIMUM PERMISSIBLE LIMITS (mg/Ncm)	METHOD OF SAMPLING[a]	METHOD OF ANALYSIS[a]
Particulates	1) Fuel Burning Equipment a) Urban[g] and Industrial Area[h] b) Other Area[i] 2) Cement Plants (kilns, etc.) 3) Smelting Furnaces 4) Other Stationary Sources[j]	 150 200 150 150 200	USEPA Methods 1 through 5	Gravimetric per sampling method
Phosphorus Pentoxide[k]	Any source	200 as P_2O_5	USEPA Methods 1 through 5 or 29	Spectrophotometry or per sampling method
Sulfur Oxides	1) Existing Sources a) Manufacture of Sulfuric Acid and Sulf(on)-ation Process b) Fuel Burning Equipment c) Other Stationary Sources[l]	 2,000 as SO_3 1,500 as SO_2 1,000 as SO_3	USEPA Methods 1 through 4 and 6 or 8 as appropriate	As per sampling method

POLLUTANT	STANDARD APPLICABLE TO SOURCE	MAXIMUM PERMISSIBLE LIMITS (mg/Ncm)	METHOD OF SAMPLING[a]	METHOD OF ANALYSIS[a]
	2) New Sources a) Manufature of Sulfuric Acid and Sulf(on)-ation Process b) Fuel Burning Equipment c) Other Stationary Sources[l]	1,500 as SO_3 700 as SO_2 200 as SO_3		
Zinc and its Compounds	Any source	100 as Zn	USEPA Methods 1 through 5 or 29	AAS[b] or per sampling method

[a] Other equivalent methods approved by the Department may be used.

[b] Atomic Absorption Spectrophotometry.

[c] All new geothermal power plants starting construction by 01 January 1995 shall control H2S emissions to not more than 150 g/GMW-Hr.

[d] All existing geothermal power plants shall control H_2S emissions to not more than 200 g/GMW-Hr.

[e] Best available control technology for air emissions and liquid discharges. Compliance with air and water quality standards is required.

[f] Emission limit of Nickel Carbonyl shall not exceed 0.5 mg/Ncm.

[g] Urban Area means a poblacion or central district of cities or municipalities having at least 50,000 population, or twin political subdivisions with contiguous boundary which essentially form one community whose population is more than 50,000 inhabitants. Inside these centers or population are some scattered industrial establishments.

[h] Industrial Area means a well-defined, exclusive land use area in various stages of development that are primarily established for industrial subdivisions, manufacturing and other industry mixes with provisions for common support infrastructures, facilities and services such as roads, water supply, power supply, communication systems, housing, storm drainage, sanitary sewerage systems, industrial wastewater treatment facilities, etc. These areas which are usually from 200 to 500 hectares in size as registered with the (Housing and Land Use Regulatory Board (HLURB) or any other duly authorized government entities as industrial estates, parks or area. Export processing zones also fall under this category of land use.

[i] Other Areas means all areas other than an urban or industrial area.

[j] Other Stationary Sources (particulates) means a trade, process, industrial plant, or fuel burning equipment other than thermal power plant, industrial boilers, cement plants, incinerators, smelting furnaces.

[k] Provisional guideline.

[l] Other Stationary Sources (sulfur oxides) refers to existing and new stationary sources other than those caused by the manufacture of sulfuric acid and sulfonation process, fuel burning equipment and incineration.

Section 2. Visible Emission Standards for Smoke and Opacity

Visible opacity standards for smoke are as follows:

a) The opacity of light or dark smoke emitted from any emission point in all stationary sources shall be such that, when compared in the appropriate manner with the Ringelmann Chart method, or using USEPA Method 9 (40 CFR, Part 60, Appendix A), or an equivalent method approved by the Department through the Bureau, visible emissions shall not appear darker than shade 1 on the Ringelmann Chart, nor exceed 20% opacity using USEPA Method 9.

b) Exceptions to the requirements stated herein may be allowed under the following circumstances: The opacity limit hereinbefore prescribed shall not apply to the emission of dark smoke for less than five (5) minutes in a period of one (1) hour provided that the total period of such emission shall not exceed an aggregate of fifteen (15) minutes in any twenty-four (24) hours; provided further, that at no time should the opacity be darker than shade 3 of the chart; and provided finally, that this provisions shall not apply to cases of dark emissions resulting from cold-start and up-set conditions. Measurements of opacity shall be made in the manner specified by the approved method employed for this purpose.

Section 3. Absence of Emission Standard for Other Air Pollutants

(a) Where no emission or ambient standard is prescribed hereof for a specific air pollutant that is potentially harmful to public health and/or public welfare, the owner or operator of an industrial plant or stationary source shall conduct its operation or process by the best practicable means as may be necessary to prevent or minimize air pollution through the employment of cleaner production technology and sound environmental management practices.

(b) The absence of the ambient air or emission standard for a specific air pollutant shall not preclude the Department through the Bureau to take appropriate action to control such pollutants to assure the health, welfare and comfort of the general population.

Section 4. Sampling Methods

Sampling for compliance purposes shall be conducted using the methods prescribed above or other equivalent method as approved by the Department through the Bureau. Sampling shall be conducted under routine operating conditions at the facility. Operating conditions at the facility during compliance testing will be used by the Bureau to establish permit conditions under which the facility may operate.

Miscellaneous Provisions and Equipment

(a) Stationary Fuel-Burning Equipment

(1) The owner or operator of a stationary fuel-burning equipment shall, if so required by the Department through the Bureau, provide a means to the satisfaction of Secretary whereby a person in charge of such a plant or equipment may at all times ascertain without leaving the boiler room, furnace room, or control room, whether or not dark smoke is discharging from any stack or such installation, such mean may include one or more of the following:
   a) Window or opening through which an unobstructed view of the top of the stack may be obtained from the boiler room, furnace room or control room;
   b) A mirror so placed as to reflect the top of the stack, which reflection shall be visible from the boiler room, furnace room, or control room;
   c) A smoke density indicator and alarm installed so as to indicate adequately in the boiler room, furnace room and control room the density of smoke being discharged;
   d) A closed circuit television installation with the receiver located in the boiler room, furnace room, or control room;
   e) Any similar device which may be approved by the Secretary.

(2) All oil-burning equipment shall have heaters capable of heating oil to a temperature appropriate for the oil and burner.

(3) The following major industries are required to install continuous emission monitoring systems (CEMS) for particulates and sulfur oxide emissions:
   a) Fossil fuel-fired power plant over 10 MW rating (including NOx);
   b) Petroleum refinery, petrochemical industries (including NOx);
   c) Primary copper smelter (including NOx);
   d) Steel plant, ferro-alloy production facility (particulates only); and
   e) Cement Plant (particulates only).

(4) New and existing sources falling under paragraph (3) a), b), c) and d) and new sources falling under paragraph (3) e) shall comply with the

requirements of installing CEMS upon the effectivity of these Implementing Rules and Regulations.

(5) All existing sources falling under paragraph (3) e) shall comply with the requirements of installing CEMS within twenty-four (24) months from the effectivity of these Implementing Rules and Regulations. Application, installation and operation of the CEMS shall meet criteria provided in Rule X Section 5.

(b) Miscellaneous Equipment.

Re-heating furnaces, smoke ovens, bake ovens, coffee heaters, varnish kettles, paint booths and similar equivalent shall be so designed that when operating, there is no free flow of objectionable gases into the atmosphere. To minimize the escape of smoke, odors, fly ash or fumes, appropriate air pollution control facilities shall be installed.

Section 6. Review and Revision of Emission Standards

The Bureau shall provide industries, non-government organizations (NGOs) and other stakeholders the opportunity to participate in the formulation and revision of standards, determination of the technical feasibility of the revised standards, setting the schedule of implementation of the revised standards, and other related concerns. Pursuant to Section 19 of the Act, the Department through the Bureau shall review, or as the need arises, revise and publish emissions standards to further improve the emission standards for stationary sources of air pollution. Such emission standards shall be based on mass rate of emission for all stationary sources of air pollution based on internationally-accepted standards, but not be limited to, nor be less stringent than such standards and with the standards set forth in this Rule. The standards, whichever is applicable, shall be the limit on the acceptable level of pollutants emitted from a stationary source for the protection of the public's health and welfare.

Section 7. Harmonization with International Standards

In the review and revision of emission standards, the Bureau shall, as appropriate, endeavor to achieve the harmonization of national emissions standards with those set by regional bodies such as the Association of South East Asian Nations (ASEAN).

Section 8. Self-Monitoring Reports

Each existing stationary source shall submit to the Bureau Regional Office where the facility is located, a self-monitoring report of its emission rates,

indicating the status of compliance with current standards. The self-monitoring report shall be submitted to the Bureau within six (6) months of the effectivity of these Implementing Rules & Regulations, and within six (6) months of each official revision of emission standards applicable to the source. The party or person responsible for the source shall assume responsibility for demonstrating proof of compliance, which the Bureau may subject to independent verification if it deems necessary.

Section 9. Consent Agreement

The Department, through the Pollution Adjudication Board (PAB) may reduce penalties or fines to be imposed upon stationary sources proven to exceed the emission rate requirements of its Permit to Operate or of these Implementing Rules and Regulations, provided that the person or party responsible for the source enters into a consent agreement with the Bureau, subject to confirmation by the PAB, in which the responsible party shall:

(a) Implement an Environmental Management System (EMS) within eighteen (18) months of entering into said agreement using scope and procedures specified in Philippine National Standard 1701 on establishing an EMS;
(b) Submit an Environmental Management Plan (EMP) derived from the EMS process within six (6) months of entering into a consent agreement. The EMP shall specify a timetable for attaining compliance with all environmental regulations as well as the means with which to accomplish compliance, with emphasis on pollution prevention methods and not limited to installation of pollution control devices;
(c) Post a performance bond acceptable to the PAB, not to exceed P500,000 but not less than P50,000 depending on the size of the facility, which shall be forfeited upon failure to submit proof of an approved EMS within eighteen (18) months, and provided that an extension of not more than twelve (12) months may be allowed by the Bureau on meritorious grounds.

The consent agreement shall incorporate requirements for environmental performance through timetables and reporting of performance, in addition to commitments and procedures adopted in the EMP. The consent agreement shall be without prejudice to possible payment/liability for damages to third parties (e.g. private persons).

Section 10. Compliance Timetable Beyond Eighteen (18) Months

Sources proposing timetables longer than eighteen (18) months for reaching compliance shall be required to first conduct a public consultation before the consent agreement be finalized.

Section 11. Proof of an Environmental Management System

Proof of an approved EMS shall be in the form of an EMS audit report prepared internally by the person or party responsible for the facility, or one prepared by a third party EMS auditor. The audit report shall be prepared by a person or company certified under an international EMS standard such as ISO 14001 or an equivalent approved by the Bureau. This report, including a determination of the EMS's conformity to PNS 1701, shall be submitted for review and acceptance by the Bureau Regional Director within eighteen (18) months from the signing of a consent agreement.

Section 12. Failure to Comply with Consent Agreement

Failure of the stationary source to comply with the timetable specified in the consent agreement shall be sufficient ground for closure through a Cease and Desist Order (CDO) issued by the PAB. Further, the facility owner shall be subject to the reimposition of the original penalty (subject of the reduction) as well as additional appropriate penalties computed on a daily basis pursuant to Section 45 of the Act.

Section 13. Prohibited Acts

(a) Fugitive Particulates.

No person shall cause, let, permit, suffer or allow the emission of particulate matter from any source whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alternation, demolition or wrecking or industry related activities such as loading, storing or "handling," without taking reasonable precautions to prevent such emission. Such reasonable precaution shall include, but not be limited to, the following:

(1) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structure, construction, operations, the grinding of rock, quarry or clearing of lands.
(2) Application of asphalt, oil water, or suitable chemicals on roads, materials stockpiles, and other surface which create airborne dust problem; and
(3) Installation and use of hoods fans and fabric filters or other suitable control devices to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

(b) Volatile Organic Compounds or Organic Solvent Emissions

No person shall store, pump, handle, process, unload or use in any process or installation, volatile compound or organic solvents without applying known existing vapor emission control devices or systems deemed necessary and approved by the Department through the Bureau.

(c) Nuisance

No person shall discharge from any source whatsoever such quantities of air contaminants or other material which constitute nuisance as defined under Articles 694 to 707 of Republic Act No. 385, otherwise known as the Civil Code of the Philippines.

(d) Open Burning

No person shall be allowed to burn any materials in any quantities which shall cause the emission of toxic and poisonous fumes. Such materials include but are not limited to plastic, polyvinyl chloride, paints, ink, wastes containing heavy metals, organic chemicals, petroleum related compound, industrial wastes, ozone depleting substances and other similar toxic and hazardous substances.

Further, no establishment, firm, company, government or private entity or organizations shall be allowed to burn or cause open burning of waste materials in their premises, area of jurisdiction, including recognized or unrecognized dumpsites in any quality or quantity. Violators, upon determination by the Department through the Bureau, shall be penalized in accordance with the provisions of Part XIII of these Implementing Rules and Regulations.

(e) General Restrictions

(1) No plant or source shall operate at capacities which exceed the limits of operation or capability of a control device to maintain the air emission within the standard limitations imposed by the Act or by relevant permit conditions issued by the Department through the Bureau.
(2) No person shall build, erect, construct, install, or implant any new source, or operate, modify, or rebuild an existing source, or by any other means release or take action which would result in, together with the concentrations of existing air pollutants, ambient air concentration greater than the ambient air quality standards specified in Section 12 (b) of the Act

(3) No person shall build, erect install or use any article, machine, equipment or other contrivance, the use of which will conceal an emission which would otherwise constitute a violation of any of the provisions of these Implementing Rules and Regulations.
(4) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate the provisions of permit regulations of Rule XIX.
(5) All pollution control devices and systems shall be properly and consistently maintained and correctly operated in order to maintain emission in compliance with the provisions and standards of Section 19 of the Act. No facilities shall be operated without the control equipment in proper operation, except with the permission of the Department through the Bureau when special circumstances arise.

RULE XXVI SOURCE SPECIFIC AMBIENT AIR QUALITY STANDARDS

Section 1. National Ambient Air Quality Standards

For any industrial establishment or operation, the discharge of air pollutants that result in airborne concentrations in excess of the National Ambient Air Quality Standards shown in Table 3 shall not be permitted. Sampling shall be done at the location of highest expected concentration. Location shall be determined using dispersion modeling. Bureau-approved techniques shall be followed in developing sampling plans. For example, the Bureau's Air Quality Monitoring Manual specifies that sampling shall be done at an elevation of at least two (2) meters above the ground level, and shall be conducted either at the property line or at a downwind distance of five (5) to twenty (20) times the stack height, whichever is more stringent. However, the Bureau may approve the adoption of a different procedure in the choice of the location of the monitoring equipment depending upon the physical surrounding and other relevant factors in the area where the sampling is to be conducted.

Table 3
National Ambient Air Quality Standards for Source Specific Air Pollutants from Industrial Sources/Operations

	Concentration [a]	Averaging	

Pollutants	µg/Ncm	Ppm	Time (min)	Method of Analysis/Measurement [c]
Ammonia	200	.028	30	Nesselerization / Indo Phenol
Carbon Disulfide	30	0.01	30	Tischer Method
Chlorine and Chlorine cmpds expressed as CL_2	100	0.03	5	Methyl Orange
Formaldehyde	50	0.04	30	Chromotropic Acid method or MBTH Colorimetric method
Hydrogen Chloride	200	0.13	30	Volhard Titration with Iodine solution
Hydrogen Sulfide	100	0.07	30	Methylene Blue
Lead	20		30	AAS[b]
Nitrogen Dioxide	375 260	0.20 0.14	30 60	Griess-Saltzman
Phenol	100	0.03	30	4-Aminoantipyrine
Sulfur Dioxide	470 340	0.18 0.13	30 60	Colorimeteric-Pararosaline
Suspended Particulate Matter – TSP PM-10	300 200	-- --	60 60	Gravimetric Gravimetric
Antimony	0.02 mg/Ncm	--	30	AAS[b]
Arsenic	0.02 mg/Ncm	--	30	AAS[b]
Cadmium	0.01 mg/Ncm	--	30	AAS[b]
Asbestos	2×10^6 Particu-lates/Ncm (over 5 micro-meter in size)	--	30	Light Microscopy
Sulfuric Acid	0.3 mg/Ncm	--	30	Titration
Nitric Acid	0.4 mg/Ncm	--	30	Titration

[a] Ninety-eight percentile (98%) values of 30-min. sampling measured at 25ºC and one atmosphere pressure.
[b] Atomic Absorption Spectrophotometry.
[c] Other equivalent methods approved by the Department through the Bureau may be used.

Section 2. Review of Ambient Air Quality Standards

The Bureau shall provide industries, non-government organizations (NGOs) and other stakeholders the opportunity to participate in the formulation and revision of standards, determination of the technical feasibility of the revised standards, setting the schedule of implementation of the revised standards, and other related concerns. The Bureau shall, on an annual basis, in coordination with other concerned agencies, review the list of Hazardous Air Pollutants and the National Ambient Air Quality Standards for Source Specific Air Pollutants under Section 12 of the Act and recommend to the Secretary of the Department the revision thereof when necessary to protect public health and safety, and general welfare.

Section 3. Publication of Revised Standards

Upon approval by the Secretary of the Department, the revised Ambient Air Quality Standards shall be published in a newspaper of general circulation and may be posted on a public internet website.

RULE XXVII AIR QUALITY CONTROL TECHNIQUES

Section 1. Air Quality Control Techniques

Simultaneous with the issuance of the Ambient Air Quality Guideline Values, the Bureau, through the National Research and Development Program contained in the Act, and upon consultation with the appropriate advisory committees, government agencies and LGUs, shall issue, and from time to time, revise information on air pollution control techniques. Such information shall include:

(a) Best available technology and alternative methods of prevention, management and control of air pollution;
(b) Best available technology economically achievable which refers to the technological basis/standards for emission limits applicable to existing, direct industrial emitters of non-conventional and toxic pollutants; and
(c) Alternative fuels, processes and operating methods which will result in the elimination or significant reduction of emissions.

Such information may also include data relating to the cost of installation and operation, energy requirement, emissions reduction benefits, and environmental impact or the emission control technology.

Section 2. Air Quality Control Techniques Database

The Bureau may establish an Air Quality Control Techniques Database.

RULE XXVIII NON-BURN TECHNOLOGIES

Section 1. Incineration Prohibited

Pursuant to Section 20 of the Act, incineration, hereby defined as the burning of municipal, bio-medical and hazardous wastes, which process emits toxic and poisonous fumes is prohibited.

Section 2. Non-Burn Technologies

With due concern on the effects of climate change, the Bureau shall promote the use of state-of-the-art, environmentally-sound and safe thermal and non-burn technologies for the handling, treatment, thermal destruction, utilization, and disposal of sorted, un-recycled, un-composted, biomedical and hazardous wastes.

Non-burn technologies are technologies used for the destruction, decomposition or conversion of wastes other than through the use of combustion and which comply with at least one of the following conditions:

a) The environment within the destruction chamber is free of Oxygen; or
b) Fire is not used within the destruction chamber; or
c) The source of heat is not fire; or
d) A heat-conducting material or medium, whether of a solid, liquid, gaseous, sol or gel form, is used to destroy the waste.

Non-burn technologies may be used provided that the following conditions are strictly complied with:

(a) Applicable emission standards are not exceeded;
(b) Installation and approved use of CEMS measuring PM, NO_2, CO, Chlorine and temperature;
(c) Compliance with all other relevant requirements of these Implementing Rules and Regulations. In cases where the requirements of this Rule are more

restrictive than those of the other requirements of the Implementing Rules and Regulations, the more restrictive requirements shall apply.

Section 3. Emission Standards for Treatment Facilities Using Non-Burn Technologies

Emissions from treatment facilities using non burn technologies shall be deemed toxic and poisonous when they result from the processing of chlorinated compounds, or when they exceed the following emission standards set forth in Tables 4 and 5.

Table 4
Daily and Half Hourly Average Limits –Treatment Facilities Using Non-burn Technologies

Item	Daily Average Values	Half Hourly Average Values
Particulates (total dust)	10 mg/Ncm	30 mg/Ncm
Gaseous and vaporous organic substances, expressed as total organic carbon	10 mg/Ncm	20 mg/Ncm
Hydrogen chloride (HCl)	10 mg/Ncm	60 mg/Ncm
Hydrogen fluoride (HF)	1 mg/Ncm	4 mg/Ncm
Sulfur dioxide (SO_2)	50 mg/Ncm	200 mg/Ncm
Nitrogen monoxide (NO) and Nitrogen dioxide (NO_2), expressed as nitrogen dioxide for incineration plants with a capacity exceeding 3 tonnes per hour	200 mg/Ncm	400 mg/Ncm
Nitrogen monoxide (NO) and nitrogen dioxide (NO_2), expressed as nitrogen dioxide for incineration plants with a capacity of 3 tonnes per hour or less	300 mg/Ncm	--
Ammonia	10 mg/Ncm	20 mg/Ncm

Table 5

Limits for Metals, Dioxins and Furans - Treatment Facilities Using Non-burn Technologies

Item	Average Values[a]
Cadmium and its compounds, expressed as cadmium (Cd)	total 0.05mg/Ncm
Thallium and its compounds, expressed as thallium (Tl)	
Mercury and its Compounds, expressed as mercury (Hg)	0.05 mg/Ncm
Antimony and its compounds, expressed as antimony (Sb)	total 0.5 mg/Ncm
Arsenic and its compounds, expressed as arsenic (As)	
Lead and its compounds, expressed as lead (Pb)	
Chromium and its compounds, expressed as chromium (Cr)	
Cobalt and its compounds, expressed as cobalt (Co)	
Copper and its compounds, expressed as copper (Cu)	
Manganese and its compounds, expressed as manganese (Mn)	
Nickel and its compounds, expressed as nickel (Ni)	
Vanadium and its compounds, expressed as vanadium (V)	
Tin and its compounds, expressed as tin (Sn)	
Dioxins and Furans	0.1 nanogram/Ncm

[a] These average values cover gaseous and the vapor forms of the relevant heavy metal emission as well as their compounds. Provided, that the emission of dioxins and furans into the air shall be reduced by the most progressive techniques. The average values shall be measured over a sample period of a minimum of four (4) hours and a maximum of eight (8) hours, except that all averages of dioxins and furans shall be measured over a sample period of a minimum of six (6) hours and maximum of eight (8) hours.

Section 4. Non-applicability of the Prohibition

The prohibition shall not apply to traditional small-scale method of community/neighborhood sanitation “siga”, traditional, agricultural, cultural, health, and food preparation and crematoria.

Section 5. Phase-out of Incinerators Dealing with Biomedical Wastes

Existing incinerators dealing with a biomedical wastes shall be phased out on or before 17 July 2003 provided that in the interim, such units shall be limited to the burning of pathological and infectious wastes, and subject to close monitoring by the Bureau. After the said grace period, facilities that process or treat biomedical wastes shall utilize state-of the art, environmentally-sound and safe non-burn technologies.

Section 6. Monitoring.

There shall be public participation in the monitoring of thermal treatment facilities.

PART VIII
POLLUTION FROM OTHER SOURCES

RULE XXIX POLLUTION FROM OTHER SOURCES - GENERAL

Section 1. Ban on Smoking

The Local Government Units (LGUs) shall, within six (6) months from the effectivity of these Implementing Rules and Regulations, implement or enforce a ban on 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 which shall be enclosed.

Section 2. Regulation of Other Sources

The DOTC shall regulate and implement emission standards on mobile sources other than those referred to under Section 21 of the Act. For this purpose, the Department through the Bureau, shall formulate and establish the necessary standard for these other mobile sources. The DOTC shall collect fines and penalties provided for under Section 46 of the Act from those found to be in violation of the applicable emissions standards for other mobile sources.

PART IX
POLLUTION FROM MOTOR VEHICLES

RULE XXX MOTOR VEHICLE COVERAGE

Section 1. Scope

These provisions, in the interest of public safety and conservation of the environment, are applicable with respect to:

(d) Manufacture, local assembly or importation into the country of new motor vehicle as classified under PNS 1891 shall be covered by a Certificate of Conformity (COC) to be issued pursuant to the following sections of this Rule, provided, however, that those motor vehicle types already covered by the COC at the time of the effectivity of these rules shall not be subject to these provisions unless the Department finds justifiable reason to suspend, cancel or revoke such a certificate;

(e) Enforcement of permissible emission levels of motor vehicles to be manufactured, marketed and/or operated in the country;

(f) Implementation of the National Motor Vehicle Inspection and Maintenance Program including accreditation and authorization of private emission testing centers and certification of inspectors and mechanics, and;

(g) Roadside inspection of motor vehicles.

RULE XXXI EMISSION CONTROL FOR NEW MOTOR VEHICLES

Section 1. Certificate of Conformity

A COC shall be issued by the Department through the Bureau to a motor vehicle manufacturer, assembler, or importer certifying that a motor vehicle type complies with the numerical emission standards in this Rule, using the relevant ECE test procedures or their equivalent as approved by the Department. No new motor vehicle shall be allowed initial registration unless a valid COC issued by the Department through the Bureau is granted. New motor vehicles shall refer to the following:

a) Motor vehicles designed and manufactured in the Philippines using brand new engines and spare parts;
b) Motor vehicles assembled in the Philippines using original and brand new parts and components imported into the country completely knocked down (CKD);
c) New motor vehicles completely built up (CBU) imported into the country.

The emission test for type approval shall be carried out by the DOTC/LTO under the policy, regulation and guidelines supervision of the Department. The facility where the tests will be conducted shall be chosen by the Department utilizing the motor vehicle type approval system testing center of the DOTC/LTO. It shall also have visitorial powers over the LTO Motor Vehicle Inspection Station and Vehicle Type Approval System Testing Center where these tests are carried out.

While the DOTC/LTO is developing inspection capability of the motor vehicle type approval system test, the previous emission test results of pre-production engine vehicle type duly authenticated by the Philippine Embassy/Consulate of the country of origin or manufacture of subject motor vehicle shall be valid and sufficient.

Section 2. Transitory Emission Limits

As a condition for the issuance of a COC, exhaust emission limits for new motor vehicle types, to be introduced into the market up to 31 December 2002, shall not exceed the following:

For cars and light duty motor vehicles, the limits for emission of gaseous pollutants as a function of given reference mass shall be as provided hereunder:

Table 6
Exhaust Emission Limits of Gaseous Pollutants for Cars and Light Duty Motor Vehicles (Reference No. ECE Reg. 15-04)

Reference Mass (kg)	CO g/test		$HC + NO_x$ g/test	
Type I Test	Type Approval	Conformity of Production	Type Approval	Conformity of Production
750	58	70	19.0	23.8
751 – 850	58	70	19.0	23.8
851 – 1020	58	70	19.0	23.8
1021 – 1250	67	80	20.5	25.6

1251 - 1470	76	91	22.0	27.5
1471 – 1700	84	101	23.5	29.4
1701 – 1930	93	112	25.0	31.3
1931 – 2150	101	121	26.5	33.1
2150	110	132	28.0	35.0
All Motor Vehicles Type II Test	Maximum Concentration of CO at end of last urban cycle = 3.5%			
All Motor Vehicles Type III Test	No Crankcase Emissions Permitted			

For medium and heavy duty motor vehicles with compression-ignition engine, the limit for the emission of gaseous pollutants and smoke shall be as provided in Table 7 and Table 8.

Table 7
Exhaust Limits of Gaseous Pollutants for Medium and Heavy Duty Motor Vehicles Equipped with Compression-Ignition Engines (Reference No. ECE Reg. 49-01)

CO (g/kWh)	HC (g/kWh)	NOx (g/kWh)
11.2	2.4	14.4

Table 8
Smoke Emission Limits Under Steady State Conditions for Heavy Duty Motor Vehicles Equipped with Compression-Ignition Engines (Reference No. ECE Reg. 24-03)

Nominal Flow (liters/second)	Absorption Coefficient (m^{-1})
42	2.26
100	1.495
200	1.065

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

Fuel evaporative emissions for spark ignition engines shall not exceed 2.0 grams per test.

For motorcycles, CO emissions at idle shall not exceed 6% for all types.

Section 3. Test Procedures to Determine Exhaust Emissions Under Transitory Standards

The test procedures for the determination of gaseous exhaust emissions under the transitory standards shall be as follows:

For cars and light duty motor vehicles	ECE Regulation 15-04 "Uniform provision concerning the approval of motor vehicle equipped with positive-ignition engine or with compression-ignition engine with regard to emission of gaseous pollutant by the engine"
For medium and heavy duty motor vehicles with compression-ignition engines	ECE Regulation 49-01 "Uniform provision concerning the approval of compression ignition (C.I.) engines and motor vehicles with C.I. engines with regards to the emission of pollutant by the engine"
For the determination of CO emission	Test procedure for the determination of CO emission shall be at idling speed.

Section 4. Emission Standards Effective Year 2003

As a condition for issuance of a COC, exhaust emission limits for motor vehicle types to be introduced into the market beginning 01 January 2003 shall refer to the provisions of Sec. 21 of the Act, which is equivalent to Euro 1, as follows:

Table 9
Emission Limits for Passenger Car/Light Duty Vehicle Type Approval (Directive 91/441/EEC)

CO (g/km)		HC + NOx (g/km)		PM[1] (g/km)	
Type Approval	**Conformity of Production**	**Type Approval**	**Conformity of Production**	**Type Approval**	**Conformity of Production**
2.72	3.16	0.97	1.13	0.14	0.18

[1]For compression-ignition engines only.

Table 10
Emission Limits for Passenger/Light Commercial Vehicles as a Function of the Given Reference Mass Type Approval (Directive 93/59/EEC)

Class of Vehicle	CO (g/km)		HC + NOX (g/km)		PM[1] (g/km)	
	Type Ap-proval	Confor mity of Produc tion	Type Ap-proval	Confor mity of Produc-tion	Type Appro val	Conform ity of Produc-tion
Class 1 (< 1250 Kg)	2.72	3.16	0.97	1.13	0.14	0.18
Class 2 (1251 < > 1700)	5.17	6.0	1.40	1.6	0.19	0.22
Class 3 (> 1700 Kg)	6.9	8.0	1.7	2.0	0.25	0.29

[1]For Compression ignition vehicles only.

Table 11
Emission Limits for Heavy Duty Vehicle Type Approval (Directive 91/542/EEC)

CO (g/kWh)		HC (g/kWh)		NOx (g/kWh)		PM[1,2] (g/kWh)	
Type Ap-pro-val	Confor mity of Produc-tion	Type Appro -val	Confor mity of Produc-tion	Type Appro-val	Confor mity of Produ-ction	Type Appro val	Confor mity of Produ-ction
4.5	4.9	1.10	1.23	8.0	9.0	0.36	0.4

[1]For Compression ignition vehicles only.
[2]For engines of 85 kW or less, the limit value for particulate emissions is increased by multiplying the quoted limit by a coefficient of 1.7.

Table12
Smoke Emission Limits Under Steady State Conditions (Reference No. ECE Reg. 24-03)

Nominal Flow (liters/second)	Light Absorption Coefficient[1] (m^{-1})
42	2.26
100	1.495
200	1.065

[1]For Compression ignition vehicles only.

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

Table 13
Emission Limits for Motorcycle Type Approval with 4-stroke Engines
ECE Regulation 40.01

Reference Weight R(1) (kg)	CO (g/km)		HC (g/km)	
	Type Approval	Conformity of Production	Type Approval	Conformity of Production
< 100	17.5	21	4.2	8
100-300	(17.5 + 17.5(R-00))/200	21 + 21(R-100))/200	4.2 + 1.8(R-100)	(6 + 2.4(R-100))/200
> 300	35	42	8	9.4

Notes: 1) Reference weight (R) = Motorcycle weight + 75 kg.

Table 14
Emission Limits for Motorcycle Type Approval with 2-stroke Engines
ECE Regulation 40.01

Reference Weight R(1) (kg)	CO (g/km)		HC (g/km)	
	Type Approval	Conformity of Production	Type Approval	Conformity of Production
< 100	12.8	16	8	10.4
100-300	(12.8 + 19.2 (R-00))/200	16 + 24(R-100))/200	8 + 4(R-100)	(10.4 + 6.4(R-100))/200
> 300	32	40	12	18.8

Notes: 1) Reference weight (R) = Motorcycle weight + 75 kg.

Table 15
Emission Limits for Mopeds Type Approval
ECE Regulation 47

Vehicle type	2-Wheeled		3-Wheeled	
Pollutant	CO g/km	HC g/km	CO g/km	HC g/km
Licensing	8.0	5.0	15.0	10.0
Production	9.6	6.5	18.0	13.0

(Mopeds are vehicles of less than 400 kg equipped with an engine having a cylinder capacity of less than 50 cubic centimeters.)

For mopeds, CO emissions at idle shall not exceed 6% for all types.

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.

Durability of pollution control equipment for spark-ignition and compression-engines shall conform to the deterioration factor prescribed in the test procedure.

The standards set forth in the above paragraphs of this section refer to the exhaust emitted over a driving schedule or engine speed, evaporative emission, crankcase ventilation emission and durability of pollution control equipment as set forth in the test procedures indicated in the succeeding section.

Section 5. Test Procedures to Determine Exhaust Emissions and Other Standards Effective in Year 2003

The test procedures for the determination of emissions and other standards effective in 2003 shall be as follows:

For exhaust emissions, fuel evaporative emission, emission of crankcase gases and durability of pollution control equipment for cars and light duty motor vehicles	ECE Regulation 83-01/02, series of amendment approval B and C: "Uniform provision concerning the approval of vehicles with regards to the emission of gaseous pollutants by the engine according to engine fuel standards" Approval B - Limitation of emission of gaseous pollutant by the engine, evaporative emission, crankcase emission and durability of motor vehicle fueled with unleaded petrol. Approval C - Limitation of emission of gaseous and particulate pollutants, crankcase emission and durability of pollution control devices of motor vehicles fueled with diesel fuel.
For Medium and Heavy Duty Motor Vehicles with compression-ignition engines	ECE Regulation 49-01/02, series of amendment (49/02) "Uniform provision concerning the approval of compression-ignition (C.I) engines and motor vehicles equipped with C.I. engine with regards to the emission of pollutants by the engine"
For the determination of CO emission	The test procedure for the determination of CO emission shall be at idling speed as provided in the Emission Test Procedure for Vehicles Equipped with Spark-Ignition Engines and the Free Acceleration Test Procedure for Vehicles Equipped with Compression-Ignition Engines

Other equivalent test procedures as approved by the Department may be utilized.

Section 6. General Requirements

Every motor vehicle manufacturer, assembler or importer shall provide all new motor vehicles with a service manual or written instructions for the proper use and maintenance of the motor vehicle, including all relevant service information or specifications to ensure proper functioning of the emission control system and compliance with emission standards.

All newly-manufactured or imported gasoline-fuelled motor vehicles, including motorcycles and mopeds, to be introduced into the market or imported into the Philippines shall be designed to operate on unleaded gasoline upon the effectivity of these Implementing Rules and Regulations.

Section 7. Application for Certificate of Conformity

The application for a COC shall be submitted to the Bureau by the motor vehicle manufacturer, assembler, importer or their duly authorized representatives. It shall be accompanied by the following particulars in triplicate copies:

(a) Complete and detailed descriptions of motor vehicle and the engine;
(b) Description of the emission control system installed in the motor vehicle;
(c) Details of the fuel feed system;
(d) Vehicle Type Approval System test result by DOTC/LTO (while the DOTC/LTO is developing inspection capability of the motor vehicle type approval system test, the previous emission test results of pre-production engine vehicle type duly authenticated by the Philippine Embassy/Consulate of the country of origin or manufacture of subject motor vehicle shall be valid and sufficient); and
(e) Other particulars which may be required by the Department.

Section 8. Filing Fees for Application for COC

A fee to be determined by the Department through the Bureau shall be paid upon the filing of the COC application. Filing fees for applications that have been denied shall not be refundable, nor applicable to subsequent applications.

Section 9. Approval of Application

Upon a determination that the vehicle type meets the general requirements of this Rule and upon payment of the corresponding application fees, the Bureau shall issue a COC within a reasonable time.

Section 10. COC as Requisite for Registration

New motor vehicles shall be registered with the LTO of the DOTC only upon presentation of a copy of a valid COC issued by the Bureau.

For purposes of registration, the COC shall cover only:

(a) new vehicle types described in the COC, or

(b) new vehicle types which conform in all material respects to the design specifications applicable to the particular vehicle type as described in the application for COC and which are produced in accordance with the particulars of a valid COC.

Section 11. Validity of COC

For purposes of vehicle registration, the COC shall be valid for six (6) years from the date of issue unless sooner revoked or suspended. In case of suspension, the 6-year validity period shall not be extended by the period of suspension.

Modifications of the brake system, steering, air conditioning, suspension and interior and exterior trimmings shall not be construed as a change in vehicle type and there will be no need to apply for a new COC.

Section 12. Consent to Inspection as Condition of COC.

To ensure that new motor vehicles manufactured, assembled, or imported conform in all material respects to the design specifications described in the COC, it shall be a condition of the COC that the manufacturer, assembler or importer shall consent to all the inspections by the Department through the Bureau of the vehicle engine, emission control system, among others, of the new motor vehicles covered by the COC.

Section 13. Ground for Revocation of COC.

Failure to comply with any of the requirements of this Rule shall justify the revocation or suspension of the COC.

Section 14. Emission Control Labeling

The manufacturer, assembler or importer of any motor vehicle or motor vehicle engine, subject to the applicable emission standards prescribed by the Department, shall affix a permanent legible label, and the vehicle identification number (VIN) plate of the type and in a manner described below.

The label, of durable material, shall be affixed by the manufacturer, assembler or importer in such a manner that it cannot be removed without defacing such label. It shall be affixed in a readily visible position in the engine compartment or any conspicuous area under the hood, or under the seat in case of a motorcycle.

The label shall contain the following information lettered in the English language in block letters and numerals with a legible print size, and of a color that contrasts with the background of the label:

(a) The label heading: Vehicle Emission Control Information;
(b) Full corporate name and trademark;
(c) Engine type displacement in metric units;
(d) International emission regulation code and/or this Act; and
(e) Engine tune-up specification and adjustment as recommended by the manufacturer including but not limited to idle speed(s), ignition timing, the idle air-fuel mixture setting procedure and value (e.g. idle CO, idle air-fuel ratio, idle speed drop), high idle speed, initial injection timing and valve lash (as applicable) as well as other parameters deemed necessary by the manufacturer.

Section 15. Submission of Vehicle Identification Number.

The manufacturer, assembler or importer of any motor vehicle covered by a COC under these Implementing Rules and Regulations shall submit to the Bureau, not later than sixty (60) days after its manufacture or entry into the country, the vehicle engine number, chassis number, engine type, vehicle type and color. Likewise, a sticker with the Department logo, COC number and date of issue and a brief statement that the vehicle complies with the provisions of the Act and its Implementing Rules and Regulations shall be conspicuously displayed on the front windshield of the motor vehicle.

RULE XXXIII EMISSION CONTROL FOR IN-USE VEHICLES

Section 1. Emission Standards for In-Use Vehicles

All in-use motor vehicles, and vehicles with updated/enhanced engine whose chassis are pre-registered with DOTC/LTO will only be allowed renewal of registration upon proof of compliance of the emission standard described below. The DOTC/LTO shall conduct the vehicle test utilizing the Motor Vehicle Inspection Station (MVIS) or its duly authorized and accredited inspection centers consistent with the R.A. 7394 otherwise known as the Consumer Act of the Philippines within sixty (60) days prior to date of registration.

Emission test procedures as given in Annex B and Annex C for registered or in-use motor vehicles equipped with spark-ignition or compression-ignition engines, respectively, should be strictly followed.

For vehicles with spark-ignition engines except motorcycles, the following emission standards shall apply:

Table 16
Emission Standards for Vehicles with Spark-Ignition Engines (Gasoline) Except Motorcycles

Vehicle Category	CO (% by volume)	HC (ppm as hexane)
Registered prior to January 1, 1997 At Idle	4.5	800
Registered on or after January 1, 1997 but before January 1, 2003 At Idle	3.5	600
Registered on or after January 1, 2003 At Low Idle At High Idle (rpm > 2,500)	0.5 0.3 (λ = 1 +/- 0.03)*	100

* or in accordance with manufacturer's specification

For vehicles with compression-ignition engines, the following emission standards shall apply:

Table 17
Emission Standards for Vehicles with Compression-Ignition Engines (light absorption coefficient, m^{-1})*

	Naturally Aspirated	Turbo charged	1,000 m increase in elevation
Registered for the first time prior to	2.5	3.5	4.5

December 31, 2002			
Registered for the first time on or after January 1, 2003	1.2	2.2	3.2

* Using the free acceleration test.

For motorcycles registered for the first time on or before December 31, 2002, CO emissions at idle shall not exceed 6.0%. For motorcycles registered for the first time after December 31, 2002 CO emissions at idle shall not exceed 4.5%.

Section 2. Emission Standards for Rebuilt Vehicles and Imported Second Hand Vehicles

No rebuilt or second hand-CBU imported into the country or pre-registered vehicles retrofitted with second hand engines shall be allowed registration or renewal of registration without valid Certificate of Compliance to Emission Standard (CCES) issued by the DOTC.

As a condition for the issuance of a CCES, exhaust emission standards of vehicles enumerated previously shall not exceed the standards described below.

As a requirement for the issuance of a CCES by DOTC for imported second hand vehicles, a Certificate of Emission Compliance duly authenticated by the Philippines Embassy/Consulate from the country of origin shall be valid and sufficient. The DOTC may however seek verification through actual testing in the MVIS.

In the case of locally rebuilt vehicles, a CCES issued by the DOTC on the basis of an inspection by the DOTC Vehicle Type Approval System, if available, or initially by LTO MVIS, is required.

The DTI through the Bureau of Import Services (BIS) shall formulate regulations and guidelines that will ensure rebuilt and imported second hand motor vehicles and engines will satisfy the emission standards for rebuilt and imported second hand motor vehicles as provided in these Implementing Rules and Regulations.

Table 18
Emission Standards for Rebuilt Vehicles and Imported Second Hand Vehicles*

	CO[a]	HC[a]	Smoke[b] [turbocharged]
Registered for the first time prior to December 31, 2002 At Idle	3.5%	500 ppm	2.5 [3.5] m^{-1}
Registered for the first time on or after January 1, 2003 At Idle	0.5%	100 ppm	2.5 [3.5] m^{-1}

a – For spark-ignition (gasoline-fueled) motor vehicles
b – For compression-ignition (diesel-fueled) motor vehicles; figure in brackets relate to turbocharged vehicles.
* If the in-use emission standard of the country of origin is more stringent than these maximum limits, it will supersede them.

Section 3. Test Procedures for Measurement of Exhaust Emission

The Department shall prescribe the type of smoke opacity meter to be used in the emission testing of vehicles with diesel engines.

The test procedures for measurement of exhaust emissions for in-use motor vehicles with spark-ignition engines and compression-ignition engines are described in Annexes B and C.

Section 4. Control of Emissions from In-use Vehicles

Pursuant to Section 21(d) of the Act, the DTI, DOTC/LTO, and the Department shall develop and implement the National Motor Vehicle Inspection and Maintenance Program that will ensure the reduction of emissions from motor vehicles and promote the efficient and safe operation of motor vehicles. The inspection and maintenance program shall require all vehicles, as a requisite for renewal of registration, to undergo mandatory inspection to determine compliance with the in-use emission standards. The DOTC through LTO and/or DOTC designated enforcement units shall also establish a roadside inspection system to ensure that vehicles comply with the in-use emission standards.

The National Motor Vehicle Inspection and Maintenance Program is described in detail in Rule XXXIV and the Roadside Inspection System is described in Rule XXXV.

Section 5. Use of tamper-resistant odometers and fuel management systems

Pursuant to Section 21 of the Act, the DTI shall 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.

Section 6. Useful Life of For-Hire Vehicles

Pursuant to Section 22 of the Act, 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 emission they were certified to meet. These regulations shall include provisions for ensuring the durability of emission devices. For considerations of public health and welfare, the Department, DTI, DOTC/LTO, NEDA and DOF may develop and implement a program to ensure for-hire vehicles to continue to meet emission standards hereto described.

RULE XXXIII REVIEW AND REVISION OF STANDARDS

Section 1. Review and Revision of Standards

To further improve the emission standards, the Department through the Bureau, in coordination with the DOTC/LTO, shall review the standards every two (2) years or as the need arises. Where necessary to achieve substantial improvement in air quality for the health, safety and welfare of the general public, the Department through the Bureau shall revise the exhaust emission standards for new and in-use motor vehicles. The revised standards must be published in a newspaper of general circulation or be filed in triplicate copies with the University of the Philippines (UP) Law Center pursuant to Presidential Memorandum Circular No. 11 dated 09 October 1992.

Section 2. Participation of Stakeholders

The Department shall provide the motoring public, automotive industry, non-government organizations (NGOs) and other stakeholders the opportunity to participate in the formulation and revision of standards, determination of the

technical feasibility of the revised standards, setting the schedule of implementation of the revised standards, and other related concerns.

Section 3. Harmonization with International Standards

In the review and revision of emission standards, the Department shall endeavor to achieve the harmonization of national emission standards with internationally-accepted standards.

The Department, in coordination with the DOTC and DTI, may adopt or formulate the functional equivalence of the emission limits and test procedures. "Functional equivalence" means exhaust emission limits and test procedures whose numerical values are almost the same or identical with other types of emission limits and test procedures.

The Department, in coordination with DOTC and DTI, and in consultation with the motor vehicle manufacturers and other stakeholders, shall study the feasibility of adopting EURO II or III standards or other appropriate standards in the Philippines to further reduce emissions from motor vehicles.

RULE XXXIV NATIONAL MOTOR VEHICLE INSPECTION AND MAINTENANCE PROGRAM

Section 1. National Motor Vehicle Inspection and Maintenance Program.

All private in-use motor vehicles and vehicles with updated/enhanced engine whose chassis are pre-registered with Land Transportation Office (LTO) will only be allowed renewal of annual registration when, upon inspection by the LTO or other authorized private Motor Vehicle Inspection Station (MVIS), such vehicles meet the in-use emission standards set forth in Section 1 of Rule XXXII hereof. The LTO or other authorized MVIS shall conduct the vehicle tests for emissions.

Public Utility Vehicles submitted to DOTC/LTO for renewal of registration shall only be allowed upon presentation of a valid Vehicle Inspection Report issued on the basis of the inspection following the standard described hereto from the MVIS or its authorized testing center. The Vehicle Inspection Report shall be valid for a maximum of six (6) months.

Emission tests may be conducted within sixty (60) days prior to the renewal of registration. The results of such test shall be presented within sixty

(60) days from the date of the test and may be presented to the LTO motor vehicle registration offices as a prerequisite to renewal of registration.

Section 2. Phased Implementation

The DOTC/LTO shall ensure that the Motor Vehicle Inspection System shall be fully operational in Metro Manila by January 2003. Nationwide implementation shall follow in twelve (12) to eighteen (18) months thereafter.

The vehicle inspection will be initially conducted in the LTO-operated MVIS or LTO Motor Vehicle Registration Centers. Priority shall be given to the immediate testing of diesel-powered vehicles.

Section 3. DOTC Authorization and DTI Accreditation of Private Emission Testing Centers

Emission testing of vehicles as a consequence of roadside inspection, for voluntary inspection after vehicle maintenance, or for rebuilt and imported second hand vehicles and engines, may be done in a private emission testing center. Private emission testing centers shall be commissioned by the Government through accreditation by DTI and authorization by DOTC. The DTI and DOTC shall accredit and authorize emission testing centers in accordance with the procedural guidelines thereon.

In order to accommodate all vehicles for emission testing, the DOTC may authorize private emission testing centers previously accredited with the DTI. Such testing centers shall be authorized to conduct emission tests on vehicles apprehended for non-compliance with the in-use emission standards. The DOTC shall issue the procedural guidelines on the authorization process. Pursuant to its standard-setting functions, the Department is responsible for regulating the specifications of the emission testing equipment to be used by private emission testing centers. The DTI shall ensure that these specifications are met by the accredited private emission testing centers.

In seeking authorization from DOTC, qualified persons may file an application with the DOTC through LTO or its designated agency, to be authorized as an emission testing center. The applicant must comply with the requirements of area, trained personnel, adequate equipment and facilities, and submit the documentary requirements as may be required by the DOTC in subsequent regulations. The facilities shall be inspected prior to the issuance of the authorization to determine compliance with the authorization requirements.

To obtain accreditation from the DTI, an application form shall be submitted by the applicant to the DTI Provincial Office located in the province where the applicant operates or resides. The applicant shall comply with the accreditation requirements and submit its organizational manual to the DTI. The facilities of the applicant shall then be inspected. Upon a favorable recommendation of the DTI Evaluation Panel / Committee, the Director of DTI Provincial Office shall approve the application and issue a certification to the applicant.

The accredited testing center shall make available to DTI or its appointed assessors all documents and shall allow the latter to inspect its facilities.

The accredited emission testing center must secure the authorization of the DOTC to conduct emission tests on vehicles apprehended for non-compliance with the in-use standards.

To facilitate the process of accreditation and authorization, the DOTC and DTI shall enter into an inter-agency agreement to develop and implement a uniform procedure for accreditation and authorization of emission testing centers. The DOTC and DTI shall study, among others, (1) the creation of a "one-stop shop" where an applicant may complete the process of accreditation and authorization, (2) the imposition of one fee, (3) the use of a single application form for both accreditation and authorization, and (4) the issuance of a single certificate of accreditation and authorization signed by both DOTC and DTI representatives.

Section 4. Certification of Institutions and Instructors; Licensing of Service Centers and Technicians

The DTI shall also develop and implement standards and procedures for the certification of training institutions, instructors, and facilities and for the licensing of qualified service centers and their technicians as prerequisite for performing the testing, servicing, repair and the required adjustment to the vehicle emission system. Vehicles that fail the emission test may be sent to accredited repair shops for repair of motor vehicle engines, exhaust system and pollution control devices.

These facilities shall be equipped with standard automotive repair tools, standard spare parts and pollution test equipment conforming to applicable ECE, ISO or SAE standards. It is also required that these repair shops or service stations shall have highly skilled mechanics and/or technicians who have on-the-

job training certificates from TESDA, local assemblers and manufacturers of motor vehicles.

RULE XXXV ROADSIDE INSPECTION OF MOTOR VEHICLES

Section 1. Roadside Inspection

Vehicles found emitting excessive smoke while operating in any public highway shall be subjected to an emission test by properly-equipped DOTC through LTO and/or DOTC-designated enforcement unit(s) and/or its deputized agents. The procedure for the apprehension of non-compliant vehicles and the deputation of agents to perform roadside inspection are set forth in Section 4 of this Rule.

Section 2. Agency Responsible for Enforcement

Pursuant to Section 46 of the Act, the DOTC, through LTO or DOTC-designated enforcement unit(s) shall establish a roadside inspection system to ensure that vehicles comply with the in-use emission standards set forth in these Implementing Rules and Regulations

The DOTC shall establish and chair an oversight committee for the purpose of monitoring smoke belching violations. Representatives from concerned government agencies, relevant sector organizations and civil society shall compose the membership of the oversight committee headed by the LTO.

Section 3. Deputation

The DOTC through LTO or DOTC- designated enforcement unit(s) may deputize qualified government employees, LGUs, government agencies and private entities to conduct roadside inspection and to apprehend vehicles which do not comply with the in-use standards set forth in these Implementing Rules and Regulations.

The deputized agents shall undergo a mandatory training on emission standards and regulations. For this purpose, the Department, together with the DOTC through LTO or DOTC- designated enforcement unit(s), DTI, DOST, the Philippine National Police (PNP) and other concerned agencies and private entities shall design a training program. The DOTC through LTO or its designated enforcement unit(s), together with the Department shall oversee the training program. This 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 4. Apprehension and Impounding of Vehicles Exceeding Emission Limits

Pursuant to Section 46 of the Act, the procedure for apprehension and impounding of motor vehicles which emit pollutants beyond the allowable limits shall be as follows:

a) A vehicle suspected of violation of emission standards through visual signs shall be flagged down by the apprehending officer.

b) The apprehending officer shall conduct an emission test of the vehicle using portable emission testing equipment and using test procedures given in Annex B and Annex C, to determine whether the vehicle complies with the emission standards. Should the results show an exceedance of the emission limits, the computerized print-out, or other test result generated by the portable emission testing equipment shall serve as prima facie evidence of violation of the emission standards.

c) Should the test result show that there is an exceedance of the standards, a ticket will be issued to the driver and a warrant of constructive or actual distraint to any owner of the motor vehicle as provided for in Republic Act 4136 shall commence unless the vehicle has been previously found violating the standards three (3) or more times within the last 365-day period. In the latter case, the motor vehicle registration shall be suspended for a period of one (1) year.

d) Upon payment of the fine at the DOTC through LTO or DOTC- designated enforcement unit(s) or deputized agency or private entity, the vehicle plate(s) will be surrendered to the apprehending officer and the driver will be issued a temporary pass allowing him to take possession of the vehicle for the purpose of undertaking the needed repairs within a period not later than seven (7) days from the date the vehicle is temporarily released.

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

f) When the repairs are made, the vehicle must undergo an emission test at a DOTC/LTO testing center or its authorized and accredited emission testing center to ascertain if it already meets the emission standards.

g) Once the vehicle meets the standards, the DOTC/LTO testing center or its authorized and accredited emission testing center shall issue a Certificate of Emission Compliance to the driver of the vehicle. The CEC will have no validity period, its sole purpose is to secure the release of the impounded vehicle or the vehicle license plates, whichever is applicable and which were confiscated as a consequence of that specific violation.

h) Upon presentation of the Certificate of Emission Compliance, the driver shall recover his vehicle or his vehicle plates, whichever is applicable, from the DOTC through LTO and/or DOTC- designated enforcement unit(s) which has custody over the vehicle or vehicle plates.

Further refinement of the apprehension procedure stated in the Act shall be developed and/or approved by the DOTC. All apprehensions shall be made strictly adopting the above procedure. Failure of enforcers to observe said procedure shall merit review of the apprehension by the adjudication service and/or waiver of fines and penalties.

Section 5. Appellate Procedure

In the event the driver of the apprehended vehicle contests the fine imposed and/or the violation of emission standards, he may appeal the same with the DOTC-designated Traffic Adjudication Service where he will be given the opportunity to be heard.

Section 6. Self-Regulation

The DOTC shall encourage self-regulation among transport stakeholders. The DOTC shall encourage private sector initiated projects which integrate preventive maintenance, driver training, sealing of injections pumps, pre-registration testing, and modified apprehension procedures to reduce smoke belching.

Section 7. Data Collection and Management

The DOTC/LTO shall improve its system of managing and collecting data from the Motor Vehicle Inspection Stations and from roadside inspection / apprehensions for violation of emission standards. The ongoing

computerization of LTO vehicle registration shall be linked to the MVIS and roadside inspection data base to be established.

Section 8. Certification of Emission Test Equipment.

To ensure proper and effective enforcement of the vehicle emission standard, the Department, through the Bureau, shall certify the conformity to standards of emission test equipment before it can be used for mandatory emission tests.

PART X
FUELS, ADDITIVES, SUBSTANCES AND POLLUTANTS

RULE XXXVI STANDARDS FOR FUELS AND ADDITIVES

Section 1. Mechanism for Setting Fuel Specifications

Pursuant to Section 26 of the Act, the Department of Energy (DOE), co-chaired by the Department, 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, within six (6) months from the effectivity of these Implementing Rules and Regulations, 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 set-forth pursuant to this section shall be adopted by the BPS as Philippine National Standards (PNS).

Section 2. Specification of Allowable Additive Content

The DOE shall 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 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.

Section 3. Fuel Specifications

The fuel formulations shall meet, among others, the following specifications set in Table 19 on or before the deadline set forth in the Act:

Table 19
Fuel Specifications

Fuel	Property	Limit	Effectivity
Unleaded Gasoline	Aromatics	45% max 35% max	Jan. 1, 2000 Jan. 1, 2003
	Benzene	4% max 2% max	Jan. 1, 2000 Jan. 1, 2003
	Anti-Knock Index	87.5 min	Jan. 1, 2001
	Reid Vapor Pressure	9 psi max	Jan. 1, 2001
Automotive Diesel Fuel	Sulfur	0.20% max 0.05% max	Jan. 1, 2001 Jan. 1, 2004
	Cetane No./Index	48 min	Jan. 1, 2001
Industrial Diesel Fuel	Sulfur	0.30% max	Jan. 1, 2001

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.

Section 4. Review and Revision of Fuel Specifications

Every two (2) years thereafter or as the need arises and subject to public consultations, 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.

Section 5. Monitoring Compliance through Fuel Sampling

Compliance with the fuel specifications set in the Act shall be monitored through fuel sampling. Guidelines and procedures for the conduct of fuel sampling shall be developed by the DOE within six (6) months from the

effectivity of these Implementing Rules and Regulations. Such guidelines and procedures shall, among others, consider the following:

(a) Fuel samples collected must be truly representative of the fuel sampled.
(b) The chosen sampling procedure must be suitable for sampling fuel under definite storage, transportation, and container conditions.
(c) Samples must be obtained in such a manner and from such locations in the tank or other container that the sample will be truly representative of the gasoline.
(d) It must be ensured that the samples represent the general character and average condition of the fuel.
(e) Care should be taken in collecting and storing samples in containers that will protect them from changes in content such as loss of volatile fractions by evaporation or leaching into the container.

Monitoring results shall be made available to the public through an annual report to be published by the DOE.

RULE XXXVII REGULATION OF FUELS AND ADDITIVES

Section 1. Agencies Responsible for Regulating Fuels and Additives

The DOE, in coordination with the Department and the BPS, shall regulate the use of any fuel or fuel additive.

Section 2. Registration of Fuels and Additives

No manufacturer, processor or trader of any fuel or additive may import, sell, offer for sale, or introduce into commerce such fuel or additive unless the same has been registered with the DOE. Prior to registration, the manufacturer, processor or trader shall provide the DOE with the following relevant information:

(a) Product identity and composition to determine the potential health effects of such fuels and additives;
(b) Description of the analytical technique that can be used to detect and measure the additive in any fuel;
(c) Recommended range of concentration; and
(d) Purpose in the use of the fuel and additive.

The DOE shall issue a separate regulation or circular detailing registration procedures, including but not limited to report formats and submission deadlines, within (6) months from the adoption and publication of these Implementing Rules and Regulations.

Section 3. Information Database

The DOE shall develop an information database of registered fuels and additives and other related data which shall be accessible to the public provided that information which are in the nature of trade secrets shall be subject to the non-disclosure and confidentiality agreement in Section 4 of this Rule.

Section 4. Non-disclosure and Confidentiality Agreement

Information on fuels and fuel additives registered with the Department of Energy which are considered trade secrets shall be covered by a non-disclosure and confidentiality agreement between the company and the Department of Energy for a period of fifteen (15) years.

RULE XXXVIII PROHIBITED ACTS

Section 1. Misfuelling

In order to prevent the disabling of any emission control device by lead contamination, no person shall introduce or cause or allow the introduction of leaded gasoline into any motor vehicle equipped with a gasoline tank filler inlet and labeled “unleaded gasoline only”. This prohibition shall also apply to any person who knows or should know that such vehicle is designed solely for the use of unleaded gasoline.

Section 2. Manufacture, Import, and Sale of Leaded Gasoline and of Engines and/or Components, Requiring Leaded Gasoline

Effective December 23, 2000 no person shall manufacture, import, sell, offer for sale, introduce into commerce, convey or otherwise dispose of, in any manner leaded gasoline and engines and components requiring the use of leaded gasoline.

Section 3. Manufacture, Import and Sale of Fuels Not According to Legally Prescribed Specifications

The manufacture, importation and sale of fuels which do not meet the specifications prescribed in these Rules and Regulations or which may be prescribed by the DOE in the future is prohibited, except where the fuel is intended for export to a country which allows fuel specifications lower than are prescribed in the Philippines.

RULE XXXIX OZONE-DEPLETING SUBSTANCES

Section 1. Enforcement of Philippine Ozone Depleting Substances Phase Out Schedule

Consistent with the terms and conditions of the Montreal Protocol on Substances that Deplete the Ozone Layer and other international agreements and protocols to which the Philippines is a signatory, the Department through the Bureau shall enforce the Philippine Ozone Depleting Substances (ODS) Phase Out Schedule as published in the June 27, 2000 editions of the Manila Times, Business World, Philippine Star, Manila Bulletin, Peoples Balita, and Abante.

Section 2. Revision of the List of Ozone Depleting Substances

When necessary, the Bureau shall revise the list of substances which are known to cause harmful effects on the stratospheric ozone layer which was initially published pursuant to Section 30 of the Act.

RULE XL GREENHOUSE GASES

Section 1. National Plan for Reduction of Greenhouse Gas Emissions

The Department through the Bureau, together with concerned agencies and local government units, shall, within one (1) year from the effectivity of these Implementing Rules and Regulations, prepare and implement a national plan consistent with the United Nations Framework Convention on Climate Change and other international agreements, conventions and protocols on the reduction of greenhouse gas emissions.

RULE XLI PERSISTENT ORGANIC POLLUTANTS

Section 1. National Action Plan

The Department through the Bureau, together with concerned agencies and local government units, shall, within one (1) year from the effectivity of these Implementing Rules and Regulations establish an inventory list of all sources of Persistent Organic Pollutants (POPs) in the country.

Section 2. National Programs on Reduction and Elimination of POPs

Pursuant to Section 32 of the Act, the Bureau shall, within one (1) year after the establishment of the inventory list referred to in the preceding section, design and implement a national government program on the reduction and elimination of POPs such as dioxins and furans.

RULE XLII RADIOACTIVE EMISSIONS

Section 1. Regulation on Atomic and/or Nuclear Energy Use

The Philippine Nuclear Research Institute (PNRI), in coordination with the Bureau and other concerned government agencies, shall regulate all projects which will involve the use of atomic and/or nuclear energy, and will entail release and emission of radioactive substances into the environment, incident to the establishment or possession of nuclear energy facilities and radioactive

materials, handling, transport, production, storage, and use of radioactive materials.

RULE XLIII HAZARDOUS AIR POLLUTANTS

Section 1. Designation and Management of Hazardous Air Pollutants

The Department through the Bureau shall issue and maintain a list of hazardous air pollutants and required control measures. The list and control measures shall be source-specific by industry and shall be designed to protect Filipinos from unnecessary risk to health or welfare. Compounds shall be considered for inclusion on the list as reasonable data or information become available.

PART XI
INSTITUTIONAL MECHANISMS

RULE XLIV IMPLEMENTING AGENCIES

Section 1. The Department

The Department is the primary government agency responsible for the implementation and enforcement of the Act. The Department shall have the following authority, among others:

(a) To promulgate rules and regulations as may be necessary to implement the intent and provisions of the Act;
(b) To closely supervise all or parts of the air quality action plans until such time that the local government concerned can assume the function to enforce the standards set by the Department;
(c) To revise, from time to time, the designation of airshed utilizing eco-profiling techniques and undertaking scientific studies;
(d) To designate areas where specific pollutants have already exceeded ambient standards as non-attainment areas and to revise the designation of such areas after consultation with local government authorities, non-government organizations (NGOs), people's organization (POs) and concerned sectors;
(e) To administer the Air Quality Management Fund;
(f) To establish a National Research and Development Program for the prevention and control of air pollution, in coordination with the Department of Science and Technology (DOST), other agencies, the private sector, the academe, NGOs and POs;

(g) To institute administrative proceedings pursuant to Section 40 of the Act;
(h) To impose fines, through the Pollution Adjudication Board, for violations of standards for stationary sources;
(i) To exercise such other authority vested by the Act and as provided for in these Implementing Rules and Regulations.

The Secretary may delegate such authority and other powers and function to the Director.

Section 2. The Bureau

The Environmental Management Bureau shall be a line bureau primarily responsible for the implementation and enforcement of the Act pursuant to Section 34 thereof. It shall be comprised of a Central Office and the necessary regional, provincial and such other offices as may be established in pertinent administrative orders issued by the Secretary. The Bureau shall establish and operationalize its regional offices within two (2) years from the effectivity of these Implementing Rules and Regulations. For this purpose, the Bureau shall reorganize and increase the number of its personnel to effectively implement the Act and the Implementing Rules and Regulations. The proposed line bureau staffing pattern shall be submitted to the Department of Budget ad Management for approval.

The Bureau shall have the following powers and functions, among others:

(a) To prepare annual National Quality Status Report pursuant to Section 6 of the Act;
(b) To design and develop, in cooperation with the National Statistical Coordination Board (NCSB), an information network for data storage, retrieval and exchange;
(c) To serve as the central depositary of all data and information related to air quality;
(d) To issue and, from time to time, revise information on air pollution control techniques upon consultation with the appropriate committees, government agencies and LGUs;
(e) To, in coordination with other concerned agencies, review and/or revise and publish annually a list of hazardous air pollutants with corresponding ambient guideline values and/or standard necessary to protect public health and safety, and general welfare;
(f) To design, impose on and collect regular emission fees from industrial dischargers as part of the emissions permitting system based on environmental techniques;

(g) To issue permit as it may determine necessary for the prevention and abatement of air pollution;
(h) To require program and project proponents to put up financial guarantee mechanisms to finance the needs for emergency response, clean-up or rehabilitation of areas that may be damaged during the program or project's actual implementation;
(i) To review, or as the need therefore arises, revise and publish emission standards to further improve the emission standards for stationary sources of air pollution as well as emission standards for motor vehicles;
(j) To have the right of entry or access to any premises including documents and relevant materials; to inspect any pollution or waste source, control devise, monitoring equipment or method required; and to test any emission;
(k) To require any person who owns or operates any emission source or who is subject to any requirement of the Act to (i) establish and maintain relevant records; (ii) make relevant reports; (iii) install, use and maintain monitoring equipment or methods; (iv) sample emission, in accordance with the methods, locations, intervals, and manner prescribed by the Department; and (v) keep records;
(l) To exercise such other powers and functions as provided by the law, the Act and these Implementing Rules and Regulations.

Section 3. Other Implementing Agencies

The other agencies primarily responsible for the implementation of the Act are the Department of Transportation and Communications, the Department of Energy, and the Department of Trade and Industry.

The DOTC shall have the authority to, among others:

(a) Implement the emission standards for motor vehicles pursuant to and as provided in the Act;
(b) Participate in the formulation of an Action Plan for the control and management of air pollution from motor vehicles;
(c) Contribute towards the establishment of procedures for inspection of motor vehicles, assist in the formulation and implementation of the National Motor Vehicle Inspection and Maintenance Program;
(d) Authorize private emission testing centers (duly accredited by DTI);
(e) Establish a roadside inspection system;
(f) Contribute towards design of training program for law enforcement officials and deputized agents on vehicle emission testing.

The DTI shall have the authority to, among others:

(a) Participate in the formulation of an Action Plan for the control and management of air pollution from motor vehicles;
(b) Contribute towards the establishment of procedures for inspection of motor vehicles, assist in the formulation and implementation of the National Motor Vehicle Inspection and Maintenance Program;
(c) Accredit private emission testing centers (duly authorized by the DOTC);
(d) Develop and implement standards and procedures for the certification of training institutions, instructors and facilities and licensing of qualified private service centers and their technicians;
(e) Prescribe regulations requiring the disclosure of odometer readings and use of tamper-resistant odometers, including tamper resistant fuel management systems.

The DOE shall have the authority to, among others:

(a) In coordination with other relevant agencies, set the specifications for all types of fuel and fuel-related products;
(b) Specify allowable content of additives in all types of fuel and fuel-related products;
(c) In coordination with the Department and BPS, regulate the use of any fuel or fuel additive.

RULE XLV ROLE OF LOCAL GOVERNMENT UNITS

Subject to Section 36 of the Act and pursuant to the Local Government Code (R.A. 7160) and other pertinent laws, the Local Government Units (LGUs) shall have the following roles within their respective territorial jurisdiction:

(a) To share the responsibility in the management and maintenance of air quality within their respective territorial jurisdiction;
(b) To implement air quality standards set by the Governing Board, consistent with Sections 7, 8 and 9 of the Act;
(c) To establish an Environment and Natural Resources Office (ENRO) in every province, city, or municipality which shall be headed by the environment and natural resources officer appointed by the chief executive of every province, city or municipality in accordance with the provisions of Section 484 of the R.A. 7160 and to exercise powers and duties set forth in Section 37 of the Act;
(d) To prepare and develop, with the assistance from the Department, an action plan consistent with the Integrated Air Quality Framework to attain and maintain the ambient of air quality standards within their respective airsheds as provided in Section 9 of the Act;

(e) To prepare and implement a program and other measures including relocation, whenever necessary, to protect the health and welfare of residents in the area;
(f) To develop and submit to the Department through the Bureau a procedure for carrying out the action plan for their jurisdiction, provided that the Department through the Bureau shall maintain its authority to independently inspect the enforcement procedure adopted;
(g) To perform such other powers and functions as may be provided by applicable laws, rules and regulations.

The Department shall provide the LGUs with technical assistance, training and a continuing capability-building program to prepare them to undertake full administration of the air quality management and regulations within their territorial jurisdiction.

RULE XLVI LINKAGE MECHANISM

Section 1. Participation of Other Organizations

The Department shall consult, participate, cooperate and enter into agreement with other government agencies, or with affected non-governmental (NGOs) or people's organizations (POs), or private enterprises in the furtherance of the objectives of the Act and these Implementing Rules and Regulations.

Section 2. Linkage with Coordinative Multisectoral Body

Pursuant to Section 35 of the Act, the Bureau shall endeavor to institutionalize consultation with a multisectoral commission tasked to coordinate the plans and efforts of government agencies and non-government organizations in addressing air pollution in an organized and systematic manner.

The Bureau shall study the creation of a multisectoral commission headed by the Secretary of the Department and composed of representatives from the following sectors: (1) government agencies involved in the task of air pollution control and management, (2) civil society, (3) business, (4) and other concerned sectors. The commission shall serve as an oversight body to ensure the systematic and effective management of air quality.

RULE XLVII RECORD-KEEPING, INSPECTION, MONITORING AND ENTRY

Section 1. Required Relevant Reports and Records

The Department through the Bureau or its duly accredited entity shall, after proper consultation and notice, require any person who owns or operates any emissions source or who is subject to any requirement of this Act to: (a) establish and maintain relevant records; (b) make relevant reports; (c) install, use and maintain monitoring equipment or methods; (d) sample emission, in accordance with the methods, locations, intervals and manner prescribed by the Bureau; (e) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; and (f) provide such other information as the Bureau may reasonably require.

Section 2. Right of Entry, Inspection and Testing

Pursuant to the Act, the Bureau, through its authorized representatives, shall have the right of:

(a) entry of access to any premises including documents and relevant materials as referred to in the herein preceding paragraph;
(b) inspect any pollution or waste source, control device, monitoring equipment or method required; and
(c) test any emission.

Section 3. Records Available to the Public

Any record, report or information obtained under this Rule shall be made available to the public, except upon a satisfactory showing to the Bureau by the entity concerned that the record, report or information, or parts thereof, if made public, would divulge secret methods or processes entitled to protection as intellectual property. Such record, report or information shall likewise be incorporated in the Bureau's industrial rating system.

RULE XLVIII PUBLIC EDUCATION AND INFORMATION CAMPAIGN

Section 1. Public Education and Information Campaign

A continuing air quality information and education campaign shall be promoted by the Department, the Department of Education, Culture and Sports (DECS), the Department of the Interior and Local Government (DILG), the Department of Agriculture (DA) and the Philippine Information Agency (PIA). Consistent with Section 7 of the Act, such campaign shall encourage the participation of other government agencies and the private sector including NGOs, POs, the academe, environmental groups and other private entities in the formulation and implementation of a multi-sectoral information campaign.

Section 2. Awareness Campaign for Mobile Sources

The enforcement and implementation of emission standards requires the active cooperation of the importers, local assemblers, owners/operators and users of all motor vehicles. To ensure the cooperation of these groups, there is a need for an intensified and sustained awareness raising campaign. Awareness raising will be focused on the transport sector and will concentrate in communicating: (i) the harmful impact of gas emission on general public and workers in the transport sector, (ii) the technological options available to the transport sector to prevent smoke belching; and (iii) the commitment of the government to fully enforce emission standards through strengthening of apprehension activities.

The advertising industry, the broadcasting industry and the print media shall participate and cooperate in the formulation and implementation of public awareness raising campaigns in connection with the emission standards without any profit to claim in connection with their involvement.

PART XII
ACTIONS

RULE XLIX ADMINISTRATION AND ENFORCEMENT

Section 1. Administration and Enforcement

These Implementing Rules and Regulations shall be administered by the Department and/or its authorized representatives or through other government agencies designated or deputized by the Department, or by this act, executive orders or memorandum circulars, and others.

Section 2. Rules and Regulations of other Government Agencies

The rules and regulations issued by other government agencies and instrumentalities for the prevention and/or abatement of pollution not consistent with this Act shall supplement the rules and regulations issued by the Department through the Bureau.

Section 3. Authentication with Official Seal

All decisions, orders and appropriate legal documents hereinafter promulgated shall be issued and authenticated with the official seal of the Department or other government agencies designated by this Act.

Section 4. Jurisdiction

The Department through the Bureau shall have exclusive and original jurisdiction to control and abate air pollution from stationary sources within the territorial jurisdiction of the Philippines.

The abatement of public nuisance as defined under the Civil Code of the Philippines and special laws shall not affect or stay the proceedings before the Department or the DOTC as the case may be, provided however, that the Department or the DOTC as the case may be, may at its discretion, take appropriate steps in the interest of justice and public welfare.

RULE L ADMINISTRATIVE ACTIONS AND PROCEDURES IN AIR POLLUTION CASES INVOLVING STATIONARY SOURCES

Section 1. Administrative Action

Without prejudice to the right of any affected person to file an administrative action, the Department shall, on its own instance or upon verified complaint by any person, institute administrative proceedings against any person who violates:

(a) Standards of limitation provided under this Act; or
(b) Any order, rule or regulation issued by the Department with respect to such standard or limitation.

Section 2. The Pollution Adjudication Board

The Pollution Adjudication Board (PAB) shall have sole and exclusive jurisdiction over all cases of air pollution, as defined in these Implementing Rules and Regulations, and all other matters related thereto, including the imposition of administrative sanctions, except as may be provided by law.

The PAB shall adopt and promulgate the rules of practice and procedure in air pollution cases from stationary sources under this Act. Unless

otherwise revised or amended, the existing rules of the PAB, PAB Resolution No. 1-C, Series of 1997, shall apply.

Section 3. Closure or Suspension of Development, Construction or Operations of a Stationary Source

In addition to the fines prescribed under the Act and these Implementing Rules and Regulations, the PAB shall order the closure or suspension of development, construction or operation of the stationary sources until such time that proper environmental safeguards are put in place; Provided, That an establishment found liable for a third offense shall suffer permanent closure immediately.

The Order of Closure or suspension is without prejudice to the immediate issuance of an ex parte order by the PAB for such closure, suspension or development or construction, or cessation of operations during the pendency of the pollution case before the PAB. Said ex parte order shall be based upon prima facie evidence that there is imminent threat to life, public health, safety or general welfare, or to plant or animal life, or whenever there is an exceedance of the emission standards set by the Department and/or the Board or the appropriate LGU.

Section 4. Fine Rating System

The PAB shall prepare a fine rating system to adjust the maximum fine prescribed under Section 45 of the Act based on the violator's ability to pay, degree of willfulness, degree of negligence, history of non-compliance and degree of recalcitrance subject to conditions set forth in the Act. In case of negligence, the first-time offender's ability to pay may likewise be considered by the PAB. In the absence of any extenuating or aggravating circumstances, the amount of fine for negligence shall be equivalent to one-half of the fine for willful violation.

RULE LI ACTIONS, PLEADINGS AND HEARING PROCEDURES FOR MOTOR VEHICLES BEFORE THE LTO

Section 1. Nature and Procedure

Subject to the basic requirements of due process, the proceedings herein provided shall be summary in nature. The technical rules of evidence obtaining in courts of law shall not bind the Traffic Adjudication Service of the LTO. The Rules of Court shall not apply in proceedings before the Board except in a supplementary character and only whenever applicable.

Section 2. Commencement of Action

Actions for any violation of any of the motor vehicle pollution control laws and/or these Implementing Rules and Regulations may be commenced by any person by filing a written complaint, or by the DOTC on its own initiative, or by the filing of a charge by any deputized agent of the DOTC before the hearing officer.

Section 3. Caption and Title

In all cases cognizable by the Traffic Adjudication Service, the full names of all parties, as far as they are known, shall be stated in the caption of the original pleadings, motion, resolution, order or decision and in all summons, notices and processes to be served upon them.

Section 4. Forms and Contents of Complaints and Charge Sheet

The complaint or charge sheet shall be in writing and drawn in clear and concise language, either in Filipino or in English. It shall recite the ultimate facts constituting the cause(s) of action and/or the violations of the motor vehicle pollution control laws and/or these Implementing Rules and Regulations, as well as all information pertinent thereto. It may specify the relief and such further remedies as may be deemed just and equitable, except that the charge sheet shall already include a notice requiring the Respondent to appear and answer the charge of the date, time and place indicated therein which shall not be less than one (1) day nor more than three (3) days from receipt hereof. In the case of a private complaint, the hearing officer shall set the case for hearing and require the Respondent to appear and answer the complaint on the date, time and place indicated in the notice of hearing which shall not be later than five (5) days from receipt thereof.

Section 5. Filing and Service of Complaint and Charge Sheet

The complaint or charge sheet shall be filed in two (2) copies before the Hearing Officer whose office covers the territorial jurisdiction where the Respondent was apprehended. The charge sheet shall be filed immediately, but

not later than twenty-four (24) hours from knowledge of the violation. Service of the copy upon the driver of Respondent, shall be deemed service to Respondent.

Section 6. Hearing on Apprehended Motor Vehicles

(a) As soon as the parties enter their appearances and manifest their readiness to proceed with the hearing of the case, the complainant shall be allowed to present evidence in support of the charge with the testimony of each witness taken under oath. Thereafter, the Respondent shall be allowed to present this evidence.
(b) If the case is commenced by the Secretary or its deputized agent, the hearing shall proceed directly with the presentation of results of the smoke meter or CO/HC tests as the case may be, and other evidence, after which the Respondent shall present his evidence.

In case of doubt, the Hearing Officer shall admit all the evidence presented, subject to the objections interposed, if there be any.

Section 7. Order/Decision

If the Respondent admits the charge, the Hearing Officer shall on that same day, issue an order imposing the appropriate fines and directing the grounding of the apprehended motor vehicle.

If the litigation of the case continues, the Hearing Officer shall decide the same within three (3) days from its submission. Said decision shall become final and executory if no appeal is taken therefrom to the Secretary within fifteen (15) days from notice thereof.

Only upon the presentation of the CEC and the official receipt certifying full payment of fines shall the grounded motor vehicle be released upon a written order duly issued by the Hearing Officer. The Hearing Officer shall then issue another order allowing the said motor vehicle to resume operation.

RULE LII CITIZEN SUIT

Section 1. Purposes

The purposes of this section are to:

(a) promote the participation of the citizens in the enforcement of the Act
(b) serve as a prod to government officials to take the necessary and appropriate action to abate and/or control pollution.

Section 2. Scope

The legal actions contemplated under this section are for civil and criminal remedies, the administrative action having been extensively treated in the preceding Rules.

Section 3. Party Defendants

The legal actions shall be against:

(a) Any private natural or juridical person, including government owned and controlled corporations, who violates or fails to comply with the provisions of this Act;
(b) Any Government agency which may issue any order or rules inconsistent with this Act. For this purpose, unless the inconsistency is so blatant as to manifest evident bad faith, the action available under this heading shall only be civil in nature, such as for declaratory relief and/or injunction. The government official who was made a respondent in said civil action shall be sued in his official capacity and shall not be liable for damages.
(c) Any public officer who willfully or grossly neglects to perform the duties provided for under the Act, or who abuses his authority or in any manner improperly performs his duties under the Act and its Implementing Rules and Regulations.

Section 4. Notice

The government official as well as the person in violation shall be given notice of thirty (30) calendar days to undertake the necessary measures to abate the pollution. This shall be a condition precedent to the filing of a civil or criminal case in court against the polluting establishment and against the government official concerned.

Section 5. Damages

Damages arising from illness, physical injury or damage to property as a result of air pollution may be included in the action filed against the government official concerned and the polluting establishment. In addition, failure to take action within the prescribed 30-day period may also be ground for the initiation of an administrative or criminal action against the government official concerned before the Office of the Ombudsman.

Section 6. Filing Fees

In coordination with the Supreme Court, the citizen suit under this Rule, including actual and moral damages alleged to have resulted from the air pollution, shall be exempt from filing fees and other court fees. The Supreme Court may also waive the payment of the nominal filing fee for actions not capable of pecuniary estimation (e.g., declaratory relief, prohibitory and mandatory injunction, etc). The fees shall however be recorded to enable the Court to collect the appropriate amount recovered by the plaintiff in the event a monetary judgment is rendered in favor of the plaintiff in the citizen suit.

Section 7. Bond

In coordination with the Supreme Court, where there is a prima facie showing by the plaintiff that the defendant establishment's emission is beyond the standards allowed by the law and these Implementing Rules and Regulations, or where there is a showing that the government official concerned has grossly neglected to perform his duty or has abused his authority, the Court shall exempt the plaintiff from the posting of a bond for the issuance of a restraining order or preliminary injunction.

Section 8. Malicious Actions

The Court shall, within thirty (30) days from receipt of the complaint, make a preliminary determination whether the case is malicious and/or baseless. The availability of technical data secured through the monitoring conducted by the Department through the Bureau, if any, or the presence of a photograph showing a visibly opaque emission shall be sufficient evidence to prove that the case is neither malicious nor baseless.

RULE LIII SUITS AND STRATEGIC LEGAL ACTIONS

Section 1. Duty of the Investigating Prosecutor

Where a suit is brought against a person who filed an action under the preceding Rule, or against any person, institution or government agency that implements the Act or these Implementing Rules and Regulations, it shall be the duty of the investigating prosecutor or the court, as the case may be, to immediately make a determination not exceeding thirty (30) days whether said legal action has been filed to harass, vex, exert undue pressure or stifle such legal resources of the person complaining or enforcing the provisions of the Act or these Implementing Rules and Regulations.

Section 2. Action of the Court

Upon determination made under the preceding section, if evidence warrants the same, the court shall dismiss the case and award attorney's fees and double damages.

Section 3. Scope

This Rule shall apply and benefit persons who filed an action under the preceding Rule or Section 41 of the Act and any person, institution or government agency that implements the Act or these Implementing Rules and Regulations. Further, it shall also apply and benefit public officers who are sued for acts committed in their official capacity, there being no grave abuse of authority, and done in the course of enforcing the Act or these Implementing Rules and Regulations.

PART XIII
FINES AND PENALTIES

RULE LIV FINES AND PENALTIES FOR VIOLATION OF STANDARDS FOR STATIONARY SOURCES

Section 1. Fines to Be Imposed

For actual exceedance of any pollution or air quality standards under the Act or these Implementing Rules and Regulations, the PAB shall impose a fine of not more than One Hundred Thousand Pesos (P 100,000.00) for every day of violation against the owner or operator of a stationary source until such time that the standards have been complied with.

The fines herein prescribed shall be increased by at least ten percent (10%) every three (3) years to compensate for inflation and to maintain the deterrent function of the fines.

Section 2. Gross Violation Defined

Gross violations of the Act or these Implementing Rules and Regulations shall mean:

(a) Three (3) or more specific offenses within a period of one (1) year;
(b) Three (3) or more specific offenses within three (3) consecutive years;

(c) Blatant disregard of the orders of the PAB, such as but not limited to the breaking of seals, padlocks and other similar devices, or operating despite the existence of an order for closure, discontinuance or cessation of operation;
(d) Irreparable or grave damage to the environment as a consequence of any violation or omission of the provisions of the Act or these Implementing Rules and Regulations.

Section 3. Penalties for Gross Violations

In case of gross violations of the Act or these Implementing Rules and Regulations, the PAB shall recommend to the proper government agencies the filing of appropriate criminal charges against the violators. The PAB shall assist the public prosecutor in the litigation of the case.

Offenders shall be punished with imprisonment of not less than six (6) years but not more than ten (10) years at the discretion of the court. If the offender is a juridical person, the president, manager, directors, trustees, the pollution control officer or officials directly in charge of the operations shall suffer the penalty herein provided.

Section 4. Lien Upon Personal and Immovable Property

Fines and penalties imposed pursuant to the Act or these Implementing Rules and Regulations shall be liens upon personal and immovable properties of the violator. Such lien shall, in case of insolvency of the respondent violator, enjoy preference subsequent to laborer's wages under Article 2241 and 2242 of Republic Act No. 386, otherwise known as the New Civil Code of the Philippines.

RULE LV FINES AND PENALTIES FOR VIOLATION OF STANDARDS FOR MOTOR VEHICLES

Section 1. Fines and Penalties for Violation of Vehicle Emission Standards

The driver and operator of the apprehended vehicle found to have exceeded the emission standards shall suffer the following penalties.

(a) First offense – a fine in the amount of one thousand pesos (P 1,000.00);
(b) Second offense – a fine in the amount of three thousand pesos (P 3,000.00); and

(c) Third offense –a fine in the amount of five thousand pesos (P 5,000.00) and the offender must undergo a seminar on pollution control and management conducted by the DOTC/LTO.

In case the third offense was committed within a year from the commission of the first offense, an additional penalty of suspension of the Motor Vehicle Registration (MVR) for a period of one (1) year shall be imposed.

Section 2. Fines for Violation of the Provisions of Section 21(d) of the Act

Any violation of the provisions of Section 21 paragraph (d) with regard to national inspection and maintenance program, including technicians and facility compliance shall be penalized with a fine of not less than thirty thousand pesos (P 30,000.00) or cancellation of license of both the technician and the center, or both, as determined by the DOTC.

RULE LVI FINES AND PENALTIES FOR VIOLATIONS OF OTHER PROVISIONS OF THE CLEAN AIR ACT

Section 1. Fines and Penalties for Violations of Other Provisions in the Act

For violations of all other provisions provided in the Act and these Implementing Rules and Regulations, fine of not less than Ten Thousand Pesos (P 10,000.00) but not more than One Hundred Thousand Pesos (P 100,000.00) or six (6) years imprisonment or both shall be imposed.

If the offender is a juridical person, the president, manager, directors, trustees, the pollution control officer or officials directly in charge of the operations shall suffer the penalty herein provided.

Section 2. Burning of Municipal Waste

Any person who burns municipal waste in violation of Sections 1 and 3 of Rule XXV shall be punished with two (2) years and one (1) day to four (4) years imprisonment.

Section 3. Burning of Hazardous Substances and Wastes

Any person who burns hazardous substances and wastes in violation of Section 1 of Rule XXV shall be punished with four (4) years and one (1) day to six (6) years imprisonment.

Section 4. Burning of Bio-Medical Waste.

Any person who burns bio-medical waste in violation of Section 4 of Rule XXV shall be punished with four (4) years and one (1) to six (6) years imprisonment.

Section 5. Smoking in Public Places

Any person who smokes inside a public building or an enclosed public place, including public utility vehicles or other means of public transport or in any enclosed area outside of his private residence, private place of work or any duly designated smoking area shall be punished with six (6) months and one (1) day to one (1) year imprisonment or a fine of ten thousand pesos (P 10,000.00).

Section 6. Manufacture, Importation, Sale, Offer for Sale, Introduction into Commerce, Conveyance or other Disposition of Leaded Gasoline.

Any person who manufactures, imports, sells, offers for sale, introduces into commerce, conveys or otherwise disposes of, in any manner leaded gasoline shall be punished with three (3) years and one (1) day to five (5) years imprisonment and liable for the appropriate fine as provided in Section 1.

Section 7. Manufacture, Importation, Sale, Offer for Sale, Introduction into Commerce, Conveyance or other Disposition of Engines and/or Engine Components Requiring Leaded Gasoline.

Any person who manufactures, imports, sells, offers for sale, introduces into commerce, conveys or otherwise disposes of, in any manner engines and/or engine components which require the use of leaded gasoline shall be punished with three (3) years and one (1) day to five (5) years imprisonment and liable for the appropriate fine as provided in Section 1.

Section 8. Manufacture, Importation, Sale, Offer for Sale, Dispensation, Transportation or Introduction into Commerce of Unleaded Gasoline Fuel which do not Meet the Fuel Specifications.

Any person who manufactures, sells, offers for sale, dispenses, transports or introduces into commerce unleaded premium gasoline fuel in violation of Section 3 of Rule XXXI or which do not meet the fuel specifications as revised by the DOE shall be punished with three (3) years and one (1) day to five (5) years imprisonment and liable for the appropriate fine as provided in Section 1.

Section 9. Manufacture, Importation, Sale, Offer for Sale, Dispensation, Transportation or Introduction into Commerce of Automotive Diesel Fuel which do not Meet the Fuel Specifications.

Any person who manufactures, sells, offers for sale, dispenses, transports or introduces into commerce automotive diesel fuel in violation of Section 3 of Rule XXXI or which do not meet the fuel specifications as revised by the DOE shall be punished with three (3) years and one (1) day to five (5) years imprisonment and liable for the appropriate fine as provided in Section 1.

Section 10. Manufacture, Importation, Sale, Offer for Sale, Dispensation, Transportation or Introduction into Commerce of Industrial Diesel Fuel which do not Meet the Fuel Specifications.

Any person who manufactures, sells, offers for sale, dispenses, transports or introduces into commerce industrial diesel fuel in violation of Section 3 of Rule XXXI or which do not meet the fuel specifications as revised by the DOE shall be punished with three (3) years and one (1) day to five (5) years imprisonment and liable for the appropriate fine as provided in Section 1.

Section 11. Manufacture, Processing, Trade of Fuel or Fuel Additive Without Prior Registration of the Fuel or Fuel Additive with the DOE.

Any person who manufactures, processes, or engages in the trade of any fuel or fuel additive without having the fuel or fuel additive registered with

the DOE shall be punished with two (2) years and one (1) day to four (4) years of imprisonment and liable for the appropriate fine as provided in Section 1.

Section 12. Misfuelling.

Misfuelling refers to the act of introducing or causing or allowing the introduction of leaded gasoline into any motor vehicle equipped with a gasoline tank filler inlet and labeled "unleaded gasoline only."

Any person who misfuels shall be punished with one (1) year and one (1) day to three (3) years imprisonment or a fine of twenty thousand pesos (P 20,000.00).

PART XIV
FINAL PROVISIONS

RULE LVII SEPARABILITY CLAUSE

Should any provision herein be subsequently declared unconstitutional, the same shall not affect the validity or the legality of the other provisions.

RULE LVIII REPEALING AND AMENDING CLAUSE

Department Administrative Order No. 2000-03 and all orders, rules and regulations inconsistent with or contrary to the provisions of these Implementing Rules and Regulations are hereby repealed or modified accordingly.

RULE LIX EFFECTIVITY

These Implementing Rules and Regulations shall take effect fifteen (15) days from the date of its publication in the *Official Gazzette* or in at least two (2) newspapers of general circulation.

Approved **: 07 November 2000**.

(Sgd.) ANTONIO H. CERILLES
Secretary

Prepared and Recommended for Approval by:

The Environmental Management Bureau

and
The Inter-Agency Technical Committee for the IRR of the Clean Air Act of 1999

(Sgd.) PETER ANTHONY A. ABAYA
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ANNEX A
AIR QUALITY INDICES

AIR QUALITY INDICES

Air Quality Indices. – The following shall describe the six (6) levels of air quality for suspended particulates, sulfur dioxide, photochemical oxidants or ozone, carbon monoxide, and nitrogen dioxide anywhere in the Philippines. Levels above those indicated, with the exception of TSP, shall be considered Emergency:

(a) Particulate Matter ($\mu g/m^3$)

(1) Total Suspended Particulates – (24-Hour Average)

Good	0 - 80
Fair	81 - 230
Unhealthy for sensitive groups	231 - 349
Very Unhealthy	350 - 599
Acutely unhealthy	600 - 899
Emergency	900 – and above

(2) PM_{10} [24-hour]

Good	0 – 54
Fair	55 – 154
Unhealthy for sensitive groups	155 – 254
Very Unhealthy	255 – 354
Acutely unhealthy	355 – 424
Emergency	425 – 504

(b) Sulfur Dioxide (ppm) [24-hour]

Good	0.000 – 0.034
Fair	0.035 – 0.144
Unhealthy for sensitive groups	0.145 – 0.224
Very Unhealthy	0.225 – 0.304
Acutely unhealthy	0.305 – 0.604
Emergency	0.605 – 0.804

(c) Ozone (ppm)
[8-hour]

Good	0.000 – 0.064
Fair	0.065 – 0.084
Unhealthy for sensitive groups	0.085 – 0.104
Very Unhealthy	0.105 – 0.124
Acutely unhealthy	0.125 – 0.374
Emergency	([1])

[1] When 8-hour O_3 concentrations exceed 0.374 ppm, AQI values of 301 or higher must be calculated with 1-hour O_3 concentrations.

[1-hour][2]

Good	-
Fair	-
Unhealthy for sensitive groups	0.125 – 0.164
Very Unhealthy	0.165 – 0.204
Acutely unhealthy	0.205 – 0.404
Emergency	0.405 – 0.504

[2] Areas are generally required to report the AQI based on 8-hour ozone values. However, there are a smaller number of areas where an AQI based on 1-hour ozone values would be more precautionary. In these cases, in addition to calculating the 8-hour ozone index value, the 1-hour index value may be calculated and the maximum of the two values is reported.

(d) Carbon Monoxide (ppm) [8-hour]

Good	0.0 – 4.4
Fair	4.5 – 9.4
Unhealthy for sensitive groups	9.5 – 12.4
Very Unhealthy	12.5 – 15.4
Acutely unhealthy	15.5 – 30.4
Emergency	30.5 – 40.4

(e) Nitrogen Dioxide (ppm) [1-hour]

Good	([3])
Fair	([3])
Unhealthy for sensitive groups	([3])
Very Unhealthy	([3])
Acutely unhealthy	0.65 – 1.24
Emergency	1.25 – 1.64

[1] NO_2 has no 1-hour term NAAQG.

Pollutant-Specific Cautionary Statements for the General Public.

(a) Particulate Matter ($\mu g/m^3$)

TSP and PM_{10} [24-hour]

Good	None
Fair	None
Unhealthy for sensitive groups	People with respiratory disease, such as asthma, should limit outdoor exertion.
Very unhealthy	Pedestrians should avoid heavy traffic areas. People with heart or respiratory disease, such as asthma, should stay indoors and rest as much as possible. Unnecessary trips should be postponed. People should voluntarily restrict the use of vehicles.
Acutely unhealthy	People, should limit outdoor exertion. People with heart or respiratory disease, such as asthma, should stay indoors and rest as much as possible. Unnecessary trips should be postponed. Motor vehicle use may be restricted. Industrial activities may be curtailed.
Emergency	Everyone should remain indoors, (keeping windows and doors closed unless heat stress is possible). Motor vehicle use should be prohibited except for emergency situations. Industrial activities, except that which is vital for public safety and health, should be curtailed.

(b) Sulfur Dioxide (ppm) [24-hour]

Good	None
Fair	None
Unhealthy for sensitive groups	People with respiratory disease, such as asthma, should limit outdoor exertion.
Very unhealthy	Pedestrians should avoid heavy traffic areas. People with heart or respiratory disease, such as asthma, should stay indoors and rest as much as possible. Unnecessary trips should be postponed. People should voluntarily restrict the use of vehicles.
Acutely unhealthy	People, should limit outdoor exertion. People with heart or respiratory disease, such as asthma, should stay indoors and rest as much as possible. Unnecessary trips should be postponed. Motor vehicle use may be restricted. Industrial activities may be curtailed.
Emergency	Everyone should remain indoors, (keeping

	windows and doors closed unless heat stress is possible). Motor vehicle use should be prohibited except for emergency situations. Industrial activities, except that which is vital for public safety and health, should be curtailed.

(c) Ozone (ppm)

Good	None
Fair	None
Unhealthy for sensitive groups	People with respiratory disease, such as asthma, should limit outdoor exertion.
Very unhealthy	Pedestrians should avoid heavy traffic areas. People with heart or respiratory disease, such as asthma, should stay indoors and rest as much as possible. Unnecessary trips should be postponed. People should voluntarily restrict the use of vehicles.
Acutely unhealthy	People, should limit outdoor exertion. People with heart or respiratory disease, such as asthma, should stay indoors and rest as much as possible. Unnecessary trips should be postponed. Motor vehicle use may be restricted. Industrial activities may be curtailed.
Emergency	Everyone should remain indoors, (keeping windows and doors closed unless heat stress is possible). Motor vehicle use should be prohibited except for emergency situations. Industrial activities, except that which is vital for public safety and health, should be curtailed.

(d) Carbon Monoxide (ppm)

Good	None
Fair	None
Unhealthy for sensitive groups	People with cardiovascular disease, such as angina, should limit heavy exertion and avoid sources of CO, such as heavy traffic.
Very unhealthy	People should stay indoors and rest as much as possible. Unnecessary trips should be postponed. People should voluntarily restrict the use of vehicles and avoid sources of CO, such as heavy traffic. Smokers should refrain from smoking.
Acutely unhealthy	People with cardiovascular disease, such as angina, should avoid exertion and sources of CO, such as heavy traffic, and should stay indoors and

	rest as much as possible. Unnecessary trips should be postponed. Motor vehicle use may be restricted. Industrial activities may be curtailed.
Emergency	Everyone should avoid exertion and sources of CO, such as heavy traffic; and should stay indoors and rest as much as possible.

(e) Nitrogen Dioxide (ppm)

Good	None
Fair	None
Unhealthy for sensitive groups	People with respiratory disease, such as asthma, should limit outdoor exertion.
Very unhealthy	Pedestrians should avoid heavy traffic areas. People with heart or respiratory disease, such as asthma, should stay indoors and rest as much as possible. Unnecessary trips should be postponed. People should voluntarily restrict the use of vehicles.
Acutely unhealthy	People should limit outdoor exertion. People with heart or respiratory disease, such as asthma, should stay indoors and rest as much as possible. Unnecessary trips should be postponed. Motor ehicle use may be restricted. Industrial activities may be curtailed.
Emergency	Everyone should remain indoors, (keeping windows and doors closed unless heat stress is possible). Motor vehicle use should be prohibited except for emergency situations. Industrial activities, except that which is vital for public safety and health, should be curtailed.

ANNEX B

EMISSION TEST PROCEDURE FOR REGISTERED OR IN-USE MOTOR VEHICLES EQUIPPED WITH SPARK-IGNITION ENGINES

Emission Test Procedure for In-Use Motor Vehicles Equipped with Spark-Ignition Engines

1. Scope
   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.
2. Test Equipment (Reference: ISO - 3930)
   a. Carbon monoxide analyzer - a NDIR (Non-dispersive Infrared) CO exhaust gas analyzer.
   b. Hydrocarbon analyzer - a NDIR HC exhaust gas analyzer, HC as hexane (C_6H_{14}).
   c. Tachometer - An easily installed and operated tachometer to measure engine speed (RPM).
3. Vehicle Preparation
   d. Set the vehicle transmission at neutral with the hand-brake engaged.
   e. Ensure that the idling speed or the engine rpm with the accelerator in the rest position, conforms with the vehicle manufacturer's recommendation.
   f. 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.
   g. Check that the temperature of the engine is at least $70^{o}C$; otherwise, run the vehicle for at least 15 minutes on a normal road before testing.
   h. Ensure that the vehicle exhaust system 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.
4. Measurement
   a. Immediately preceding the measurement, adjust the instrument to zero and accelerate the engine to about 2,500 rpm, using the tachometer, if available. Maintain this speed from ten (10) to fifteen (15) seconds, then release the pedal to return the engine at idle speed.
   b. While the engine idles, insert the sampling probe into the exhaust pipe as deeply as possible which shall not be less than thirty (30) cm. Wait for twenty (20) seconds and take the CO/HC reading.

c. 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.

5. Instrument Calibration, Adjustments (Reference: ISO 3929)
   a) 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.
   b) 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 non-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.
   c) 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.
   d) Ensure that the sample handling line and probe are free from contaminants.

ANNEX C

FREE ACCELERATION TEST FOR IN-USE COMPRESSION-IGNITION MOTOR VEHICLES **Free Acceleration Test for In-Use Compression-Ignition Motor Vehicles**

1. Scope
   The test is a smoke opacity measurement for in-use motor vehicles equipped with compression-ignition (diesel) engines, using the free acceleration from low idle speed method.
2. Motor Vehicle Test Condition
   a. 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.
   b. The combustion chamber should not have been cooled or fouled due to a prolonged period of idling preceding the test.
   c. The exhaust system shall not have any orifice or leaks wherein the gases emitted by the engine might be diluted.
3. Test Equipment
   The light-absorption coefficient of the exhaust gases shall be measured with an opacimeter satisfying the conditions laid down in ECE Regulation No. 24, Revision 2E/ECE/TRANS 505. Rev Add 23 Rev 2, Annex 8: Characteristics of Opacimeter.
4. Test Procedures and Smoke Opacity Measurement
   a. Follow the opacimeter manufacturer's instruction for on the proper installation, operation/use and checking the accuracy and calibration before and after each test.
   b. Set the vehicle gear-change control in the neutral position and the hand-brake effectively engaged.
   c. Start the engine and warm it up to its normal operating temperature.
   d. Accelerate the engine two to three times (2-3) prior to smoke sampling in order to remove deposits of soot and other carbon particles in the tail pipe.
   e. 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 smokemeter.
   f. The operation described in paragraph (4)(e) 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 each successive acceleration shall be noted until

stabilized values are obtained. The values read shall be regarded as stabilized when four (4) consecutive readings are within a hand width of 0.25 m^{-1} and do not form a decreasing sequence. The arithmetic mean of the four stabilized values shall be the test result for the concerned vehicle.

g. 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 measured do not differ by more than 0.15m^{-1}

   For motor vehicles designed with several exhaust outlets connected from one 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.

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

DENR Administrative Order
No. 2000 – 82
November 07, 2000

SUBJECT : Integrated Air Quality Improvement Frame-Work Air Quality Control Action Plan

Pursuant to Section 7 and 8 of Republic Act No. 8749, otherwise known as the Philippine Clean Air Act of 1999, the attached Integrated Air Quality Improvement Framework - Air Quality Control Action Plan is hereby adopted. The same shall serve as the official blueprint with which all government agencies must comply with to attain and maintain clean and healthy air.

This Order shall take effect immediately.

(Sgd.) ANTONIO H. CERILLES
Secretary

Prepared and Recommended for Approval by:

The Environmental Management Bureau
And The Inter-Agency Technical Committee for the
IRR of the Clean Air Act of 1999

(Sgd.) PETER ANTHONY A. ABAYA
Director, EMB
Chairman, Inter-Agency Technical Committee

INTRODUCTION

1.1. Purpose

This document is intended to provide a basis for development and understanding of rules supporting the implementation of the Philippine Clean Air Act (CAA) of 1999 (RA 8749). The CAA describes requirements for a comprehensive air pollution management and control program designed for the Republic of the Philippines.

1.2. General

In order to provide the basis for a comprehensive air pollution management and control program, the CAA requires that an Integrated Air Quality Improvement Framework (IAQIF) be developed. The IAQIF (provided in Part 2, below) defines goals and supporting management strategies and control measures intended to achieve healthful air in the Philippines, including:

- Emission reduction goals;
- Time period(s) for achieving emission reduction goals;
- Institutional framework to support the implementation of the IAQIF; and
- Other supporting elements, such as a description of economic incentives, collective action, and environmental education and information.

In addition, the CAA requires that a National Air Quality Control Action Plan (NAQCAP) be developed. The NAQCAP (provided in Part 3) is intended to spell out specific methods and means to achieve the intent of the CAA, using the strategy described in the IAQIF. The NAQCAP will include:

- Enforceable air emission limitations and a description of other control measures, considering the current situation and types of industries, emissions, and existing or anticipated new sources;
- Schedules and timetables for compliance;
- A description of a strategy to obtain, compile and analyze ambient air quality and other relevant data;
- A designation of airsheds (and criteria for definition of airsheds) to be utilized as part of the air quality management strategy;
- A description of a program to prevent significant deterioration of air quality, including use of economic incentives, management strategies, environmental education and dissemination of information;
- A description of a program to enforce the requirements of the CAA as embodied in the Implementing Rules and Regulations (IRR), with respect to pollution from area sources, stationary sources and mobile sources;
- A description of other measures necessary for the effective control and abatement of air pollution.

1.3. Acronyms

TABLE I
Acronym

AAQM	Ambient Air Quality Monitoring
AAQS	Ambient Air Quality Standards
ADB	Asian Development Bank
AQCAP	Air Quality Control Action Plan
AQls	Air Quality Indices
AQMF	Air Quality Management Fund
AWMA	Air and Waste Management Association
BOT	Build Operate Transfer
BPS	Bureau of Product Standards

CAA	Philippine Clean Air Act of 1990
CEM	Continuous Emission Monitoring
CFCERT	Committee on Fuel Conservation and Energy in Road Transport-
CNG	Compressed Natural Gas
CO	Carbon Monoxide
COC	Certificate of Conformity
CPAS	Computerized Permitting Administrative System
DBM	Department for Budget and Management
DECS	Department of Culture and Sports
DENR	Department of Natural Resources
DILG	Department of Interior and Local Government
DOE	Department of Energy
DOF	Department of Finance
DOH	Department of Health
DOJ	Department of Justice
DOST	Department of Science and Technology
DOTC	Department of Transportation and Communications
DPWH	Department of Public Works and Highways
DTI	Department of Trade ind Industry
EMB	Environmental Management Bureau
EMPs	Environmental Management Plan
EMS	Environmental Management System
ENRO	Environment and Natural Resources Office
EO	Executive Order
FY	Fiscal Year
GB	Governing Board
IAQIF	Integrated Air Quality Improvement Framework
IRS	Implementing Rules and Regulations for the CAA
LGUs	Local Government Units
LPG	Liquefied Petroleum Gas
LTO	Land Transportation Office (within DOTC)

MBIs	Market Based Instruments
MDPPA	Motor Cycle Development Program Participants Association
MMAQISDP	Metro Manila Air Quality Improvement Sector Development Program
MMDA	Metropolitan Manila Development Authority
MOA	Memorandum of Agreement
MVIS	Motor Vehicle Inspection Station
MVR	Motor Vehicle Registration
NAAQG	National Ambient Air Quality Guidelines for Criteria Pollutants
NAAQS	National Ambient Air Quality Standards – Source-Specific Air Pollutants
NAQAP	National Air Quality Action Plan
NAQCAP	National Air Quality Control Action Plan
NCR	National Capital Region
NEDA	National Economic Development Authority
NESSAP	National Emission Standards for Source-Specific Air Pollution
NGO	Non-government Organizations
NSCB	National Statistical Coordination Board
NTRC	National Tax and Revenue Committee
PAB	Pollution Adjudication Board
PCMU	Program Coordination and Monitoring Unit
PEPP	Philippine Environmental Partnership Program
PIP	Philippine Institute of Petroleum
PM	Particular Matter
PNS	Philippines National Standards
POs	Private Organizations
PCSD	Philippine Council for Sustainable Development
SIDA	Swedish International Development Agency
SVPCF	Special Vehicle Pollution Control Fund
TA	Technical Assistance
TC	Technical Committee

TOR	Terms of Reference
TSP	Total Suspended Particulars
US EPA	United States Environmental Protection Agency
USAEP	United States-Asia Environmental Partnership Program

2. INTEGRATED AIR QUALITY IMPROVEMENT FRAMEWORK

2.1. Goal

2.1.1. General

The primary goal of the CAA is to achieve and maintain healthful air for all areas of the Philippines. Healthful or "healthy" air meets (has pollutant levels less than or equal to) the National Ambient Air Quality Guidelines for Criteria Pollutants, as defined in Section 12a of the CAA, or as subsequently amended. Recognizing that manmade air pollution is largely caused by economic activity (transportation, manufacturing, etc.), a parallel goal is to achieve the primary goal while minimizing associated negative impacts on the economy of the Philippines. In summary, the goal of the CAA is to: achieve **and maintain air quality that meets the National Ambient Air Quality Guidelines for Criteria Pollutants, throughout the Philippines, while minimizing possible associated negative impacts on the economy of the Philippines.**

This Framework document describes a National Air Quality Management System, designed to achieve the goal of the CAA.

2.1.2. Compliance Schedule for Ambient Air Quality

The schedule for achievement: of healthy air will be set on an airshed-specific basis, and is based upon the degree of difficulty anticipated in achieving compliance with the National Ambient Air Quality Guidelines for Criteria Pollutants in each airshed that is designated as a non-attainment area for one or more pollutant. Airsheds, “attainment areas" and "non-attainment areas" are discussed below.

The following preliminary compliance schedule for achievement of the National Ambient Air Quality Guidelines may be revised from time to time. The responsibility for such revisions rests with EMB who will carry out broad consultations before making such revisions. For examples review and possible revision of the schedule will occur after a baseline study of ambient air conditions in the Philippines has been completed. The baseline study, together with meteorological and other data, will be utilized as inputs for a program of dispersion modeling, designed to assess present and future air quality in each airshed, and to define or confirm the definition of the airsheds. Further revisions may follow after more regular monitoring data become available on ambient air quality, after the capacity for ambient air quality monitoring has been strengthened. The preliminary compliance schedule is estimated as follows:

- "Moderate" non-attainment areas: 10 years from the date of promulgation of the IRR for the CAA.
- "Severe" non-attainment areas: 20 years from the date of promulgation of the IRR for the CAA.

Definitions of "Moderate" and "Severe" non-attainment will be based amongst others on criteria established in Air Quality Indices[1].

2.2. Partnership Approach to Healthy Air

The CAA envisions a multisectoral participatory approach to the achievement and maintenance of healthy air in the Philippines. Key features of this approach are (i) the solicitation of ideas and comments from the private sector, including representatives of industry, NGOS, and the general public; (ii) the public disclosure of large amounts of information; (iii) the introduction of citizen suits, which will allow concerned citizens to become actively involved in addressing non-compliance. In addition the CAA calls for the establishment of multisectoral governing boards to oversee the planning and implementation of air quality management policies in individual airsheds. Making the IAQIF a successful reality will be aided by linking to ongoing multisectoral initiatives such as the Philippine Environment Partnership Program (PEPP)[2]. Consistent with the PEPP, the National Air Quality Management System will encourage dialogue with industry, LGUs, NGOs and the general public to facilitate implementation of the requirements of the CAA.

[1] like the air quality indices established in DAO 14.

2 This is a government-industry partnership initiative, established by the DENR through the EMB, with support from other relevant Government Agencies, institutions, the business community and other stakeholder groups

2.3. Basic Concepts

2.3.1. Airsheds

Airsheds (geographic areas with similar characteristics pertinent to air quality) will be defined for the purpose of assessing and managing air quality. These "similar characteristics" include factors such as climate, meteorology and topology that affect the interchange and diffusion of pollutants in the air.

2.3.2. Attainment and Non-Attainment Areas

Airsheds, or parts of airsheds, will be designated as "attainment areas" (in conformance with National Ambient Air Quality Guidelines for Criteria Pollutants[3]) or as "non-attainment areas" (areas that do not conform to the Guidelines). Attainment will be determined based on airshed ambient air quality as reported in annual Air Quality Status Reports that will be generated for each airshed.

An airshed, or parts of it, may be a non-attainment area for one or more Criteria Pollutants and an attainment area for the remaining Criteria Pollutants.

The overall air pollution control/management program, including the general relationship of attainment areas, non-attainment areas, and air emissions source requirements is depicted in Figure 1.

3 Criteria Pollutants are those which have been defined in Schedule 1 of Section 12 of the Clean Air Act.

2.3.3. National Air Quality Management System; Permits

The IAQIF envisions a national air quality management system to manage and enforce the requirements of the CAA and its IRR. A fundamental tool under this national air quality management system will be the concept that all sources of air pollutant emissions will require a permit to operate. In the case of stationary sources, the permit will contain operational and other requirements designed to assure compliance of the emissions source with the relevant provisions of the CAA and its IRR. For mobile sources, the permit to operate will incorporate in the vehicle registration. The procedures to register the vehicle for the first time and the subsequent annual renewal of the registration include requirements to be met to ensure compliance with the emission standards outlined in the CAA and IRR. Area sources are currently not yet regulated by permits. EMB will study the desirability and feasibility to introduce a permit system to deal with area sources of pollution.

2.4. Stationary Sources

2.4.1. General

All stationary sources of air emissions must comply with National Emission Standards for Source Specific Air Pollution (NESSAP) and Ambient Air Quality Standards (AAQS) pertaining to the source. Additional requirements are summarized in the following paragraphs, "Stationary Sources" may generally be defined as individual points of air emissions (e.g. smokestacks).

2.4.2. Existing Stationary Sources in an Attainment Area

Existing stationary sources of air emissions located within an attainment area for a particular pollutant or pollutants will be required to pay a fee for the mass rate of emissions for those pollutants. At the discretion of EMB, an existing stationary source located in an attainment area may be considered to consist of a group of emissions points (facilitating source averaging or the "bubble" approach to air emissions compliance).

2.4.3. New or Modified Stationary Sources in an Attainment Area

New or modified stationary sources of air emissions that are located within an attainment area will be required to control their emissions to achieve emissions control requirements as defined in the IRR using the "Best Available Control Technology," New or modified stationary sources of air emissions located within an attainment area will be required to pay a fee for the mass rate of air emissions (pollutants) of the source. No new source may be constructed or existing source modified if emissions from the proposed source or modification will, based on computer dispersion modeling, result in an exceedance of the National Ambient Air Quality Guideline Values; or an increase in existing ambient air levels above the increment levels defined in the IRR.

2.4.4. Existing Stationary Sources in a Non-Attainment Area

Existing stationary sources of air emissions located within a non-attainment area for a particular pollutant or pollutants will be required to pay a higher fee for the mass rate of emissions for those pollutants than for equivalent sources of air emissions located within an attainment area.

2.4.5. New or Modified Stationary Sources in a Non-Attainment Area

New or modified stationary sources of air emissions located within a non-attainment area will be required to demonstrate a reduction of air emissions (for the particular pollutant(s) that cause the designation of non-attainment) within the non-attainment area such that the reduction exceeds by a specified amount the new emissions that will be caused by the new source. In this way, the total emissions in the non-attainment area will gradually be reduced over time, until the goal of attaining healthy air is attained.

In addition, more stringent emissions control standards will be applied to new sources located within a non-attainment area, including a requirement for the use of relevant air. pollution control technology that will provide the "Lowest Achievable Emission Rate" of the pollutant for which the area is designated non-attainment,

New or modified stationary sources of air emissions located within a non-attainment area for a particular pollutant or pollutants will be required to pay a higher fee for the mass rate of emissions for those pollutants

than would be the case for equivalent sources of air emissions located within an attainment area.

2.4.6. Permitting

New or modified sources of air emissions will be required to obtain a formal "authority to construct" before physical construction of the new source is permitted to proceed. The application for the authority to construct must demonstrate that the new or modified source will meet applicable air emissions requirements under the CAA, as promulgated in the IRR.

Existing and new or modified sources of air emissions will be required to obtain a permit to operate. The permit application must demonstrate that the source will meet applicable air emissions requirements under the CAA, as promulgated in the IRR. In the case of new or modified sources, the authority to construct will be converted to a permit to operate, upon a demonstration that the conditions of the authority to construct (especially regarding air emissions) have been met.

2.4.7. Economic Incentives

In order to induce continuing reductions in air emissions, stationary sources of such emissions will be required to pay fees for the mass of pollutants that they emit to the atmosphere. The fees will be determined based on the type of pollutant, the mass emission rate at the source, and the type of airshed (attainment or non-attainment) into which the emissions occur. Higher fees will be charged for

emissions located within a non-attainment area. A schedule of fees for mass emissions for various pollutants may also be developed on an airshed-specific basis.

Fees will be paid into the Air Quality Management Fund, which will ensure that money raised will actually be used for air quality management purposes.

Mass emission rates for a particular source shall be calculated using one of the following procedures:

(1) Measure concentrations of pollutants at the point of emission. Measure volumetric flow rate associated with these emissions. Determine approximate relationship between air emissions source operation or production rate, and observed emissions and volumetric flow rate. Based on annual production or operation data, calculate annual mass emissions rate for applicable pollutants.
(2) Estimate annual mass emissions rate for applicable pollutants based on fuel usage and type, or other relevant parametric data. Such estimates shall be based on a "conservative" approach, using EMB-approved, recognized procedures or algorithms, so as to avoid underestimating actual mass emissions rates.

This approach provides two types of economic incentives to owners of air emissions sources:

- An incentive to measure actual emissions using stack sampling or continuous emissions monitoring (CEM) techniques, and to provide

verifiable analytical and other data related to the stack sampling or CEM results to the EMB. This incentive is based on the expectation that directly-measured air mass emissions rates using procedure (1) above will be lower than those conservatively estimated emissions based on parametric data using procedure (2). Because fees are associated with mass emissions rates, a reduction in fees will be associated with a reduction in the mass emission rate from a conservatively estimated level to a (lower) directly-measured level.

- An incentive to continue to reduce actual air mass emissions rates, based on the cost of fees associated with the air mass emissions rates.

As noted above, a higher fee for mass emission rates for a particular pollutant will be charged for sources located in a non-attainment area for that pollutant.

In addition, the CAA envisions tax incentives (e.g. tax credits and/or accelerated depreciation deductions) for owners of facilities that install or retrofit qualifying (approved by EMB for this purpose) air pollution control devices that reduce air pollution.

2.4.8. Emissions Credits

New or modified stationary sources of air emissions located within a non attainment area will be required to demonstrate a reduction of air emissions (for the particular pollutant(s)

that caused the designation of non-attainment) within the non-attainment area such that the reduction exceeds the new emissions that will be caused by the new source. A program defining credits based on the air mass emissions rate reductions will be developed and implemented by EMB. EMB shall have responsibility to certify the resulting credits. Upon certification, such credits can be purchased or traded, and utilized to demonstrate the required reduction of air emissions, necessary to obtain the authority to construct a new air emissions source in non-attainment area.

In an attainment area, an existing facility can purchase air emissions credits as part of a compliance plan to meet the emissions requirements of the IRR. This will not be allowed in non-attainment area.

2.4.9. Flexibility in Permitting process; Compliance Sequence

An existing facility (stationary source) shall submit to the Bureau Regional Office, where the facility is located a self-monitoring report of its emission rates, indicating the status of compliance with the requirements of the Clean Air Act Implementing Rules & Regulations. The self-monitoring report shall be submitted to the Bureau Regional Office within six months of the effectivity of these Implementing Rules

and Regulations, and within six months of each official revision of emission standards applicable to the source. The Bureau Regional Office may also inspect the facility and check the facility's emission rates.

The Bureau will issue a notification of non-compliance with the facility, if the facility is not in compliance with the requirements of the implementing Rules & Regulations. A facility that is not in compliance shall take action to achieve compliance. Such a facility is required to submit a "Compliance Plan" with the Bureau Regional Office. A Compliance Plan is a plan submitted to the Bureau Regional Office for approval which details how an existing stationary air emissions source will be brought into compliance. The owner of the facility must submit the plan within two months of notification of non-compliance by the Bureau. The plan must include a schedule that will be enforceable.

The Compliance Plan for a facility located in an attainment area is required to achieve compliance within a period of time as set forth in the approved Compliance Plan schedule. This period of time may be up to 18 months from the date of notification of non-compliance. A facility located in a non-attainment area is required to achieve compliance within 12 months of the date of notification of non-compliance, if the facility is out of compliance with requirements for one or more of the pollutants for which the area is designated as non-attainment.

The Bureau may grant an extension of up to 12 months for good-faith actions from the source owner , for a facility located in an attainment area. An extension will not be granted for a facility located in a

non-attainment area, if the facility is out of compliance with requirements for one or more of the pollutants for which the area is designated as non-attainment.

Should a facility fail to comply with the schedule provided in its Compliance Plan, or otherwise fail to comply with the requirements of the Implementing Rules & Regulations (such as failing to submit a self-monitoring report within the specified period) the Department through the Pollution Adjudication Board (PAB) may take enforcement action against the facility or its owner. In this case, if the owner enters into a Consent Agreement with the Department, the Department through the PAB may waive certain penalties or fines to be imposed upon stationary sources proven to exceed emission rates provided that the Consent Agreement includes enforceable provisions indicating that the responsible party shall:

a) Implement an Environmental Management System (EMS) within eighteen (18) months of entering into said agreement using scope and procedures specified in Philippine National Standard 1701 on establishing an EMS;

b) Submit an approvable Environmental Management Plan (EMP) derived from the EMS process within six (6) months of entering into a Consent Agreement, The EMP shall specify a timetable for attaining compliance with all environmental regulations as well as the means with which to accomplish compliance, with emphasis on pollution prevention methods and not limited to installation of pollution control devices; and

c) Post a performance bond acceptable to the PAB, not to exceed P500,000 but not less that P50,000 depending on the size of the facility, which shall be forfeited upon failure to submit proof of an approved EMS within eighteen (18) months, and provided that an extension of not more than twelve (12) months may be allowed by the Bureau Regional Office on meritorious grounds.

The Consent Agreement shall incorporate requirements for environmental performance through timetables and reporting of performance, in addition to commitments and procedures adopted in the EMP. Sources proposing timetables longer than eighteen (18) months for reaching compliance shall be required to first conduct a public consultation before the Consent Agreement may be finalized.

The compliance sequence described above is depicted in Figure 2.

2.5 Sources

2.5.1. General

A program of permitting and monitoring, coupled with emissions control requirements, will be established for mobile sources, of air emissions. This is intended to control pollution from motor vehicles. Compliance with emissions limits must be demonstrated for each vehicle as described below. Furthermore, through the imposition of specific fuel standards a contribution will be made as well to reduce emissions from mobile source.

2.5.2. Emission Standards

Emission standards are in place already to control the release of harmful pollutants by motor, vehicles. These standards set the maximum emission limits for gaseous and other pollutants which motor vehicles must not exceed. Motor vehicle emissions of Carbon Monoxide (CO), Hydrocarbons (HC), NOx, and Particulate Matter (PM) are regulated by the standards. It is the policy of the Department to gradually adopt more strict standards.

New vehicle types will be subjected to type approval standards. The current standards adopted in the Philippines as well as the proposed future standards are commonly know as the ECE standards. At present all new light duty vehicles are required to comply with ECE regulation R. 15-04. With effect from 1 January 2003 Euro 1 standards will be adopted, this requires compliance with standards as formulated in European Union Directives 91/441, 93/59 and 91/542 (Step 1), respectively. It is expected that future review of the standards will lead to the adoption of Euro 2 or 3 standards by 2005 or the following years.

The in use emission standards to be adopted are linked to the type approval standards. This means that in use standards will be made more strict upon the adoption of the new type approval standards in 2003. The specific in use standards which a vehicle will have to comply with are determined by the age of the vehicle and the type approval standards that were valid at the time of the first registration of the vehicle.

To ensure that all existing vehicles meet the in use standards it was decided that rebuilt and imported

second hand vehicles and/or engines will have to meet in use standards.

Considering the number of motorcycles and the rapid growth of the number of motorcycle registrations the EMB will develop more detailed type approval and in use emission standards for motor cycles.

EMB and DOTC reserve the right to impose more restrictive air emission limits for vehicles (or limits on the use of such vehicles in certain areas), based on the condition of the particular airshed in which a vehicle is operated, changes in technology, or other factors.

2.5.3. Permitting, Testing and Monitoring

A program of permitting and monitoring, coupled with emissions control requirements, will be established for mobile sources of air emissions. This is intended to control pollution from motor vehicles. Compliance with emission limits as described in the CAA must be demonstrated for each vehicle.

A Certificate of Conformity (.COC), to be issued through DENR will document compliance for new or locally-assembled vehicles. A COC is required before such a vehicle can be sold or registered for use by DOTC/LTO. The emission tests to be carried out to determine compliance with the type approval emission standards are part of what is known as the type approval tests[4], which is carried out under the responsibility of DOTC/LTO.

4 The emission tests are only a small component of the overall test program, which largely focuses on safety of the vehicle.

A special procedure is developed to ensure that the large number of rebuilt vehicles and imported second hand vehicles will be properly tested prior to their initial registration, Vehicles which have passed this test, which will be based on the in use standards will be issued with a Certificate of Compliance to Emission Standards by DENR before they can be registered by DOTC/LTO,

Used (in-use) vehicles shall be required to meet emissions standards contained in the IRR in order to renew their registrations. This compliance shall be demonstrated through mandatory yearly inspections, to be carried out through the Motor Vehicle Inspection System (MVIS), operated by the Department of Transportation and Communication/Land Transportation Office (DOTC/LTO), or its authorized private MVIS.

DOTC/LTO will oversee the implementation of roadside apprehension activities for vehicles, which do not comply with the in use emission standards. In coordination with DTI, it will oversee the establishment of transparent and effective procedures, which will allow private emission testing centers to conduct officially sanctioned tests to determine whether drivers or owners of vehicles apprehended for smoke belching have complied to the standards after adequate repairs to their vehicles have been made.

2.5.4. Regulation of Fuel Specifications - Mobile Sources

The Department of Energy (DOE) will regulate fuel specifications to address air pollution by attaining better

fuel quality. The Clean Air Act contains fuel specifications, which shall be imposed to reduce and/or eliminate the toxicity of fuel. With the phase out of leaded gasoline, other fuel improvements shall be imposed. The anti-knock index, Reid vapor pressure, volume of aromatics and benzene in unleaded gasoline shall comply with the fuel specifications set in the CAA and the IRR. The sulfur content in diesel will also be gradually reduced according to a time frame indicated in the CAA.

Compliance with emission standards is partly determined by emission technology, which the vehicle is equipped with. Fuel specifications are an important determinant of the type of technology that can be used in vehicles[5]. It is therefor important that the adoption of new stricter emission standard is done in a coordinated manner, whereby it is ensured that the required vehicle technology can be adopted on the basis of availability of appropriate types of fuel.

DOE in coordination with DENR and the Bureau of Product Standards regulate the use of fuel and fuel use. DOE, in consultation with concerned government agencies, representatives of the fuel and automotive industries, academia and consumers will set specifications for all types of fuel and fuel-related products, including fuel additives, which will subsequently be adopted as Philippines National Standards.

5 Examples of this are the need to use unleaded gasoline or low sulfur diesel in order to be able to use catalytic converters.

As part of its comprehensive fuels strategy, the DOE shall continue to conduct and/or support research on the use of alternative fuel or power sources for motor vehicles such as Liquefied Petroleum Gas (LPG), Compressed Natural Gas (CNG) or electricity.

2.5.5. Standards for Vehicle Technology

The DENR, in coordination with DTI and DOTC and in consultation with the vehicle manufacturers, civil society, and other stakeholders, shall impose standards to promote the use of available state-of-the-art vehicle technology for the reduction and/or elimination of gaseous and other pollutants emitted by motor vehicles. These standards will be imposed for the improvement of the emission control devices used by the vehicle fleet. As explained, imposing standards for vehicle technology will require a close linkage with the review and revision of emission standards and review and revision of fuel specifications.

2.5.6. Transport Planning

Measures to improve public transport services shall be undertaken by the DOTC and other concerned government agencies. This will include amongst others (i) promote public transport to increase passenger capacity and reduce number of private vehicle trips; (ii) strengthen traffic planning and traffic management, (iii) stimulate land use planning, with a strong associated focus on transport planning. (iv) promote the operation of environmentally friendly-fueled mass transit systems, and (v) introduce travel demand management measures. These combined measures aim at improving vehicular

traffic flow and thus reducing the travel time and associated emissions required for vehicular trips

2.5.7. Economic Incentives

Mobile sources of air emissions will be required to pay a fee related to the mass of pollutants that they may emit to the atmosphere. The fee will be included in the registration fee, based on a system to be determined by DOTC. The system is based on weight of the vehicle. The proceeds of the fee, which is levied through the Motor Vehicle Users Charge, will be deposited in the Special Vehicle Pollution Control Fund. This fund which will be under the administration of the DOTC will be used to fund activities outlined in the NAQAP, that are directly or indirectly related to the reduction of pollution resulting from vehicle emissions.

2.6. Area Sources

As noted above, “stationary sources” may be defined generally as individual points of air emissions (e.g. smokestacks). By contrast, an "area source" is a source of air emissions that is not confined to a discrete point or points of emission. Examples of area sources and their associated air emissions include but are not limited to the following:

- Unpaved roadways (dust; TSP or PM-10);
- Construction sites (dust; TSP or PM-10);
- Lagoons (photochemically reactive compounds and/or other emissions)
- Industrial facilities with many small or generalized potential sources such as valves, seals, etc. (photochemically reactive compounds and/or other emissions); and

- Common generally industrial, small, non-regulated point sources (e.g. dry cleaners and gasoline stations) where the point source(s) cannot feasibly or practically be measured.

Area source emissions shall comply with the AAQS. If a facility with stationary source(s) covered by a permit includes area sources of emissions, these emissions must be estimated and included in the application for a permit to operate (and, in the case of a new facility, in the application for authority to construct). EMB will study the desirability and feasibility to set up a permitting system for other types of area sources which can be controlled and managed, e.g. construction sites.

2.7. Fuels

In addition to the regulation of fuel specifications in connection with pollution from mobile sources an important component of the overall approach to air quality is the specification of fuels for use by industry and by the general public, In particular the content of lead, sulfur and other compounds may have a significant effect on the potential emissions from fuel handling and combustion.

2.8. Institutional Context

The CAA clearly states that success air quality management will require strong coordination within the government as well as between government and other sectors in society. The CAA includes a number of provisions, which will provide the basis for a successful multisectoral approach to air quality management.

2.8.1. Mandates of Government Agencies

The CAA stipulates that the DENR will be the primary government agency responsible for the implementation and enforcement of the Act. Within the DENR a distribution of responsibilities has been agreed upon between the Department and the Environmental Management Bureau (the Bureau). According to this general distribution of responsibilities DENR is responsible for the regulation of air quality, and enforcement of the CAA and the IRR, and to maintain overall coordination with other relevant Government agencies. EMB shall administer and enforce the requirements of the IRR as regards stationary sources, and shall coordinate with other relevant Government agencies in administering the requirements of the IRR as regards mobile sources.

DENR has the following authority, among others:

a) To set Ambiert Air Quality Guideline Values and Ambient Air Quality Standards;
b) To promulgate rules and regulations as may be necessary to implement the intent and provisions of the CAA;
c) To revise, from time to time, the designation of airsheds utilizing eco-profiling techniques and scientific studies;
d) To designate areas where specific pollutants have already exceeded ambient standards as non-attainment areas and to revise the designation of such areas after broad based consultations;
e) To closely supervise all or parts of the air quality action plans until such time that the local government concerned can assume the function to enforce the standards set by the DENR;
f) To administer the Air Quality Management Fund;

g) To establish a broad based National Research and Development Program for the prevention and control of air pollution;
h) To institute administrative proceedings pursuant to Section 40 of the CAA and to impose fines, through the Pollution Adjudication Board, for violations of standards for stationary sources; and
i) To exercise such other authority vested by the CAA and as provided for in the IRR.

EMB has the following powers and functions, among others:

a) To oversee ambient air quality monitoring and to prepare annual National Air Quality Status Reports pursuant to Section 6 of the CAA;
b) To design and develop, in cooperation with the National Statistical Coordination Board (NCSB), an information network for data storage, retrieval and exchange, which will serve as the central depositary of all data and information related to air quality;
c) To issue and, from time to time, revise information on air pollution control techniques upon consultation with the appropriate committees, government agencies and local government units (LGUs);
d) To, in coordination with other concerned agencies, review and/or revise and publish annually a list of hazardous air pollutants with corresponding ambient guideline values and/or standards necessary to protect public health and safety, and general welfare;
e) To design, impose on and collect regular emission fees from industrial dischargers as part of the

emissions permitting system based on environmental techniques;

f) To review, or as the need therefore arises, revise and publish emission standards to further improve the emission standards for stationary sources of air pollution as well as emission standards for motor vehicles

g) To develop, implement and monitor the functioning of permitting system as it may determine necessary for the prevention and abatement of air pollution by stationary sources, which amongst others addresses the need for program and project proponents to put up financial guarantee 4nechanisms to finance the needs for emergency response, clean-up or rehabilitation of areas that may be damaged during the program or project's actual implementation;

h) To monitor compliance with emission standards for stationary sources. EMB has the right of entry or access to any premises including documents and relevant materials; to inspect any pollution or waste source, control device, monitoring equipment or method required; and to test any emission;

i) To require any person who owns or operates any emission source or who is subject to any requirement of the CAA to (i) establish and maintain relevant records; (ii) make relevant reports; (iii) install, use and maintain monitoring equipment or methods; (iv) sample emission, in accordance with the methods, locations, intervals, and manner prescribed by the DENR; and (v) keep records; and

j) To exercise such other powers and functions as provided by the law, the CAA and its I RR.

Other agencies primarily responsible for the implementation of the CAA are the Department of Transportation and Communications (DOTC), the Department of Energy (DOE), the Department of Trade and Industry (DTI),

DOTC, shall have the following authority, amongst others:

(a) Implement the emission standards for motor vehicles set pursuant to and as provided in the Act;
(b) Participate in the formulation of an Action Plan for the control and management of air pollution from motor vehicles;
(c) Contribute towards the establishment of procedures for inspection of motor vehicles, assist in the formulation and implementation of the national motor vehicle inspection and maintenance program;
(d) Authorize private emission testing centers (duly accredited by DTI);
(e) Establish a roadside inspection system
(f) Contribute towards design of training program for law enforcement officials and deputized agents on vehicle emission testing

DTI shall have the following authority, amongst others:

(a) Participate in the formulation of an Action Plan for the control and management of air pollution from motor vehicles;

(b) Contribute towards the establishment of procedures for inspection of motor vehicles, assist in the formulation and implementation of the national motor vehicle inspection and maintenance program;
(c) Accredit private emission testing centers (duly authorized by DTI);
(d) Develop and implement standards and procedures for the certification of training institutions, instructors and facilities and licensing of qualified private service centers and their technicians,
(e) Prescribe regulations requiring the disclosure of odometer readings and use of tamper-resistant odometers, including tamper resistant fuel management systems

DOE shall have the following authority, amongst others:

(a) In coordination with other relevant agencies set the specifications for all types of fuel and fuel related products;
(b) Specify allowable content of' additives in all types of fuel and fuel related products;
(c) In coordination with DENR and BPS regulate the use of any fuel or fuel additive.

2.8.2. Local Government Units

LGUs have the following roles within their respective territorial jurisdictions:

a) To share responsibility in the management and maintenance of air quality within their respective territorial jurisdictions;

b) To implement air quality standards set by the Governing Board, consistent with Sections 7, 8 and 9 of the CAA;
c) To establish an Environment and Natural Resources Office (ENRO) in every province, city, or municipality which shall be headed by the environment and natural resources officer appointed by the chief executive of every province, city or municipality in accordance with the provisions of Section 484 of the R.A. 7160 and to exercise powers and duties set forth in Section 37 of the CAA;
d) To prepare and develop, with the assistance from the DENR, an action plan consistent with the Integrated Air Quality Framework to attain and maintain the ambient of air quality standards within their respective airsheds as provided in Section 9 of the CAA;
e) To prepare and implement a program and other measures including relocation, whenever necessary, to protect the health and welfare of residents in the area;
f) To develop and submit to the DENR a procedure for carrying out the action plan for their jurisdiction, provided that the DENR shall maintain its authority to independently inspect the enforcement procedure adopted; and
g) To perform such other powers and functions as may be provided by applicable laws, rules and regulations.

2.8.3. Coordination Mechanisms

To ensure coordination among government agencies and between government agencies and the private

sector and civil society DENR will set up a Multi-sector Coordination Body. This to replace the Presidential Air Quality Commission, established by virtue of EO 16 (1998), which was repealed by the passing of the Clean Air Act. It is important to maintain a coordination body at the national level also after the establishment of governing boards for the individual airsheds. This related to review and revision of standards, national research and development program, review of national action plans for management and control of stationary sources of pollution and for mobile sources of pollution. These issues require a national level approach and can not be addressed in individual air shed governing boards.

Coordination within individual airsheds will be carried out through Governing Boards. Governing boards shall be headed by the Secretary of the Department of Environment and Natural Resources as chairman. The members shall be as follows:

a) Provincial Governors from areas belonging to the airshed;
b) City/Municipal Mayor, from areas belonging to the airshed;
c) A representative from each concerned government agency;
d) Representatives from people's organizations;
e) Representatives from nongovernment organizations; and
f) Representatives from the private sector.

To facilitate the functioning of the governing boards an Executive Committee will be formed consisting of 7 persons. Technical working groups will be formed to ensure broad-based participation in the work of

governing boards. Each governing board will be assigned a full time technical-administrative secretariat with a separate budget.

Role and functions of governing boards: pro-active stance with respect to implementation of Clean Air Act. Set priorities for air quality management in the airshed and actively coordinate and stimulate initiatives. This will include:

a) Formulation of policies;
b) Preparation of a common action plan;
c) Coordination of functions among its members; and
d) Submission and publication of an annual Air Quality Status Report for each airshed

Governing Boards will in certain cases initiate activities. In most cases it will coordinate activities. In all cases it is expected that implementation of activities will be through organizations (government, private sector, civil society) that are part of the governing board. Governing Board will assist in identifying funds for specific activities that are part of the CAP for the airshed. In majority of cases it is expected that LGUs will not formulate independent action plans for the management and control of air quality but that they will base activity plans on the CAP for the airshed that they are part of.

Governing boards will be introduced in a phased manner in line with the designation of airsheds.

2.8.4. Funding for air quality management

One of the most serious potential threats to a successful implementation of the CAA is the lack of funding for its implementation. While a substantial part of provisions of the CAA can be implemented without direct government funding, e.g. compliance of private sector with emission standards for stationary sources and mobile sources there are also a large number, of areas which will require government funding for the years to come. This includes amongst others: resources for standard setting and review, monitoring, enforcement, awareness raising. There is a wide spread acknowledgement that substantial capacity building efforts will be required in these areas, in the form of additional staff, additional equipment as well as operating costs.

It is planned that funding for air quality management in support of the implementation of the Clean Air Act will come from:

a) Special allocation of Peso 750 million made in the CAA for the initial implementation of the CAA;
b) Annual appropriations for- Departments involved in the implementation of the CAA;
c) Contributions by donor organizations, either in the form of Technical Assistance Grants or in the form of Loans;
d) Special Vehicle Pollution Control Fund. This fund, which will be administered by DOTC will receive 7.5 % of the collections under the Motor Vehicle Users. Act (Republic Act 8794);
e) Air Quality Management Fund. This fund is to be administered by the EMB as a special account in the National Treasury. One third of the fund will be reserved for national purposes while the

remaining two-thirds will be allocated among the airsheds.

2.9. People Driven approach to air quality management

Air quality management should be people driven. This implies that both rights and responsibilities should be taken in consideration in the manner in which air quality management and control is structured in future

2.9.1. Basic rights and responsibilities

Citizens have the following basic rights and responsibilities:

a) The right to breathe clean air;
b) The right to utilize and enjoy all natural resources according to the principle of sustainable development;
c) The use of property bears a social function. It is the responsibility of every citizen to ensure that the use of his property does not cause any harm to the health of other citizens and to the ecosystem of which (s)he is part

2.9.2. Access to information and participation in formulation of environmental and development policies

The CAA indicates the importance for broad based participation in the formulation of environmental and developmental policies. To achieve this private citizens will have:

a) The right to be informed of the nature and extent of the potential hazard of any activity, undertaking

or project and to be served timely notice of any significant rise in the level of pollution and the accidental or deliberate release into the atmosphere of harmful or hazardous substances;

b) The right of access to public records which a citizen may need to exercise his or her rights effectively under this Act;
c) The right to participate in the formulation, planning, implementation and monitoring of environmental policies and programs and in the decision making process;
d) The right to participate in the decision-making process concerning development policies, plans and programs projects or activities that may have adverse impact on the environment and public health;
e) The right for citizens to be represented through civil society groups in the monitoring of compliance with emission standards.

2.9.3. Citizens Suit

Clean Air Act creates the possibility of citizens suit to (a) promote the participation of the citizens in the enforcement of the Act and b) serve as a prod to government Officials to take the necessary and appropriate action to abate and/or control pollution.

The legal actions shall be against:

a) Any private natural or juridical person, Including government owned and controlled corporations, who violates or fails to comply with the provisions of this Act;

b) Any Government agency which may issue any order or rules inconsistent with this Act. For this purpose, unless the inconsistency is so blatant as to manifest evident bad faith, the action available under this heading shall only be civil in nature, such as for declaratory relief and/or injunction. The government official who was made a respondent in said civil action shall be sued in his official capacity and shall not be liable for damages.

c) Any public officer who willfully or grossly neglects to perform the duties provided for under this Act, or who abuses his authority or in any manner improperly performs his duties under this law and its implementing rules.

In addition citizens will also have the right to bring action in court or quasi-judicial bodies to enjoin all activities in violation of environmental laws and regulations, to compel the rehabilitation and cleanup of affected area, and to seek the imposition of penal sanctions against violators of environmental laws; and the right to bring action in court for compensation of personal damages resulting from the adverse environmental and public health impact of a project or activity.

2.10. Public Information

2.10.1. General

The emphasis in the development of public education and information campaigns will be on: (a) describing causes and consequences of air pollution; (b) dissemination of information on technological and non-technological options to prevent and/or control

air pollution; (c) outlining the health and economic benefits to be derived from reduced emissions and (d) possibilities within the law to address air pollution.

To strengthen the effectiveness of Public Information Campaigns the following general measures will be taken:

a) strengthening Public Information strategy: increased emphasis on specific target groups, more attention for prevention and addressing causes;
b) strengthen capacity to implement Public Information campaigns: both within government as well as within other sectors of society, strengthening both in terms of quantity (larger numbers of Public Information professionals) and quality (strengthening impact assessment of Public Information in order to raise its efficiency and effectiveness)
c) networking of Public Information campaigns and initiatives;
d) provide more resources for Public Information campaigns: both from government as well as through other (private sector - civil society) sources.

2.10.2. Air Quality Indices

In order to enhance public understanding of air quality, Air Quality Indices (AQls) may be defined for key air pollutants such as particulate matter, sulfur dioxide, photochemical oxidants or ozone, carbon monoxide, and nitrogen dioxide. Levels of air quality may be defined for these indices, such as: Good;

Moderate; Unhealthy for Sensitive Groups; Very Unhealthy; and Hazardous.

3. NATIONAL AIR QUALITY CONTROL ACTION PLAN

3.1 AMBIENT AIR QUALITY MANAGEMENT

Component and sub-components	Perfor-mance standard	Respon-sible	Remarks
3.1.1 Assess and Define AAQM network			
• Based on assessment of current methods propose refined methodology	Within six months of issuance IRR	DENR/EMB	Methodology to address adequacy of data, Quality assurance and quality control, and reliability. Methods to build on work conducted already by MMAQISDP and SIDA Project
• Ensure availabi-lity of adequate monitoring equipment	Within 6 months of issuance of IRR for Manila airshed, within 18 months for rest of country	DENR/EMB	Equipment for Metro Manila airshed to be provided from MMAQISDP Program and SIDA Program. Other areas possibly from AQMF
• Conduct ambient air quality monito-ring	Manila airshed: 06-12/2001,	EMB, private sector	Data collection will be outsourced in various parts of

based on agreed methodology	other initially designated airsheds: 06/2003, rest of the country: 06/2005		country, as part of provision of equipment. Ensure appropriate communication interface between supplier and EMB
• Develop overall data-base on air quality and mechanism to transfer data on regular basis to EMB Central Office	Within 6-12 months of issuance of IRR	EMB Central Office	With support from MMAQISDP and SIDA Program. In coordination with Bureau of Statistics. This is based on assumption that Airviro system will be used as central system for ambient air quality monitoring
• Prepare and distribute annual air quality status report	Within three months after end of each monitoring year	EMB	Report will be gradually grow in coverage of number of pollutants and area covered. SIDA TA 2 will include training activities to support this.
3.1.2 Designation of Airshed			
• Finalize designation of initial airsheds	06/2001	EMB	This will be for the airsheds, which are designated on a preliminary basis during formulation of

			IAQIF/AQAP. This will involve validation of data.
• Designation airsheds rest of the country	06/2002	EMB	
• Develop procedures for redesignation of airsheds	12/2000	EMB	These will include the mechanisms for public consultation called for in CAA
3.1.3 Designation of non-attainment areas			
• Finalization of designation of first batch of non-attainment areas	12/2000	DENR/EMB	To be based on preliminary designation arrived at during drafting IAQIF/AQAP. Prior to formal designation validation of data to be carried out. Final designation will take place through formal DENR promulgation
• Re-designation of existing non-attainment areas.	Periodic and when needed	DENR/EMB	To be based on reliable data. Formal designation through DENR promulgation.
Socio-Economic Cost Benefit Analysis of CAA			
• Study which assesses costs and benefits for	Available by 12/2001	NEDA with assist-	PCSD and DENR to advice NEDA

country		ance from PCSD	
• Conduct needs assessment in terms of man-power and skills requirements at national and regional level	Before 03/2001	EMB	Needs assessment will also cover other agencies and groups utilizing ambient air quality data. Needs assessment to cover both ambient air quality monitoring and stationary sources. To be funded from MMAQISDP TA
• Put in place first batch of additio-nal staff	12/2002	EMB-DBM	This concerns 40 staff to be recruited with support MMAQAISDP, currently requested from DBM.
• Ensure full utilization of current EMB staff in the regions in air quality manage-ment	06/2001	EMB	This concerns involvement in both ambient air quality monitoring and management of pollution from stationary sources. This will be done based on detailed needs assessment.
• Put in place additional staff	07/2001 beyond	EMB-DBM	Based on needs assessment and further

			organizational strengthening of EMB as line bureau additional staff will become available. Placement will be in phased manner and will follow designation of airsheds and non-attainment areas.
• Conduct regular training	Periodic	EMB	SIDA TA 2 to make contribution. Training will be partly in country and abroad. Training to be aimed not only at EMB staff but also at users of data. Training to be phased with expansion of AAQM network.
3.1.6 Public Awareness on Ambient Air Quality			
• Develop overall communication strategy to inform general public on ambient air quality	Before 12/2000	DENR/EMB, NGOs with inputs from other concer-ned groups	To be part of MMAQISDP work on public awareness. Additional support from US EPA and USAEP. NGOs are expected to play important role in this component of air

		esp. PIA	quality management.
• Set-up air quality indices, and develop channels to inform public on regular basis	Design indices and system before 06/2001, after that ongoing information of public	DENR/EMB, NGOs and concer-ned groups	Air quality indices are expected to be modeled on earlier versions. Input from SIDA loan project expected.
• In addition to ongoing information provision conduct period special cam-paigns	According to plan	DENR/EMB, NGOs and other concer-ned groups	Active cooperation with ongoing and new initiatives from private sector and NGOs will be sought. E.g. Bantay Kalikasan
• Integrate aware-ness raising on air quality issues in primary, secon-dary and tertiary education	Ongoing after initial strategy formulation	DECS, CHEDS, TESDA, and private educa-tion facilitiesa nd DENR/EMB	Initial limited funding from MMAQISDP, subsequent addi-tional funding required.
3.2 MOBILE SOURCES **3.2.1 Review and Revise Emission Standards**			
• Revalidate feasiblity of introduction of Euro 1 standards	Review to be completed by 12/2001	DENR/EMB, DOE, DOTC,	Special attention to be given to linkage with adoption of 0.05% sulfur stan-

by 01-01-2003		DTI/ BPS in consulation with car manufacturers, oil industry and transport sector	dard for diesel scheduled for 01-01-2004 and the gasoline specifications
• Prepare groundwork and timetable for the introduction of Euro 2 or 3 standards	Review completed and recommendations drafted for decision making by June 2004	DENR/EMB, DOE, DOTC, DTI/ BPS in consultation with car manufacturers, oil industry and transport sector	Adoption of Euro 2 or 3 standards will depend on availability of appropriate fuels
• Study the need and possibility for specific emission standards for motorized tricycles	To be started ASAP and to be completed by June 2001	DOST, MDPPA DENR/EMB, DILG, DOTC	Tricycles also need general technical standards, to be drawn up in parallel with possible special emission standards
• Assess the need	Assessment	DOTC/L	Required in light of

for additional testing facilities for testing motor cycle emissions	with respect to in-use standards by 12/2000, type approval testing by 06/2001	TO-DENR/EMB	additional standards for new motor cycles effective 2003 and increased emphasis on in-use testing. To be funded from SVPCF.
3.2.2 Develop Capacity for Type Approval Testing			
• Allocate specific institutional responsibility within DOTC	Required instructions to be issued before 10/2000	DOTC Secre-tary	
• Design Facility	Construc-tion Plans approved, site selected by 12/2001	DOTC with external inputs	To be funded through the Special Vehicle Pollution Control Fund (SVPCF) and Grants
• Construct Facility	Construc-tion to be completed, including commis-sionning of equipment by 12/2002	Outsourc ed or through internal DOTC arrangem ents	To be funded through the Special Vehicle Pollution Control Fund (SVPCF) and Grants
• Allocate staff and train staff	Staff training to commence June 2002, which will allow start functioning	Human Resour ce Division DOTC/L TO with external	

	of facility upon completion	inputs	
3.2.3 Strengthen MVIS			
• Obtain MVIS implementation approval	First pass approval of BOT scheme to be issued by 09/2000	NEDA, DOTC	Based on the assumption that strengthening of MVIS will be on the basis of BOT procedure
• Develop LTO regulatory capacity over MVIS operated by private sector	Needs assessment to be carried out prior to 06/2001, capacity to be in place by 06/2002	DOTC/LTO, support from DBM and DENR	MMAQISDP capacity building component foresees setting up special unit in LTO for this purpose
• Finalize negotiations with private sector propo-nents	To be completed 12 months after First Pass has been issued by NEDA	DOTC/LTO	
• Introduction MVIS	Within Metro Manila by 01/2003 and Nation wide by 01/2004	Private Proponents with support DOTC/LTO	Private proponents will be required to provide inter-connection with LTO IT scheme
• Develop and	Metro	DOTC/L	This specific

implement public aware-ness campaign to support introduction and functioning MVIS	Manila 09/2002 onwards, Nationwide 09/2003 onwards	TO, active involvem ent of private proponen ts	awareness campaign to be part of overall awareness raising campaign to be developed with MMAQISDP support in second half 2000
• Develop interim capacity for emission testing pending strengthening of MVIS	Selected MVR stations in NCR to be equipped and trained by 11/2000 and 6/2001 nationwide	DOTC/L TO with support from DBM and DENR	MMAQISDP to fund NCR and SVPCF to fund rest of the country
3.2.4 Strengthening Road Side Inspection			
• Agree on the standardized test methodology and equipment	Completed by 08/2000	DENR, DOTC/L TO, DTI	
• Procurement of mobile smoke emission testers	Completed by 12/2000	LTO, DBM	Funding by MMAQISDP for Metro Manila Airshed and SVPCF for the rest of the country
• Study feasibility of outsourcing roadside inspec-tion and apprehension to private sector	Initial recommen-dations by 9/2000. To be followed by detailed arrangement	DOTC/L TO, MMDA	External inputs provided through consultancy input in context of MMAQISDP in MMDA

	s in place by 6/2001		
• Training of Inspectors, Apprehending Officers and Deputized Agents	Ongoing-Periodic	LTO, DENR/EMB, DTI	Training design and duration to be reviewed. Private Sector to provide inputs and to act as observers during training
• Review and standardized detailed apprehension procedures	To start on immediate basis and to be completed by August 2000	LTO, DOTC	This would address the apprehension procedures itself, the subsequent testing and procedures to pay fines and reclaim plates.
• Develop appropriate linkage between apprehending teams and LTO	For Metro Manila by 03/2001, other parts of country in phased manner	LTO, deputized agents	Interconnection to be established with LTO IT system. Metro Manila to be funded from MMAQISDP, other parts of country from SVPCF
• Establishment of one stop shop for accreditation and authorization of private sector emission testing centers	One month after issuance of IRR	DOTC/LTO, DTI	This concerns third party emission inspection stations.
• Establishment of	To be in	Quali-	Testing rates to be

Private Sector Emission testing centers	place in 12/2000, based on interest demonstrated by private sector	fied Private Proponents	reviewed by DTI and DOTC. Re-capitalization will be required by 2003 to comply with new in-use standards. Interconnection with LTO IT to be established
• Public Information Campaign	Three months after IRR effectivity	DOTC, PIA, NGOs and other concerned groups	This specific awareness campaign to be part of overall awareness raising campaign to be developed with MMAQISDP support in second half 2000. Bantay Kalikasan initiative to be integrated.
• Develop and Implement Self Regulation Project	Plans to be submitted by 01/2001 and when appropriate	Transport Sector Organizations to initiate Plans, DOTC/LTO to evaluate and approve if all condi-	Self Regulation Projects should meet ALL the requirements outlined in the February 2000 MoA on Elimination of Smoke Belching. It is expected that there will be active involvement of Swisscontact preventive maintenance program in design and implementation Self Regulation Projects

		tions are met	
3.2.5 Formulate and implement vehicle standards and parameters			
• Review technical standards for rebuilding and remanufacturing of vehicles and engines	By 06/2001	BPS (TC 44), DOTC	To be part of Vehicle Road Safety
• Design and implement approriate preventive maintenance systems for public transport vehicles	10/2000 onwards	CFCERT/DOE, DOTC Transport Sector and Swiss-contract	This program aims at reduced fuel consumption and reduced emissions due to improved maintenance
• Encourage wider research and development for appropriate vehicle technology and emission control devices	Ongoing	DOST – private sector	
3.2.6 Strengthen land use and transport planning			
• Strengthen land use planning		MMDA, LGUs	To be carried out in context of other initiatives. Emphasis will be on ensuring that emission reduction is on the agenda

• Review of ongoing transport plans		DOTC, MMDA, LGUs, NGOs	To be carried out in context of other initiatives. Emphasis will be on ensuring that emission reduction is on the agenda, and on encouraging non-motorized transport.
• Traffic Engineering		MMDA, LGUs, DPWH	To be carried out in context of other initiatives. Emphasis will be on ensuring that emission reduction is on the agenda.
3.2.7 Develop and Introduce Market Based Instruments and Incentives to reduce Vehicle Emission			
• Study the feasibility of programs that can provide incentives for transport sector enterprises that successfully comply with emission standards or which are operating environment friendly vehicles	First phase of study to be completed by 03/2001. Further work will follow.	DOF, DTI, DOTC, Trans-port sector	Initial study to be part of work on MBIs carried out in context of MMAQISDP.

• Study the use of MBIs to promote reduction in vehicle emissions	First phase of study to be completed by 03/2001. Further work will follow.	DOF, DTI, DOTC, Trans-port sector	Initial study to be part of work on MBIs carried out in context of MMAQISDP.
3.2.8 Formulate and Implement Capacity Building Program			
• Needs assess-ment and formulation of capacity building program for DOTC/LTO at national and regional level	To be completed by 01/2001	Human Resour-ce Develop ment Division DOTC and outside consul-tants	It is expected that the needs assessment will take into account the requirements of other government agencies involved with mobile sources as will as transport sector. Funding from MMAQISDP and SVPCF.
• Implement capacity Building Programs	02/2001 onwards	DOTC/L TO, DBM, Trans-port Sector	Avail of multilateral facilities
• Strengthen Traffic Adjudication Services	Initial streng-thening to be completed by 12/2001	DOTC/L TO, DBM	Additional staff will be required, pending formal approval use will be made of contractual staff. Funding: SVPCF
• Carry out	To be	DENR/E	To be linked to

baseline studies concerning contribution of mobile sources to deterioration of air quality	determined	MB-DOTC	availability of reliable ambient air quality monitoring data
• Conduct monitoring studies to review impact of various measures to reduce emissions from mobile sources	Monitoring periodic and related to availability equipment. Objectives, strategy and approach by 03/2001	DENR/EMB, DOTC/LTO, DOH and others	It is expected that this will include special impact studies by DOH
3.3 STATIONARY SOURCES **3.3.1 Review and Revise standards**			
• Formulate criteria for review and revision (health based)	Within 2 years after issuance of IRR	EMB, concerned departments and industries	Rationalization of standards to be considered. Standards based on mass rate of emission to be re-examined.
• Following sets of standards to be reviewed/ revised: 1) ambient air quality standards, 2) source emission standards of specific pollutants	Every two year or on as need basis	EMB, concerned departments and industries	This includes the development of reference values for CO_2 and O_2

3) ambient air guideline values			
3.3.2 Strengthening of Permitting system			
• Internal permitting guidelines to be developed and issued to Regional offices	Before 12/2000	EMB Central Office	Rationalization and harmonization with the EIS system to be considered
• Activation of Computerized Permitting Administrative System (CPAS)	Operational by 06/2001	EMB Central and Regional Offices	Support available in context of MMAQISDP for overall design and Metro Manila Airshed. Introduction in rest of the country is expected to be done in a phased manner, which could be linked to designation of airsheds. This will include a review of individual steps and paperwork involved.
• Procurement of additional equipment	Before 11/2002	EMB Central and Regional Offices, DBM	
3.3.3 Develop and Introduce MBIs			
• Determine Mass	Before	EMB	Assistance from

based emission rate fees	03/2001		ongoing ADB TA in context of MMAQISDP
• Study and recommend introduction of other MBIs and tax incentives to promote compliance with emission standards	Before 03/2001, after that further ongoing work	EMB and DOF	Assistance from ongoing ADB TA in context of MMAQISDP. It is assumed that tax incentives will be promulgated through EO
3.3.4 Implement Incineration Ban			
• Develop program to phase out Bio-Medical Incinerators	Initial program design 03/2001. After that implementa-tion of program in line with targets set up to July 2003	EMB, in consulta tion with affected groups	This will require close intensive monitoring by EMB
• Conduct study on the impact on productivity, efficiency and cost to industries and employment	The result of the study shall be submitted to the EMB on or before 31 December 2001 and to be imple-mented on or	DTI	The study will include the use and application of mechanisms and technologies designed to make emissions from existing incinerators non-toxic and non-poisonous

	before 17 July 2003		
3.3.5 Awareness Raising			
• Carried out in context of overall awareness raising activities		DENR, EMB, NGOs, POs, LGUs, DECS	See for detailed description section on Awareness Raising under Ambient Air Quality Monitoring
3.3.6 Strengthening of Monitoring			
• Development of monitoring methodology approval system	Before July 2003	EMB	
• Implement intensified stack monitoring program	Metro Manila airshed start by 06/2001, rest of country in phased manner on airshed basis	DENREMB	Metro Manila monitoring program to be funded from MMAQISDP. This will be outsourced activity with limited capacity building support for DENR/EMB
3.3.7 Strengthen Industry Government cooperation in Ensuring the reduction of air pollution by stationary sources			
• Operationalize Environmental partnership program	Initial operationalization by 12/2002, after that branch specific	EMB, DOST and other signatories of MoA on	This activity builds on the initiative of the IISE (Industrial Initiatives for a Sustainable Environment) project to develop

	agreements	partnership	environmental partnerships between government and private sector.
• Establish/ maintain database of Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) technology	Establish initial database by 06/2001	DOST with input from DENR	
• Develop detailed procedures for designing, submitting and monitoring of compliance plans for non complying industries in attainment and non-attainment areas, and for EMPs to be submitted as part of EMS for industries desiring to make use of grace period	By 06/2001 to be reviewed on regular basis and revised on as need basis	EMB in consultation with AWMA and sector branch organizations/ associations	

under Sect. 19 of CAA			
3.3.8 Capacity Building			
• Hiring of additional staff for CAA implementation			See activities under Capability Building in Section on Ambient Air Quality Monitoring
• Strengthening of the Pollution Adjudication Board	Detailed approach agreed upon by 03/2001, implementa-tion of strengthe-ning plan according mile stones outlined in plan	DENR	This is part of the TA under the MMAQISDP
3.3.9 Monitoring of stationary sources on air quality			
• Carry out baseline studies concerning contribution of stationary sources to deterioration of air quality	To be determined	DENR/ EMB	To be linked to availability of reliable ambient air quality monitoring data
• Conduct monitoring studies to review impact of various measures to	Monitoring periodic and related to availability equipment.	DENR/ EMB, DOH and others	It is expected that this will include special impact studies by DOH

reduce emissions from stationary e sources	Objectives, strategy and approach by 03/2001		
3.4 AREA SOURCES **3.4.1 Develop profiles of Area Sources**			
• Carry out desk study of local and international information	By 12/2001	DENR/ EMB with involvement of other Department where requir-ed	Conduct workshop upon completion to inform concerned groups
3.4.2 Allocate Institutional Responsibilities for management of air pollution from Area sources			
• Develop agreement on concerned departments on permitting and monitoring of area sources	By 12/2000	EMB in coordination with other departments	It is suggested that industrial facilities will be regulated as part of permitting process for stationary sources. Construction sites permits are responsibility of LGUs.
3.4.3 Develop monitoring methodologies for specific area sources			
• Monitoring approaches to be elaborated and	By 06/2001	EMB and other	Limited funding available for study on potential to

documented		departments if allocated institutional responsibility	reduce emissions from gasoline stations from MMAQISDP
3.4.4 Develop Administrative Actions and Fines and Penalties for Air Pollution from Area Sources			
• Formulate concerned actions and fines		EMB, PAB and other departments if allocated institutional responsibility	
3.4.5 Develop and Implement Capacity Building Program for Area Sources			
• Identify capacity building needs and implement program	12/2000	EMB and other departments if allocated institutional responsi	Emphasis will be on required skills and knowledge. For the time being it is not assumed that this will result in substantial additional staff in various organizations

		bility	
3.4.6 Develop and Implement Public Awareness Program to prevent and control air pollution from Area Sources			
• Formulate and Implement campaign	06/2000 formulation campaign, implementation based on agreed upon plan	EMB and other concerned agencies	MMAQISDP awareness raising activities will have to integrate area sources. Emphasis in awareness raising is to explain why and how area sources contribute and what can be done to reduce this.
3.5 FUEL SPECIFICATIONS **3.5.1 Implement fuel specifications**			
• Review and revalidate 2001, 2002, 2003, and 2004 fuel specs for viability	Initial review in 2001 and subsequent revalidation in 2002, 2003, and 2004	DOE, oil industry, PIP, DTI, DENR and others	Linkage with emission standards to be considered.
• Conduct study on impact of CAA on oil industry	To be completed before 2001	DOE	Emphasis of study will be on the timing of fuel specifications. Study to be funded from MMAQISDP
• Adopt feasible fuel specifications as Philippines National Standards (PNS)	2000/2001/2002/2003 in line with changing fuel specifica-	Reconstituted Technical Com-	

	tions	mittee 12	
• Procurement of additional testing equipment	12/2000	DOE	Completion of ongoing establishment of Fuel monitoring laboratory
• Formulation of additional staff requirements and training of new and existing staff	New staff to be in place of 09/2001. Training to start in 09/2000	DOE	Focused on monitoring and testing of fuel specifications
• Conduct regular sampling and testing of fuels	Ongoing-periodic	DOE	
• Review PNS re bunker fuel sulfur content	To be completed by 06/2001	DENR, DOE, DTI	Consider reducing maximum sulfur content
• Develop penalty provisions for violation and non-compliance with fuel specifications	Before 12/2000	DOE with input from TC 12	To be issued through DOE Administrative Order. This will also require establishment or strengthening of quasi judicial body in DOE.
3.5.2 Conduct research on, and introduce alternative fuel additives			
• Pilot test alternative fuels, e.g. CNG, LPG and electric	Ongoing	DOE, DOST, DOTC and	CNG tests ongoing, limited funding available from MMAQSIDP,

		Private sector (oil and gas indus-try, trans-port sector and others	additional funding from SVPCF
• Study potential of fuel additives to reduce vehicle emissions	Continuing	DOST, DOE, private sector	This will involve review of experiences in other countries
3.5.3 Awareness raising program on cleaner fuels			
• Information, education campaigns	Ongoing, linked to changing fuel specifica-tions	DOE, Coali-tion for cleaner fuels	
3.5.4 Review, Develop and Introduce MBIs to achieve cleaner fuels			
• Rationalization of fuel taxes	Within 6 months after issuance of IRR	DOF, NTRC, DOE, NEDA	To ensure that fuels used for power generation are taxed in proportion to their potential contribution to emissions. Not intended to change overall amount of taxes raised.

3.5.5 Monitor Impact of changing fuel specifications on ambient air quality			
• Formulate and conduct monitoring studies to review impact of changes in fuel specifications on ambient air quality	Monitoring periodic and related to availability equipment. Objectives, strategy and approach by 03/2001	DENR/ EMB, DOE, DOH and others	It is expected that this will include special impact studies by DOH
3.6.1 Establishment of Governing Boards			
• Issuance of Operational Guidelines	Within 90 days after the issuance of the IRR Review of operational guidelines 18 months from the effectivity of guidelines or as the need arises	DENR	Involve DILG, DOTC, and other Government Agencies as well as private sector and civil society groups. Operational guidelines to call for submission of Business Plan, Performance Indicators, alongsise with Annual Air Quality Status Report for Airshed. PCMU support to be utilized to draw up guidelines.
• Establishment of individual Boards	For the initially designated airsheds 90	DENR	

	days after effectivity of Operational Rules, subsequent Boards within 90 days after designation		
• Establishment of Executive Committee in Individual Board	Within 15 Days after establish-ment of Board	Gover-ning Board	EMB to monitor establishment activities of GB Executive Committee is a subset of GB. Expected is that Executive Committee will be multisectoral in composition
• Adoption of House Rules	Within 30 days from establish-ment of GB	Governi ng Board	
• Appointment of Technical Secretariat	Within 60 days from establishment of GB	Governi ng Board	Technical Secretariat Metro Manila Airshed Technical Secretariat to be funded from MMAQISDP
3.6.2 Joint Oversight Committee			
• Appointment	Immediate	Senate	There is a need for

committee members	Basis	and the House of Representatives	clarification of the nature of the JOC, is it a standing committee or an ad-hoc committee
3.6.3 Establishment of Air Quality Management Council			
• Develop agreement on functions and composition of such body	Within 90 Days after issuance of IRR (for draft EO to be submitted to Office of the President)	DENR et.al.	Determine need for EO. The Council will be follow-up of the Presidential Air Quality Commission and will act as national forum for discussions on air quality management. It will be a multisectoral council with representatives from government, private sector and civil society
3.6.4 Set up Air Quality Management Fund (AQMF)			
• Validate sources of fund and identify new sources	Within 60 days from effectivity of IRR of CAA	DENR, DOF	
• Develop Fund Management Rules and Regulations	Within 180 days from establish-ment of GB	DENR, DBM	Management Rules to include guidance on allocation mechanism to individual airsheds. Develop institutional capacity for oversight AQMF

• Annual Costings of Action Plans	Within 90 days after the end of fiscal year for input to the following FY budget	DENR, Gover-ning Boards	Based on IRR provision that 1/3 of AQMF will be allocated for national purposes and 2/3 to individual airsheds
• Annual Report on Use and Effectiveness	90 days after end of Fiscal Year	DENR (exter-nal auditor as requir-ed	Report to be published within 60 days of submission
• Develop and implement awareness raising campaign on AQMF	Within 90 days after approval of Rules and Regulations for use of AQMF	DENR, GB's	Integrate within overall awareness raising campaign.
3.6.5 Set up a CAA implementation coordination Unit in EMB			
• Develop TOR for coordinating unit	Within 60 days after IRR issuance	DENR	Important elements facilitate multisectoral review IRR, IAQIF/NAQAP. Act as secretariat for National Air Quality Management Council
• Provide staffing	Within 90 days after IRR issuance	DENR, EMB	To be included in new EMB structure

3.6.6 Periodic Review of IRR, and IAQIF			
• Monitor implementation of Clean Air Act	To be carried out on six monthly basis	CAA implementation monitoring unit, together with focal points in concerned departments and organizations	Information to be used for National Air Quality Management Council
• Review IRR and provide suggestions for revisions	To be carried out on annual basis or when needed	CAA implementation monitoring unit, together with focal points in concerned departments and organizations	Decision to modify IRR rests with DENR and Departments which have specific responsibility allocated in CAA
• Review and	Framework	CAA	Revisions in

update IAQIF/ NAQAP	to be reviewed on annual basis, Action Plan on six monthly basis.	implementation monitoring unit, together with focal points in concerned departments and organizations	IAQIF/NAQAP to be approved by DENR upon recommendation of National Air Quality Management Commission
3.6.7 Access to Information			
• Develop detailed guidelines and procedures on information which will be made available to public concerning air quality management	12/2000	DENR/ EMB	This in coordination with other departments involved in the implementation of the Clean Air Act
• Put in place the necessary information systems to ensure that information will be available in efficient and effective manner	06/2001	DENR/ EMB	
3.6.8 Introduce Citizens Suits			
• Produce a	Draft	DENR,	Bench book to be

bench-book on court adjudication of air pollution cases to support the Rules of Court	available within six months of issuance of IRR	Supre-me Court	issued by Supreme Court. Production Bench book to be part of MMAQISDP Legal TA or other external donor assistance
• Develop detailed procedures which outline citizens involvement in administrative actions	Within 3 months after issuance of IRR	DENR, DOTC, DOE	In line with concerned provisions in IRR
• Support the creation of environmental courts	Three months from issuance of Bench book	Supre-me Court	
• Develop and implement capacity building program	Ongoing, starting after issuance of Bench book	DENR, Supre-me Court Depart ment of Justice	
• Develop Public Awareness Program to inform general public	Ongoing after issuance Bench book and creation environmenta l courts	DENR, DOJ and others	Awareness arising program to be fitted in with overall awareness raising program. Which is supported by MMAQISDP or other external donor assistance
3.6.9 Develop Research and Development Program			

• Develop institutional mechanism	Within 9 months from issuance of IRR	DENR, DOST, Private Sector, Academe, NGOs and POs	DOST as lead agency
• Formulate research priorities	Within 12 months from issuance of IRR	DENR, DOST, Private Sector, Academe, NGOs and POs	Should address technology transfer. Linkage with Clean Production initiatives
• Organize funding for research	Continuous/ on-going	By agreed upon institu-tional mecha-nism	Possible source are special funds AQMF and SVPCF
• Develop knowledge basis	Continuous/ on-going	By agreed upon institu-tional mecha-nism	Possible source are special funds AQMF and SVPCF
3.7 OZONE AND GREENHOUSE GASES			
• Monitor implementation of Chemical Control Order (CCO)	Continuous/ On-going	DENR/EMB	
• Implementation of the Philippines Country Program	On-going	DENR/EMB concer-ned government	

		agen-cies	
• Preparation of the National ODS Phase out Strategy	On-going	DENR/EMB, WB, LBP, private sector, concer-ned government agen-cies	
• Preparation of the Refrigeration Management Plan	On-going	DENR/EMB, SIDA	
• Study and formulate control mechanisms for importation of second hand ODS-using equipment	Within 1 year	DENR/EMB, BOC, DTI	Policy mechanisms for the 3 government agencies will be incorporated as amendment to the CCO
• Conduct regular sampling and testing of ODS-consuming enterprises/-industries	Periodic	DENR/EMB	Monitoring equipment will be provided by UNDP
• Information, education and awareness raising campaigns on ODS	Continuous, ongoing	DENR/EMB	
• Monitoring of ODS phase out	Continuous	DENR/EMB	

investment projects			
• Develop database for ODS monitoring	Within 1 year	DENR/EMB	To be incorporated in the National Phase out strategy
• Capacity building	Periodic	DENR/EMB, WB, UNDP	Focused on prospective project grantees

DENR Administrative Order
No. 2000 – 102
December 27, 2000

SUBJECT : Establishing The National Support Program On Local Environmental And Natural Resources Planning And Management.

In the interest of the service and pursuant to Executive Order 192 dated July 10, 1987 mandating the DENR to be the primary agency responsible for the conservation, management and development and proper use of the country's environment and natural resources and in line with Republic Act 7160 (The Local Government Code of 1991) which strengthens participation of local government units in managing the environment and natural resources within their territorial jurisdiction in partnership with the national government, and in order to replicate the positive results of the Local Environmental Planning and Management Project (Local EPM) in three demonstration cities, the "National Support Program on Local Environmental and Natural Resources Planning and Management" (NSP) is hereby established.

Section 1. Basic Policy.

It is the policy of the State to achieve sustainable development for the benefit of the Filipino people. It is also the policy of the State to protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.

It is the policy of the Department to implement its mandate along and within the objectives, provisions, policies and principles of sustainable development as enshrined in the Philippine Agenda 21 and the Philippine National Development Plan (2000-2025). It is also the policy of the Department to fully support the localization process in development planning and management of the environment and the

natural resources (ENR) within the framework of national laws, policies, rules and regulations. Finally, it is the policy of the Department to assist local government units to increase their capability to manage local ENR projects, including providing for the transfer of expertise and setting up of institutional arrangements for co-management of the environment and natural resources.

Section 2. Scope and Objectives.

The NSP shall further enhance the local ENR planning and management initiatives at the three demonstration cities and expand its application nationwide to selected LGUs which are distinguished by different natural resource endowment, institutional and financing capability and investment opportunities. A set of criteria for the selection process shall be drawn for this purpose

The National Support Program shall have the fallowing objectives:

1. To enhance lessons learned on local ENR planning and management from the three demonstration cities through wider application to selected LGUS;

2. To catalyze the nationwide institutionalization of the local ENR planning and management process;

3. To establish operational guidelines for a nationwide coverage and application of the local ENR planning and management process;

4. To identify policy gaps and develop/advocate policy actions in support of local ENR planning and management initiatives;

5. To establish a multi-level and multi-media linkage which will serve as a venue for sharing resources, information and technology;

6. To provide technical assistance to the demonstration cities and expansion LGUs in project preparation and resource generation; and

7. To upgrade the capability of personnel of both DENR and LGUs towards the application of gender responsive and culturally sensitive local ENR planning and management processes.

Section 3. Program Components.

The National Support Program shall be organized with the following components and activities:

1. Capability Building - The overall capability building framework for the demonstration cities shall be the core of the national capability building effort. Major activities shall include (a) wider application of the ENRPM process experience; (b) enhancement of the Philippine ENRPM toolkit; (c) training based on LGU technical/skills needs and to include important aspects of project preparation, resource generation, and gender issues; and (e) cross-visit.

2. Information, Education and Communication - Knowledge and skills management through an electronic information base shall be created for quick access. A Philippine ENRPM Website shall systematize the upkeep and utilization of ENRPM knowledge between the LGUs, agencies and programs. This shall include the establishment of the Philippine ENRPM Website for E-forum.

3. Policy Development and Advocacy - Policy gaps shall be identified and the corresponding policy actions shall be developed/advocated in furthering the institutionalization of the local ENRPM process. Advocacy for national policy on ENRPM shall be pursued through a comprehensive IEC framework.

4. Linkaging and Networking - Networking for ENRPM support shall be engaged at three levels - League of LGIJS, national agencies and programs, and the international arena - to forge and establish a partnership undertaking which shall promote sharing of resources, information and technology.

The NSP shall work out the details of the Program management arrangements as provided for in Section 4. It shall undertake the selection of the LGU expansion areas based on criteria which they shall draw up.

Section 4. Program Management.

The over-all direction and management of the NSP shall be lodged with the Undersecretary for International Commitments and Local Government Affairs who shall chair and get advice from a multi-partite body to be known as the "Multi-Partite Advisory Committee for the NSP on Local ENRPM" (MAC-NSP). The MAC-NSP shall also assist in formulating policies to enhance a policy environment for strengthening the ENRPM process and its future institutionalization into the mainstream of local government affairs.

The members of the MAC-NSP shall include the DENR Assistant Secretary for Local Government Affairs; DENR Assistant Secretary for Planning and Policy; DILG Assistant Secretary for Local Government; Director of the Environmental Management Bureau; Director of the Forest Management Bureau; Director of the Mines and Geosciences Bureau; Director of the Lands Management Bureau; President of the League of Provinces; President of the League of Cities; and President of the League of Municipalities. The MAC-NSP shall be instituted as soon as possible and, for this purpose, an inter-agency Memorandum of Agreement shall be executed by and between DENR and the participating agencies defining therein the extent of each party's participation and responsibilities.

A National Support Program Management Office (NSPMO) shall be created under the Office of the Undersecretary for International Commitment and Local Government Affairs and to be directly supervised by the Assistant Secretary for Local Government Affairs. The main functions of the NSPMO shall be to manage the implementation of the Program and to serve as the Secretariat of the MAC-NSP. The expertise of the present staff of the Local EPM Project shall be tapped to initially operationalize the NSPMO. Additional staff from the different units of the DENR Central office shall be identified and detailed on a full-time basis to the NSPMO.

At the regional level, the Chief Planning Officer of DENR Regional Offices shall be designated as the focal person for purposes of coordinating the Program.

A pool of technical experts shall be created to respond to the required technical assistance and training needs of LGU expansion areas. The experts shall be drawn from the DENR's Foreign-Assisted and Special Projects Office, Planning and Policy Studies Office, Regional Offices and sectoral bureaus, both at the Central Office and Regional levels. If deemed necessary, the technical expertise of other government agencies, academe, NGOs and private entities shall also be sought and, for this purpose, an agreement shall be entered into by and between the Department and the participating entities.

Section 5. Funding Support.

The NSPMO shall work out the funding details and arrangements for the NSP. Funding for the expansion areas shall be arranged through the execution of a Memorandum of Agreement between DENR and the participating LGUS. Potential sources from DENR programs and projects, including but not limited to the Special Projects and Gender and Development Program, shall also be tapped

to finance component activities of the NSP. The NSPMO, with the assistance of FASPO, shall also continuously explore the generation of funds from foreign sources to support NSP activities. Proposals for this purpose stall be prepared and submitted to prospective institutions as soon as possible.

Section 6. Program Evaluation.

Annual Program evaluation shall be conducted to enhance effectivity of implementation and set proactive adjustments. The evaluation shall be conducted by a multi-partite team, the composition of which shall be determined by the MAC-NSP.

Section 7. Repealing Clause.

All orders, circulars, official instructions or parts thereof inconsistent with the provisions of this Order are hereby repealed.

Section 8. Effectivity.

This Order shall take effect immediately.

(Sgd.) ANTONIO H. CERILLES
Secretary