

LEGAL PROTECTION OF ENVIRONMENT IN MEXICO

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In 1968, the General Assembly of the United Nations appointed the members of a Committee which should take care of the preliminary work required for a Conference on Human Medium. México had the honor of being nominated as one of the 27 members of this Committee, whose efforts made possible the holding of such a Conference in Stockholm, Sweden, in 1972.

The world-wide concern about the danger represented by an inadequate transformation of the environment, reaches critical level in the developing nations, which because of their role as producers and exporters of prime materials, suffer an acute risk of degrading and depleting their natural resources.

México endeavors for a complete social and economical development, and simultaneously sustains a pitched battle against contamination and deterioration of environment.

Two basic postulates guide the Mexican policy on the subject: 1) Public welfare and health must be protected and promoted, and 2) Useful materials and disposable resources are to be preserved and incremented.

The Federal Government, in the performance of its related activities, has publicly sustained the following principles of action:

- 1) Industrial growth in cities is compatible with the maintenance of ecological balance, with ambient improvement and with a decrease of the effects of contamination, which may be diminished through technical means founded upon modern science findings.
- 2) Fighting the contamination should be a continuous activity that gets impulsed by the development process itself.
- 3) The participation and sense of responsibility required in fighting contamination and in improving environment, are duties that apply

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to all members of the national community. Those who contribute most to the deterioration and destruction of those natural conditions propitious for human life, should be burdened with heavier obligations.

- 4) Humanity has a right to use natural resources as means of growth and development, but no one has a title for the abusing and destroying of nature's inheritance.
- 5) Strong nations can not be morally justified when attempting the curtailment of development and industrialization of weaker ones.
- 6) Environmental improvement should be imbibed—in the heart of individual and collective living processes—and it should be con-natural with the politic, economical, cultural, and social organization of communities.
- 7) A general right to life and health generates the individual's corresponding obligation of maintaining conditions of purity in water and air, and of fertility in the soil.
- 8) Individual's rights to health and life, originate a duty of cooperation in favour of life, health, and welfare of the collectivity.
- 9) Collective welfare is dependant on a healthful ambient in which human faculties can be perfected and developed.
- 10) Home is the ambient that conditions the most important human characteristics by reason of being the place of formation of the purest of social cells, the family.

A necessity of speeding up our social and economical development, but with no attached loss of ecological equilibrium, was the determinant factor that made felt the urgency of legislation on environmental matters. Bearing this in mind, President Luis Echeverría Álvarez submitted to Congress, for consideration and further approval, the text of a constitutional amendment. Such an amendment was directed at endowing the Consejo de Salubridad General with all the faculties needed for a legally authorized prevention and control of environmental contamination.

The constitutional amendment was carried into effect, modifying section 4 of Article 73 of the National Constitution, and as a consequence, the Congress passed the *Ley para Prevenir y Controlar la Contaminación Ambiental*, in force since March 23, 1971.

The dispositions embodied in said law, are not only oriented towards a prevention and control of contamination, but encompass also provisions

for improvement, restauration, and preservation of the environment. All relative activities are considered of public interest.

The anticontamination law under discussion is nationally enforceable, and according to its text, an office of the executive power, the Secretaría de Salubridad y Asistencia, is the competent agency in matters concerning the application and observance of its precepts.

Other executive ministries have also coordinated competence. They are the Secretaría de Recursos Hidráulicos (water problems), the Secretaría de Agricultura y Ganadería (soils), and the Secretaría de Industria y Comercio (industrial contamination). The law gives a status of auxiliary deputies to the officers and employees of the federal executive power, extending this nomination to the equivalent staffs of state and municipal authorities.

The broad objective of the law consists of the prevention, regulation, control, and prohibition—as the case may be—of contamination and its causes. No legal distinction is made concerning the procedence and origin of contaminating materials but they are defined as those substances capable of producing, directly or indirectly, contamination or deterioration of ecological systems; that is, apt to alter or modify the natural characteristics of air, soil, water or ambient, and susceptible of causing adverse effects on human life, health or welfare, and noxious consequences to the flora and fauna. Degradation of vital elements, property or resources in general, are also considered.

In pursuit of such goals, the aforesaid law vests ample faculties in the federal executive power.

The long enumeration of the tasks required of the executive power in pursuit of this general aim, reads as follows: clasification and evaluation of contaminating sources; formulation of standards and devisal of technical procedures adequate to the control of contaminants; execution of all kind of measures, procedures, and technological conceptions, appropriate for the prevention of contamination; regulation of the use of fuels in internal combustion engines; realization of studies and research, and creation of the agencies or organizational facilities required to attain the objectives of the law.

Contamination is regulated in regard to its sources, which are grouped in two general types: 1) Natural sources such as eroded or disecated lands, volcanic emissions and such; and 2) Artificial sources created by man's technology or activities. These can be subdivided in: a) Fixed sources (factories, boilers, shops, etc.); b) Movable (automotive vehicles in general); c) Miscellaneous, open incineration of waste materials, or generally those activities that imply combustion of inflamable materials and may be potentially contaminating.

The law we are analyzing contains separate chapters on air, water, and soil contamination, vetoing any discharge of materials that may alter the natural qualities of the environment components initially named, and prohibiting also, any such discharge in excess of the amounts allowed by regulations.

There is a specific disposition concerning emissions of dust, vapours, smoke, gas, radioactive materials, and similar substances into the atmosphere, which only can be effected in abeyance to the corresponding regulations, or tempered by the use of devices that attenuate their effects.

Our law prohibits the feeding into bodies of water and the infiltration into the soil of residual contaminating waters. Utilization of residual waters will be legally provided for, regulating the conditions, in which it may be permissible to pour them into drainage systems.

Soil problems are regulated by prohibiting discharging or depositing contaminants on its surface, unless the relative legal dispositions are observed.

There is a similar prohibition regarding infiltration of contaminating materials.

Accumulation of industrial, domestic, agricultural, animal, and public-use waste, may only take place in conformity with practices that can prevent contamination of the soil, avoid alteration of biological processes, and impede disturbances harmful to soil utilization or hydraulic capacity of any body of water.

The executive power is also competent to regulate all aspects pertaining to plagicides, fertilizers, defoliators, radioactive materials, and so forth. There is also a provision with respect to utilization of solid residues and rubbish.

Different types of waste materials not susceptible of organic decomposition (plastics, glass, etc.) must also be the object of pertinent regulations.

Infringement of this law may be penalized with fines ranging between 50.00 and 100,000.00 pesos, temporary seizure or occupation (in toto or in part) of facilities or sites housing the contaminating sources, or else with closure of premises. There may be a combination of these last penalties with a fine.

Imposition of the penalties described above follows a procedure tending to the protection of the infringer's rights. There must be a previous hearing, in which the culprit may submit exonerating evidence and present allegations on behalf of his cause. In case of an adverse resolution, one can appeal to the head of the corresponding executive department.

Public action for denouncement of contaminating facts is recognized.

Up to this date, our legislators have approved and enforced the following by-laws: 1) *Reglamento para la Prevención y Control de la Contaminación Atmosférica Originada por la Emisión de Humos y Polvos*, dated September 17, 1971; 2) *Reglamento para la Prevención y Control de la Contaminación de Aguas*, in force since March 29, 1973.

These by-laws were originally drafted by a committee specially appointed for this purpose. It is named Comisión Jurídica para la Prevención y Control de la Contaminación Ambiental and its members are representatives of diverse offices of the Federal Executive Power, of decentralized (that is, autonomous) institutes, and of private entrepreneurs organizations. It is presided by the Attorney General. The committee must forward its completed legal projects to the President of the Republic, who, in turn, will submit them to the National Congress that will convert them into laws.

A presidential resolution, dated on June 1971, is the origin of another committee, the Comisión Nacional Tripartita. It is formed by representatives of the government, the private economic sector, and the labourers. This Comisión Tripartita, through its Six Studies Commissions, supervises the drafting of the by-laws to be proposed and is competent to modify their text. In this manner, a communication channel between the three most important economic sectors of the nation, is established. This communicating capability permits the previous consideration of the effects that may be caused by enforcement of the proposed dispositions.

A far-reaching decision of our President was the creation, in January 1972, of an organizational structure capable of directing the battle against environment deterioration. It is called Subsecretaría de Mejoramiento del Ambiente, and belongs organizationally to the Secretaría de Salubridad y Asistencia.

This official agency has as its main task, the application and implementation of the respective law and its secondary regulations throughout the country. It may also plan and carry into practice all kind of activities aimed at a reduction of present contamination levels, at prevention of ecological deterioration and, generally, at the improvement of ambient in urban and rural zones.

The Subsecretaría under discussion has done a remarkably good work. Pressed by time, its officers devised educational plans for the schooling of experts. They promoted intense research on the causes and consequences of contamination, gathering technical information about possible solutions of the problems involved, and adapting them to Mexican situations. Theirs was also the task of devising nation wide reaching policies and of advising industrial concerns in the adoption of anticontaminating practices.

The activity of this official agency was equally directed to citizens information projects.

Its representatives organized and took part in national and international conferences on the subjects. They promoted the regulation of contamination phenomenae, and activated other governmental offices, high educational institutes, and industry and labour organizations, turning them into crusades in the cause of improving ambiental conditions in our country.

The Federal Government has issued diverse dispositions in an effort directed at locating new industries outside of urban zones showing signs of defective public services, undue excesses of population, contamination problems, and social strain. Federal Government is also promoting regional development hoping that this policy shall increase occupational opportunities that will be further reflected in better standards of living, which will produce in the future improved efficiency in production by the growing pressure of the internal markets.

To this goal, several legal mechanisms have been put into operation. New industries conforming to this locating policy may obtain tax exemptions or reductions, benefiting by fast rates of equipment depreciation and financial help in the purchase and installation of decontaminating devices.

Various governmental dispositions have created funds, and trust funds as financial means aiding the carrying into effect of studies on the subject and the erection of new industrial parks, cities, and complexes. National production of decontaminating equipment is also being promoted. Industrialization of waste materials is equally activated.

It is pertinent to note that the *Código Sanitario*, a body of laws on sanitation dated March 13, 1973, contains a third chapter dealing with sanitation of ambient. This chapter is subdivided into sections regulating problems of atmosphere, soil, water, territorial sea, ionizing radiations, electromagnetism, and radioactive isotopes. Secondary by-laws on this questions are under study.

The Stockholm Conference proclaimed that natural and artificial aspects of the human ambient are essential factors in man's welfare and enjoyment of his fundamental rights, that includes a fundamental right to a human life.

Our Government, accordingly, has instituted a merciless battle against ambiental contamination, omitting no effort in behalf of the enrichment of our stock of natural resources. This goal will be only attained through an intelligent planning of demographic growth, and by means of sound programs of social and economical development.

The fact that we are a nation in the process of development, turns into an undeferable national duty the urgent adoption of measures that may halt the irrational exploitation of natural resources, the erosion of our

soils, the squander of materials, and in one word, the total degradation of our ecological systems.

Maintenance of ecological equilibrium is the only way open to attain our economic, social, and moral advancement.

Taking the previous statement as a point of departure, the government has incremented the number of natural parks, with a double target in mind: to protect the ambient and to satisfy recreational needs of the people.

Natural parks have been demarcated not only in forestal zones but also in desert and jungle areas and submarine locations.

The protection of wild flora and fauna in danger of extinction, has received renewed consideration, after the Mexican intervention in the Conferencia Plenipotenciaria para Concertar un Convenio Internacional sobre Comercio de ciertas Especies Silvestres, a conference held in Washington, D. C. in February, 1972.

A presidential resolution of December 1971, resulted in a refuge for shales and young whales, that reserves to such use the waters of lagoon Ojo de Liebre, located on the Pacific Ocean shore, in the Mexican State of Baja California Sur. This resolution was founded on the agreements reached by the international convention on whale-hunting regulations, agreements adhered to by Mexico in June 1949.

In November 1972, another presidential disposition demarcated as a refuge for ocean flora and fauna, the area of the western coast of Isla Mujeres and that of the reefs on Cancún and Nizuc Points. Said disposition strictly prohibits commercial and sport fishing, use of explosive materials, and also throwing into the water toxic or harmful substances as well as abandoning fishing waste on the beach close to that zone.

A coastal point in the Baja California Peninsula is the starting point of a submarine canyon in which sand displacements that originate spectacular cascades of sand upon the sea bottom, take place. This periodical phenomenon has aroused scientific interest by its relation with submarine processes of erosion and because of the role it plays in the formation of very peculiar ecosystems. To protect this site became an evident necessity and in August 1973, the presidential offices provided dispositions to that effect. A refuge for flora and fauna, protecting also the ecology of sea bottom, was demarcated in Cape San Lucas, in the southern coast of the Baja California Peninsula.

Fauna resources have also been protected through hunting vetoes safeguarding marine turtle, crocodiles and alligators, sea elephants, seals, and mother-of-pearl, as a complement to the ordinary dispositions of the respective laws concerning hunting seasons.

Sites of scientific interest have been similarly taken into account by the corresponding department of the Subsecretaría de Mejoramiento del Ambiente.

A most interesting research project is under way and will eventually lead to the creation of a Biological Reserve, on Cuatro Ciénegas Valley, State of Coahuila. Rising to 700 meters above the sea level, this desertic region appears to have suffered a sort of isolation from the surrounding zones. Such isolation motivated process of evolution of species of a most peculiar kind. After approximately 65 millions years of independent evolution, an estimation that places the starting point on the Mesozoic period, the region presents unique ecosystems and fauna.

Cuatro Ciénegas is the habitat of at least nine fish species, three genera and three species of isopods, three species of mollusks, five scorpion species, and several species of reptiles, among them the Terrapene-Coahuila turtle, the only known amphibian species of its sort. The uniqueness of the above cited species is world-ranging.

From the preceding description it is apparent that in that region we find ourselves in the presence of a live laboratory that must be protected. Identical reasons of scientific benefit, applied to Galapagos Island, where Charles Darwin was a visitor 150 years ago.

The legal task involved in the Cuatro Ciénegas matter, resides in the elaboration of the required expropriation acts. A declaration converting Cuatro Ciénegas Valley into a protected scientific interest area will follow suit. Such a declaration will be the basis for the enforcement of regulations pertaining to the vigilance and management of the zone and to the proscription of any human activity differing from scientific research.

Our government is presently conducting a research on the probable ecological impact that may be the result of active operations in those regions newly opened to industrial and touristic development. An example of this kind is the Tula region, State of Hidalgo, site of a new oil refinery of Petróleos Mexicanos and of a new hydroelectric plant of the Comisión Federal de Electricidad. The erection of touristic centers in the Chamela beaches of the State of Jalisco, and in the Cancún Beaches of the Quintana Roo State, as well as those tourist centers to be built in the vicinity of the Transpeninsular Highway, that traverses Baja California Peninsula, are being studied from the same point of view.

Up to this point of our diggression, we have stated what México has accomplished in matters pertaining to the environment protection. We cannot claim spectacular results. The application of laws and regulations aimed at prevention and control of environmental contamination date only from middle of this year. Other much needed regulations are still in the studying and presidential-approval stages.

Benefits derived from ambient protection legislation will be shortly apparent because education and participation of the community in the questions of problems of human medium are already yielding results.

There still is much to be done. We have to learn how to use with maximum profit the existing technology. Scientific investigation must be promoted and new means of converting contaminating factors into economically useful materials, are yet to be discovered.

We must learn how prime materials can be integrally utilized and the manner in which vital and scarce elements can be profitably used time after time.

We must practice waste recycle and recuperation of those substances evolved from industrial processes, nowadays projected into the air, the water currents or the soil and that are the cause of their contamination.

Investigation will discover novel and non-contaminating energetics and put them to work as improvers of economic progress.

And last, but not least, we shall modify our patterns of conduct and endeavor to help in the preservation of Nature.

To summarize we might add that our country is following in practice the conclusions and recommendations set forth in the Seminario Regional Latinoamericano sobre los Problemas del Medio Ambiente y Desarrollo. This seminary took place in México in September, 1971. Also practiced in our country are the final conclusions arrived at by the United Nations Conference on Human Environment, held in Stockholm, Sweden, in June 1972.

With these conclusions and recommendations as a basis, Mexican authorities have developed national directives and policies for the preservation of optimal ambiental conditions, coordinating them with vitally pressing plans of economical development. Health and welfare of the people have been the presiding thought in this task.

We sincerely hope, that as a result of the Colloquy organized by the International Association of Legal Sciences, new agreements of world-range benefit may be reached. It is to be expected also, as another beneficial outcome of this gathering, the adoption of legal measures that can be presented at national government level or as multinational proposals, as means of attaining a future pure and healthy ambient which all of us may share and enjoy.