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ENVIRONMENTAL IMPACT ASSESSMENT EIA ENVIRONMENTAL IMPACT REPORT EIR
ORIENTATION MANUAL

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 S O PAULO - BRASIL

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The basic guidelines adopted by this Secretariat for preparation of Environmental Impact Assessments - EIA and the accompanying Environmental Impact Reports - EIR were formulated under the supervision of Engineer José Luiz Camargo Maia, and are based upon the joint efforts of the Special Secretariat for the Environment - SEMA, and the State Foundation for Engineering and the Environment - FEEMA with participation of the environmental agencies of the states of São Paulo, Rio Grande do Sul, Bahia and Minas Gerais.

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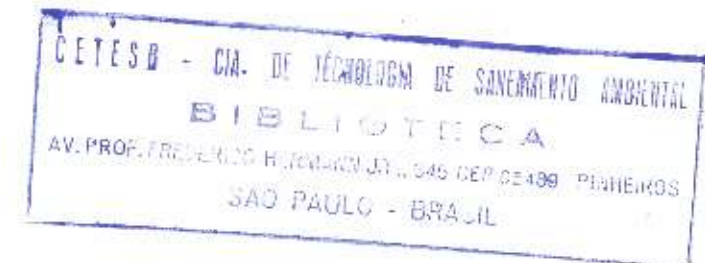
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Secretariat for the Environment
Environmental Planning Department

**Environmental Impact Assessment - EIA
Environmental Impact Report - EIR
Orientation Manual**



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Foreword

Increasing synergism between ecological consciousness and Environmental Policy is fostering the appearance of new approaches, both technical and administrative, to strengthen environmental management. Environmental Planning has evolved into a broad gauge assessment of effects to be expected from socio-economic interference with the environment; a preventive posture seeking to better harmonize human endeavor with the natural surroundings.

One of the most effective instruments of environmental policy used in planning is the Environmental Impact Assessment - EIA as related in the Environmental Impact Report - EIR, an evaluation which transcends the pollution sources to embrace the broader, more significant context.

To better utilize this Assessment in view of the concern for preservation and reclamation of the environment and to enhance the quality of life, the Secretariat for the Environment of the state of São Paulo has prepared and now updated a second enlarged edition of the Orientation Manual for EIA/EIRs. This is still another contribution to the Series of Manuals directed toward activities subject to Resolution 001/86 of CONAMA - the National Council for the Environment.

This Series includes titles on Environmental Accomodation of New Industrial Districts (January 1991), EIA/EIR Instructions for Mining Enterprises - A Reclamation Plan for Regenerated Areas (June 1991) and EIA/EIR Criteria, Requirements and Instructions pertaining to recycling and compost plants, incinerators and sanitary landfills for disposition of domestic and industrial solid wastes, (June 1991).

This edition incorporates a new Resolution SMA-19 of October 9, 1991, where the EIA/EIR analysis procedures within the jurisdiction of the Secretariat for the Environment are clearly and concisely defined.

I would like to take this opportunity to again emphasize the intent of this Secretariat to facilitate access and dissemination of the technical procedures related to environmental policy. Growing public

interest is the most important reason for our continued drive to obtain the practical results desired by all from environmental legislation.

In summary, it is my hope that the progress made with the environment of São Paulo will be clearly reflected in the quality of life for our people and that it will transcend the boundaries of this state to benefit the nation as a whole, a nation which is so deserving of support to achieve the environment desired for our children.

Alaôr Caffé Alves
Secretary

SECRETARIA DE TECNOLOGIA E SANEAMENTO AMBIENTAL
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This Orientation Manual is composed of the Resolution of the National Council for the Environment, CONAMA, related to Environmental Impact Assessments - EIAs and Environmental Impact Reports - EIRs and the basic guidelines for preparation of these assessments as well as the technical and administrative procedures adopted by the Secretariat for the Environment - SMA and by the State Council for the Environment - CONSEMA, in the jurisdiction of the State of São Paulo, for the purpose of introducing this important environmental planning and control instrument.

Resolution N. 001/86 authorized CONAMA to require the presentation of an appropriate EIA and EIR as a prerequisite for the licensing of activities which are judged to affect the environment.

Article 1 of this Resolution defines Environmental Impact as "any alteration in the environments physical, chemical and biological properties caused by any form of substance or energy resulting from human activities that, directly or indirectly affect:

- I. the health, safety and welfare of the population;
- II. the social and economic activities,
- III. the biota;
- IV. the aesthetic and sanitary conditions of the environment;
- V. the quality of the environmental resources."

The compulsory presentation of an EIA/EIR represented a considerable victory for the environmental system, and an opportunity to modernize this aspect of the nation by introducing up-to-date legislation. It also instituted an examination of environmental viability for proposed projects which, prior to 1986, considered only technical and economic factors.

Correct management of natural resources, proper use of raw materials, and utilization of high technology together with the general direction provided in the EIA, will better orient management of medium and large enterprises, avoiding high investments in the future for control and monitoring equipment, thereby minimizing detriment to the environment and consequently attenuating socio-economic penalties.

In order to carry out the implantation and improvement of the environmental policy, CONAMA has created various other resolutions, a number of which are included in this Manual.

In the State of São Paulo the Constitution introduced both the environmental license, dependent upon the approval of the Environmental Impact Assessment and the report for enterprises which are likely to affect the environment.

With the SMA Resolution N. 01, of 01/02/90, the Secretariat for the Environment, seeking improved control over environmental conditions may require EIA/EIRs for activities already under way and even those already possessing some type of license.

To license activities, Resolution 001 of CONAMA established a basic guideline for EIA/EIRs which is applicable to various types of activities or enterprises. The technical team responsible for producing the documents must select parameters to be used and add new ones as required.

This Manual also provides the entrepreneur with administrative procedures for EIA/EIRs in the State. The Environmental Planning Department, through its Environmental Impact Assessment Division, is responsible for analysis and technical review of EIA/EIRs. The need for CONSEMA's deliberation on an EIA is decided by the Council itself. Approval of an Environmental Impact Assessment by the Secretariat for the Environment is the first step toward Environmental license.

Further steps are related to the nature of each enterprise, in accordance with institutional requirements of the environmental area.

Appreciation of EIA/EIRs by CONSEMA and the holding of Public Hearings are important means for Society to assure and organize participation and to influence environmental policy.

Environmental Impact Assessment - Basic Guidelines

General information

- Identification of enterprise
 - Name,
 - address,
 - state registration and CGC numbers,
- Description of enterprise,
- Country of origin of the technology to be used,
- Information which identifies the size of the enterprise,
- Principal and secondary activities,
- Summary of objectives and justification of the socio-economic impact on the country, region, state and municipality,
- Geographical location proposed with maps or sketches, including access roads and the river basin,
- Definition of implantation phases,
- Associated enterprises,
- Name and address for contacts related to EIA/EIRs.

Characterization of the enterprise

To provide characterization of the enterprise in its planning, implantation, and operational phases and also, if applicable, in case of stoppage.

In the case of gradual implantation or of planned expansions, complete information must be provided for each phase, as well as a full description of technological and/or location alternatives.

Area of influence

To define the limits of the geographic area to be directly or indirectly impacted - called the project area of influence - must show the areas of impact occurrences, including separate outlines for each variable under consideration.

It is also necessary to justify the definition of the areas of influence and impact occurrences including maps.

Baseline data of the area of influence

The description and analysis of the environmental aspects and their interactions must be furnished to characterize the area of influence before the implantation of the enterprise. These aspects include:

- variables which are likely to be affected, directly or indirectly, by actions during the planning implantation and operational phases and, if applicable, in case of stoppage.
- Cartographic information showing the area of influence using maps scales compatible with the level of accuracy for the environmental aspects analysed.

Environmental quality

An outline of the interactions of physical, biological and socio-economic environmental aspects must be presented and the methods adopted for their analysis must be reported, in order to describe the interrelationships between the biotic, abiotic and anthropic components of the system to be affected by the enterprise.

In addition to this, the evolutionary tendencies of these aspects over a period of time must be identified to characterize the interference of the enterprise.

Environmental aspects

Physical aspect

The physical aspect must be approached according to the type and size of the enterprise and to the characteristics of the region. Some of these characteristics are:

- climate and meteorological conditions of the area potentially affected by the enterprise,
- air quality in the region,
- noise level in the region,
- geological formation in the area potentially affected by the enterprise,
- geomorphological formation in the area potentially affected by the enterprise,
- soil in the area potentially affected by the enterprise.
 - water resources
 - surface hidrology
 - hidrogeology
 - physical oceanography
 - water quality
 - water use

Note: See "Environmental Aspects - Details".

Biological aspect

The aspects to be taken into account are those which characterize the biological ambient according to the nature of the enterprise and the

region. Other aspects in the area of influence of the enterprise may be included as required. That is:

- land ecosystems,
- aquatic ecosystems,
- ecosystems of transition.

Note: See "Environmental Aspects - Details".

Anthropic aspect

All the necessary aspects for the characterization of the anthropic aspect should be reviewed, bearing in mind the type and size of the enterprise and the characteristics of the region. This characterization must also be based on the data given below emphasizing two points: one, the population in the area directly affected by the enterprise and the other which reveals the interrelationship typical of the region's anthropic aspect which is likely to be significantly altered by the indirect effects of the enterprise. Whenever applicable these variables considered in the anthropic aspect must be presented in a clear historical sequences permitting evaluation of their temporal evolution.

Among the factors, to be considered and specified may be included:

- population dynamics,
- land use and occupation accompanied by a map,
- standard of living,
- the framework of services and production,
- social organization of all relating to the enterprises area of influence.

Note: See "Environmental Aspects - Details".

Environmental impact prediction

The purpose of this section is to present the prediction analysis (identification, evaluation and interpretation) of the probable environmental impacts occurring during the planning, implantation and operational phases and, if applicable, in the case of the enterprises stoppage. The physical, biological and anthropic aspects are to be included and the time span considered must be identified, and justified.

The impacts will be assessed according to the criteria described in "Baseline Data of the area of influence", and may include impacts such as:

- direct and indirect
- positive and negative
- permanent, temporary and cyclic

- long-term, medium-term and immediate
- reversible and irreversible
- strategic, regional and local.

The environmental impact assessment includes, for each case, identification, an estimate of the magnitude and an interpretation of the significance, to enable an overall understanding of the effects.

This assessment will provide a prognosis of the environmental quality in the enterprise area of influence, useful not only when the project and its alternatives are carried out but also should the project be rejected.

This assessment must be presented in two formats:

- an outline of the relevant impacts during each of the four phases of the enterprise - planning, implantation, operation and stoppage in case of accidents - together with the analysis (identification, prediction of magnitude and interpretation) of the interactions.
- a detailed description of the impacts for each relevant environmental aspect considered in the environmental survey such as those on the following aspects:
 - physical
 - biological
 - anthropic.

The methods used to identify the impacts, the techniques utilized to predict their magnitude and the criteria adopted to interpret and analyse their interactions must be mentioned.

Proposals of mitigating measures

Measures to minimize the adverse impacts, mentioned in the previous section, must be presented and classified according to:

- their preventive or corrective nature, also the evaluation of the efficiency of pollution control equipment in relation to the environmental quality criteria and effluent disposal standards, for liquids, atmospheric emissions and solid wastes;
- the phase of the enterprise in which they should be adopted: planning, implantation, operation and stoppage in case of accidents;
- the environmental aspect to which they are destined: physical, biological, socio-economic;
- the duration of actions short, medium and long term;
- responsibility for the implementation: entrepreneur; public power or others;
- the cost.

The adverse impacts which can not be averted or mitigated must be also mentioned.

Monitoring program for the environmental impacts

The monitoring programs for the beneficial and adverse environmental impacts caused by the enterprise must be presented, considering the phases of planning, implantation, operation and stoppage - in case of accident. Depending upon the case, may be included:

- indication and reason for the parameters selected for the impact assessment of each of the environmental aspects considered;
- indication and reason for the sampling network, including dimensional and spatial distribution;
- indication and reason for sampling methods, collection and analysis;
- indication and reason for the sampling periodicity of each parameter according to the several environmental aspects;
- indication and reason for the methods to be applied in processing the data collected, in order to accurately describe the evolution of environmental impacts caused by the enterprise.

Environmental Aspects - Details

The "Environmental Impact Assessment - Basic Guidelines" includes the environmental aspects specified below. The degree of detail of these aspects in each EIA depends upon the nature of the enterprise, the relevance of the aspects in relation to location and the criteria adopted by the assessment group.

Physical aspect

Climate and meteorological conditions

The characterization of the climate and the meteorological conditions in the area potentially affected by the enterprise includes:

- wind conditions, temperature, humidity of the air in the earth's boundary layer;
- radiation balance component, at soil surface;
- soil hydric balance components;
- nebulosity;
- large and medium-scale meteorological conditions favoring the formation of a high concentration of pollutants, detrimental to human health, fauna, flora and to water and soil quality;
- evaluation of the frequency of large scale meteorological conditions favoring the formation of a high concentration of pollutants, including the frequency and intensity of transitory and semi-permanent sub-tropical anticyclones;
- meteorological parameters to determine the rate of rainfall such as:
 - average rainfall: weekly, monthly, yearly;
 - the frequency of weekly and monthly maximum and minimum rainfall.
- coefficient of the annual rainfall variation;
- maximum, average and minimum number of rainy days in each month;
- definition of dry and rainy periods;
- the relationship of intensity, duration and frequency of rainfall for hourly and daily periods;
- meteorological parameters for the evaluation of the rate of the average monthly and weekly transference of water to the atmosphere (evaporation and evapotranspiration) as well as other contributions of the soil hydric balance (surface water runoff and infiltration).

Air quality

Characterization of the air quality in the region includes:

- reference concentrations of atmospheric pollutants;
- physical-chemical composition of rainwater.

If a complementary measuring network for atmospheric pollutants is required, the criteria adopted must be justified in the specification of parameters. The applied measuring method must be described for all cases.

Noise

The characterization of noise levels in the region includes:

- noise level
- plotting of measurement points.

Geology

The geological characterization of the area potentially affected by the enterprise includes:

- a structural sketch, showing stratification, foliation and fractures;
- lithological sketch, with a crono-stratigraphic synthesis, showing the physical-chemical and mineralogical characteristics of the rocks;
- evaluation of geotechnical conditions using parameters for rock and soil mechanics.

Geomorphology

The overall geomorphological characterization includes:

- the general topographic division of the study areas (plateau, hollows, flat land);
- location of the area within the valley or river basin (high, medium, valley bottom or headwater, streambank, etc.);
- dominant topography (crests, hills river plain etc.);
- presence of great relevant masses or very high points (crests, mountain ranges, peaks, and isolated hills) in the vicinity;
- position of the area in relation to main topographical features (top, sidehill, foothill etc);
- classification of topographical forms according to origin (karstic forms, stream, plain, coastal);
- topography dynamics (erosion or accelerated tendency to ward silting, areas subject to flooding, or eolic erosion etc).

Soils

The characterization of soils potentially affected by the enterprise includes:

- definition of soil classes on a taxonomic series, with a morphological and analytical description,
- special individual or association distribution,
- description of agricultural applicability.

Water resources

The characterization of the water resources, taking into account all river basins in the area potentially affected by the enterprise includes:

Surface hydrology

Description of the hydrological parameters obtained from historical data; if not available, presentation of an analysis of water level and sediment information related to a minimum period of a complete hydrological cycle is acceptable. Complete characterization includes:

- hidrographic network, identifying the enterprise location, the physical characteristics of the river basin and the hydraulic relationships;
- hydric balance of the area;
- related hydrological parameters;
- sediment production in the basin and its carriage along the river flumes.

Hydrogeology

Description of aquifers on two different levels: an outline and a detailed survey of the granular (confined or not confined), and of the fractured or karstic aquifers. This list may include:

- location, nature, geometry, lithology, structure and other geological aspects of the aquifer;
- supply (including artificial replacement), flow and discharge (natural or artificial);
- location of underground water levels;
- relationship with surface waters and other aquifers;
- physical and chemical composition of underground waters;
- conditions of usage, considering the location and the types of catchment utilized, quantities used and the pumping arrangement for each catchment.

Physical oceanography

Description of the physical properties of the waters (such as temperature, salinity, ocean currents and tides) and depth and shoreline profile of the study area.

Water quality

Description of the water quality as well as the methods used to determine the physical-chemical and bacteriological composition of the internal, surface and underground, estuary, and ocean water resources.

Water use

Characterization of the main uses of water in the area potentially affected by the enterprise, with a listing of its uses, present and future demands on quantitative and qualitative levels as well as the analysis of availability

for current and future use taking into account importations and exportations as found.

Identified must be:

- industrial and domestic requirements;
- dilution of domestic and industrial wastes;
- power generation;
- irrigation;
- fishing;
- recreation;
- preservation of fauna and flora;
- navigation.

Biological aspect

Land ecosystems

Characterization and analysis of land ecosystems include:

- description of cover vegetation: mapping of the area in consideration, identification of different vegetations; mapping of the vegetation density; identification of the rare species threatened, those of scientific and economic importance together with the mapping of locations; identification of vegetation indicators for the quality of the air, humidity and soil disturbances;
- general description of fauna-fauna and fauna-flora interrelationships in the directly affected area, with the following factors concerning the fauna: mapping of the area showing the animal species present, their territory and specific diversity; mapping of the location of their feeding and drinking sources, the species' shelters and territories reproduction and breeding sites, of the material required by rare species, for nest building of those threatened and those of economic importance and of the vectors and origins of disease.

Aquatic ecosystems

Analysis and characterization of the aquatic ecosystem in the area influenced by the enterprise include the following procedures:

In areas under direct incidence of impacts:

- mapping of the basic components of the aquatic population (algae, vascular plants, zooplankton, bentons and nektons), classified according to ocean systems, estuary regions, waterway systems, lotic and lentic environments; also, presentation of population densities of the different species identified as well as the area in which they are found in accordance with their biotypes; with separate tables for presentation of specific diversity indices.

- identification of the trophic condition of the water bodies, showing the critical link in the food chains;
- identification of threatened rare species of animals and plants, of disease vectors and origins, and mapping of their occurrence;
- identification of animal and plant species that function as biological indicators of environmental changes in each type of aquatic ecosystems;
- identification of direct incidence of impacts on the benton and nekton components which are economically important and the mapping of their shelters, territorial areas, reproduction and breeding sites.

In areas of influence:

- mapping of the different aquatic ecosystems, showing animal and plant species, denoting their territories and areas in which they are found;
- inventory of animal and plant species by ecosystem and the study of their specific diversity.

Ecosystems of transition

The ecosystems of transition in the area under consideration must be analysed according to the criteria for land and aquatic ecosystems, emphasizing the regulatory role. Ecosystems such as mangroves, marshes, swamps must be included.

Anthropic aspect

Population dynamics

Population dynamics in the area of influence include:

- population distribution, with maps showing where urban and rural agglomerations are found, and classification according to the number of inhabitants; road and river networks must also be shown;
- population distribution with a map showing the population density in the study areas, and also the following data: total (urban and rural) population according to sex and age groups; average rate of vegetative and demographic growth of the total (urban and rural) population in the last decade; extent of urbanization during a significant period;
- seasonal, weekly and daily population mobility, in the study areas, caused by recreation, work and education activities;
- migratory trends, identifying their intensity, origin, causes, work and access conditions etc.

Land use and occupation

Land use and occupation characterization includes:

- mapping of urban and rural areas and of urban expansion;
- mapping of the areas of historical, cultural and ecological importance;

- identification of urban use: housing, commerce, services, industry, institutional and public, including the zoning laws;
- identification of the infra-structure, including the main road system, harbors, airports, freight and passenger terminals, water supply and environmental sanitation systems etc.;
- identification of the main rural uses: permanent and temporary crops, natural or planted pastures etc.;
- description of the agrarian structure, according to its minimal local rural model; settlement on areas without legal tenure;
- mapping of the exotic and native vegetation.

Living standards

The characterization of the living standards in the area of influence includes:

- occupational structure: economically active population - total, urban and rural - by sex; population engaged in economic activities; income distribution and evolution; unemployment rates and evolution and the labor situation for each economic sector;
- education: supply and demand for urban and rural teaching in the 1st and 2nd grades, rate of attendance, passing and failure at these levels (urban and rural); characterization of the private and public school systems (human and physical resources); degree of illiteracy for each age group; professional courses as well as reading and writing and informal courses available; school lunch program and formal education at private and public levels;
- health: infant and general mortality rate, mortality caused by infectious and parasitic diseases (that may be reduced by sanitation, immunization and special programs) mortality caused by non-identified diseases (lack of medical care) prevailing nosologic situation, including the endemic and venereal diseases; characterization of the institutional structure; private and public health programs; susceptibility of the physical, biological and socio-economic aspects to host and/or spread diseases such as Chagas' disease, malaria, yellow fever, leishmaniasis, and parasites in general; characterization of informal medicine (using human and natural resources);
- food: nutritional situation of the population; eating habits; food supply system; local - natural and cultivated; production from other states or locales; public and private food programs;
- leisure, tourism and culture: cultural manifestations related to the natural and socio-religious environment (dance, music, feasts, traditions and dates); description of monuments with cultural, scenic, historical and natural importance; principal recreational activities of the population; more popular leisure areas; urban and rural leisure facilities; urban social centers; importance of tourism as a source of income; monthly, weekly, local and regional newspapers; local and regional radio and TV stations;

- safety, criminal incidence and growth rates, court and police facilities; fire brigade, care and welfare for the aged and minors; civil defense system;
- settlement: housing conditions in the city, towns and rural areas, given the cultural and technological variations of the housing and cluster layout, related to the vulnerability to vectors and diseases in general; water and electric power supply; sewerage and garbage collection; transportation; property rental and sales value and future trends.

Production and service structure

Characterization of the production and service framework includes:

- production factors;
- change related to the composition of local production;
- technological use and achievement in each area;
- economic relationship between the local micro-regional, regional and national economies, including the disposition of local production and its relative importance.

Social organization

Social organization in the area of influence is characterized by:

- social forces and tensions;
- community groups and movements;
- community leadership;
- active political and union forces;
- associations.

Environmental Impact Report - EIR

The Environmental Impact Report - EIR consists of the conclusions drawn from the Environmental Impact Assessment - EIA. The technical information contained must be clearly conveyed to the public in understandable language illustrated by maps - with suitable scales, tables, graphs and other visual supports, to make all environmental consequences and alternatives understood, and their advantages and disadvantages compared.

Contained must be:

- project objectives and rationale, the relationship and agreement with sectorial policies, public plans and programs;
- project description with location and technological alternatives described, in the construction and operation phases: area of influence, raw material, labor, power sources, operation and technical processes, effluents, emissions and wastes, energy losses, direct and indirect employment generated, cost/benefit ratio of the socio-environmental assets and liabilities;
- summary of the baseline data of the project's area of influence;
- description of the environmental impacts, considering the project and its alternatives, the time span for these impacts and listing of the methods, techniques and criteria adopted for their identification, quantification and interpretation;
- definition of the future environmental quality in the area of influence, comparing the different possibilities, alternatives, and eventual rejection of the project;
- description of the foreseen result of mitigating measures regarding adverse impacts, listing the unavoidable ones and their foreseeable effect;
- monitoring program for impacts;
- recommendation of the most favorable alternative (conclusion and general comments).

The EIR must bear the name and professional registration number of each participant.

Basic Legislation for Implantation of the EIA/EIR

Resolutions of the National Council for the Environment - CONAMA

CONAMA Resolution N. 001, of 01/23/86⁽¹⁾
The National Council for the Environment - CONAMA

Article 48 of Decree N. 88.351, of 06/1/83, for the effective exercise of the responsibilities attributed by article 18 of the same decree, and considering the necessity to define responsibilities, the basic criteria and general guidelines for the use and implementation of the Environmental Impact Assessment as instrument of the National Environmental Policies, hereby resolves:

Article 1 - For the purpose of this Resolution the environmental impact is considered any alteration in the environmental physical, chemical and biological properties, caused by any form of substance or energy resulting from human activities that, directly or indirectly, affects:

- I. the health, safety and welfare of the population;
- II. the social and economic activities;
- III. the biota;
- IV. the aesthetic and sanitary conditions of environment;
- V. the quality of the environmental resources.

Article 2 - Licensing of activities which may modify the environment will depend upon the preparation of the Environmental Impact Assessment - EIA accompanied by the Environmental Impact Report - EIR, to be approved by the competent state agency and supplied by SEMA. These activities are:

- I. highways with 2 (two) or more lanes;
- II. railways;
- III. chemical, ore and oil terminals and harbors;
- IV. airports, as defined in item I, Article 48, of the Decree-Edic, N. 32, of 11/18/66;
- V. oil pipelines, gas pipelines, ore pipelines, sewerage main outfall sewers;
- VI. transmission lines above 230 Kv;

¹ Published in "Diário Oficial da União", on 02/17/86.

VII. water works for the exploitation of water resources, such as: dams for any hydro-electric purpose, above 10 Mw, for sanitation or irrigation, dredging of navigation channels, drainage and irrigation, straightening of water courses, dredging of sand bars and channel entries and crossing of basins and dikes;

VIII. extraction of fossil fuel (oil, schist, coal)

IX. mining, including class II as defined in the Mining Code;

X. sanitary landfills, processing and final destination of toxic or dangerous wastes;

XI. electric power plants, any primary power source above 10 Mw;

XII. industrial and agroindustrial plants (petrochemical, iron, chlorochemicals, alcohol distilleries, coal, extraction and culture of hydrobic resources;

XIII. industrial districts and zones, strictly industrial - ZEI;

XIV. logging in areas larger than 100ha (one hundred hectares) or less when occupying areas significant in percentual terms or of environmental importance;

XV. urbanistic projects, above 100ha (a hundred hectares) or in areas considered environmentally relevant according to the criteria adopted by SEMA and competent state and municipal agencies;

XVI. any activity that utilizes more than ten tons per day of charcoal, derivatives or similar products;

XVII. agricultural and cattle projects which occupy areas above 1000ha (one thousand hectares) or less when occupying significant areas in percentual terms of environmental importance, including environmental protection areas.

Article 3 - The licensing of activities that, by law, are of federal jurisdiction will depend upon the elaboration of Environmental Impact Assessment - EIA and the respective EIR to be submitted for SEMA's approval.

Article 4 - The responsible environmental agencies and SISNAMA's sectorial agencies must harmonize the licensing processes with the planning and implantation stages of activity that change the environment, considering the criteria and guidelines set by this Resolution and based upon the nature, size and specifics for each case.

Article 5 - The environmental impact assessment, in addition to and respecting the legislation, especially the principles and objectives expressed in the National Law for Environmental Policies, will comply with the following guidelines:

- I. consider all technological and location alternatives of the project in confrontation with an eventual project rejection;

II. systematically identify and evaluate all environmental impacts caused during the implantation and operation phases of the enterprise.

III. define the geographical boundaries that will be directly or indirectly affected by the impacts - called the project area of influence - considering without fail the river basin in which it is located.

IV. consider public plans and programs, proposed or in the implantation phase, within the project area of influence and compatibility to them.

Sole Paragraph - When the Environmental Impact Assessment preparation is required, the appointed state organ, or SEMA, or the municipality will set further guidelines that, due to the nature of the project and the environmental characteristics of the area, are required, including the delays for conclusion and analysis of the assessment.

Article 6 - The Environmental Impact Assessment will undertake, at least, the following technical activities:

I. baseline data of the project area of influence, complete description and analysis of the environmental resources and their interactions, exactly as they are, so as to characterize the environmental situation of the area before implanting the project, considering:

a. physical aspect: underground, waters, air and climate, mineral resources, topography, types and possibilities of the soil, water bodies, hydrologic system, ocean currents, atmospheric currents;

b. biological aspect and natural ecosystems-fauna and flora, showing species that record environmental quality, those of scientific and economic value, rare and threatened and permanent preservation areas;

c. socio-economic aspect - land use and occupation, water uses, and socio-economy, emphasizing the archeological, historical and cultural sites and monuments of the community, the dependence relations between the local society, environmental resources and the possible future use of these resources.

II. prediction of the environmental impacts of the project and its alternatives, by identification, predicting their magnitude and interpretation of the weight of probable relevant impacts, detailing: beneficial and adverse impacts, direct or indirect impacts, short-medium and long-term impacts, temporary and permanent impacts and their degree of reversibility, their cumulative and synergetic properties, their social benefits and costs;

III. definition of mitigating measures for adverse impacts, among them the control equipment and waste treatment systems, and an evaluation of effectiveness;

IV. elaboration of monitoring programs for adverse and beneficial impacts indicating the factors and parameters to be considered.

Sole Paragraph - When the Environmental Impact Assessment preparation is required, the state authority, SEMA or the municipality will provide further direction according to the project's nature and the environmental characteristics of the area.

Article 7 - The Environmental Impact Assessment will be performed by a qualified multidisciplinary team, directly or indirectly independent of the project entrepreneur and it will be technically responsible for the results presented.

Article 8 - The project entrepreneur is responsible for the cost of preparation of the Environmental Impact Assessment including: data base, field work and inspection, laboratory analysis, scientific and technical studies, impact monitoring and EIR preparation, with at least, 5 (five) copies.

Article 9 - The Environmental Impact Report will present the Environmental Impact Assessment - EIA conclusions and shall contain:

I. project objectives and reasons, relationship and compatibility with sectorial policies and public plans and programs;

II. project description, technological and location alternatives, specifying for each of them, in the construction and operation phases, the area of influence, the raw material and labor, power sources, operational processes and techniques, probable effluents, emissions, wastes and energy losses, direct and indirect employment it will generate;

III. summary of results obtained from the baseline data of the project area of influence;

IV. description of probable environmental impacts caused by implantation and operation of the enterprise, considering the project and its alternatives, time limits and indication of the methods, techniques and criteria adopted to identify, quantify and interpret them;

V. characterization of the future quality of the environment in the area of influence, comparing the different possibilities of fitting of the project and its alternatives as well as its rejection;

VI. description of the foreseen mitigating measures effects in relation to adverse impacts, pointing out the unavoidable ones and the predicted degree of alteration;

VII. impact monitoring programs;

VIII. statement of the most favorable alternative (conclusion and general comments).

Sole Paragraph - The EIR must be objectively presented and facilitate comprehension. All information must be presented in clear language, with clear visual support such as maps, charts, tables, graphs, etc., so that all

advantages and disadvantages of the project and its environmental outcomes are understood.

Article 10 - The state authority, or SEMA or the municipality will have a delay to deliberate on the EIR presented.

Sole Paragraph - The period referred to in Article 10 will begin on the day that the Environmental Impact Assessment and EIR are received at SEMA or the state or municipal agency.

Article 11 - Respecting industrial secrecy requested and stated by the entrepreneur, public access to EIR will be granted. Copies will be available at the document or SEMA controlling state agency libraries, further, available during the period of technical analysis.

Para. 1 - Interested public agencies or those directly related to the project will receive copies of the EIR.

Para. 2 - When the Environmental Impact Assessment preparation and EIR presentation is defined, the qualified state or municipal agency or SEMA will determine a time period for the receipt of comments by public agencies and, whenever necessary, public hearings will be conducted to discuss the project, its environmental impacts and the EIR.

Article 12 - This resolution becomes effective on the date of its publication.

CONAMA Resolution N. 006, of 09/16/87⁽²⁾

The National Council for the Environment, vested with its legal attributes, considering the necessity for general regulation of environmental licensing of large scale enterprises, especially those of relevant interest for the Federal Government, such as electric power generation, with the intention to harmonize the concepts and language among all participants in the process hereby resolves:

Article 1 - The concessionaries that commercialize, generate and distribute electric power, must provide all technical data about the project, as determined in the environmental legislation and defined in this Resolution when applying for environmental licensing at the qualified state agency.

Article 2 - In the case of enterprises that must be licensed by more than one state, because of the area involved, the agencies must, in so far as possible, standardize requirements in advance.

Sole Paragraph - SEMA will supervise all agreements foreseen in this article.

Article 3 - The qualified state agencies and members of SISNAMA partaking in the licensing process will establish phases and specifications suitable to the enterprise characteristics, as covered in this Resolution.

² Published in "Diário Oficial da União", on 10/21/87.

Article 4 - For hydro-electric enterprises, and with due consideration to the specifics of each case, the Previous Licence (PL) must be required and obtained in the beginning of the feasibility analysis, the Instalacion Licence (IL) must be obtained prior to construction and the Operation Licence (OL) must be obtained before closing the dam.

Article 5 - For thermoelectric plants, the PL must be required in the beginning of the feasibility study; the IL before implantation and the OL after tests are made and before commercial generation takes place.

Article 6 - For substation and transmission lines licensing process, the PL must be required prior to planning, before defining locations and the IL after concluding the construction project and before beginning work, the OL, before the commercial operation.

Article 7 - The necessary documents for licensing referred to in Articles 4, 5 and 6 are those mentioned in the appendix of this Resolution.

Sole Paragraph - All complementary information considered necessary must be required by the state licensing agency for the environment.

Article 8 - For enterprises cited in CONAMA Resolution N. 1/86 - Article 2, the Environmental Impact Assessment must be prepared so that the entrepreneur is able to provide a qualified state agency(ies) report on assessment planning to be executed and provisional schedules, whenever the PL is requested. As such, further instructions provided for in CONAMA's Resolution N. 1/86, Article 6, Sole paragraph may be imposed.

Para. 1 - All inventory information existent must be reported to the state agency(ies) responsible for the licensing.

Para. 2 - The PL will be issued only after EIR analysis and approval.

Article 9 - The Environmental Impact Assessment, the preparation of EIR, the specifications of the relevant environmental aspects to be carried out in the licensing phases, including impact monitoring programs will be accompanied by technicians designated by qualified state agency(ies).

Article 10 - The EIR must be accessible to the public as determined by CONAMA Resolution N. 1/86, Article 11.

Sole Paragraph - The EIR, specifically intended to clarify the environmental advantages and outcomes of the enterprise must be elaborated to effectively reach its objective as determined in CONAMA Resolution N. 1/86, Article 9, sole paragraph.

Article 11 - Other technical data in the Environmental Impact Assessment must be reported to the qualified state agency(ies) as established in Article 9 of this Resolution.

Article 12 - Determinations of this Resolution will be applied considering the planning and execution phases of the enterprise.

Para 1 - In case the timing for obtaining PL or IL is overdue, it will not be issued.

Para. 2 - The Environmental Impact Assessment performed sprung of planning and execution requirements of the enterprise must be reported to the qualified state agencies even if the PL or IL have not been issued, according to the previous paragraph.

Para. 3 - Even when the IL application period is overdue, the EIR must be prepared using available information, as well as the additional information required by the qualified environmental agency(ies) for the licensing, so as to advertize the enterprise's characteristics and the predicted socio-economic and environmental outcomes.

Para. 4 - For enterprises beginning operation after February 1st, 1986, regularization will be accomplished by means of the OL aquisition for which the EIR is necessary with, at least, the following information: enterprise description, beneficial and adverse impacts on the area of influence, description of environmental protection and impact mitigating measures adopted or to be adopted, in addition to other environmental assessments already performed by the enterprise.

Para. 5 - Enterprises in operation prior to February 1st, 1986, will be regularized through aquisition of the OL without presenting the EIR. However, the entrepreneur must send the state agencies a report with a general description of the enterprise, and of environmental impact caused and protective measures adopted or to be adopted.

Article 13 - This Resolution will be enacted on the date of publication.

Documents required for Licensing (Appendix to Resolution 006)

Hydroelectric Plants

Previous Licence (PL)

- Previous License request.
- Regulation MME authorizing the viability Assessment.
- Environmental Impact Report (EIR) - summarized and complete when necessary.
- Copy of PL request.

Installation Licence (IL)

- Report on the viability assessment.
- Installation license request.
- Copy of confirmed PL.
- Copy of IL request.

- Copy of Decree granting the hydro-electric concession.
- Basic environmental project.

Operation License (OL)

- Operation License request.
- Copy of confirmed IL.
- Copy of LO request.

Thermo-electric Plants

Previous License (PL)

- Previous License request.
- Copy of LP request.
- Regulation MME authorizing feasibility assessment.
- Research permission or DNPM warrant, when applicable.
- Municipality Declaration.
- EIA (summarized and complete).

Installation License (IL)

- Installation License request.
- Copy of confirmed PL.
- Copy of IL request.
- DNAEE Feasibility Report.
- Basic environmental project.

Operation License (OL)

- Operation License request.
- Copy of confirmed IL.
- Copy of OL request issue.
- DNAEE regulation for basic project approval.
- MML regulation authorizing the enterprise implantation.

Transmission Lines

Previous License (PL)

- Previous License request.
- Copy of PL request.
- EIR (summarized and complete).

Installation License (IL)

- Installation License request.
- Copy of confirmed PL.
- Copy of IL request.
- Basic environmental project.

Operation License (OL)

- Operation License request.
- Copy of confirmed IL.
- Copy of OL request.

- Copy of DNAEE regulation approving the project.
- Copy of MME regulation (administrative purpose).

CONAMA Resolution N. 010, of 12/03/87⁽³⁾

The National Council for the Environment - CONAMA, by means of its legal attributions as stated in Law N. 6.938, Article 4, item I, of August 31st, 1981, Decree N. 88.351, Article 7, items II and X, of June 1st, 1983, hereby resolves:

Article 1 - In order to cover the environmental losses due to the destruction of forests and other ecosystems, the licensing of large scale enterprises, as considered by the licensing agency based on the EIR, will have as one of its pre-requisites, the implantation of an Ecological Station by the entity or company responsible for the enterprise, preferably in the area.

Article 2 - The value of the area to be utilized and the facilities provided to achieve the purpose established in the previous Article will be proportional to the environmental loss to be compensated and it cannot be inferior to 0,5% (half per cent) of the total costs of the enterprise implantation.

Article 3 - The licensing agency will determine the characteristics, extension, boundaries and buildings of the Ecological Station in the licensing process of the enterprise.

Article 4 - The EIR - Environmental Impact Report, will present a proposal or project and indicate the possible alternatives to meet the determinations in this Resolution.

Article 5 - The agency or company responsible for the enterprise will be in charge of the Ecological Station, directly or by agreement with an agency of the Public Power, qualified for the purpose.

Article 6 - The environmental licensing agency will inspect the implantation and work of these Ecological Stations as determined in this Resolution.

Article 7 - This resolution will take effect on the date of its publication.

Constitution of the State of São Paulo Chapter IV

Environment, Natural Resources, Sanitation

Section I - Environment

Article 192 - The execution of works, activities, production processes and enterprises and the exploitation of any kind of natural resources

3. Published in "Diário Oficial da União", on 03/18/88.

either by public or private agencies, will be permitted if the environment remains ecologically balanced.

Para. 1 - Grant of the environmental license, by a competent public agency, part of the unified system for this purpose, will be made according to the general criteria determined by Law, in addition to the norms and standards established by the Public Power and in accordance with environmental planning and zoning.

Para. 2 - The environmental license, renewable according to law, for the execution and exploitation mentioned in this article, when potentially an originator of significant degradation of the environment, will according to the criteria specified in the legislation always be preceded by the approval of the preliminary Environmental Impact Assessment and its report to which will be given previous notice insuring public hearings.

Legislation of the state

SMA Resolution N. 01, of January 2nd, 1990

The Extraordinary Secretary for the Environment using his legal attributes and based upon Deliberation N. 037, of 12/01/89 voted at the 46th Ordinary Assembly of the State Council for the Environment CONSEMA, resolves:

Article 1 - The responsible for the work or activity (public or private) determined in Para. 1 of this article, already implanted or not yet begun on the date of the present Resolution, although licensed, authorized or approved by a public agency or organ, and that has not yet been submitted to EIA/EIR, shall present this assessment, in terms of the criteria determined by the Secretariat for the Environment - SMA, observing the determinations of CONAMA Resolution N. 001/86.

Para. 1 - The activities and works referred to in this article are stipulated, case by case, according to the criteria applied by SMA, established on a technically justified basis, taking into account the effects on the aspects mentioned in CONAMA Resolution N. 001/86, Article 1, items I to V.

Para. 2 - The interested parties may request from SMA definition of the technical criteria applicable to their enterprise.

Para. 3 - After determining the works or activities subject to the requirements defined in the item, the responsible party will be informed of the decision, through DOE publication and an official letter duly registered, to a contention request at the Secretariat for the Environment - SMA, if necessary, submitted to the CONAMA Resolution N. 001/86 determination.

Para. 4 - The decision for a contention request, by the qualified agency at the Secretariat for the environment, informed through DOE publication and an official letter duly registered, will be done on a final decision level to CONSEMA which will be interposed in a ten-day period after the referred decision.

Para. 5 - The presentation period for the EIA/EIR shall be of 60 (sixty) days, postponable according to the criteria of the Secretariat for the Environment, from the requirement notification, or when no more requirements are accepted.

Para. 6 - The work or activity will be interrupted, totally or partially, if any evidence of serious environmental damage occurs, basically, according to the criteria of the Secretariat for the Environment.

Para. 7 - To comply with the determination in the previous paragraph, the Secretariat for the Environment will conduct a proper technical audit.

Article 2 - The responsible party for the work or activity regularly done and already concluded must submit to corrective measures established by the Secretariat for the Environment - SMA, technically substantiated, if the technical audit proves environmental degradation.

Sole Paragraph - The period adopted for the corrective measures shall be of 60 (sixty) days from the day of its determination by the Secretariat for the Environment - SMA, postponable at its criterion, the responsible party being subject to penalties of the environmental legislation.

Article 3 - Licensed or already initiated works with no approved EIA/RIMA, and not foreseen in this Resolution, will be the object of specific analysis by the Secretariat for the Environment - SMA, by means of applicable technical auditing.

Article 4 - CONSEMA may indicate works or activities for the purpose of applying this Resolution.

SMA Resolution N. 19 of October 9, 1991.⁽⁴⁾

The Secretary for the Environment, vested with his legal attributions and considering the need to improve the procedures for the Environmental Impact Assessment and respective Environmental Impact Report - EIR, to attain the objectives of this agency, hereby resolves:

Article 1 - To meet the scope of this Secretariat all EIA/EIRs analysis procedures, contained in the appendix of this Resolution, are approved.

Article 2 - All provisions not in conformity with the above are hereby revoked
EIA/EIRs analysis Procedure within the scope of SMA

The Environmental Impact Assessment - EIA and its Environmental Impact Report - EIRs must be delivered to the Secretariat for the Environment - SMA. The EIA/EIRs must comply on the formal and content levels, with the CONAMA Resolution 001/86.

4. Published in "Diário Oficial do Estado de São Paulo", on 10/10/91.

The SMA will publish, up to the tenth day of each month, in "Diário Oficial do Estado", a list of the EIA/EIRs delivered to SMA in the previous month, with the enterprise and the entrepreneur names, location, delivery date, file number and the consultant responsible for preparation of the EIA/EIRs according to the information given by the entrepreneur.

The entrepreneur must deliver to the Secretariat, the following documents:

- Request of EIA/EIRs (model 1) provided by SMA;
- 6 (six) copies of the EIA and EIRs;
- summary of EIA/EIR (model 2);
- copy of an issue of the local and/or newspaper of the region where the enterprise is to be implanted, as determined in CONAMA Resolution 006/86 (model 3);
- copy of the ART form (Statement of Technical Responsibility), when necessary, by the consultant;
- entrepreneur's authorization to the person in charge of the follow-up, legally signed, with expressed powers to follow-up the process and expressed citation that the accounted declaration will commit the grantor.

When the EIA/EIR is received by the Environmental Impact Assessment Division - DAIA/SMA, a preliminary analysis of the Assessment will be made, within 15 (fifteen) day-period, to ensure that it is in accordance with CONAMA Resolution 001/86.

If the EIA/EIR is not in accordance with CONAMA Resolution 001/86, the document will be sent back to the entrepreneur so that a new study can be provided for. In this case the process is automatically filed and this determination must be reported to CONSEMA and the licensing body of SMA.

When the previous analysis is concluded, the DAIA/SMA will analyse the EIA/EIR.

This analysis must be executed in the maximum period of 3 (three) months from the receipt of the EIA/EIR at SMA, with the corresponding technical review issue.

If, due to the technical complexity of the EIA/EIR, DAIA/SMA requires more time for the analysis, the fact and a justification must be reported, in an official letter, to the entrepreneur.

DAIA/SMA may request of the entrepreneur, in an official letter, EIA/EIR complementations.

Whenever DAIA/SMA requests complementation the analysis period will be interrupted on the day of the SMA official letter. Elapsed time will again be counted from the day that the complementations are formally delivered.

Likewise, should a Public hearing, be needed the periods may be altered not only to organize the meeting, but also, and especially, because of the resulting new requirements and complementation.

When the analysis is completed, the DAIA/SMA must issue the Technical Report and respective sumulla stating the approval, the rejection or the approval with complementary requirements of the EIA/EIR in question, which will be forwarded to CONSEMA for appreciation and deliberations, as well as to the entrepreneur.

The responsible parties for the enterprise will be invited to participate at the CONSEMA meeting to describe the enterprise and the EIA/EIR, and also to answer the questions asked by the Council Members.

After the meeting, the Secretariat for CONSEMA will provide:

- a. Publication of the Deliberation in "Diário Oficial do Estado".
- b. The forwarding of the Deliberation copies to the responsible party for the enterprise and consultant.
- c. The forwarding of the Deliberation and EIA/EIR Technical Report copies to CETESB and/or the Department for Natural Resource Protection - DEPRN, so that the enterprise licensing process may continue.
- d. The forwarding of the Technical Report and corresponding Sumulla copies, to the municipality where the enterprise is located.

CONSEMA Deliberation N. 17, of 07/13/90⁽⁵⁾

The State Council for the Environment - CONSEMA, in its 53rd Ordinary Assembly (2nd phase), held on 07/13/90, in order to accelerate its work and EIA/EIR licensing process at the Secretariat for the Environment hereby resolves:

The EIA/EIR will be submitted for CONSEMA evaluation only when recommended by any one of its members.

The EIA/EIR which are not to be submitted to CONSEMA's evaluation are considered ready for analysis, and are approved or rejected by SMA, through an act of the Secretary.

The recommendations for EIA/EIR evaluation by CONSEMA must be made up to 15 (fifteen) days after the formal dispatch of the document referred to in item 5.

For the EIA/EIRs which are not recommended for CONSEMA's evaluation, the Executive Secretariat for CONSEMA does not need to comply with the procedures determined in Article 7, Para. 2, of the Internal Rules for Environmental Impact Report Evaluation Commission.

5. Published in "Diário Oficial do Estado de São Paulo", on 08/04/90.

The CONSEMA Executive Secretariat will on a biweekly basis provide the council members with a list of EIA/EIR delivered for analysis to the Environmental Impact Assessment Department - DAIA - CPLA.

The CONSEMA Executive Secretariat will on a bimonthly basis provide the Council Members with a list of EIA/EIRs under analysis by DAIA.

The recommendations for EIA/EIR evaluation by Council Members will be formalized at the Secretariat for CONSEMA.

Considering the several EIA/EIRs already being analysed by SMA, the council members shall indicate, within fifteen days, as from the date of the next listing dispatch, the EIAs that must be evaluated by CONSEMA

Decree N. 30.555, of October 3rd, 1989⁽⁶⁾

Restructures, reorganizes and regulates the Secretariat for the Environment and divulges correlated measures.

Title V - Collegiate Entities

Chapter II

State Council for the Environment

Article 115 - The State Council for the Environment, created by the Decree N. 26.942 of April 1st, 1987 has the following attributions:

- I. to propose, accompany and evaluate the State's policy concerning preservation, conservation, control and maintenance of environmental quality;
- II. to propose State norms and standards for evaluation, control and maintenance of environmental quality;
- III. to establish guidelines for the defense of the States natural resources and ecosystems;
- IV. to propose the implantation of environmental protection areas of relevant ecological interest and multisectorial ecological units;
- V. to support scientific research for conservation and preservation of the environment and of natural resources;
- VI. to promote documentary and divulgation educational activities in the field of conservation, preservation, recuperation and improvement of the environment and of the natural resources;
- VII. to encourage the communities participation in the process of conservation, preservation and recuperation of the environmental quality;
- VIII. to evaluate environmental impact reports according to the legislation;
- IX. to set up internal rules.

6. Published in "Diário Oficial do Estado de São Paulo", on 10/04/89.

Article 116 - The council is presided by the Secretary for the Environment and composed by the following members:

- I. A representative of the Secretariat for Economy and Planning;
- II. A representative of the Secretariat for Agriculture and Supply;
- III. A representative of the Secretariat for Energy and Sanitation;
- IV. A representative of the Secretariat for the Government;
- V. A representative of the Secretariat for Health;
- VI. A representative of the Secretariat for Housing and Urban Development;
- VII. A representative of the Secretariat for Education;
- VIII. A representative of the Secretariat for Culture;
- IX. A representative of the Secretariat for Social Welfare;
- X. A representative of the Secretariat for Justice;
- XI. A representative of the Secretariat for the Consumer Defense;
- XII. A representative of the Secretariat for Science, Technology and Economic Development;
- XIII. A representative of the Secretariat for Transport;
- XIV. A representative of the Secretariat for Sports and Tourism;
- XV. A representative of the "Companhia de Tecnologia de Saneamento Ambiental" (Environmental Technology Agency - CETESB);
- XVI. A representative of the Environmental Planning Department of the Secretariat for the Environment;
- XVII. A representative of the Department of Protection of Natural Resources of the Secretariat for the Environment;
- XVIII. A representative of the State Attorneys Office;
- XIX. A representative of the "Federação das Indústrias do Estado de São Paulo" (Federation for Industry, State of São Paulo - FIESP);
- XX. A representative of the "Conselhos Municipais de Defesa do Meio Ambiente do Estado de São Paulo" (City Councils for Environmental Protection);
- XXI. A representative of the "Associação Paulista de Municípios" (Association of Municipalities in the State of São Paulo);
- XXII. A representative of the "Federação dos Trabalhadores na Agricultura do Estado de São Paulo" (Federation for the Agricultural Laborer - FETAESP);

XXIII. A representative of the Unions for the Urban Workers of the State of São Paulo;

XXIV. A representative of "Universidade de São Paulo" (São Paulo University - USP);

XXV. A representative of "Universidade Estadual Paulista Júlio de Mesquita Filho" (São Paulo State University "Júlio de Mesquita Filho" - UNESP);

XXVI. A representative of "Universidade Estadual de Campinas" (Campinas State University - UNICAMP);

XXVII. A representative of the "Sociedade Brasileira para o Progresso da Ciência" (Brazilian Society for the Progress of Science - SBPC);

XXVIII. A representative of the "Instituto de Arquitetos do Brasil" (Institute of Brazilian Architects - IAB-SP);

XXIX. A representative of the "Associação Brasileira de Engenharia Sanitária e Ambiental" (Brazilian Association for Environmental and Sanitation Engineering - ABES);

XXX. Six representatives of Associations with Environmental Protection Background.

Para. 1 - The representatives of agencies for the State Centralized and Decentralized Administration and the Public Ministry, as well as their respective deputies will be designated by the Governor.

Para. 2 - The representatives referred to in items XIX and XXX will be chosen among three nominees, one for full members and the other for the respective substitutes and deputies designated by the Governor of the State.

Para. 3 - Council members shall not be paid although their work is considered a relevant public service.

Para. 4 - Council membership shall be exercised for a 2 (two) year-term, being renewable, but subject to alteration, by the Governor of the State at any time.

Para. 5 - CONSEMA members may be excluded by the General Prosecutors Office after non justified absence to two consecutive meetings or four alternated meetings.

Para. 6 - The Executive Secretary of CONSEMA shall be designated by the Secretary for the Environment.

Article 117 - The Secretariat for the Environment will provide the necessary technical and administrative support for the Council.

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