

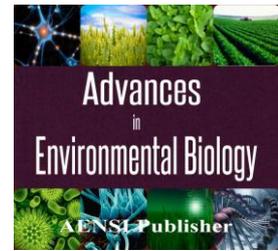


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Prevent Water Pollution by International Organizations And International Instruments

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ABSTRACT

It has been stated that there is no over-all national water problem in any of the European countries, and this statement may be correct as far as quantity is concerned. But the water problem most frequently encountered in any country is that of having the right amount of water of proper quality at the right time and place. The current national water resources problem of practically every European country is that of maintaining the quality of the new and used water suitable for use or reuse. As a resource, water is a requirement so basic to a country's existence and economy that the use of all other resources is dependent upon a plentiful supply of water; if this is lacking, the use and development of other resources becomes impossible. While many of our natural resources vanish with use, the use of water merely produces changes in its position, quantity, and quality. In this discussion we are primarily interested in its change in quality and in the action necessary to protect the quality of waters yet unused and to make reusable the water that has already been used. Water quality management, or pollution control, revolves around those materials remaining in the water from a previous exposure or use which render it unfit for reuse; it must obviously include both preventing the entrance of such materials and removing them after they have entered.

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INTRODUCTION

Regardless of geographic location, the causes and problems of water pollution are basically the same throughout the world. Wherever it occurs, people have accepted nature's most valuable resource-water-and in their zeal to establish and expand communities and industries, have permitted it to be polluted by the discharge of sewage and industrial wastes in the cheapest and most convenient manner into the nearest watercourse. Eventually the health authority, the farmer, the fisherman, and the industrialist have realized the immeasurable losses that have occurred and have invoked man-made laws in an attempt to recoup the losses already incurred by their violation of nature's laws. Real progress in pollution abatement has been made only as provinces, states, river basins, and nations have enacted laws giving balanced consideration to all the interests involved; when one particular group or interest has dominated the administration of pollution control activities they have been ineffective. Purely voluntary action without legal authority has not been found effective; prevention or abatement beyond what can be secured by persuasion must be obtained by legal pressures and court action. An effective law providing for the prevention, abatement, and control of pollution of both surface and underground waters may vary according to the concept of government in given country, but any such law should include the following[1]:

- Statement of national policy on water pollution control, so that there is a clear understanding concerning this vital matter;
- definition of terms, especially of the word "pollution", in order that any persons, industries, or cities charged will have a "bill of particulars", as well as the terms "sewage" and "industrial wastes" and other terms used in the law ;
- the creation of a water pollution control agency ;
- delineation of the organization and structure of such an agency ;
- statement of the jurisdiction of the agency and outline of its authorities, powers, and duties;

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- provision for enforcement, including procedures before the agency and public hearings;
- penalties for violations of the law and definition of a violation;
- Provision for technical staff competent to serve and advice on both domestic and industrial technical problems

Policy regulation:

The policy regulation should indicate that, because pollution of waters constitutes a menace to public health and welfare, creates a public nuisance, is harmful to wildlife, fish and aquatic life, and impairs domestic, agricultural, industrial, recreational, and other legitimate beneficial uses of the water, it is the public policy to maintain reasonable standards of purity for the waters consistent with their uses for domestic and industrial water supplies, for the propagation of fish and other aquatic life and of wildlife, and for domestic, agricultural, industrial, recreational and other legitimate uses, including use for the final disposal and distribution of water-borne wastes; also to provide that no wastes be discharged into any waters without first being given the degree of treatment necessary to prevent the pollution of such waters; and to provide for the prevention, abatement and control of new or existing water pollution and co-operation with other public or private agencies of the country in carrying out these objectives.

Water Pollution on Europe Union:

Europe contains some of the most densely populated highly industrialized areas in the world. Natural water resources, already heavily taxed before the present "chemical revolution", are now rapidly dwindling as a result of demands for increases in quantity, caused by the expansion of cities and conurbations, and for improvements in quality required by higher standards of hygiene and more sophisticated industrial processes. In addition there is an increasing discharge of waste water into rivers and lakes, which in many cases have already passed the "point of no return": that is, natural auto depuration phenomena alone can no longer be relied on to restore the original balance of conditions on which the continued availability of these resources depends. The complex nature of these waters, principally due to the new chemical compounds constantly being introduced into contemporary technology, which are now detectable in "trace" amounts, confronts public health authorities with new urgent tasks whenever the waters that carry these wastes are tapped as sources for the ever-increasing domestic demand. These new problems, superimposed on the old ones of water rights, water economy, and still unsolved matters of international legal principle, make the study of the entire question even more complicated.

Creation of a water pollution control agency:

A water pollution control law should create an agency stating its name and its central location. As previously stated, it should provide that the agency will be administratively responsible to the head of the government unit in which it is located. Its composition is important: the members of the agency should be specifically designated (by office) and should be representatives of the various water interests involved. Logically they would include the ministers of health and welfare, agriculture, conservation (fisheries), industry, and one additional member to be appointed by the head of government to represent the municipal governments, or, in other words, the general public [3]. (The term "minister" is used here merely to designate the various officials or governmental agencies that would be involved because of their interest in water use.) Obviously there can be other combinations, depending on the organizational structure of the government of a country.

Water pollution on International Agencies:

To assist the control agency in the evaluation of some of its problems, especially in connexion with the multipurpose use of streams, an advisory water pollution council is desirable. The agency, however, should not be legally required to follow the advice or recommendations of such a council, for the agency itself and not the advisory council is responsible for the administration of the law. Such an advisory council can profitably be utilized to assist in the evaluation of the various water uses of a particular watercourse and to help guide the agency in its administrative discharge of the duties charged to it. Such a council could consist of the chairman of the water pollution control agency serving as chairman *ex officio* [4], two members of the legislative body of the government under which the agency functions, and six additional members by appointment, of which one member should represent each of the following: industry, agriculture, public health, wildlife and recreation, municipal government, and general public interest.

General organizational structure:

The technical secretary or administrative officer of the agency should be selected by the agency members and should be a trained sanitary engineer with a number of years of technical and administrative experience in the field of sanitary engineering. As administrative officer he would handle correspondence, make arrangements for inspections and investigations, and obtain, assemble or prepare such reports and data as the agency might direct or authorize.

The agency should provide such technical, scientific and other services as may be required in carrying out the provisions of the law, including the necessary laboratory and other facilities [5]. In a country where private consulting engineering services normally provide the necessary technical engineering information to solve the problems of municipal or industrial waste treatment, the technical staff of a governmental water pollution control agency should not be required to compete with private enterprises in this field. The author believes it illogical for government to act as the accuser and also to be responsible for the solution to the problem of the accused. But the philosophy of government in a particular country may result in a different concept.

While the basic personnel necessary to carry out the provisions of the law should be sanitary engineers and other allied technical personnel employed by the agency, the law should provide that the agency may by agreement secure such services as it may deem necessary from other branches of the government and may arrange for the compensation of such services. The agency should also be empowered to employ and compensate consultants and other personnel on a full- or part-time basis as may be necessary to carry out the provisions of the law; and to request and receive the assistance of educational institutions, experiment stations, boards, commissions, departments, and officials [6].

The agency should be authorized to conduct scientific experiments, investigations, and research to discover economical and practical methods for preventing pollution and should be authorized to cooperate with any public or private agency in the conduct of such experiments, investigations, and research and to receive monies for and on behalf of the government for water pollution control activities, surveys, or programs.

Enforcement:

One of the key provisions of the law should be that the agency must investigate pollution if it receives a complaint. Upon the receipt of information concerning a violation, it should be mandatory for the agency to cause an investigation to be made, and if pollution is found to exist or if it appears that the law or the rules and regulations of the agency have been violated, to take such action as may be necessary to enforce the provisions of the law.

It is essential that the law should stipulate by a specific provision that no person shall throw, run, drain, or cause, permit, or suffer to be thrown, run or drained, allow to seep, or otherwise dispose into any of the waters of the country any organic or inorganic material that will cause pollution (as previously defined) of such waters .

Under the justification of preventing pollution, the law should give the agency the authority to prevent the discharge of wastes that will cause pollution, as well as to abate pollution that already exists. Under this provision for prevention, the law should specifically require that a permit be obtained from the agency for the construction, installation, modification or operation of any sewage works or any extension thereof; for the increase in volume or strength of any wastes in excess of the permissive discharges specified under an existing permit; for the construction, installation or operation of any industrial or commercial establishment or any extension or modification of such an establishment which would increase the discharge of wastes into the waters of the country; and for the construction or use of any new outlet for the discharge of wastes directly into the waters under the jurisdiction of the agency. The importance of having such a provision requiring a permit cannot be over-emphasized. If, for example, a municipality constructed sewer extensions without a permit, it would be in specific violation of such a provision of the law and therefore any public funds so expended would be illegal expenditures. Furthermore, where approval for financing is required, such approval could not be secured unless a valid permit had been issued.

Violations:

A water pollution control law should provide for penalties, usually predicated on the number of days of violation or discharge—in other words, the number of days that pollution exists in violation of the act. Various modifications and additions can be included in the law. For example, if the discharge of wastes results in the killing of fish, the agency can be empowered to collect from the violator the value of the fish, these monies to be deposited in the governmental fund provided for the propagation of fish.

Objective:

The objective of a national water pollution control agency should be to secure and maintain the waters of the country in such chemical, physical and biological condition that these waters will not create a nuisance or be harmful, detrimental or injurious to public health, safety or welfare or to the domestic, commercial, industrial, agricultural, recreational or other legitimate uses, or to livestock, wild animals, birds, fish or other aquatic life.

Principles and Policies:

The extent of the control agency's participation in solving specific problems of industrial waste—whether by technical aid or financial subsidy or both—will depend on the prevailing philosophy of government and of business. In a country of free industrial enterprise, the control agency's responsibility, in the author's opinion, should be to determine the extent of an industrial problem, the components of the wastes, their strength and

volume, their effect on the stream, and the reduction of their strength necessary in view of the water uses in the outlet stream. The primary responsibility for the solution of an industrial waste problem rests with the industry; in such circumstances, the fact that no solution has been found by the industry indicates that it has given insufficient time and effort to the problem. Waste utilization or treatment is part of the industrial production problem, and activities in the field of waste treatment should parallel the development of work on any new product [9]. If an industry is sufficiently competent to develop a process or a product, it is equally competent to develop a means of treating any wastes resulting from this development. The pollution control agency, however, should furnish technical consultation and advice to an industry on its waste-treatment problem, especially as it relates to the effect of the wastes on the outlet waters. The agency should be kept informed, by monthly operation reports, of the quality of the effluent being discharged by every industry into streams; and each industry should be advised of the agency's activities, especially any requirements, regulations or policies affecting that industry. In addition, each industry should notify the agency of any accidental spills or discharges upstream of a drinking-water-supply intake, in sufficient time so that adequate warning can be given to the water plant or plants utilizing the stream.

Jurisdiction; authority; powers and duties:

The agency should have the power to determine whether pollution exists in any of the waters under its jurisdiction.

It should be given the authority to [10]:

1. make, alter, or modify orders requiring the discontinuance of pollution of waters due to the discharge of sewage and of industrial or other wastes and specify the conditions and the time within such discontinuance must be accomplished (this key provision must of course be accompanied by the authority to institute legal proceedings in a court of competent jurisdiction to compel compliance with the order and provisions of the law ;
2. require the submission of plans and specifications for sewage works or for additions or changes or extensions of such works and prescribe the method and manner in which such plans and specifications or other data are to be submitted, and inspect the construction for compliance with the approved plans ;
3. require the issuance of permits for sewage works, and issue, continue in effect, and deny permits as may be determined to be reasonable for the prevention and abatement of pollution or for the installation and operation of sewage works;
4. require the preparation and submission of reports of operation of sewage works;
5. require the definition and certification of the technical competency of operating personnel of sewage works, and ascertain that such works are under the supervision of trained individuals whose qualifications to perform their duties have been approved by the agency;
6. Hold public hearings and make findings of fact and determination with respect to violations of the provisions of the law or of orders issued by the agency, and adopt, prescribe, and promulgate reasonable rules and regulations governing the procedure of the agency with respect to such hearings.

In addition to the above, it should be the duty and responsibility of the agency to:

1. Encourage voluntary co-operation in order to restore and pre-serve the waters for their use in the public interest ;
2. Encourage the formation and organization of co-operative groups or associations of municipalities, industries, and other users of water to discuss and formulate plans for the prevention and abatement of pollution;
3. Prepare and develop a general comprehensive plan for the abatement of existing pollution and the prevention of new pollution;
4. Require to be submitted plans and specifications for sewage works and to issue permits for the same and to inspect the construction for compliance with the approved plans.

Conclusion:

The regional office for Europe of the World Health Organization, in co-operation with other international agencies concerned with the same problem, has, in the past decade, conducted or promoted many surveys, studies and meetings in Europe in an effort to stimulate Member Governments to further or initiate national programmes for water pollution control agencies. The Conference on Water Pollution Problems in Europe, some of the papers of which are presented here in revised form, was the culmination of several years of close collaboration between the Regional Office for Europe of the World Health Organization, the Economic Commission for Europe of the United Nations, the Food and Agriculture Organization, and the International Atomic Energy Agency. Held in Geneva early in 1961, it attempted to identify the most urgent water-pollution problems in Europe and dealt with their technical, legal, administrative, and economic aspects. In addition there is an increasing discharge of waste water into rivers and lakes, which in many cases have already passed the "point of no return": that is, natural auto depuration phenomena alone can no longer be relied on to restore the original balance of conditions on which the continued availability of these resources depends. The complex nature of these waters, principally due to the new chemical compounds constantly being introduced into

contemporary technology, which are now detectable in "trace" amounts, confronts public health authorities with new urgent tasks whenever the waters that carry these wastes are tapped as sources for the ever-increasing domestic demand.

Protection of waters from pollution with a view to preserving their productive use, not to mention their continued existence, has always been a function of law. Since the beginning of industrialization in the nineteenth century, legislation has in many European countries been particularly concerned with this question, though not with any very great success; as is to be seen from the increasing pollution of and menace to these waters. Water protection has thus become a very pressing problem in most countries, from the point of view both of the general public and of industry. The similarity of developments in this connection is in itself sufficient to justify its definition as a legal problem of national and international import, which can be brought nearer to solution by a standardization of relevant law [11]. Over and above that consideration, water protection constitutes a problem of international law in that pollution is not confined by frontiers, particularly in the case of the so-called boundary or continuous rivers, where regulation or arrangements under international law are required.

The responsibility of national legislation for protecting the waters from pollution is nowadays largely regarded as being primarily one of organization on the basis either of State supervision or of co-operative effort. The demand for joint supervisory bodies has also made itself felt at the international level. But quite apart from administrative measures or sanctions, the value of civil-law liability for damage ensuing from water pollution as an effective instrument of protection is not to be underestimated. It is the prophylactic aspect of such liability and its tendency to prevent a recurrence of the offence, rather than the payment of compensation for damage actually done, that in many respects renders it a more effective instrument for keeping the waters clean than the threat or infliction of penalties under criminal law. Liability also promotes the development of the individual's sense of responsibility for avoiding damage for his own sake and for that of the community.

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