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EFFLUENT LIMITATIONS AND NPDES: FEDERAL AND STATE IMPLEMENTATION OF THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972

THOMAS B. ARNOLD*

INTRODUCTION

In November 1971, Senator Edmund Muskie surveyed the continuing environmental and economic damage being caused by water pollution in the United States, and concluded that the national effort to abate and control water pollution was "inadequate in every vital aspect." ¹ Previous federal and state approaches had provided neither enforceable standards nor an effective enforcement procedure. ² To rectify this situation the Senate Committee on Public Works proposed a bill which would make two major changes in the existing law: it would change the primary control mechanism from water quality standards ³ to effluent limitations ⁴ on each point.

³ "Water quality standards" are quantitative measurements of the concentration of pollutants in a particular body of water. The implementation of water quality standards would prohibit any discharge which would result in a greater concentration of pollutants in the water than the maximum amount permitted by statute or regulation.
⁴ "Effluent limitations" are restrictions based upon quantitative measurements of the "chemical, physical, biological, and other constituents" into navigable waters. 33 U.S.C. § 1362(11) (Supp. II 1972). Effluent limitations prohibit the discharge of a pollutant in greater concentration or volume than permitted by statute or regulation of a state or of the EPA. 33 U.S.C. §§ 1311(a), (b)(1)(A) (Supp. II 1972).

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For discussion of the inadequacies of prior legislation and the need for new legislation to control water pollution, see Comment, The Federal Water Pollution Control Act Amendments of 1972, 14 B.C. Ind. & Com. L. Rev. 672, 674-80 (1973).

"Discharge of a pollutant" means
(A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.

source, and it would establish a national permit system to control the discharge of pollutants by each point source. These two changes were incorporated into the Federal Water Pollution Control Act Amendments of 1972 (Amendments). More than a year has passed since the Amendments were enacted, and it is now appropriate to review the problems which have arisen under the amendments and their implementing regulations, and the actions which have been taken by the Environmental Protection Agency (EPA) and by the states to deal with these problems.

Specifically, this article will discuss an ambiguity in the language of the Amendments relating to the procedure which the EPA should use to set effluent limitations for point sources. It will describe the EPA's solution to this problem and the delays which have been encountered in setting effluent limitations. The article will then discuss the permit program established by the Amendments, focusing on the treatment of three specific issues by the EPA and the states: modification of a permit; public availability of information; and public participation in the permit process.

I. EFFLUENT LIMITATIONS

In order to effectuate the objective of the 1972 Amendments that "... the discharge of pollutants into the navigable waters be eliminated by 1985," Congress established a standard of quantitative measurement of water pollution in the form of effluent limitations. A discharge occurring after the statutory deadline which contained a quantity of pollutants in excess of these effluent limitations was prohibited by the new legislation. The Amendments required all point sources, other than publicly-owned treatment works, to achieve, not later than July 1, 1977, effluent limitations based upon

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3 "Point source" is defined as "any discernible, confined, and discrete conveyance... from which pollutants are or may be discharged." 33 U.S.C. § 1362(14) (Supp. II 1972).
8 The effective date of the Amendments was Oct. 18, 1972.
9 33 U.S.C. § 1251(a)(1) (Supp. II 1972). The fundamental goal of the new legislation is set out in the same section: "The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a) (Supp. II 1972).
11 The Amendments require publicly-owned treatment works in existence on July 1, 1977 to achieve effluent limitations based on "secondary treatment." Effluent limitations based upon secondary treatment are to be defined by the EPA. 33 U.S.C. § 1311(b)(1)(B) (Supp. II 1972).

the "best practicable control technology currently available,"\textsuperscript{12} and to achieve, not later than July 1, 1983, effluent limitations based upon the "best available technology economically achievable."\textsuperscript{13} Since the application of the best practicable control technology standard will result in substantial reductions in the discharge levels of pollutants,\textsuperscript{14} and because the law in this field is evolving rapidly and may well have changed significantly by 1977, this article will focus on the efforts to set effluent limitations based on the 1977 standard of best practicable control technology and to issue permits which will require point sources to meet those limitations.

Two initial questions are presented by the use of an effluent limitation standard such as that used in the Amendments: First, what factors should be taken into account in deciding what is best practicable control technology? Second, should one uniform limitation be set for an entire industry or should a case-by-case evaluation of each point source be made? Initially, the Senate expected the Administrator of the Environmental Protection Agency to define best practicable technology by evaluating a number of factors, including: the age of the plants in question; their size and unit processes involved; and the cost of applying such controls. For each category or class of point sources the Administrator would perform a three step analysis: (1) he would establish a base level discharge standard applicable to all plants within that category; (2) he would then define a range of discharge levels stricter than the base level formulated upon the average of the best existing performance by plants of various sizes, ages and unit processes within each industrial category; and (3) he would apply the above factors to each specific plant, but in no event would a plant be allowed to discharge more than the base level.\textsuperscript{15} It was implied in this formulation that the Administrator would consider the relevant factors at each stage of the three step analysis.

This scheme was not expressly incorporated into the Senate bill.\textsuperscript{16} That bill required the Administrator to publish regulations which: (1) identify the degree of effluent reduction attainable through the application of the best practicable control technology

\begin{footnotesize}
\begin{enumerate}
\item[14] In some industries the application of "best practicable control technology" will result in the elimination of discharges. 40 C.F.R. §§ 426.12, .22, 38 Fed. Reg. 28,902, 28,906-07 (Oct. 17, 1973) (proposed rules). In most industries it will result in an 80-90% reduction in pollutants contained in the raw waste load.
\end{enumerate}
\end{footnotesize}
currently available for classes and categories of point sources; and (2) specify factors to be taken into account in determining the control measures and practices to be applicable to any point sources within such categories of classes. These factors were set out in section 304(b)(1)(B) of the bill and included: the age of equipment and facilities involved; the process employed; the engineering aspects of the application of various types of control techniques; process charges; the cost of achieving such effluent reduction; and such other factors as the Administrator deemed appropriate. The bill did not require the Administrator to establish a base level for each industry. Nor did it specifically require the Administrator to establish a range of discharge levels, although it was possible that the identification of effluent reductions attainable for "classes and categories" of point sources was intended to include the identification of levels for subcategories within each industrial category. The most serious ambiguity, however, was contained in the specific requirement in the Senate bill that the enumerated factors be taken into account in determining control measures to be applicable to "any point sources within such categories or classes." This statutory language could be construed to mean that the EPA would be required to consider the factors set out in the Amendments and formulated in its own regulations in setting control measures for subcategories or for individual point sources rather than only for categories or classes of point sources. It would appear that if an individual point source evaluation had been intended as the Senate report stated, the statutory language should have read "any point source." The use of the plural form, however, left the congressional intent unclear. The House version did not resolve this problem. It preserved the language of the Senate bill and merely enlarged "the cost of achieving such effluent reduction" to "the cost and the economic, social, and environmental impact of achieving such effluent reductions.

These ambiguities remained in the Amendments as finally passed by Congress. Two changes were made in the language of section 304(b)(1)(B): first, the word "any" was deleted, leaving a requirement that the enumerated factors be taken into account in determining control measures applicable to "point sources" within such categories or classes; and second, the cost factors stated in the Senate and House bills were dropped, and a cost benefit analysis,
which called for a balancing of the "total cost of application of technology" with the effluent reductions benefits to be achieved, was added.

The conference reports and debate on the Amendments did not provide a final resolution of the ambiguity. Senator Muskie indicated that the six enumerated factors set out in section 304(b)(1)(B) should not be considered in each permit determination. Other statements on this issue were not as clear. Representative Jones, for example, stated that the cost-benefit analysis should be a factor in the determination of best practicable control technology for a given category or class of point sources, but then stated that the analysis should include the internal or plant costs sustained by the owner of an individual point source. The Conference Report was more definite; it expressly stated that the determination of the economic impact of an effluent limitation should be made on the basis of classes or categories of point sources "as distinguished from a plant by plant determination." On balance it would appear that Congress intended the determination of best practicable control technology to be made by category and not on a case-by-case analysis of each point source. The legislative history of the conference bill discussed a strong desire for uniformity in the permit program. Uniformity was an essential element of the Amendments, and it would be lacking if the equipment and economic capability of each owner was considered in setting each permit's conditions.

In view of this confused legislative history, it is interesting to examine the EPA's response to this problem. Essentially, the EPA considers the factors set out in section 304(b)(1)(B) only when it sets effluent limitations for a class or category of point sources. However, it subdivides each industrial category and sets effluent limitations for such category. Thus, a range of base levels is set within...
each category, and each point source within a subcategory must meet the limitations imposed upon that subcategory. It does not appear that the EPA has defined a best practicable technology limitation which would act as a base level for all point sources within a category. 28 In setting effluent limitations for each subcategory, the EPA takes into account the economic impact on the sources within the subcategory. 29 Although this impact is usually small, the EPA has indicated that some small sources may experience financial difficulty in meeting the limitations. 30 When this is the case, the EPA has suggested alternative methods of meeting the limitations and has also implicitly accepted the possibility that some sources may be forced to close down.

While the subcategory approach appears to carry out the congressional desire for uniformity, it leaves unanswered some basic questions. If section 304(b)(1) 31 requires at least a two step analysis, does a subcategory approach properly perform both steps, or is more required? Furthermore, is the Administrator required by section 304(b)(1)(A) 32 to set base levels for all classes and categories, and if so, what factors must be taken into account? Finally, if the application of the statutorily enumerated factors demonstrates that a particular source could do better than the limitation for its specific subcategory, should the Administrator require it to meet a more stringent limitation? Many of these questions have been mooted, however, by the EPA's decision to proceed with the permit program before issuing guidelines, and by its failure to promulgate industry guidelines in accordance with the statutory timetable. Shortly after the Amendments were enacted, Senator Muskie expressed his concern with the EPA's proposed procedure for negotiating permits with the major industrial dischargers in the absence of industry guidelines. 33 This concern was largely ignored by the EPA, which

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28 This omission is important because point sources not within a specified industrial subcategory will press for an individualized determination of the best practical control technology available for them. In that situation the base level should be identified and utilized as a limiting factor.

29 See, e.g., 38 Fed. Reg. 29,011 (Oct. 18, 1973), which sets out the expected economic impact of proposed water pollution controls upon the Ferroalloy Manufacturing Point Source category.


33 I am sure you will agree that uniformity is necessary in the permits issued under section 402. This goal cannot be achieved through an interim program based on effluent limits derived on an ad hoc basis, nor can it be achieved through an interim program premised on concepts specifically rejected by Congress.
proceeded to issue permits based on water quality standards and, where guidance was sufficiently thorough, to express a high degree of confidence that permits as written would not be "materially inconsistent with effluent guidelines subsequently issued." In addition, the guidelines were not promulgated by October, 1973, as required by the Amendments. Many have still not been promulgated and will not be promulgated until shortly before the statutory deadline for issuing permits of December 31, 1974. Since most of the major industrial dischargers are now covered by permits, and more permits are being issued under the proposed guidelines, it appears that the congressional procedure for achieving uniformity, based on industry-wide effluent limitations, has not been followed. It can only be hoped that uniformity has been achieved on a case-by-case basis.

II. THE PERMIT PROGRAM

Prior to the enactment of the 1972 Amendments no comprehensive federal permit program existed for regulating the discharge of pollutants. The 1970 Amendments only required that water quality standards be considered in the issuance of federal permits for discharges into navigable waters. The applicant for any such permit was required to obtain state certification that state water quality standards would be met. In December 1970, the President directed the United States Army Corps of Engineers to establish a permit system under the Refuse Act of 1899. Its efforts were less than successful. Although regulations were promulgated governing the issuance of permits and declaring all unlicensed discharges unlawful, the program was not sufficiently comprehensive. Under the

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36 The deadline for promulgation of the guidelines was established by judicial decision. See note 26 supra.

37 For federal water pollution control legislation prior to the 1972 Amendments, see note 2 supra.


39 Id.


Refuse Act permits could only be issued with respect to discharges into navigable waterways. Refuse Act permits could only be issued with respect to discharges into navigable waterways. Municipal sewage treatment plant discharges were beyond the scope of the Act. Moreover, the courts interpreted the National Environmental Policy Act to require the Corps of Engineers to prepare environmental impact statements for each permit to be issued. The program was suspended so that modifications could be made in the regulations to comply with this requirement. In the meantime, discharges continued without permits.

To provide a comprehensive and effective permit system the 1972 Amendments established the National Pollutant Discharge Elimination System (NPDES). By broadening the definition of "navigable waters" so as to reach the broadest scope constitutionally permissible, and by providing for certain exemptions from the National Environmental Policy Act, the Amendments eliminated those limitations which hampered the Refuse Act permit program. Moreover, state and federal efforts were to be coordinated under one system with ultimate control on the federal level.

Under NPDES any state could administer the permit program within its boundaries provided that it adopted a program meeting certain requirements. If a state did not so elect, the EPA would administer the program within the state's boundaries. Once a state program was approved the responsibility for permit issuance and enforcement rested primarily with the state. Although the EPA retained the authority to take action against dischargers who did not have permits, where the violation of a permit was involved the EPA was authorized to defer action on the permit violation until the relevant state officials had had an opportunity to act. If state officials failed to take action within thirty days of being notified by the EPA of the existing violation, then federal enforcement actions would be commenced. If the state consistently failed to take enforcement measures, a period of "federally assumed enforcement"...
could be instituted, during which deference to state action was not necessary.\textsuperscript{53}  

The issuance of permits was also subject to ultimate federal control. The EPA would have to be notified of all permits which were approved for issuance by state officials.\textsuperscript{54} No permit would be issued if the EPA objected to its issuance; this requirement, however, could be waived.\textsuperscript{55} The waiver could be made with respect to any particular application, or at the time a state program was approved with respect to any class, type or category, or for all state programs by regulation with respect to any class, type or category of point source.\textsuperscript{56}

Under NPDES a state desiring to administer its own permit program could submit its plan to the EPA for approval. The Administrator of the EPA was directed to: “approve each submitted [state] program [for participation in NPDES] unless he determines that adequate authority does not exist” to meet the requirements set forth in the 1972 Amendments.\textsuperscript{57} By conferring upon the EPA the power to pass upon state permit programs, the Amendments assured that there would be, at the very least, a minimum national standard for the granting of all permits. The requirements which would have to be met before a state permit program was approved by the EPA included limitations on the terms and conditions of permits, procedures for including the participation of officials of other states, federal officials and the public in the permit issuance process, and means of monitoring and enforcing compliance with permits.\textsuperscript{58} By phrasing the test in terms of “authority,” however, the draftsmen created uncertainty as to what form state permit plans would have to take. For example, to what extent could states rely on general delegations of authority to state administrative agencies to do whatever was necessary to facilitate the state’s participation in NPDES? Furthermore, to the extent that the state program would have to articulate specific procedures or substantive rules, was it sufficient that they appear in a regulation rather than in a statute?  

It would appear clear that at a minimum the Amendments intend that state statutes must prohibit the discharge of pollutants without permits or in violation of permits, and must provide for enforcement through abatement proceedings and civil and criminal penalties.\textsuperscript{59} It would seem likely that regulations could not effec-

\textsuperscript{56} 33 U.S.C. §§ 1342(e), (f) (Supp. II 1972).
\textsuperscript{57} 33 U.S.C. § 1342(b) (Supp. II 1972) (emphasis added).
\textsuperscript{58} Id.
\textsuperscript{59} The Amendments require, for example, state permits which
tively provide these required components of state programs. All of the state programs which have been approved have been contained in statutory provisions. Beyond this, the degree to which any particular state relies on statutory authority or regulations has varied widely. Of the states which have been approved by the EPA, California has incorporated more of the specific requirements set out in the 1972 Amendments into its statute. For example, the California statute sets forth the 1977 and 1983 deadlines with which all permits must be consistent. The statutes of other states usually only refer to permits complying with the Amendments and thereby merely incorporate by reference the specific requirements of that legislation. On the opposite end of the spectrum from California is the approach adopted by Washington. When the 1972 Amendments were enacted, Washington already had water pollution control legislation which included a permit program. Desiring to become a member of NPDES as quickly as possible, the legislature of that state did not review or amend the existing permit program. Rather it delegated authority to the relevant state administrative agency to establish and administer an NPDES program notwithstanding the other statutory provisions. The agency responded by adopting regulations closely modeled after the federal guidelines. This solution was approved by the EPA, but was not intended to be permanent. The state agency was required by the new statute to report to the legislature with respect to the program established and with suggestions for legislation designed to eliminate any contradictory provisions of the old program and to codify as much of the new program as was appropriate.

apply, and insure compliance with, any applicable requirements of sections 1311 (which provision pertains to effluent limitations), 1312 (water quality related effluent limitations), 1316 (national standards of performance), 1317 (toxic and pretreatment effluent standards), 1343 (ocean discharges) of this title.

33 U.S.C. § 1342(b)(1)(A) (Supp. II 1972). The Amendments further require state enforcement procedures which authorize state officials “to abate violations of the permit or the permit program, including civil and criminal penalties and other ways and means of enforcement.”


61 Cal. Water Code § 13,379 (West Supp. 1969) provides in pertinent part: “Waste discharge requirements shall be adopted to meet the following: (a) Not later than July 1, 1977, effluent limitations for point sources . . . which (1) shall require the application of the best practicable control technology currently available as defined under the Federal Water Pollution Control Act . . . .”


On the federal level, many of the general procedural requirements have been left to the EPA for elaboration in its regulations and guidelines. The state plans which have been approved generally have followed suit. The statute that will be the basis for Wisconsin's program, if approved, takes a different approach. Many of the requirements in the EPA guidelines, such as those relating to procedures for effecting public notice, public hearings, and fact sheets, have been incorporated into the Wisconsin statute.

The state plans which have been approved by the EPA have adopted comprehensive regulations to fill in the details of their programs. Although the regulations tend to follow the EPA guidelines, they vary from state to state. One problem which arises in regard to these regulations reflects another ambiguity caused by the Amendments stating the test of state program adequacy in terms of authority. The state regulations tend to confer upon local officials discretion in exercising their authority. For example, the Amendments require that the state program include adequate authority to provide an opportunity for public hearing. Some states apparently interpret this requirement to be satisfied by authorizing the exercise of discretionary authority by state officials. The intent of Congress would seem, however, to be more accurately reflected in the guidelines discussed later in this article. At least with respect to some of the requirements for state programs, the statutory language suggests discretionary authority is not sufficient. Several requirements are phrased in terms of "authority to insure," such as authority to insure that other states whose waters may be affected and other interested parties receive notice of any proposed permit. The additional words "to insure" suggest that the state program must direct that the required action be taken rather than leave that decision to the discretion of a state official.

Had the draftsman used the format of the Clean Air Act these ambiguities could have been avoided. In setting forth the requirements for state implementation plans in that act, Congress provided that the Administrator "shall approve such plan, or any portion thereof, if he determines that it was adopted after reasonable notice and hearing" and that "it includes . . . it contains . . . [and] it

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69 See text at notes 146-48 infra.
70 See text at notes 144-45 infra.
71 33 U.S.C. §§ 1342(b)(3)-(6), (8), (9) (Supp. II 1972).
provides . . .” certain enumerated substantive and procedural elements.\(^73\) This format might have been used in the Amendments to enable the states to qualify their permit programs without substantially revising their existing programs. Also, certain factors appear to indicate that the draftsmen were not concerned with the specific form which the state programs would take, for example: the highly articulated structure of the Amendments; the necessity for detailed regulations issued by the EPA with respect to the portion of NPDES it will administer, and the extent of federal supervision over state activities. Thus, it could be said that, at least in certain areas, states should be given latitude in developing their own permit programs. With regard to certain other aspects of the permit system, however, more demanding standards for state water pollution control legislation should be required. For example, it would seem that in regard to state programs purporting to give unwarranted discretion to state officials, strict conformity to the Amendments should be required, since an excessive delegation of discretion to state officials can only serve to confuse the public. Perhaps the EPA should be more insistent in its guidelines that state programs clearly delineate the authority and nondiscretionary obligations of state officials.

Other problems also arise with the NPDES system as set forth in the Amendments. In order to illustrate these difficulties, this article will now examine the response of the EPA and the states whose permit programs have been approved by the EPA to three specific requirements of the Amendments. These requirements concern modifications of an existing permit, public availability of information, and public participation in the permit issuing process.

A. Modifications

Permits issued by the EPA and the states must include a schedule of compliance as well as effluent limitations.\(^74\) However, the Amendments indicate that a permit

\begin{itemize}
  \item can be terminated or modified “for cause” including, but not limited to, the following: (i) violation of any condition of the permit; (ii) obtaining a permit by misrepresentation, or failure to disclose fully all relevant facts; (iii) change in any condition that requires either a temporary or perma-
\end{itemize}

\(^74\) 40 C.F.R. §§ 124.43-44, 125.24-25 (1973). If a discharge is not in compliance with applicable pollution control standards a permittee is required to take specific steps to achieve compliance within the period of time set forth in an applicable compliance schedule. 40 C.F.R. § 124.43(a) (1973).
EFFLUENT LIMITATIONS AND NPDES

The interpretation placed on this language by the EPA and by the states is crucial to the entire permit program. If permits are issued with stringent effluent limitations and schedules of compliance, and are later modified, the 1977 goals may not be met. Thus, it is important to know the extent to which permit conditions can be modified, the reasons for which conditions can be modified, and the procedures which must be followed when a permit is modified. These issues are discussed below.

1. Extension of the 1977 Deadline

Perhaps the most fundamental issue which is raised by the modification power is the question of whether or not a modification of an effluent limitation or schedule of compliance will allow postponement of compliance with the Act beyond July 1, 1977, the date established for achievement of effluent limitations based on the best practicable control technology. The modification provision in section 402(b)(1)(C) of the Amendments does not expressly prohibit such modification. Nor do the EPA guidelines or regulations ban such a modification. Thus, it might be argued that the 1977 deadline can be extended by the use of the modification authority. This argument has little weight, however, when the legislative history of the Amendments is examined.

The Senate bill provided no authority for extending any effluent limitation which required the application of best practicable control technology. The Report of the Senate Committee on Public Works dealt with the issue of extensions beyond the prescribed deadlines:

The deadlines established to achieve effluent limitations are strict. . . .

Through the permit program established under section 402, with the help of those States which have effective programs, the Administrator and the States can and

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76 Id.
77 40 C.F.R. §§ 124.72, 125.23 (1973). 40 C.F.R. pt. 124 establishes guidelines specifying procedural and other elements which must be present in a state or interstate program in order for it to be accepted by the EPA (hereinafter referred to in the text as guidelines). 40 C.F.R. pt. 125 prescribes the policy and procedures to be followed in obtaining a federally issued permit from the EPA (hereinafter referred to in the text as regulations).
78 Senator Muskie, the principal sponsor of the Amendments, indicated that the July 1, 1977 deadline overrides existing implementation plans and compliance schedules which did not require the application of best practicable control technology by July 1, 1977. 118 Cong. Rec. S16,870 (daily ed. Oct. 4, 1972) (remarks of Sen. Muskie).
should, by mid-1973, be able to apply specific effluent limitations for each industrial source. Application of limitation by that date would provide thirty months for achievement of required levels of reduction.

While some may suggest that this is too short a period, many industries have known that they are expected to achieve the equivalent of secondary treatment and should be in the process of applying control techniques.

In some cases, where industries have done nothing, their capacity to comply may be stretched to the limit. The Committee recognized this, and suggests that to provide opportunity for further delay would only reward polluters who ignored the requirements of the 1965 Act and penalize those discharge sources who moved quickly to comply. 79

The House bill, however, granted the EPA discretion to extend such effluent limitations for not more than two years for any point source. 80 The EPA was required to hold public hearings on the extension prior to granting it, and the extension could be granted only if the EPA determined: (1) that it was not possible either physically or legally to complete the necessary construction within the statutory time limit; or (2) that a longer time period was provided in the plan of implementation for the applicable water quality standard. However, this provision was deleted in the final bill without specific discussion in the Conference Report. 81 The reasons for the deletion were stated by Representative Jones, one of the bill’s managers, in the House debate on the Conference Report:

It is the intention of the manages that the July 1, 1977, requirements be met by phased compliance and that all point sources will be in full compliance no later than July 1, 1977. Discharge permits issued by the Administrator or by the States should include any applicable implementation plans established under existing water quality standards.

If the owner or operator of a given point source determines that he would rather go out of business than meet the 1977 requirements, the managers clearly expect that any discharges issued in the interim would reflect the fact that all discharges not in compliance with such “best practicable control technology currently available” would cease by June 30, 1977. In any event, the discharge would have

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to be consistent with any applicable water quality standards including implementation plans.82

This legislative history indicates a deliberate rejection of any modifications which would extend the 1977 deadline.83

The conclusion that Congress did not want to permit extensions of the 1977 deadline is reinforced by the limited modification provision provided for the 1983 deadlines. Section 301(b)(2)(A) requires the achievement of effluent limitations based on the best available technology economically achievable not later than July 1, 1983.84 Such effluent limitations must require the elimination of discharges of all pollutants if such elimination is technologically and economically achievable for a category or class of point source.85 In making a determination of "best available technology" the EPA must apply the same factors as in the "best practicable technology" determination, but the minimum effluent limitation is established with reference to the best performer in an industrial category rather than to the average of the best performers.86 Instead of performing a cost-benefit analysis, the EPA must take account of "the cost of achieving" such effluent reductions.87 However, a limited modification procedure is provided for certain point sources. If a permit application is filed after July 1, 1977, the EPA may modify an effluent limitation if the owner can demonstrate that such modified requirements: (1) will represent the maximum use of technology within the economic capability of the owner; and (2) will result in reasonable further progress toward the elimination of the discharge of pollutants.88 While this provision provides some discretion to modify the effluent limitations based on the best available technology standard on a case-by-case basis, the owner is still required to demonstrate that the modifications represent an upgrading over the July 1, 1977 requirements.89 Thus, continued improvement is required, even for those point sources which are economically unable to comply with best available technology limitations.

83 It should be noted that two years earlier Congress passed the Clean Air Amendments of 1970 which expressly authorized two-year extensions of the date for achieving air quality standards, and one-year postponements of any requirement in a state implementation plan. 42 U.S.C. §§ 1857c-5(e), (f) (1970). The failure to include similar authority in the Amendments must be viewed as a deliberate choice by the Congress.
85 Id.
In the Amendments Congress provided a five-year period for promulgation of and compliance with best practicable effluent limitations. It expressly rejected a proposed extension provision similar to that provided in the Clean Air Amendments of 1970 and relied instead on a strict timetable for the formulation and promulgation of effluent standards. It is clear that the EPA has not met that timetable, and has instead issued permits without setting effluent limitations for each industry. It remains to be seen whether this approach will allow all point sources to meet the best practicable control technology standard by 1977 or whether the delay in promulgating guidelines will force Congress itself to extend its 1977 deadline.

2. Modifications of an Effluent Limitation in a Permit

It is more difficult to identify the modifications which may be made in a permit limitation and the grounds which can be used to justify a modification. The Amendments state three specific grounds upon which a permit may be terminated or modified for cause.90

Initially, it may be asked whether Congress intended the same standard to be applied to both terminations and modifications. It would appear that while the three specific examples given in the statute might be grounds for either action, there may be cases where cause for one action may not be cause for the other action. A second question concerns the types of modifications which are authorized: Can a permit condition be relaxed or only tightened? Looking to the statutory language, it appears that Congress intended to allow only modifications which would tighten a permit condition. Certainly, it would be difficult to envision a situation in which a misrepresentation in a permit application or a change in condition would be valid grounds for easing a permit condition, and most violations of a permit condition would not be valid grounds for a relaxation either. However, there may be limited situations where equity would require an easing of a permit condition: for example, a situation could exist in which the EPA requires a process to be installed but the process does not perform as expected and the effluent level does not meet the industry guidelines. In such situations, there may be limited authority to modify a permit condition.

A related question arises because of the EPA's current practice of issuing permits before publishing effluent guidelines for each

90 These grounds are:
(1) violation of any condition of a permit;
(2) obtaining a permit by misrepresentation or failure to disclose fully all relevant facts;
(3) change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharges.
industry. When the final guidelines are published, some permits may be based upon a level either higher or lower than the effluent limitations stated in the guidelines. In such situations it is important to know whether the permit can be modified up or down to conform to the final industry guideline.

The EPA has taken the position that it would issue permits where water quality standards dictated permit conditions or where the knowledge of the best practicable control technology is sufficiently thorough to give a high degree of confidence that permits will not be "materially inconsistent with effluent guidelines subsequently issued."91 It has also taken the position that permits once issued would remain in effect even if effluent guidelines subsequently issued might be more or less stringent.92 Given the fact that the EPA was unable to publish guidelines in the required time, this position was perhaps inevitable. It allowed the permit program to proceed in the absence of guidelines and it protected the applicant who applied for and received a permit before the guidelines were published. However, it should be noted that a permit condition which is materially inconsistent with the final effluent guideline may be challenged either by the applicant or by a private citizen. In such a situation, it would be appropriate to require upward revision, but not downward revision. Upward revision would be required to ensure uniformity in the permit system and to comply with the requirement that all sources achieve the best practicable technology standard by 1977. Downward revision would be banned because the factors enumerated in section 304(b)(1)(B)93 were considered in setting the permit conditions for the individual applicant, and thus the applicant's permit represents the best practicable control technology for his plant.

To implement the requirements of the Amendments and to standardize the procedures followed by states, the EPA has promulgated regulations governing its action under the Amendments and providing guidelines for state program elements which were necessary for the state to participate in the NPDES program. The EPA guidelines and regulations provide that a permit can be modified for cause, including, but not limited to, the three statutory causes enumerated in section 402(b)(1)(C) of the Act94 or for failure to permit entry to his property and access to his records, monitoring...
equipment and effluents. Both the guidelines and regulations also provide that a schedule of compliance can be modified if the director determines that good and valid cause, such as an act of God, strike, flood, materials shortage, or other event over which the permittee has little or no control, exists. While there may well be inherent discretion to modify the timetable for meeting an effluent limitation, there is a serious danger in granting this power to the states. Most applicants for a modification of a compliance schedule can make a case that the permittee has little or no control over the event causing the delay. Most compliance schedules have limited internal flexibility. Thus, moving one date back will move the final attainment date back. When the final attainment date is June 30, 1977, and the permittee can meet the requirements for a modification of the compliance schedule, the pressure to extend the 1977 deadline or to modify the effluent limitations in the permit will increase. Thus, modifications of compliance schedules should be granted sparingly and the delay absorbed within the overall schedule whenever possible.

3. Public Hearings on Modifications

The Amendments are silent as to the issue of whether the opportunity for a public hearing will be afforded for a compliance schedule modification. The EPA guidelines and regulations require public notice and a public hearing of any modification, supervision or revocation of a permit. However, no similar requirements are stated if the applicant requests modification of a compliance schedule. It may be that the EPA intended the requirements for a public hearing and public notice to apply to modifications of a schedule of compliance. Thus, the guideline can be read as merely stating additional grounds for modifying a schedule of compliance which would not be applicable to modifications of other permit conditions. This interpretation would make this guideline consistent with the congressional purpose to provide for and encourage public participation in the NPDES program. It would also remove the inherent ambiguity of setting these requirements for certain types of permit modifications and not for others. If these requirements gov-

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96 40 C.F.R. §§ 124.72(b), 125.23(d) (1973).
99 40 C.F.R. § 124.72(b) (1973). 40 C.F.R. § 125.23(d) (1973) does require that there be public notice given.
ern modifications of effluent limitations in a permit, then there is no statutory justification for not stating the same requirements for a modification of a schedule of compliance, which is equally a part of the permit.

Nor is there any sound policy reason for doing so. Caught between the deadlines in the schedule of compliance and the cost of complying with the permit conditions, the applicant may not resist the temptation to seek additional time in the hope that the whole problem may go away before he is forced to comply. Without the opportunity for public scrutiny and comment, the state Director may well be lenient in granting extensions. Yet each delay will increase the risk of ultimate noncompliance on July 1, 1977. The cost of giving public notice and affording the opportunity for a public hearing is slight, and delays can be reduced by using expedited notices for public hearings, or in extreme cases by granting a limited modification of the compliance schedule (up to sixty days) with public notice and the opportunity to request a hearing on any additional postponement. Weighing the slight inconvenience of following these procedures against the stated congressional goal of encouraging public participation, it is difficult to justify the failure to include these requirements in the EPA guidelines and regulations.

B. Public Availability of Information

1. EPA Guidelines and Regulations

Section 308 grants to the EPA the authority to require the owner or operator of any point source to monitor and sample effluents, maintain records, and make such reports as are necessary to determine if any effluent limitation or other standard has been violated. The Administrator is also authorized to enter the premises in which an effluent source is located, to inspect and copy records, and to sample effluents. All records, reports or information obtained by the Administrator shall, in the case of effluent data, be related to any applicable effluent limitation or performance standard, and shall be available to the public. The only exception is for information which, if made public, would divulge methods or processes entitled to protection as trade secrets. However, this exception does not apply to effluent data, or to permit applications and permits issued under section 402 of the Amendments.

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102 Id.
104 Id.
105 33 U.S.C. § 1342(j) (Supp. II 1972). This provision was apparently intended to override the trade secret exception in 33 U.S.C. § 1318(b) (Supp. II 1972).
The EPA regulations require that all information provided by an applicant or permittee identifying the nature and frequency of a discharge shall be available to the public without restriction. All other information, other than effluent data, which is submitted by an applicant in connection with a permit application or which may be furnished by a permittee in connection with required periodic reports shall also be available to the public unless the applicant or permittee is able to demonstrate that disclosure of such information would divulge methods or processes entitled to protection as trade secrets.

These regulations present several questions: Must the EPA make public trade secret information contained in a permit application if the data is pertinent to the EPA's determination whether to grant a permit? Is information submitted "in connection with a permit application" part of the "permit application" within the meaning of section 402(j)? Finally, must the Administrator make public information obtained by the EPA in the course of an inspection carried out by the EPA or a state?

These questions concern practical problems in the administration of the NPDES program. An applicant may try to demonstrate that his process is not contained within one of the subcategories for which effluent limitations have been set by the EPA. If this information is submitted "in connection with a permit application" it may be shielded from the public, even though it relates to an important issue in the EPA's determination to grant a permit to that applicant. Likewise, "process employed" and "process changes" are factors which may be considered by the EPA in setting control measures and practices applicable to a point source. If a description of these processes is provided as part of the permit application, it should be made available to the public, even if the process would otherwise be entitled to protection as a trade secret. Faced with a conflict between the applicant's interest in protecting his trade secrets and the public's interest in having all of the facts upon which a permit determination is based, Congress by its choice of statutory language appears to have chosen in favor of the public's interest. The EPA regulations unduly restrict the public's access to this information.

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106 40 C.F.R. § 125.35(a) (1973).
107 Id. If such information is found to be entitled to protection as a trade secret, it must be considered confidential in accordance with the purposes of 18 U.S.C. § 1905 (1970).
109 33 U.S.C. § 1314(b)(1)(B) (Supp. II 1972). It should also be noted that cost information may also be considered in setting permit conditions, but it must also be made available to the public.
Several additional questions are raised when a state permit program is approved by the EPA. Section 402(b)(2) requires a state to have adequate authority to issue permits which apply and insure compliance with section 308. It is not clear whether a state is authorized to make a determination that certain data should not be disclosed to the public because it is trade secret information; and if it is so authorized, whether it must apply the state standard or the federal standard in determining what constitutes a trade secret. The EPA guidelines require any state trade secret determination on information contained in an NPDES form to be concurred in by the EPA. Apparently, the EPA would apply the federal standard in those cases. The limitation of the guidelines to NPDES forms may be important. An NPDES form is any issued NPDES permit and any uniform national form developed for use in the NPDES and prescribed by EPA regulations. Thus, the federal standard might not apply to information obtained by a state as a result of its own inspection or information provided at a public hearing. While it may be appropriate for the EPA to make a limited delegation of its decisional responsibility to a state, the need for uniformity in setting policies which control the public’s access to data makes it desirable for each state to apply the federal standard and not its own.

Aside from these problems, the EPA guidelines do not comply with section 308 in several specific respects. The guidelines require that any NPDES form shall be available to the public. However, the Director is given the discretion to prohibit public access to any other records, reports, plans or information obtained by the state pursuant to its participation in the NPDES. Since this discretion appears in a different section of the guidelines than does the authority to protect trade secrets, the guidelines appear to give the Director discretion to prevent public access to information even if it is not entitled to protection as a trade secret. This discretion is not authorized by section 308.

In addition, the Director is required to protect any information, other than effluent data, contained in “any NPDES form” or other records, reports or plans which would divulge methods or processes entitled to protection as trade secrets. This provision would pro-
tect trade secret information even if it were contained in a permit application.\textsuperscript{118} Finally, the guidelines do not require the state to relate effluent data to any applicable effluent limitations or performance standards.

2. State Legislation

At this point it would be valuable to survey state water pollution control legislation to determine what provisions have been made in those acts for public access to information.

\textbf{California}

The California Water Quality Control Act requires any person discharging waste or proposing to discharge waste to file a "report of the discharge."\textsuperscript{119} The report is the equivalent of an application for a permit. However, the portions of a report which might disclose trade secrets or secret processes shall not be made available to the public.\textsuperscript{120} Although the statute does not exclude effluent data, the regulations purport to state such an exclusion.\textsuperscript{121} It would appear that the regulation is illegal under the Act and would not comply with the Amendments.\textsuperscript{122} The regulations also provide protection for confidential information even if it is contained in an NPDES application form.\textsuperscript{123} This provision does not comply with the EPA’s guidelines.\textsuperscript{124}

\textbf{Oregon}

Upon a showing satisfactory to the Director of the state pollution control agency that the public disclosure of records, reports or information would divulge a secret process, device, or method of manufacturing or production entitled to protection as a trade secret, the Director is authorized to treat such material as confidential.\textsuperscript{125} Effluent data and permit applications are not exempted. The Oregon Administrative Rules do not provide a procedure for protecting trade secrets,\textsuperscript{126} but a Memorandum of Agreement between the EPA Regional Administrator and the Oregon Director provides that any claim of confidentiality for information on a NPDES form must

\begin{footnotes}
\footnote{118 40 C.F.R. § 124.1(k) (1973).}
\footnote{120 Cal. Water Code § 13,267(b) (West Supp. 1969).}
\footnote{121 Cal. Admin. Code tit. 23, ch. 3, subch. 9, § 2235.4(d)(3) (1973).}
\footnote{122 See Natural Resources Defense Council, Inc. v. EPA, 478 F.2d 875 (1st Cir. 1973).}
\footnote{123 Cal. Admin. Code tit. 23, ch. 3, subch. 9, § 2235.1(c)(2) (1973).}
\footnote{124 40 C.F.R. § 124.35(a) (1973) states that the information contained in or the comments made upon a NPDES form shall be made available to the public.}
\footnote{126 Ore. Admin. Rules ch. 340, div. 4, subdiv. 5, § 45-035(6) (1973) provides that the application and other supporting documents will be made publicly available.}
\end{footnotes}
EFFLUENT LIMITATIONS AND NPDES

be confirmed by the Regional Administrator. All other information submitted which is not on an NPDES form must be classified confidential if it meets the test set forth in the Oregon statutes. The Memorandum provides that effluent data will not be considered confidential. Although the Memorandum exempts effluent data, the Memorandum may not be controlling, in the face of a statute which states no such exemption. Nor does the statute or the Memorandum require effluent data to be related to effluent limitations or performance standards.

**Michigan**

The Michigan Water Resources Commission Act is silent on the confidentiality of trade secrets. However, the Michigan regulations provide that information contained on an NPDES form, except effluent data, shall be treated as confidential if it would divulge a trade secret. This would include non-effluent data on the permit application, information obtained by state inspection, or information provided at a public hearing.

It would appear from this brief survey that state water pollution control legislation has limited public access to information to a greater extent than was apparently intended by Congress. In order to effectuate the congressional purpose, it will be necessary for EPA to restrict the scope of exemptions from public disclosure provided in state legislation.

**C. Public Participation in the Permit Process**

The Amendments state as a congressional goal and policy that public participation in the development, revision and enforcement of any regulation, standard, effluent limitation, plan or program established by the Administrator of the EPA or any state shall be provided for, encouraged and assisted by the Administrator and the states. Public participation can be encouraged and assisted only if

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127 Memorandum of Agreement between Director, State of Oregon Dep't of Environmental Quality, and Regional Administrator, Region X of the EPA, at 5 (1973), on file at the offices of the Boston College Industrial and Commercial Law Review [hereinafter cited as Oregon Memorandum of Agreement].


129 The use of the Oregon Memorandum of Agreement, supra note 127, raises several questions. It was not adopted as a regulation and by its own terms may be modified or terminated by the Oregon Director on thirty days written notice to the EPA, but without public notice or opportunity for a public hearing. Since it is not adopted as a regulation, conflicts between it and the regulations will be difficult to resolve. On balance, it would be better practice to require the state to amend its regulations rather than to enter into a private agreement with the EPA.


the public receives adequate notice of each application for a permit and if the public has the opportunity to request and obtain a public hearing before a ruling on each such application. The Amendments require the EPA and the states to insure that the public receives notice of each application.\textsuperscript{132}

This requirement was implemented by the EPA in its guidelines for state program elements necessary for participation in NPDES.\textsuperscript{133} The EPA guideline pertaining to the requirement for public notice requires public notice of every complete application for an NPDES permit to be circulated in a manner designed to inform interested and potentially interested persons of the proposed quantity of discharge by the permit applicant and of the proposed determination to issue or deny an NPDES permit for the proposed discharge.\textsuperscript{134} Procedures for the circulation of public notice must include at least a requirement that notice be given by posting or by newspaper publication, and by mailing to a list of interested persons maintained by the Director and to any other person upon request. The EPA regulations include the same requirements.\textsuperscript{135} These appear adequate to comply with the requirements of the Amendments. The states which have been granted the permit program also appear to have adequately provided for public notice in their statutes.

The Amendments require the Administrator and the states to provide an opportunity for public hearing.\textsuperscript{136} This requirement must be read in conjunction with the declared goals and policy of the Amendments to provide for, encourage and assist public participation in the permit program.\textsuperscript{137} The EPA guidelines initially stated that the Director shall hold a hearing "if there is significant public interest (including the filing of requests or petitions for such hearing) in holding such a hearing."\textsuperscript{138} The request or petition must indicate the interest of the person filing the request and the reasons why such a hearing is warranted.\textsuperscript{139} It is not made clear by the guidelines what "interest" is sufficient or what "reasons" will warrant a hearing. However, this requirement would probably have been interpreted narrowly, because the guidelines also specified that "[i]nstances of doubt should be resolved in favor of holding the hearing."\textsuperscript{140} Thus, a petition which alleged failure to comply with a

\begin{itemize}
  \item \textsuperscript{132} 33 U.S.C. § 1342(b)(3) (Supp. II 1972).
  \item \textsuperscript{133} 40 C.F.R. pt. 124 (1973).
  \item \textsuperscript{134} 40 C.F.R. § 124.32(a) (1973).
  \item \textsuperscript{135} 40 C.F.R. § 125.32(a) (1973).
  \item \textsuperscript{136} 33 U.S.C. §§ 1342(a)(1), (b)(3) (Supp. II 1972).
  \item \textsuperscript{137} 33 U.S.C. § 1251(e) (Supp. II 1972).
  \item \textsuperscript{138} 40 C.F.R. § 124.36 (1973).
  \item \textsuperscript{139} Id.
  \item \textsuperscript{140} Id.
\end{itemize}
requirement of the Amendments or the guidelines would require a public hearing. This language reflects the declaration of goals in the Amendments, and provides adequate opportunity for public participation in the decision-making process.

However, this position was seriously weakened in the EPA regulations. Under these regulations, if the Regional Administrator finds a significant degree of public interest in the proposed permit, he may hold a public hearing to consider such permit, but he may exercise his discretion and decide not to hold a public hearing even if there is a significant degree of public interest.\textsuperscript{141} No guidance is given as to how instances of doubt should be resolved, nor is any indication given of the standard which the Regional Administrator will use in exercising his discretion.\textsuperscript{142} This discrepancy between the EPA guidelines and the EPA regulations is not justified by the Amendments, which require the EPA permit program to be subject to the same terms, conditions and requirements as those which apply to a state permit program.\textsuperscript{143} The regulations do not satisfy the requirement to provide opportunity for a public hearing.

Following the publication of these regulations, however, the EPA published additional regulations which set a general minimum standard for public participation in water pollution control.\textsuperscript{144} These regulations overrule any inconsistent federal or state regulations and thereby provide a greater opportunity for public hearings than would be the case under the EPA regulations described immediately above, which specifically deal with the federal permit application program. The additional regulations provide that where the opportunity for public hearing is called for in the Act, and also in other appropriate instances, a public hearing shall be held if the hearing official finds that there exists significant public interest (including the filing of request or petitions for such hearing) and that pertinent information would be gained. Instances of doubt should be resolved in favor of holding a hearing, or if necessary, of providing an alternative opportunity for public participation. This regulation corrects the deficiencies of the prior EPA regulations. It also removes the requirement stated in the guidelines that the request or petition must indicate the interest of the person and the reasons why such a hearing is warranted. However, as is discussed in more detail.

\textsuperscript{141} 40 C.F.R. § 125.34(b) (1973).

\textsuperscript{142} EPA Regions vary widely in their practice. Some hold hearings on all permits. Others hold hearings only if there is strong public pressure for a hearing.


below, many states do not have statutes or regulations which comply with these requirements. While it is clear that the new guidelines are legally binding on the states, there is a danger in approving a state program which appears to leave greater discretion in the Director. The Director may feel that his discretion is greater than it is because he will be primarily conversant with the state regulations. In addition, the public in each state will generally rely on the state's statutes and regulations, and will not be aware of the requirements stated in the EPA's guidelines. Thus, the EPA should require each state to adopt regulations which conform to the new guidelines.

At present, state legislation does not make adequate provision for public participation in the permit process. The Oregon general laws, for example, contain no specific provision which insures an opportunity for a public hearing of a permit application. The Oregon Regulations provide that the Director "may, at his discretion, require a public hearing before the Commission or authorized representative before a final determination on the NPDES permit is made." The Memorandum of Agreement between the Regional Administrator and the Director states that a public hearing may be scheduled at the discretion of the Director if "sufficient interest" is shown or "significant comments" are received.

The Michigan law similarly contains no express provision that there be an opportunity for a public hearing. However, the General Rules of the Department of Natural Resources, Water Resources Commission give the Commission discretion to hold a hearing if a petition for public hearing constitutes "sufficient cause" or if there is sufficient public interest in an application for a public hearing.

145 Several other states have passed legislation preliminary to applying for the permit program, but have not yet been granted the permit program. The approach of these states to the problem of public hearings is varied. The law of Wisconsin provides that the department shall hold a public hearing on a permit application on the petition of five or more persons or if the department deems that there is significant public interest in holding such a hearing. Wis. Stat. Ann. § 147.13(1)(b) (Supp. 1973). Massachusetts provides that the director may hold a public hearing if he deems such hearing to be in the public interest—an inversion of the requirement in the EPA guidelines that a public hearing shall be held if there is significant public interest in holding such a hearing. Mass. Gen. Laws Ann. ch. 21, § 43(4) (Supp. 1973). The most stringent limitation on public hearings appears in the Delaware statute, which prohibits the Secretary from holding a public hearing on a permit application unless he receives a public hearing request which he deems "meritorious." Del. Code Ann. § 6004(b) (1973). Such a request shall be deemed meritorious if it "exhibits familiarity with the application and a reasoned statement of the permit's probable impact." Id.


147 Oregon Memorandum of Agreement, supra note 127, at 8.

148 Mich. Admin. Rules § R.323.2130(1) (1974). The petition must indicate: (1) the reasons why a hearing is requested; (2) the interest in or relationship of the petitioner to the application or proposed discharge; and (3) which portions of the application or other NPDES form or information create a necessity for a public hearing.
The provisions of these two states do not comply with the new EPA guidelines and do not provide adequate assurance that there will be opportunity for a public hearing on a permit application. The lack of adequate provision for public participation in the permit system by state legislation underscores the need for an EPA requirement that the states provide for public hearings in conformity with the new guidelines.

CONCLUSION

This article has analyzed some of the problems which have been encountered in the implementation of the Amendments, and some of the weaknesses in the NPDES programs of the EPA and the states. In retrospect, it can be said that Congress clearly stated the goals it wished to achieve but failed to address and resolve adequately the procedural difficulties which would be encountered in achieving those goals. As a result, the implementation of the Amendments by the EPA and the states participating in NPDES has not been as effective as possible.

It appears that these requirements are meant to discourage rather than to encourage public participation. Since it is unclear what standards will be applied in deciding whether these tests have been met, the potential for abuse is present and should have been reduced or eliminated.

Two major issues were not discussed, but it should be noted that their resolution will have a major effect on the NPDES program. One is the issue of non-degradation, and the other is the adequacy of federal funding for the construction of municipal treatment plants.