The Evolution of the Enforcement Provisions of the Federal Water Pollution Control Act: A Study of the Difficulty in Developing Effective Legislation

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THE EVOLUTION OF THE ENFORCEMENT
PROVISIONS OF THE FEDERAL WATER
POLUTION CONTROL ACT: A STUDY
OF THE DIFFICULTY IN DEVELOPING
EFFECTIVE LEGISLATION

Frank J. Barry*

Man has not voluntarily chosen a polluted environment. He has, however, voluntarily elected to undertake the activities which have produced a polluted environment. These activities have biological and often cultural motivation. Reproduction of the species and the virtues of hard work, thrift, and ingenuity are favorably regarded in our literature, music, and art; and despite the fact that the possession of wealth cannot be the cause or effect of moral superiority, men tend to reserve a special courtesy and honor for wealthy persons. These conscious and unconscious forces have induced men to multiply in numbers and affluence. As the numbers of men have increased, the amount produced and consumed has also increased. Likewise, as affluence has increased and become more widespread, each individual has produced and consumed more. The effects of this affluence are that society produces only by means that are most convenient and consumes only that which is most satisfying. What is less convenient or satisfying it discards. This propensity is exhibited in almost everything man does: in the morsels he selects to eat, in the clothing he changes daily, and in unused articles he accumulates. It is also exhibited in what man throws away—into the river, into the air, and onto the trash pile. Spurred by these biological and cultural appetites, man's intelligence has brought him to a condition in which the production of children and goods, which was formerly necessary to his survival, now jeopardizes his survival by creating an environment saturated with pollution. It is clear, then, that the rate at which pollution is growing must be arrested and that pollution itself must be substantially reduced. Pollution control, however, is difficult enough just from the technological standpoint, for pollution cannot be entirely abated without a complete recycling of materials. The task is made even more difficult by the fact that success depends on the development of habits and practices which are seemingly contrary to demonstrated biological and cultural instincts.

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The Federal Water Pollution Control Act,\(^1\) which was originally enacted in 1948\(^2\) and which has been amended five times from 1956 to 1970,\(^3\) has been the primary federal response to the problem of water pollution. The development of that Act in the past twenty-two years has been a story of delayed and inadequate response to the increasing problems of water pollution. The development of the Act's enforcement provisions is particularly representative of those problems. It is the purpose of this Article to examine that development, to point out the shortcomings in the Act, and to analyze the effort that has been made to improve the Act's enforcement provisions.

I. Evolution of the Act

A. The Water Pollution Control Act of 1948

Prior to 1970, the Federal Water Pollution Control Act underwent five stages of evolution. The first of these was the Water Pollution Control Act of 1948,\(^4\) which supplied the general framework for later legislation. That Act stated that the states have the primary responsibilities and rights in water pollution control; and it provided for the preparation of comprehensive plans to abate water pollution, for the encouragement of interstate cooperation in this endeavor, for federal financial assistance to states and municipalities, for the Federal Water Pollution Control Advisory Board, and for federal authority to seek judicial orders for the abatement of water pollution.

That Act made subject to such abatement the pollution of "interstate waters,"\(^5\) which were defined as "all rivers, lakes, and other waters that flow across, or form a part of, State boundaries."\(^6\) The


\(^5\) 1948 Act § 2(6)(l).

\(^6\) 1948 Act § 10(c).
limitation of enforcement jurisdiction to interstate waters was not a serious restriction, for pollution which reached interstate waters only through tributaries was also subject to abatement.\(^7\)

A more serious restriction, however, was the requirement that in order for the pollution to be subject to abatement, that pollution must have caused or contributed to a danger to the “health or welfare of persons” in a state other than the state in which the discharges originated.\(^8\) That limitation rendered untouchable by the Act pollution in many interstate waters. For example, the coastal waters of California form a part of a state boundary and thus constitute interstate waters under the Act’s definition. Pollution originating in the San Joaquin River, an intrastate stream, might pollute those coastal waters; but it is highly improbable that such pollution could extend northward to Oregon’s coastal waters and thereby endanger the health or welfare of persons in Oregon. Thus, because such a condition would probably not endanger the health and welfare of persons outside California, the 1948 Act would not be able to reach it. There are many other examples in which the pollution of interstate waters would endanger only local residents.

The 1948 Act provided that if the Surgeon General did find that interstate waters were polluted by discharges in one state and that the health and welfare of persons in another state were endangered, he could give a formal notification to the alleged polluters, recommend measures for abatement, and set a reasonable time for the polluter to comply with his recommendations. In doing so, he was required to give notice of his action to the water pollution control agency of the state in which the pollution originated. If abatement measures had not been initiated within the time which he had prescribed, the Surgeon General could give a second notice to the alleged polluter and the agency. He could include in the second notice to the state agency a recommendation that it proceed by court action to abate the pollution.\(^9\) If, within a reasonable time after the second notice, no abatement action had been undertaken and no suit filed, the Federal Security Administrator\(^{10}\) could appoint a board and call for a hearing before that board. The Act provided that a majority of the hearing board had to consist of persons who were not officers or employees of the Federal Security Agency, that

\(^7\) 1948 Act § 2(d)(1).
\(^8\) 1948 Act § 2(d)(1).
\(^9\) 1948 Act § 2(d)(2).
\(^{10}\) The Public Health Service, headed by the Surgeon General, was, in 1948, a subdivision of the Federal Security Agency. Reorganization Plan No. 1 of 1939, § 205, 53 Stat. 1426.
at least one member of the board could be designated by each state in which the pollution originated, and that one member was to be a representative of the Department of Commerce. The Act further directed that the board, after having heard evidence, was to recommend to the Administrator "reasonable and equitable" measures to be taken for the abatement of the pollution. The recommendations of the board became the effective recommendations under the Act and superseded any prior inconsistent recommendations of the Surgeon General and the Federal Security Administrator.

If the alleged polluter had not complied with the board's recommendations within a reasonable time, the Administrator could "with the consent of the water pollution agency (or any officer or agency authorized to give such consent) of the State or States in which the matter causing or contributing to the pollution [was] discharged, request the Attorney General to bring a suit on behalf of the United States to secure abatement of the pollution." The Act directed that when the Attorney General brought the suit, the court in which the abatement proceeding was instituted was to consider evidence taken by, and the recommendations of, the board, and to hear any other evidence it deemed necessary. In rendering its judgment, the court was required by the Act to give due consideration to the practicability and to the physical and economic feasibility of securing abatement of any pollution proved; and in that consideration, the judge could be governed by his own view of the public interest and the equities of the case.

As the foregoing presentation indicates, the enforcement provisions of the 1948 Act left much to be desired. Under that Act, the Government could bring a court action only if a polluter was discharging pollutants which were endangering persons in another state; and a polluter could avoid a court action entirely if it could persuade a majority of the hearing board to recommend abatement measures which appeared "reasonable and equitable" to the polluter as well as to the hearing board. The board was so constituted that it was possible for the accused polluter to prevail with his suggestions at this point in the proceedings. A polluter could also avoid court action if it could persuade the officials of its own state to refuse to

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11. 1948 Act § 2(d)(3).
12. 1948 Act § 2(d)(3).
13. 1948 Act § 2(d)(3).
15. 1948 Act § 2(d)(7).
16. 1948 Act § 2(d)(7). This standard has endured to the present day. 33 U.S.C. § 466g(h) (Supp. IV, 1965-1968).
consent to the bringing of an abatement action by the Attorney General. Prospects of success in obtaining the denial of consent were enhanced by the fact that those who had to be endangered by the pollution were not constituents of such officials. Thus, unless the pollution also substantially endangered persons in the state in which the discharges originated, there was little incentive for the local officials to consent to an abatement action. Finally, even if those obstacles were overcome and the Attorney General did bring an abatement action, and even if the pollution and its danger were proved, the polluter might avoid an adverse ruling by showing that abatement would be impracticable or physically or economically unfeasible. Thus, even as a beginning, federal enforcement provisions were not impressive as deterrents to pollution; and, not surprisingly, no lawsuits were filed under the authority of the 1948 Act. 17

B. The 1956 Amendments

In 1955 the Secretary of Health, Education, and Welfare, to whom the administration of the 1948 Act had been transferred, 18 urged the Congress to amend the Water Pollution Control Act. In the Secretary's discussion of the Act's enforcement provisions, she pointed out that after notice of a violation had been given to a polluter and after abatement action had been recommended, a second notice, as required by the 1948 Act, served no purpose but delay. She also suggested that the provisions which required the consent of officials of the state in which the polluting discharges originated permitted such officials to veto any action to abate the pollution. The Secretary requested that both of these requirements be eliminated. 19

Congress complied with the Secretary's requests by passing the Water Pollution Control Act Amendments of 1956 (1956 Act). 20 In doing so, however, it modified the procedure in a way which served to introduce more delay into the administrative process. To the notification and hearing board procedures of the 1948 Act, the 1956 Act added an intermediate procedure. The new procedure provided

that if the Surgeon General found actionable pollution to exist, or if he was petitioned by a state, he was required to call a conference of all state and interstate water pollution control agencies of all the states concerned. That at the conclusion of that conference he was to prepare and forward to the agencies a summary of the discussions, including those related to the occurrence of actionable pollution, the adequacy of abatement measures, and the nature of any delays in effecting abatement. This conference procedure took even more time than had the second-notice procedure which had been objectionable under the 1948 Act. In addition, the new Act included a built-in delay of at least six months, for it provided that if effective abatement measures were not being carried out, the Surgeon General, upon conclusion of the conference, should recommend to the appropriate state agencies that they undertake remedial action themselves within a reasonable time; the time allowed for these state efforts was six months. If the state-controlled remedial action had not been taken within the time prescribed, the Secretary of Health, Education, and Welfare could then call a hearing before a board. The composition of the hearing board and its proceedings were substantially the same as prescribed by the 1948 Act, except that the board was now required to make findings respecting pollution and any abatement action being taken. The Secretary was directed to transmit the findings and his recommendations to the alleged polluters, giving them not less than six months to comply.

Whereas the 1948 Act had given polluters "a reasonable opportunity to comply" with an abatement order, the 1956 Act, by allowing six months after the receipt of the recommendations of the board in addition to the six months it already allowed after the conference and before the calling of a public hearing, gave to the polluter an assurance of immunity for at least a year after the Government had first interested itself in the case. Indeed, when the delay encountered in procedural matters is taken into account, it is clear that the built-in delay extended well beyond one year. After a request had been made to the Surgeon General to call a conference, additional time would have been required for him to be informed of its justification and for him to make necessary arrangements. The statute pre-

\[\text{References:}\]

scribed that three-weeks' notice be given to the conferees. The conference itself, the deliberations of the conferees, the preparation of a summary of the conference proceedings, and the preparation of the Surgeon General's recommendations would all have taken even more time. After the recommendations had been made and the first six-month period had expired, further time would have been consumed in preparing for the public-hearing procedure. First, the Secretary had to obtain nominations from those who were required by statute to be represented, and he had to appoint the hearing board. Then, three-weeks notice had to be given prior to the hearing. Furthermore, the hearing itself could have been lengthy, and additional time would have been required for the board to prepare its findings and recommendations. Not until the recommendations had been transmitted to the alleged polluters did the second six-month period begin to run.

If, within the time prescribed, the polluter had not commenced action to abate pollution, the Secretary could then request the Attorney General to file an abatement action. But before he could make such a request, the Secretary had to have either a written request from the water control agency of one of the states in which the health and welfare of persons was endangered or the written consent of the corresponding agency in the state or states in which the pollution originated. Delay in obtaining the necessary requests or consents was to be expected, because copies of the board's findings had to be sent to the interested state agencies, and those agencies would have needed time to study the recommendations. From these indications, then, it is clear that substantial delays were to be expected at every stage of the proceedings; and since the basic procedure has not been changed since 1956, such delays still remain a problem in most cases.

Another problem with the abatement provisions of the 1956 Act was that, like those of the 1948 Act, they applied only to interstate waters. Moreover, the definition of "interstate waters" was significantly narrowed. Under the 1948 Act, pollution of any boundary waters was subject to abatement. But in the 1956 Act the term

33. See note 70 infra and accompanying text.
34. See text accompanying note 6 supra.
“interstate waters” was defined as “all rivers, lakes, and other waters that flow across, or form a part of, boundaries between two or more States,” thus excluding from the abatement provisions of the Act all coastal and many other major waterways. The Administration had not requested such a change nor had the Senate Committee. The bill which had been approved by the Senate Committee had passed the Senate in June of 1955, but by the time the House Public Works Committee considered it, another bill, which was said to be a revision of the Senate bill and which contained the new definition of “interstate waters,” had been introduced. Ultimately, that revised bill became the 1956 amendments. When the modified definition was re-examined in 1961 by the House Committee on Public Works, that committee stated:

The present law... excludes from enforcement jurisdiction the greater part of the Great Lakes and their tributaries, the coastal waters of the Nation, many important coastal streams, intrastate water bodies such as the Detroit River, those of Florida, and all rivers, streams, lakes, and coastal waters of Alaska, Hawaii, and the Virgin Islands and Puerto Rico. International boundary streams such as the St. Lawrence, Niagara, lower Colorado, and Rio Grande Rivers are untouchable under the act. The same situation exists as to international streams flowing across the northern and southern borders of the United States into our international neighbors. Examples are the Red River of the North in Minnesota, Lake Champlain in New York, Souris and Riviere Rivers in North Dakota, and the Flathead and Kootenai Rivers in Montana. In addition, the Missouri River from the Kansas State line to just above St. Louis is an untouchable area under existing law. The greater part of the Hudson River is excluded, as are important reaches of the Tennessee,

35. 1956 Act § 11(e).
39. The House Public Works Committee had commenced hearings on S. 890 in July 1955, but it adjourned the hearings after one day and did not recommence them until eight months later, at which time H.R. 9540 may have been the result of an objection voiced in the 1955 House hearings by California’s water pollution control agency. H.R. REP. No. 1446, 84th Cong., 1st Sess. 45 (1955). This objection attacked the earlier definition of interstate waters on the ground that they included coastal waters. California’s substitute definition excluded coastal waters (id. at 49), as did the definition accepted by the Congress. The House committee chairman did not list the change as a “major” change (id. at 103); rather, the House report merely stated: “For purposes of this act the committee believes this is an improved and clearer definition.” Id. at 4. The Conference Report simply noted that the House version had been accepted in conference. H.R. REP. No. 2479, 84th Cong., 2d Sess. 16 (1956).
Columbia, Colorado, and Merrimack Rivers. Of the estimated 26,000 water bodies in the United States, there are only an estimated 4,000 of an interstate nature.\footnote{40}

Another significant aspect of the legislative history of the 1956 Act is one which relates to water quality standards. For the first time it was formally proposed that Congress adopt a more traditional enforcement procedure by establishing water quality standards so that pollution would be defined in advance of any abatement action.\footnote{41} Under the 1948 Act—and indeed under all amendments prior to 1965—the authorities were required to prove in each case not only that a body of water had been polluted by an alleged polluter’s discharges, but also that the pollution actually, in that very case, endangered someone’s health and welfare. It was not unlawful to discharge wastes into a river if no one used the water. Polluters could thus argue that if the quality of a river had been rendered so notoriously bad that no one dared use it, except to carry more filth, they were innocent of any violation of federal law.\footnote{42} The 1956 proposal for water quality standards would have made subject to the sanction of an abatement proceeding any discharge which reduced the quality of water below standards previously established. That proposal would have provided for investigations, consultations, and studies with municipalities, industries, and federal and state water pollution control agencies, and for the adoption and publication of standards by the Surgeon General. Under the proposal, the Surgeon General would have been directed to base standards on present and future uses of water for water supply, fish and wildlife, recreation, agriculture, industry, and other legitimate uses. Standards could have been established by the Surgeon General only when, in his judgment, the states had failed to adopt adequate standards. The committees of both the Senate and the House rejected this proposal in 1956, leaving the courts to determine in each case whether the alleged pollution was in fact harmful to the health and welfare of individuals. The 1956 Act also left unchanged the procedure in court and the power of the court to substitute its independent judgment for that of the Surgeon General and that of the Secretary.\footnote{43}

The principal forward step taken in the 1956 Act was to remove

\footnote{40. H.R. REP. No. 306, 87th Cong., 1st Sess. 8 (1961).}
\footnote{41. The proposal was made by the administration. STAFF OF HOUSE COMM. ON PUBLIC WORKS, 84TH CONG., 1ST SESS., COMPARATIVE CHANGES PROPOSED TO BE MADE IN THE WATER POLLUTION CONTROL ACT 6 (Comm. Print No. 2, 1955); it was incorporated in § 7 of S. 890, § 7 of H.R. 3426, and § 8 of S. 5897, 84th Cong., 1st Sess. (1955).}
\footnote{42. See, e.g., 1956 Act § 8.}
\footnote{43. 1956 Act § 8(g), codified in 33 U.S.C. § 466g(h) (Supp. IV, 1966-1968).}
from authorities of the state in which pollution originated the power to veto court action.\textsuperscript{44} That veto power had been inherently inconsistent with the idea of any federal abatement power, for if states had had the political power to challenge economically important polluters, they would probably have used their police power to enact and enforce their own antipollution laws so that federal legislation would have been unnecessary. On the other hand, if states did not dare institute abatement actions themselves, neither would those states have been likely to provide the consent necessary for the United States to institute such actions. This factor may have been partially responsible for the fact that no actions had been brought under the 1948 Act. It is clear, however, that the state veto power was not the only impediment to federal court action, for only one court action was brought under the 1956 Act, and that action was not filed until 1960.\textsuperscript{45} Moreover, as late as August 1967, that action was the only court action ever filed under the Federal Water Pollution Control Act.\textsuperscript{46}

In spite of many shortcomings, the 1956 Act did constitute a small step toward federal control of pollution. Congress had labored long and hard on the Act; and although the result was not all that could reasonably have been desired, at least the problems of pollution were being vigorously aired. Fortunately, as those problems became more pressing, the number of concerned legislators steadily increased.

C. The 1961 Amendments

Some further advances in federal control of water pollution were accomplished in the 1961 amendments to the Act (1961 Act).\textsuperscript{47} The scope of the Act was broadened to include almost all of the waters of the nation:

The pollution of interstate or navigable waters in or adjacent to any State or States (whether the matter causing or contributing to such pollution is discharged directly into such waters or reaches such waters after discharge into a tributary of such waters), which en-

\textsuperscript{44} 1956 Act § 8(c). See text accompanying note 31 supra.

\textsuperscript{45} Hearings on S. 4 Before the Special Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 89th Cong., 1st Sess. 32 (1965).

\textsuperscript{46} Hearings on Activities of the Federal Water Pollution Control Administration—Water Quality Standards Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 90th Cong., 1st Sess. 674 (1967).

\textsuperscript{47} Federal Water Pollution Control Amendments of 1961, Pub. L. No. 87-88, 75 Stat. 204 [hereinafter 1961 Act].
The definition of "interstate waters" was amended to encompass "all rivers, lakes, and other waters that flow across or form a part of State boundaries, including coastal waters." This definition substantially restored the 1948 formulation, and it removes any doubt that coastal waters are included. Under this revised definition, navigable waters, expressly covered by the Act for the first time, can include intrastate waters which are not tributary to interstate waters. The Senate committee expressly recognized that intrastate waters were included in the new language, pointing out that "it would be helpful to States in coping with water pollution problems, if the Federal Government were permitted, upon request of the Governor, to enter into intrastate cases . . . ." The term "navigable waters" is not defined by the Act; but it has had a fairly definite meaning since the case of The Daniel Ball, decided by the United States Supreme Court in 1871. In that case, the Court stated:

Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.

In addition, under the 1961 Act, federal abatement authority was expanded to cover pollution caused or contributed to by discharges within the same state in which the "health or welfare of persons" is endangered. Under the 1956 Act the Secretary had been authorized to call a conference—whether upon request of state authorities or on his own motion—only when the pollution in question en-

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50. S. REP. No. 353, 87th Cong., 1st Sess. 4 (1961). The Senate committee expressly recognized that intrastate waters were included in the new language, pointing out that "it would be helpful to States in coping with water pollution problems, if the Federal Government were permitted, upon request of the Governor, to enter into intrastate cases . . . ." The term "navigable waters" is not defined by the Act; but it has had a fairly definite meaning since the case of The Daniel Ball, decided by the United States Supreme Court in 1871. In that case, the Court stated:

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51. 77 U.S. (10 Wall.) 557 (1871).
52. 77 U.S. (10 Wall.) at 563. This definition is consistent with the term "navigable waters of the United States" as used in the 1966 amendment of the Oil Pollution Act of 1924. That term is there defined as "all portions of the sea within the territorial jurisdiction of the United States, and all inland waters navigable in fact." Oil Pollution Act of 1924, ch. 516, § 2(4), 43 Stat. 604, as amended, 33 U.S.C. § 432(4) (Supp. IV, 1965-1968).
dangered persons in another state. The 1961 Act expands that authority somewhat by permitting the Secretary to call a conference when pollution of interstate or navigable waters is endangering the "health or welfare of any persons," including those living in the state in which the pollution originated. Such a conference can be called, however, only upon request of the governor of the state in which the pollution has originated. That requirement has the effect of severely limiting the application of the Act in such intrastate situations, for the fact that the state has not proceeded against the polluter under its police power probably indicates a lack of conviction to proceed at all, since police power measures can be more swift and effective than those available under federal law.

In one other respect the 1961 Act opened the way for some increase in the availability of federal enforcement. Under the 1956 Act, if a municipality suffering from pollution desired federal assistance in combating that pollution, the community faced the problem of overcoming the traditional reluctance of its state government to challenge important industrial polluters, since only the state governor or state water pollution control authorities could make the request necessary to initiate federal action. Under the 1961 amendments, however, a municipality is permitted to make such a request directly, although the municipality is still required to obtain the concurrence of the governor and of the state water pollution control agency.

D. The 1965 Water Quality Act

The years following the passage of the 1961 amendments saw renewed interest in a proposal for federal water quality standards applicable to interstate waters—a proposal that had been suggested as early as 1956. After the resolution of considerable differences between the House and Senate versions of such a proposal, a compromise bill was passed by Congress and was signed into law by the President on October 2, 1965. That bill became the Water Quality Act of 1965, which amended the Federal Water Pollution Control Act.

54. 1956 Act § 8(c)(l); the limitation originated with the 1948 Act. See text accompanying note 8 supra.
56. 1961 Act § 8(c)(l).
58. See text accompanying notes 41-43 supra.
Section 10(c) of the Water Pollution Control Act, added by the 1965 amendments, provides for the establishment of water quality standards applicable to interstate waters. Under the procedure provided for adopting such standards, designated state officers file a letter of intent to adopt acceptable criteria, together with a plan for the implementation and enforcement of those criteria. If after public hearings the state adopts such criteria, and if the Secretary finds the criteria to be consistent with the requirements of the Act, then such criteria and plan become the applicable water quality standards. On the other hand, if the state does not file the letter of intent to adopt the criteria and plan, the Secretary, after a conference and consultations with interested parties, can prepare regulations setting forth his own standards for water quality. If, within six months after publication of such regulations, the state fails to adopt acceptable standards or to request a public hearing, the Secretary can then promulgate his own standards. The standards, whether initiated by the state or the Secretary, are required to be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of [the] Act. In establishing such standards the Secretary, the Hearing Board, or the appropriate State authority shall take into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses.

If the Secretary promulgates his own standards, the governor of an affected state can, within thirty days after promulgation, ask for revision, in which case the Secretary is required to call a hearing. The composition of the hearing board which is called to consider such revisions is substantially the same as that of the board which is convened for the public hearing that follows the conference procedure. If the hearing board revises the Secretary's standards, he is required to promulgate regulations incorporating the revisions.

63. 1965 Act § 5(a) (adding § 10(c)(1) to the FWPCA), codified in 33 U.S.C. § 466g(c)(1) (Supp. IV, 1965-1968).
64. 1965 Act § 5(a) (adding § 10(c)(2) to the FWPCA), codified in 33 U.S.C. § 466g(c)(2) (Supp. IV, 1965-1968).
65. 1965 Act § 5(a) (adding § 10(c)(2) to the FWPCA), codified in 33 U.S.C. § 466g(c)(2) (Supp. IV, 1965-1968).
68. 1965 Act § 5(a) (adding § 10(c)(4) to the FWPCA), codified in 33 U.S.C. § 466g(c)(4) (Supp. IV, 1965-1968).
In addition to providing for water quality standards, the 1965 Act makes subject to abatement the discharge of matter which reduces below the established standards the quality of interstate waters. That provision applies only to "interstate" waters and not to other "navigable" waters. When the Secretary finds that pollution has reduced the quality of interstate waters below standards, he may request the Attorney General to bring the action to abate. If the discharges and the persons affected are in the same state, the consent of the governor of that state is required before the action can be commenced. Furthermore, no action may be commenced until 180 days after the Secretary has given notice of the alleged violation of the standards to "violators and other interested parties." Thus, in the rather limited case of a violation of standards on an interstate, not merely "navigable," stream, the lengthy conference and hearing board procedures are replaced by a single six-month notice period.

The 1965 amendments further expand the scope of enforcement under the basic Act by authorizing the Secretary to call a conference when "he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution referred to in subsection (a) and action of Federal, State, or local authorities."  

E. The Clean Water Restoration Act of 1966

The Clean Water Restoration Act of 1966 made several additions to the enforcement provisions of the Federal Water Pollution Control Act. The 1966 legislation authorizes the Secretary to call a conference at the request of the Secretary of State when it appears

69. 1965 Act § 5(a) (adding § 10(c)(5) to the FWPCA), codified in 33 U.S.C. § 466g(c)(5) (Supp. IV, 1965-1968).
70. Section 10(c)(5) of the FWPCA, 33 U.S.C. § 466g(c)(5) (Supp. IV, 1965-1968), which allows for the 180-day notice for the bringing of an abatement action, applies only when the discharge that reduces the quality of the waters below the established water quality standards is into interstate waters. This limitation follows from the fact that water quality standards can be established under the Act only for interstate waters. See text accompanying note 61 supra. For a discussion of this limitation, see Dunkelberger, The Federal Government's Role in Regulating Water Pollution Under the Federal Water Quality Act of 1965, 3 NATURAL RESOURCES LAW 3, 12-14 (1970).
71. 1965 Act § 5(a) (adding § 10(c)(5) to the FWPCA), codified in 33 U.S.C. 466g(c)(5) (Supp. IV, 1965-1968).
73. 1965 Act § 5(a) (adding § 10(c)(5) to the FWPCA), codified in 33 U.S.C. 466(g)(6) (Supp. IV, 1965-1968).
that pollution originating in the United States is endangering the
health or welfare of persons in a foreign country.\textsuperscript{76} Foreign countries
affected by the pollution are to be represented, with all the rights of
a state water pollution control agency, both at the conference and
before any subsequent hearing board which might be called in con-
nection with the conference procedure.\textsuperscript{77} The Act further provides
that only those foreign countries which grant reciprocal rights to
the United States can take advantage of these procedures.\textsuperscript{78}

The 1966 Act took another important step toward more effective
enforcement by authorizing the Secretary to require an alleged pol-
luter to file with him a report, based on existing data, which fur-
nishes information concerning the “character, kind, and quantity”
of the discharges and which shows what “use of facilities or other
means” is being made to reduce such discharges.\textsuperscript{79} The Secretary
may call for such a report either during a conference, provided that
a majority of conferees so request,\textsuperscript{80} or at the hearing board stage.\textsuperscript{81}
Thus, whereas the law prior to 1966 was silent with respect to how
the Secretary was to obtain specific evidence of pollution, the 1966
legislation furnishes the Secretary with a means to gather data for
use in framing specific recommendations and for possible use in
subsequent proceedings. Failure to comply with a request for a re-
port subjects a polluter to a fine of 100 dollars per day.\textsuperscript{82} However,
trade secrets and secret processes need not be disclosed, and informa-
tion submitted by the polluter is to be treated as confidential by the
Secretary.\textsuperscript{83}

II. PROBLEMS WITH THE ACT

Although the Federal Water Pollution Control Act was amended
four times between 1948 and 1966, each amendment contained only

\textsuperscript{76} 1966 Act \textsection{206} [amending FWPCA \textsection{10(d)(2)}], codified in \textsection{33 U.S.C. \textsection{466g(d)(2)}

\textsuperscript{77} 1966 Act \textsection{206} [amending FWPCA \textsection{10(d)(2)}], codified in \textsection{33 U.S.C. \textsection{466g(d)(2)}

\textsuperscript{78} 1966 Act \textsection{206} [amending FWPCA \textsection{10(d)(2)}], codified in \textsection{33 U.S.C. \textsection{466g(d)(2)}

\textsuperscript{79} 1966 Act \textsection{208(b)} (adding \textsection{10(f)(2)} to the FWPCA), codified in \textsection{33 U.S.C. \textsection{466g(f)(2)}

\textsuperscript{80} 1966 Act \textsection{208(a)} (adding \textsection{10(k)(1)} to the FWPCA), codified in \textsection{33 U.S.C. \textsection{466g(k)(1)}

\textsuperscript{81} 1966 Act \textsection{208(b)} (adding \textsection{10(f)(2)} to the FWPCA), codified in \textsection{33 U.S.C. \textsection{466g(f)(2)}

\textsuperscript{82} 1966 Act \textsection{208(a), 208(b)} (adding \textsection{10(k)(2), 10(f)(3)} to the FWPCA), codified in
\textsection{33 U.S.C. \textsection{466g(k)(2), 466g(f)(3)} (Supp. IV, 1965-1968).

\textsuperscript{83} 1966 Act \textsection{208(a), 208(b)} (adding \textsection{10(k)(1), 10(f)(2)} to the FWPCA), codified in
\textsection{33 U.S.C. \textsection{466g(k)(1), 466g(f)(2)} (Supp. IV, 1965-1968).
partial solutions to the manifest problems in preceding versions of the Act, and in some cases the amendments created new problems. Moreover, some of the basic problems with the enforcement provisions of the 1948 Act were never remedied by amendment. In response to the enforcement problems which existed under the Act after 1966, Congress earlier this year passed the Water Quality Improvement Act of 1970.84 As will be discussed later,85 the 1970 amendments, like prior amendments to the Act, have partially solved some problems and largely ignored others. In order to understand why reform was needed and what improvement, if any, the 1970 amendments have made in the Act, it is necessary to analyze the enforcement problems which existed under the Act as it stood in 1969 and which in many cases remain today.

One basic problem with the Act was that it did not create a realistic division of authority between federal and state law. The 1970 amendments have made a small attempt at solving this problem,86 but for the most part the problem remains. The policy of the Act is to encourage state efforts in abating pollution.87 Only when the alleged polluter is a federal installation does the Federal Water Pollution Control Act pre-empt state law.88 Although it cannot be doubted that state and local efforts are indispensable in attempting to curb water pollution, the Act’s policy against pre-emption seems to discourage any organized mobilization of national effort. By allowing state and federal laws to overlap in all phases of pollution control except that concerning federal installations, the Act fosters duplication of effort and a waste of valuable resources. Pollution is considered by many to be the paramount problem which this country will face in the next decade;89 it is thus imperative that efforts to fight pollution be well organized. Surely some problems are purely local in character and accordingly may be dealt with by the states or municipalities either alone or in conjunction with the federal government.90 Other problems, however, are of such character that

85. See text accompanying notes 136-62 infra.
86. See text accompanying notes 161-62 infra.
90. See text accompanying notes 161-62 infra.
they can best be handled by the federal government alone.\textsuperscript{91} In order to be effective, the Federal Water Pollution Control Act must designate which aspects of water pollution are of paramount federal interest, so that state and local authorities can concentrate on the aspects of pollution that are more susceptible to state and local regulatory authority. Failure to draw distinct battle lines in the fight against pollution constitutes a major weakness in the Act.

Another major problem with the Act, and one which the 1970 amendments only begin to solve, is that the Act is not related in any comprehensive scheme to other federal provisions dealing with pollution control. As mentioned previously, only one abatement action has been brought under the Act in twenty-two years.\textsuperscript{92} This fact is not particularly surprising in view of the acute problems of delay built into the Act.\textsuperscript{93} If the federal government does find a severe case of ongoing pollution on a navigable but intrastate stream,\textsuperscript{94} it makes little sense to require the Government to resort to the Act's lengthy conference and hearing board procedures, which take more than a year to complete before an abatement action can be filed. Even if the discharge is into an interstate stream for which water quality standards have been adopted, the delay is six months.\textsuperscript{95} Moreover, if the origin and effects of pollution are confined to one state, the Secretary may encounter problems in getting the Governor of that state to consent to the bringing of an action.\textsuperscript{96} The 1970 amendments do substantially reduce these problems in the case of water pollution caused by oil discharges,\textsuperscript{97} and they contain a mechanism whereby other pollutants may eventually be reached as well.\textsuperscript{98} But, at the present time, severe types of pollution other than that caused by oil discharge are not readily subject to attack under the enforcement procedures provided by the Federal Water Pollution Control Act. Thus, if immediate measures against such pollutants are needed, the Attorney General must turn to other federal laws such as the 1899 Rivers and Harbors Act.\textsuperscript{99} Although important actions have been

\begin{itemize}
\item \textsuperscript{91} See text accompanying note 161 infra.
\item \textsuperscript{92} See note 46 supra and accompanying text.
\item \textsuperscript{93} See text accompanying notes 21-33, 70-73 supra.
\item \textsuperscript{94} See note 70 supra and accompanying text.
\item \textsuperscript{95} Id.
\item \textsuperscript{96} See text accompanying note 55 supra.
\item \textsuperscript{97} See text accompanying notes 137-46 infra.
\item \textsuperscript{98} See text accompanying notes 147-50 infra.
\end{itemize}
brought under that Act, it is essentially a criminal statute, and it applies only to "refuse matter . . . other than that flowing from streets and sewers and passing therefrom in a liquid state." In view of these considerations, Congress might well consider incorporating the 1899 Act into the Federal Water Pollution Control Act and making the latter statute the basis of a comprehensive scheme providing for a full panoply of remedies for all types of pollution.

Another problem with the enforcement provisions of the Federal Water Pollution Control Act—and one on which the 1970 amendments are completely silent—involves the formulation of the judicial standard for entering the abatement order. Under that formulation, a court may refuse to order abatement of even the most heinous pollution if it finds that such abatement would not be physically or economically feasible or practical. At best this standard is imprecise; at worst it may provide polluters with a substantial loophole through which to avoid an abatement order. Considerable trial time may be consumed in presenting evidence relating to the feasibility of abatement—time which could be spent for abatement itself. In many cases, if the Attorney General is to succeed in securing the relief, he must prove not only the existence of illegal pollution, but also the existence of a reasonable method of abatement. Such a variable standard based on the apprehended equities of particular situations tends to afford a choice to corporations whose manufacturing processes produce considerable pollution. They can either attempt to make their polluting discharges reasonably abatable or they can create such a great vested interest in pollution that abatement becomes unfeasible. A judicial standard which allows polluters to make the latter choice does not seem to be in the public interest.


103. The 1970 amendments seem to take a step in this direction by repealing the Oil Pollution Act of 1924 and dealing with the problem of oil pollution through civil and criminal penalties, provision for immediate abatement, and the assessment of removal costs under the Federal Water Pollution Control Act. See text accompanying notes 137-46 infra.

104. See text accompanying note 16 supra. The 1948 standard was re-enacted in the 1966 Act, § 8(g), and is now found in 33 U.S.C. § 466g(f) (Supp. IV, 1965-1968).

105. 33 U.S.C. § 466g(f)(2) (Supp. IV, 1965-1968) will be of help to the Attorney General only if the alleged polluter has "existing data" of a reasonable method of abatement. See text accompanying notes 79-81 supra.
A further problem with the enforcement provisions of the Act lies in the fact that they give the polluter—even one who could easily abate—no incentive to do so in the absence of an abatement order. The 1970 amendments reach this problem only in the very limited area of pollution by oil discharges. For the most part, however, the Act does not forbid conduct which causes pollution; instead it merely threatens a polluter with the possibility that, following the lengthy proceedings required under the Act, he may be subjected to an order to abate. Compliance with the court order may be more costly than continued pollution, and consequently the polluter may strive to delay for as long as possible the entering of the abatement order. Moreover, he risks little by continuing to pollute, since in general the Act provides no penalty for previous acts of pollution. It seems clear that the judicial remedy of abatement, although crucial to any pollution control scheme, is not in and of itself a sufficient deterrent to potential polluters. By focusing on the single remedy of abatement and by refraining from imposing civil or criminal penalties in any area but that of oil discharges, the Act fails to make most acts of pollution sufficiently costly to the polluter to affect his initial decision whether to engage in conduct which causes pollution. Thus, imposing economic incentives at the decision-making stage seems imperative not only with respect to oil discharges, but with respect to all types of water pollutants.

What little deterrent the Act's enforcement provisions might have is further reduced by the Act's failure to provide an adequate mechanism for gathering data on pollution and polluters. This problem remains in 1970, since the amendments do not deal with it. The only provision made by the Act for gathering evidence of pollution is that which permits the Secretary to require "reports" from alleged polluters. Those reports may be required both at the conference and the hearing board stage, but the effectiveness of the requirement is substantially reduced by the provision that reports be based on existing data. The Act places no affirmative burden on industry to conduct studies on pollution and its prevention, and consequently only those polluters who make an independent effort to study the

106. See text accompanying note 140 infra.
107. The proceedings under the Act entail considerable delay, as outlined above. See text accompanying notes 21-33, 70-73, 93-95 supra. Furthermore, the polluter may resort to tactics such as that suggested in the text accompanying notes 104-05 supra.
108. See text accompanying notes 79-83 supra.
109. See text accompanying notes 80-81 supra.
pollutant effect of their industrial wastes are adversely affected by
the report requirement. Thus, the verbal formulation of the report
requirement seems to put a premium on inaction, at least for the
polluter who fears that the Secretary may proceed against him under
the Act. Moreover, the report requirement is useful as a data-gath­
ering device only at a relatively advanced stage of the proceed­
ings, since before the Secretary can initiate proceedings or demand a
report, he must have some evidence on which to base an allega­tion of
a violation of water standards. Yet the Act is silent as to how
evidence of pollution is to be gathered in the first instance. The
lack of a permanent method to measure pollution and to identify
polluters necessarily impedes the effective implementation of water
quality standards under the Act.

A related problem with the Act, and one on which the 1970
amendments are similarly silent, concerns formulation of the water
quality standards themselves. Certainly it is essential that there be
well-defined standards for water quality; but it seems equally essen­
tial that there be quality standards for industrial and municipal
effluents. Furthermore, standards should be developed to prevent
the degradation of relatively clean streams to the minimum accept­
able water quality level. Without effluent and degradation standards,
pollution would be permissible until its cumulative effect reduced
the quality of a given body of water below the standards provided
for in the Act. An industry on a “clean” stream could thus discharge
noxious effluents in greater quantities than could a similar industry
on a stream that is already polluted. The net effect of having water
quality standards without effluent and degradation standards, then,
would be to encourage industries to locate on “clean” streams rather
than to improve existing facilities on polluted streams.

Secretary Udall responded to these problems in his formulation
of Guidelines for Establishing Water Quality Standards for Inter­
state Waters. The first guideline prohibits standards which allow

111. 33 U.S.C. § 466g(d)(1) (Supp. IV, 1965-1968) indicates that the Secretary is to
initiate proceedings on the basis of “reports, surveys, or studies,” but it does not set
up a continuing mechanism for providing them.

112. See generally Brown & Duncan, Legal Aspects of a Federal Water Quality


114. Federal Water Pollution Control Administration, U.S. Dept. of the Interior,
Guidelines for Establishing Water Quality Standards for Interstate Waters, in Hear­
ings on Activities of the Federal Water Pollution Control Administration—Water
Quality Standards Before Subcomm. on Air and Water Pollution of the Comm. on
for degradation,\textsuperscript{118} and the third\textsuperscript{118} and the eighth\textsuperscript{117} guidelines impose effluent standards. Nevertheless, the establishment of degradation and effluent standards presents problems, for neither type is expressly provided for in the Act. Furthermore, prohibiting the degradation of any interstate stream may substantially inhibit future industrial and municipal development;\textsuperscript{118} and uniform application of effluent standards on even a statewide basis may be unnecessary in many cases, since some bodies of water, because of their present quality, volume, flow, or other factors, have a greater ability to cleanse themselves than do others. Thus the standards that are applied to effluents discharged into these water systems need not be as rigid as those applied to effluents discharged into other systems. Accordingly, it would seem desirable that degradation and effluent standards be specifically authorized by statute\textsuperscript{119} and that those standards be subjected to frequent administrative review in order to keep them responsive to changing state needs.

The problems with the Act’s enforcement provisions themselves, however, are perhaps not the most serious ones encountered in attempting to enforce the Federal Water Pollution Control Act. No piece of legislation is self-executing; and, consequently, the burden

\begin{quote}
\textsuperscript{115} Guideline 1 (emphasis added) provides:
Water quality standards should be designed to enhance the quality of water. If it is impossible to provide for prompt improvement in water quality at the time initial standards are set, the standards should be designed to prevent any increase in pollution. \textit{In no case will standards providing for less than existing water quality be acceptable.}

\textsuperscript{116} Guideline 3 provides:
Water quality criteria should be applied to the stream or other receiving water or portions thereof. The criteria should identify the water uses to be protected and establish limits on pollutants or effects of pollution necessary to provide for such uses. Numerical values should be stated for such quality characteristics where such values are available and applicable. Where appropriate, biological bioassay parameters may be used. In the absence of appropriate numerical values of biological parameters, criteria should consist of verbal descriptions in sufficient detail as to show clearly the quality of water intended (e.g., “substantially free from oil”).

\textsuperscript{117} Guideline 8 provides:
No standard will be approved which allows any wastes amenable to treatment or control to be discharged into any interstate water without treatment or control regardless of the water quality criteria and water use or uses adopted. Further, no standard will be approved which does not require all wastes, prior to discharge into any interstate water, to receive the best practicable treatment or control unless it can be demonstrated that a lesser degree of treatment or control will provide for water quality enhancement commensurate with proposed present and future water uses.

\textsuperscript{118} The State of Iowa has recently claimed that the Secretary of Interior has exceeded his authority under the Act by insisting on standards which both prohibit degradation of existing water quality and prescribe effluent standards. See \textit{Air \& Water News}, Nov. 4, 1969, at 9-10. The objections made by Iowa reaffirm similar objections made by the Governor of Wyoming in March 1968. See \textit{114 Cong. Rec.} H 2984 (daily ed. April 24, 1968).

\textsuperscript{119} See \textit{114 Cong. Rec.} H 2968 (daily ed. April 24, 1968).
\end{quote}
of actual enforcement lies not only in the substantive provisions of an act, but also in the hands of the various governmental units designated to carry out those provisions. The importance of this problem may be seen in the fact that executive and legislative branches of government apparently have not been as zealous as they might have been in appropriating funds for projects authorized by the Act. For example, the 1956 Act authorized the grant of federal subsidies for sewage treatment works,\textsuperscript{120} and the 1966 Act authorized the appropriation of 1.25 billion dollars in construction grants for those projects in the fiscal year 1970.\textsuperscript{121} The President's budget request, however, was for only 214 million dollars.\textsuperscript{122} Congress finally agreed upon an appropriation of 800 million dollars amid predictions that the Administration would not spend the entire amount appropriated.\textsuperscript{123}

Moreover, the problems caused by the failure to appropriate adequate sums for pollution control are intensified by what has apparently been inefficient utilization of the funds which have been made available. On November 3, 1969, for instance, the Comptroller General of the United States forwarded to Congress a report entitled *Examination into the Effectiveness of the Construction Grant Program for Abating, Controlling, and Preventing Water Pollution*.\textsuperscript{124} The Report's principal finding is as follows:

During fiscal years 1957 through 1969, FWPCA awarded grants to States, municipalities, and intergovernmental agencies of about $1.2 billion for the construction of more than 9,400 projects having a total estimated cost of about $5.4 billion.

These projects have contributed to abating water pollution because the problem would have been worse if the projects had not been constructed. GAO [the General Accounting Office, headed by the Comptroller General] believes, however, that the benefits have not been as great as they could have been because many waste treatment facilities have been constructed on waterways where major polluters—industrial or municipal—located nearby continued to discharge untreated or inadequately treated wastes into the waterways.\textsuperscript{125}

Such haphazard application of pollution control measures will not

\textsuperscript{120} 1956 Act § 6(a), as amended, 33 U.S.C. § 466(a) (1964).
\textsuperscript{123} Id.
\textsuperscript{125} Id. at 1.
provide any enduring long-run solution to the problem of water pollution.


Public reaction to pollution has been slow in developing into an effective political force. The publication of Rachel Carson's *The Silent Spring* in 1962 brought the problem of environmental pollution before the public and touched off a controversy which now seems to have been settled in her favor. The grounding of the *Torrey Canyon* on Seven Stones Reef off southwestern England in March 1967 slowly came to be recognized as a great disaster. Finally, the Union Oil Company "blowout" in January 1969 demonstrated to most Americans the possible magnitude of pollution problems. Thus, environmental problems which had been neglected for so long were suddenly placed with stark force before the public eye. As a result, Congress has become much more willing to take a strong stand on the issue of pollution control.

The first congressional response to the rising tide of public opinion was the National Environmental Policy Act of 1969, signed by President Nixon on January 1, 1970. Title I of the Act reaffirms "that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, [and] to create and maintain conditions under which man and nature can exist in productive harmony . . . ." It also requires all federal agencies to submit to the President, to the newly created Council on Environmental Quality, and to the public, a report detailing the environmental impact of any proposed legislation or of other proposed major federal action. That report must describe any unavoidable environmental effects of the proposal, possible alternatives to the proposed action, and any irreversible commitment of resources which

130. See text accompanying note 133 infra.
the proposal would require. The Act thus calls for a new awareness of the environmental problems that are involved in all governmental actions. Undoubtedly, a conscious awareness of the existence of a problem is an important first step in the quest for an effective remedy.

Title II of the Act creates, in the Executive Office of the President, the Council on Environmental Quality. The Council is designed to be an independent fact-finding body to advise the President on the environment. In addition, according to the Act, the Council is to make a comprehensive study of trends and problems in environmental quality—including those in the area of water pollution—and to develop a series of priorities for dealing with those problems. The Act also directs the Council “to review and appraise the various programs and activities of the Federal Government in the light of the policy set forth in Title I of this Act.”

The creation of the Council on Environmental Quality seems to take a major step in solving one of the acute problems under the Federal Water Pollution Control Act. At last Congress has recognized that environmental problems, including those of water pollution, must be approached in a systematic and comprehensive manner. It is to be hoped that the new Council will develop concrete proposals for an efficient division of authority in environmental control, and that the Council’s findings will provide a basis upon which to amend present laws, primarily the Federal Water Pollution Control Act, in order to mobilize local, state, and federal resources to fight pollution in the most rational manner.

Shortly after the passage of the National Environmental Policy Act, Congress unanimously passed the Water Quality Improvement Act of 1970. That Act, which became law on April 3, 1970, substantially amends the Federal Water Pollution Control Act. The 1970 amendments are important not only for their substantive provisions, but also for the apparent modification in congressional policy which they reflect. The new section 11 added by the amendments, dealing with the problem of water pollution caused by oil spillage, replaces the Oil Pollution Act of 1924 and brings within

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135. 1969 Act § 204(3).
the scope of the more general Federal Water Pollution Control Act
the specific problem of oil spillage. This section provides that per­
sons in charge of any vessel or of any onshore or offshore oil facility
shall be subject to a fine of up to 10,000 dollars or imprisonment for
one year or both for failure to report any known discharge of oil
into navigable waters or onto the adjoining shoreline. In addition,
the owner or operator of any vessel or facility from which oil is
knowingly discharged is subject to a civil penalty of 10,000 dollars
for each offense. Thus, for the first time, Congress has determined
to impose civil and criminal penalties under the Federal Water
Pollution Control Act for past acts of pollution. The existence of
such penalties should provide the shipping and oil industries with
economic incentives to exercise a strong degree of self-regulation
with regard to oil pollution.

Section 11 also provides for the preparation of a National Con­
tingency Plan for the effective detection and removal of oil spills. If
and when an oil spill does occur, the owner of the polluting facil­
ity is given the opportunity to remove the oil. If he fails to do so,
the President may arrange for the removal of the oil pursuant to the
National Contingency Plan. If the President does act to remove
the oil, the owner of the vessel or the facility from which the oil is
discharged is then liable to the United States for the costs of re­
moving the oil, subject to certain monetary limitations based on the
degree of fault and the type of facility causing the spillage. If the
owner can prove the responsibility of a third party, he may escape
liability, and the third party will be liable; if he can prove that
the discharge was caused solely by an act of God, an act of war, or
a negligent act by the United States, the federal government will
have to bear the cost of removal. By holding responsible for the
costs of removal those who cause oil pollution, the new amendment
provides a further economic deterrent to the potential polluter.

Section 12 of the Federal Water Pollution Control Act, added
by the 1970 amendments, deals with the control of hazardous pol-

139. 1970 Act § 102 (adding § 11(b)(4) to the FWPCA).
140. 1970 Act § 102 (adding § 11(b)(5) to the FWPCA).
141. The penalties are more stringent than those that were provided
142. 1970 Act § 102 (adding § 11(c)(2) to the FWPCA).
143. 1970 Act § 102 (adding § 11(e) to the FWPCA). Section 11(k) of the FWPCA
sets up a $35,000,000 revolving fund for the Government to use in removing oil spill-
age.
144. 1970 Act § 102 (adding §§ 11(f)(1)-(3) to the FWPCA).
145. 1970 Act § 102 (adding § 11(g) to the FWPCA).
146. 1970 Act § 102 (adding § 11(h)(1) to the FWPCA).
luting substances other than oil.147 Basically, section 12 contemplates that the President shall designate distinct elements or compounds which, like oil, constitute definable water pollution hazards.148 Such substances will, again like oil, be subject to removal if spilled into navigable waters or onto shorelines.149 The President is further directed to recommend measures and limits for assessing against the polluter the costs of such removal, presumably so that provisions similar to those found in section 11 will be extended to other hazardous substances.150

The 1970 Act's other two substantive amendments relevant to the enforcement of water quality standards are sections 13 and 21. Section 13 requires the Secretary of the Interior, in conjunction with the Secretary of Transportation,152 to "promulgate federal standards of performance for marine sanitation devices . . . which shall be designed to prevent the discharge of untreated or inadequately treated sewage into or upon the navigable waters of the United States from new vessels and existing vessels . . . ."153 Violations of the federal standards by any manufacturer or vessel owner subjects the violator to an injunction in a federal district court and a civil penalty for each violation.154 Section 21 establishes a procedure to be followed by an applicant "for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities which may result in any discharge into the navigable waters of the United States . . . ."155 Under that procedure, before a federal license may be issued to an applicant, his application must be submitted for certification by the appropriate state or interstate agency in the area in which the discharge will occur.156 Such certification is to be made only if the agency is satisfied at a public hearing that the facility's discharges will not violate applicable water quality standards.157 If, after the hearing, the agency refuses to grant

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147. 1970 Act § 102 (adding § 12(a) to the FWPCA).
148. 1970 Act § 102 (adding § 12(d) to the FWPCA).
149. 1970 Act § 102 (adding § 12(g) to the FWPCA).
150. 1970 Act § 102 (adding § 12(g) to the FWPCA).
151. Like all prior Acts, the 1970 Act contains provisions not directly related to enforcement of water quality standards. Thus, FWPCA §§ 16-18 provide for training grants and scholarships for the training of pollution control experts and the like.
152. Section 13 designates this Secretary as "the Secretary of the department in which the Coast Guard is operating." In peacetime that is the Secretary of Transportation, in wartime, the Secretary of the Navy. 49 C.F.R. § 1.4 (1970).
153. 1970 Act § 102 (adding § 13(b)(l) to the FWPCA).
154. 1970 Act § 102 (adding §§ 13(b)-(j) to the FWPCA).
155. 1970 Act § 103 (adding § 21(b)(l) to the FWPCA).
156. 1970 Act § 103 (adding § 21(b)(l) to the FWPCA).
157. 1970 Act § 103 (adding § 21(b)(l) to the FWPCA).
certification, no federal license can be issued; but if the agency fails to act on an application within one year after submission, the certification requirement is waived.

The Water Quality Improvement Act of 1970 does provide a positive response to many of the problems existing under the Federal Water Pollution Control Act. By repealing the Oil Pollution Act of 1924 and placing an oil pollution control mechanism under the more general water pollution control statute, Congress seems to be taking a determined step to integrate at the federal level the fight against water pollution from whatever source. Sections 12 and 13 of the new Act reflect the same tendency. Certainly Congress has not gone far enough in devising a comprehensive scheme to combat water pollution, but the 1970 amendments do seem to reflect a movement in that direction. The enforcement provisions now have considerable force, at least with regard to the control of oil pollution, and it is to be hoped that section 12 will provide an effective vehicle for developing readily available and effective remedies, in the form of civil and criminal penalties, with respect to other definite classes of pollutants as well.

In addition to creating a more comprehensive federal statute, the 1970 amendments have taken a positive step toward better defining various realms of influence in water pollution control. Section 13, which provides for the control of sewage from vessels, pre-empts any state action in the field. This course of action is undoubtedly wise, since differing state standards could greatly impede interstate commerce by waterway. On the other hand, section 11, dealing with oil pollution control, does not pre-empt state law on the subject. This policy of selective pre-emption according to the demands of the given pollution problem should be carried into other areas of pollution control as well, in order to effect a better allocation of responsibility between the federal government and state or local units. Section 21 is significant in this respect, for it allows the states, through the certification procedure, to exercise an effective veto over federally licensed projects whenever the pollution threat posed by the project is sufficiently great. Thus, section 21 correctly recognizes that it would be unwise for the federal government to establish uniform standards for federally licensed projects, when local water conditions vary so widely throughout the country.

158. 1970 Act § 103 (adding § 21(b)(I) to the FWPCA).
159. 1970 Act § 103 (adding § 21(b)(I) to the FWPCA).
160. See note 158 supra.
161. 1970 Act § 102 (adding § 13(f) to the FWPCA).
162. 1970 Act § 102 (adding § 11(o)(2) to the FWPCA).
IV. CONCLUSION

The evolution of the enforcement provisions of the Federal Water Pollution Control Act has been a slow and painful process. Each amendment to the Act has perpetuated as many problems as it has solved, either by ignoring existing problems or by using half-measures to attempt to solve them. While such a course of development is to be expected in an area such as environmental law, which has not traditionally been considered by Congress to be of paramount importance, it is no longer an acceptable course of development when that area becomes one of vital importance. Although the American public has gradually come to realize during the decade of the 1960's that pollution in general, and water pollution in particular, is a national problem of the highest priority, Congress has not responded with the bold measures which are necessary if there is to be effective pollution control. Although the battle against pollution must be fought simultaneously on many different fronts, the enforcement provisions of the Federal Water Pollution Control Act can provide important weapons in the fight. Thus the Act can and must be made more effective in carrying out its role in the over-all scheme of pollution control. But half-measures will not suffice; rather, well-reasoned and well-developed changes must be made to transform the Act into a comprehensive package, able to respond with a full panoply of remedies to varying degrees of pollution from whatever source.

Perhaps the 1969 and 1970 Acts are a harbinger of such reform. The temporal proximity between the two Acts may indicate a genuine kindling of congressional interest in halting water pollution. The substance of those Acts also offers hope for the future, for the National Environmental Policy Act emphasizes the need for planning and coordination in pollution control, and, more important, the Water Quality Improvement Act begins to integrate specific water pollution control measures into the general Federal Water Pollution Control Act. Thus both of the new Acts seem to constitute the genesis of a more rational approach to pollution problems. Let those of us who value clean water pray that subsequent legislation will continue in this direction with even more conviction.

163. It is, of course, not suggested that the enforcement provisions of the Federal Water Pollution Control Act constitute the single answer to the problem of water pollution. Rather they are only a remedial device. Other measures, such as public and private subsidies to develop antipollution devices, tax incentives to induce pollution control, and educating the public on pollution control, are surely important in the fight against pollution, but they are outside the scope of this Article.