(c) 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.

The Department, in cooperation with the National Statistical Coordination Board (NSCB), shall design and develop an information network for data storage, retrieval and exchange.

The Department shall serve as the central depository of all data and information related to air quality.

SEC. 7. *Integrated Air Quality Improvement Framework.* – The Department shall, within six (6) months after the effectivity of this Act, establish, with the participation of LGUs, NGOs, POs, the academe and other concerned entities from the private sector, formulate and implement the Integrated Air Quality Improvement Framework for a comprehensive air pollution management and control program. The framework shall, among others, prescribe the emission reduction goals using permissible standards, control strategies and control measures to be undertaken within a specified time period, including cost-effective use of economic incentives, management strategies, collective action, and environmental education and information.

The Integrated Air Quality Improvement Framework shall be adopted as the official blueprint with which all government agencies must comply with to attain and maintain ambient air quality standards.

SEC. 8. *Air Quality Control Action Plan.* – Within six (6) months after the formulation of the framework, the Department shall, with public participation, formulate and implement an air quality control action plan consistent with Section 7 of this Act. The action plan shall:

(a) Include enforceable emission limitations and other control measures, means or techniques, as well as schedules and time tables for compliance, as may be necessary or appropriate to meet the applicable requirements of this Act;

(b) Provide for the establishment and operation of appropriate devices, methods, systems and procedures necessary to monitor, compile and analyze data on ambient air quality;

(c) Include a program to provide for the following: (1) enforcement of the measures described in subparagraph (a); (2) regulation of the modification and construction of any stationary source within the areas covered by the plan, in accordance with land use policy to ensure that ambient air quality standards are achieved;

(d) Contain adequate provisions, consistent with the provisions of this Act, prohibiting any source or other types of emissions activity within the country from emitting any air pollutant in amounts which will significantly contribute to the non-attainment or will interfere with the maintenance by the Department of any such ambient air quality standard required to be included in the implementation plan to prevent significant deterioration of air quality or to protect visibility;

(e) Include control strategies and control measures to be undertaken within a specified time period, including cost effective use of economic incentives, management strategies, collection action, and environmental education and information;

(f) Designate airsheds; and

(g) All other measures necessary for the effective control and abatement of air pollution.

The adoption of the plan shall clarify the legal effects on the financial, manpower and budgetary resources of the affected government agencies, and on the alignment of their programs with the plans.

In addition to direct regulations, the plan shall be characterized by a participatory approach to the pollution problem. The involvement of private entities in the monitoring and testing of emissions from mobile and/or stationary sources shall be considered.

Likewise, the LGUs, with the assistance from the Department, shall prepare and develop an action plan consistent with the Integrated Air Quality Improvement Framework to attain and maintain the ambient air quality standards within their respective airsheds as provided in Section 9 hereof.

The local government units shall develop and submit to the Department a procedure for carrying out the action plan for their jurisdiction. The Department, however, shall maintain its authority to independently inspect the enforcement procedure adopted. The Department shall have the power to closely supervise all or parts of the air quality action plan until such time the local government unit concerned can assume the function to enforce the standards set by the Department.

A multi-sectoral monitoring team with broad public representation shall be convened by the Department for each LGU to conduct periodic inspections of air pollution sources to assess compliance with the emission limitations contained in their permits.

SEC. 9. *Airsheds.* – Pursuant to Section 8 of this Act, the designation of airsheds shall be on the basis of, but not limited to areas with similar climate, 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.

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.

To effectively carry out the formulated action plans, a Governing Board is hereby created, hereinafter referred to as the Board.

The Board 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 Mayors 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.

The Board shall perform the following functions:

(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.

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

Emissions trading may be allowed among pollution sources within an airshed.

SEC. 10. *Management of Nonattainment Areas.* – The Department shall designate areas where specific pollutants have already exceeded ambient standards as nonattainment areas. The Department shall prepare and implement a program that will prohibit new sources of exceeded air pollutant without a corresponding reduction in existing sources.

In coordination with other appropriate government agencies, the LGUs shall prepare and implement a program and other measures including relocation, whenever necessary, to protect the health and welfare of residents in the area.

For those designated as nonattainment areas, the Department, after consultation with local government authorities, nongovernment organizations (NGOs), people's organizations (POs) and concerned sectors may revise the designation of such areas and expand its coverage to cover larger areas depending on the condition of the areas.

SEC. 11. *Air Quality Control Techniques.* – Simultaneous with the issuance of the guideline values and standards, the Department, through the research and development program contained in this 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 shall refer 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 requirements, emission

reduction benefits, and environmental impact or the emission control technology.

The issuance of air quality guideline values, standards and information on air quality control techniques shall be made available to the general public: *Provided,* That the issuance of information on air quality control techniques shall not be construed as requiring the purchase of certain pollution control devices by the public.

SEC. 12. *Ambient Air Quality Guideline Values and Standards*. – The Department, in coordination with other concerned agencies, shall 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. The initial list and values of the hazardous air pollutants shall be as follows:

(a) For National Ambient Air Quality Guideline for Criteria Pollutants:

	Short Term[a]			Long Term[b]		
Pollutants	µg/Ncm	ppm	Averaging Time	µg/Ncm	ppm	Averaging Time
Suspended Particulate Matter[c] – TSP	230[d]		24 hours	90	--	1 year[e]
– PM-10	150[f]		24 hours	60	--	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	140	0.07	1 hour	--	--	--
As Ozone	60	0.03	8 hours	--	--	--
Carbon Monoxide	35 mg/Ncm	30	1 hour	--	--	--
	10 mg/Ncm	9	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 analyses are procured and become available.

d Limits for Total Suspended Particulate Matter with mass median diameter less that 25-50 µm.

e Annual Geometric Mean

f Provisional limits for Suspended Particulate Matter with mass median diameter less than 10 microns 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) For National Ambient Air Quality Standards for Source Specific Air Pollutants from Industrial Sources/Operations:

Pollutants[1]	Concentration[2] µg/Ncm	ppm	Averaging time (min)	Methods of Analysis/ Measurement[3]
1. Ammonia	200	0.28	30	Nesslerization/Indo Phenol
2. Carbon Disulfide	30	0.01	30	Tisher Method
3. Chlorine and Chlorine compounds expressed as Cl_2	100	0.03	5	Methyl Orange
4. Formaldehyde	50	0.04	30	Chromotropic acid Method or MBTH Colorimetic Method
5. Hydrogen Chloride	200	0.13	30	Volhard Titration with Iodine Solution
6. Hydrogen Sulfide	100	0.07	30	Methylene Blue
7. Lead	20		30	AAS[c]
8. Nitrogen Dioxide	375	0.20	30	Greiss-Saltzman
	260	0.14	60	
9. Phenol	100	0.03	30	4-Aminoustiphyline
10. Sulfur Dioxide	470	0.18	30	Colorometric-
	340	0.13	60	Pararosaniline
11. Suspended Particulate Matter --TSP	300	--	30	Garvimetric
--PM10	200	--	60	-do-

1 Pertinent ambient standards for Antimony, Arsenic, Cadmium, Asbestos, Nitric Acid and Sulfuric Acid Mists in the 1978 NPCC Rules and Regulations may be considered as guides in determining compliance.

2 Ninety-eight percentile (98%) values of 30-minute sampling measured at 25°C and one atmosphere pressure.

3 Other equivalent methods approved by the department may be used.