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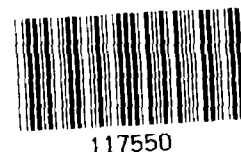
BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Administrator Environmental Protection Agency

A New Approach Is Needed For The Federal Industrial Wastewater Pretreatment Program

Federal efforts to implement a Federal industrial wastewater pretreatment program has been surrounded by controversy and has generated considerable uncertainty and confusion. It is highly unlikely that the program can be implemented within the existing time frames.

GAO is recommending that the Administrator provide certain information to the Congress on toxic pollution problems and issues.



CE-82-37
FEBRUARY 19, 1982

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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

COMMUNITY AND ECONOMIC
DEVELOPMENT DIVISION

B-198742

The Honorable Anne M. Gorsuch
Administrator, Environmental
Protection Agency

Dear Mrs. Gorsuch:

Subject: A New Approach Is Needed for the Federal
Industrial Wastewater Pretreatment Program
(CED-82-37)

We reviewed the Environmental Protection Agency's (EPA's) efforts to develop and implement the industrial pretreatment program authorized by the Clean Water Act, as amended. We found that the overall scope and impact of the pretreatment program remains undefined; the program may result in costly, inequitable, and/or redundant treatment that may not address toxic pollution problems; and the program will be a further drain on scarce Federal, State, and local pollution control resources. We believe it is highly unlikely that the program can be fully implemented within the currently established time frames.

Although EPA is conducting a regulatory impact analysis of the pretreatment program, the time frame for completing the analysis and selecting an option is very ambitious. Given the many uncertainties about toxic pollution problems, we are concerned about EPA's ability to resolve these issues in the relatively short time established. EPA needs to pay close attention to the problems and unresolved issues associated with the present pretreatment program.

If EPA acts too quickly in selecting a pretreatment alternative, we believe it may commit itself to a course of action that contains many of the current program's problems and that is equally unacceptable to those involved. Therefore, we are recommending that you advise the Congress that the deadlines for implementing the pretreatment program cannot be met until significant problems and issues on toxic pollution are resolved. We also recommend that you advise the Congress of the estimated time frame needed to resolve these matters.

We are recommending further that, after completing the regulatory impact analysis, you provide the Congress with legislative proposals to revise the present pretreatment program and with information the Congress needs in considering program changes.

OBJECTIVES, SCOPE, AND METHODOLOGY

Recognizing that the Federal pretreatment program is still in a developmental stage, we attempted to determine what, if any, problems are being encountered. Our specific objectives were to determine (1) what discharge limitations have been set for industrial wastewater, (2) the equity of the pretreatment program to industry, States, and municipal agencies, and (3) the availability of governmental resources to implement and enforce the program.

To accomplish these objectives we focused on EPA's efforts to develop and implement pretreatment regulations and requirements and the experiences of industry, States, and local governments in dealing with these regulations and requirements. Our primary approach involved discussions with EPA, State, municipal, and industry officials and obtaining supporting documentation from them.

We also reviewed and analyzed EPA pretreatment program regulations and reports on the pretreatment program, congressional hearings on the program, and extensive reports and other information provided by those contacted during our review. (Detailed information on these matters is contained in app. I.) Our review was performed in accordance with our "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions."

We did not obtain written EPA comments on this report but we did discuss the matters contained in the report with EPA pretreatment program managers and their views are included where appropriate. We attempted to obtain their views on our discussion of the January 1982 changes to the pretreatment program. They were not able to provide comments, however, within the time we gave them because they were involved with other projects.

PRETREATMENT PROGRAM REQUIREMENTS

The pretreatment program has its roots in the 1972 Federal Water Pollution Control Act Amendments, but the Clean Water Act of 1977 substantially changed the emphasis and increased the importance of the program. The Clean Water Act, as amended, required that EPA establish a program requiring industries discharging wastewater into municipal or publicly owned treatment works (POTWs) to clean up, or "pretreat," wastewater that interferes with the treatment works or that contains toxic or potentially toxic substances.

General pretreatment regulations issued by EPA in June 1980 describe the overall policy for establishing and enforcing pretreatment standards, delineate the responsibilities and deadlines applicable to the various parties involved in the pretreatment

effort, and regulate the discharge of pollutants by industries to POTWs. In addition to the general pretreatment regulations, EPA has or will develop two types of pretreatment standards:

--Prohibited discharge standards require that any pollutants introduced into a POTW may not inhibit or interfere with the POTW operation or performance. These standards apply to all nondomestic (commercial or industrial) users whether or not they are subject to other national, State, or local pretreatment requirements.

--Categorical pretreatment standards set out national discharge limits based on the "best available technology economically achievable," as required by the Clean Water Act. Separate regulations or standards are being developed and promulgated for each of 34 specific industrial categories. The act also requires compliance with categorical standards within 3 years from the date the standards become effective or July 1, 1984, whichever is earlier.

Pretreatment focuses primarily on local enforcement of categorical industry standards. States also have an important role in the pretreatment program. States with an EPA-approved discharge permit program must develop a pretreatment program and provide backup enforcement authority for local pretreatment programs. States may also assume responsibility for implementing local pretreatment programs. EPA has a backup role in enforcing the categorical standards and other program requirements.

Ten years after passage of the 1972 act, controversies and uncertainties continue to surround both the general pretreatment regulations and the categorical industry standards. For example, EPA issued general pretreatment regulations on June 26, 1978. Amendments were proposed on October 29, 1979, and finalized on January 28, 1981. On January 29, 1981, a Presidential freeze on new regulations indefinitely delayed implementation of the latest amendments. On October 13, 1981, EPA published a rule establishing a January 31, 1982, effective date for the general pretreatment amendments. Concurrently, however, EPA published a proposed rule suspending the January 31, 1982, effective date and inviting comments on whether the effective date should be postponed further. In January 1982, EPA suspended several of the more controversial portions of the proposed amendments but allowed other proposed provisions to go into effect on January 31, 1982. Included in the provisions which became effective on January 31 are provisions requiring States and POTWs to have approved pretreatment programs by July 1, 1983.

EPA has also experienced considerable difficulty in developing and issuing industry standards. Currently the pretreatment program applies to 129 distinct substances (priority pollutants)

in each of the 34 specific industrial categories. Many controversies have arisen during this standard-setting process which have resulted in numerous lawsuits. As of December 15, 1981, standards have been issued in final form for only 2 industries--electroplating and timber products--and are proposed for only 13 other industries.

SCOPE AND IMPACT OF PRETREATMENT
EFFORT REMAINS UNDEFINED

Much remains unknown about toxic contaminants, their impact on the environment and health, the ability of POTWs to treat or remove toxic wastes, and the economic impact of toxic waste controls. Without basic information on the nature, extent, and impact of toxic pollutants EPA has difficulty determining which pollutants will require controls, the extent of controls needed, pollutant sources, and the number of POTWs and industries that will be included in the program. States, POTWs, and industries therefore are apprehensive about the requirements and costs to develop and implement complex pretreatment programs. For example, officials of a State water control board said a definite need exists to better define the scope of the pretreatment program and that until the categorical industry standards are developed, the real scope and any associated costs remain a matter of conjecture.

EPA estimates that about 2,000 of the 16,400 POTWs nationwide will be required to develop local pretreatment programs because they receive industrial discharges warranting local pretreatment. This information should be viewed as tentative, however, because the eventual determination of which POTWs must have a pretreatment program will depend on the discharge limits set in the industry standards and the final general pretreatment regulations.

The number of industries subject to pretreatment is also uncertain. The State and municipal officials we talked with did not have precise data on the industries that will have to pretreat. EPA estimated that at least 60,000 industrial dischargers in the 34 priority categories will be initially required to pretreat wastes. In contrast, the Association of State and Interstate Water Pollution Control Administrators estimated that 260,000 to 350,000 firms could be required to pretreat wastes. EPA concedes that additional industrial categories may be added to the list of 34, and that industrial dischargers may also be subject to supplemental State and local pretreatment requirements.

According to EPA, pretreatment regulations may also be extended beyond the 129 priority pollutants. Under the current program approach, EPA anticipates that regions, States, and municipalities

will determine whether specific local concerns warrant controls on other toxics or more stringent limits on the priority pollutants. This open-ended provision further obscures the eventual number of industries that may be subject to pretreatment standards. POTWs generally know who the industrial dischargers are and, to some extent, what they are discharging. But the absence of industry pretreatment standards makes it difficult for even the large, technically sophisticated POTWs to identify specific firms that will be required to pretreat their wastewater.

While much research is underway on the control, environmental impact, and health implications of toxic pollutants, data is only now becoming available and the results are too sparse to form firm conclusions. However, preliminary results indicate that conventional POTW treatment processes (advanced and secondary treatment) remove some priority pollutants. For example, while preliminary conclusions from an EPA study of conventional and toxic pollutants in POTWs in 40 cities 1/ indicate that industries contribute to toxic wastewater problems, the POTW study also concluded that conventional treatment techniques effectively remove some priority pollutants. Information from 20 cities showed that:

--Half of the "secondary treatment" POTWs significantly reduced priority pollutants, including metals, volatiles, and acid-base-neutral pollutants.

--Advanced treatment processes reduced priority pollutants slightly better than secondary processes; primary treatment was less effective.

Research efforts also indicate that the source of toxic pollutants is still not well defined. The extent to which storm runoff, nonindustrial waste discharges, or other sources contribute to the increased load of metallic pollutants is not well established. For example, a Department of Commerce study 2/ on the impact of electroplating pretreatment standards in New York City found that:

1/"Fate of Priority Pollutants in Publicly Owned Treatment Works," an interim report issued in Oct. 1980 by EPA's Effluent Guidelines Division.

2/"Effects of Proposed Environmental Protection Agency Pretreatment Standards for Electroplating in New York City," staff study prepared by the Industry and Trade Administration, U.S. Department of Commerce, Apr. 1978.

"In the case of copper, zinc and cadmium, residential sources contribute more than electroplaters. Storm water runoff contributes more to the City picture than the electroplaters, except for nickel. The City of New York, using copper sulfate as an algicide, contributes more copper to sewer plant influent than do the electroplaters."

The source of toxic contaminants in municipal sludge has also been called into question. A survey ^{1/} conducted by Chicago's Metropolitan Sanitary District disclosed that if all point sources of cadmium in the sewage system were controlled ("zero discharge") the cadmium content in the district's sludge would be reduced only by 40 percent. Thus, more than half of the cadmium contaminants come from nonindustrial sources.

NATIONAL CATEGORICAL STANDARDS
RESULT IN UNEQUAL INDUSTRY TREATMENT

While equal treatment for industrial dischargers has been a principal EPA justification for the current Federal pretreatment approach, inequities do exist in the pretreatment standards among and within industries. According to EPA, the national categorical standards provide equity because they require a comparable level of treatment within each regulated industry. However, differences exist in the proposed limits set on the same pollutant for various industries or firms within an industry. Regulatory exclusions create other inequities.

Requirements for like pollutants
differ among and within industries

The national categorical pretreatment standards establish discharge limits according to the technological capability of each industry to remove a specified pollutant. This approach, however, results in widely contrasting discharge limits for the same pollutants among and within the various industries. A comparison of the industry regulations proposed or issued as of December 15, 1981, shows significant differences in the discharge limits for the same pollutant among and within industry categories. For example:

--Proposed textile mill standards require treatment for chromium discharges that are almost eight times more stringent than those for electroplaters.

^{1/}"Industrial Waste Pretreatment and EPA Cadmium Limitations," Chicago Metropolitan Sanitary District, Journal of Water Pollution Control Facilities, Oct. 1980.

--Proposed standards for zinc and copper in the inorganic chemical industry vary according to the production process, and each is considerably more stringent than the limits for electroplaters.

--Proposed standards for the paint and ink formulating industries include a ban on the discharge of pollutants (zero discharge), although many of these pollutants are allowed to be discharged by other industries.

These examples illustrate that under the current approach companies in different industrial categories that discharge into the same sewer system will be required to meet widely differing standards for the same pollutants.

State and municipal officials we visited question the logic and fairness of this approach. For example, an official at a large metropolitan POTW said it is neither equitable nor environmentally rational to require some industries to reduce the levels of a particular pollutant beyond that required of other industries. He went on to say that he expects many lawsuits questioning this inequitable treatment once other standards are finalized.

Several industry officials affected by these categorical standards were critical of EPA's attempts to achieve equity. A textile mill official told us there is no justification for setting more stringent standards for the textile industry than for electroplaters discharging the same pollutants. Several paint manufacturers complained to us about proposed zero discharge requirements facing paint formulators for pollutants that other industries will be allowed to discharge. Paint industry officials said they will have to seek an exemption, go to court, or close down if this zero discharge standard is not changed.

The Subcommittee on Oversight and Review, House Committee on Public Works and Transportation, questioned EPA about the logic of this approach, stating that "a pound of zinc is a pound of zinc from the standpoint of the aquatic organism which couldn't care less where a pound of zinc came from." The subcommittee asked if a single standard for each pollutant would be more comprehensible and acceptable. EPA responded that although the law could be interpreted to allow such an approach, the legislative history behind the 1977 amendments "indicates a resolve" to set standards on an industry-by-industry basis.

According to EPA, the industry limits are determined strictly on the basis of the performance of available treatment technology and, when employed by different industries, identical

technologies may not produce the same level of pollutant removal because of different industrial processes. EPA further stated that the industry standards establish different limitations for different industrial categories in recognition of the variability of raw wastes, the treatment processes available, and the economic health of the industries. EPA added that the standards limit only the concentration of pollutants and the individual discharger is given the flexibility to find the most cost-effective treatment process to meet those concentration limits. However, EPA said that, in essence, the standards require a national minimum standard of pollution control and the elements of flexibility do not alter the uniform intent of the law or uniform nature of the program.

While EPA provides a rationale for its approach based on technological capabilities and economic considerations, such an approach will not assure that the standards established are equitable or even environmentally rational.

Regulatory exclusions
promote inequities

One EPA industry standard provides regulatory exclusions that in effect promote unequal treatment within an industry. Regulatory exclusions provided or proposed will set different discharge standards for pollutants within the same industry based on the volume of an individual plant's discharge. For example, in the electroplating standards, EPA has provided more lenient requirements for companies that discharge less than 10,000 gallons of waste per day, to limit the economic hardship caused by the standards. EPA estimates that over 1,000 electroplating firms will qualify for the 10,000-gallon cutoff. EPA also estimates that the cost of compliance for firms that cannot qualify for the exclusion will be four to nine times the cost for smaller dischargers. A waste-volume cutoff has not yet been proposed for any of the other industries.

This matter has resulted in considerable controversy. The National Association of Metal Finishers has come out against the cutoff. The Association claims that the cutoff is both poorly defined and environmentally unjustified. In written comments on the then proposed electroplating standards, the Association stated, "We see no possible justification for EPA to allow one 9,500-gallon firm to discharge more pollutants than a dozen or more larger firms with which it competes in the community." In fact an Association representative told us that since companies in the electroplating industry compete on a regional or local basis, national standards were not needed to prevent competitive advantages. He opposed EPA's 10,000-gallon cutoff because

it would create local competitive advantages which did not previously exist.

The impact of this inequity is demonstrated by the case of a small hosiery manufacturer in Illinois with a discharge flow of 7,000 to 8,000 gallons a day. Unlike the electroplating standards, EPA's proposed standards for textile mills provide no volume cutoff even though all of the pollutants regulated in the textile industry are also regulated in the electroplating industry. Without a volume cutoff, this mill will be in violation of the proposed textile mill standards.

An official of a large metropolitan POTW said that the 10,000-gallon cutoff is not environmentally supportable, and the POTW does not intend to allow small dischargers to take advantage of the exclusion. Four of the 13 municipalities we visited currently regulate electroplaters and other indirect dischargers through pretreatment standards, but none of them make any exception for size of discharge level.

In commenting on the electroplater standards, EPA justified the cutoff limit as necessary "to reduce the economic impact of the regulation while maximizing the environmental benefit obtained." EPA acknowledged that no quantitative method exists to determine an optimum cutoff; it used an analysis of untreated discharges compared to the estimated closure rate of electroplating companies. For example, at the 10,000-gallon cutoff, EPA estimated that 3 percent of the flow will go untreated while an estimated 20 percent of the job shops will be forced to close.

We understand EPA's rationale for volume cutoff limits and applaud its efforts to consider the economic impact of regulations on small firms. The volume cutoff, however, undermines EPA's efforts to treat all industrial dischargers within the same class equally.

REMOVAL ALLOWANCES UNLIKELY TO AVOID REDUNDANT TREATMENT

EPA's general pretreatment regulations provided criteria and procedures for a system of removal allowances designed to avoid redundant treatment of toxic pollutants by industry and POTWs. Removal allowances are authorized for industries based on the proven ability of a POTW to treat toxic pollutants. For example, if the POTW consistently removes a pollutant, the industry discharge limits for that pollutant may be raised.

The burden of developing and granting these allowances is placed on the POTW. The regulations stipulate that the POTW must demonstrate "consistent removal of each pollutant" to

qualify for a removal allowance and provide continued monitoring of its removal efficiency. This requirement includes a minimum of monthly pollutant sampling and biannual reporting to the approval authority (State or EPA). The removal allowances must be discontinued if the POTW does not meet the requirements and fails to take appropriate corrective actions.

Recent studies show that POTWs are fairly effective in removing some priority pollutants, especially organic chemicals. For example, interim results from EPA's study of POTWs in 40 cities show that secondary treatment removed 32 to 92 percent of the pollutants tested. The categorical pretreatment standards, however, are based on the removal capability or treatment technology available to industry and may not recognize the removal efficiency of the POTWs.

Many POTW officials are critical of the removal allowance provisions now proposed. Several POTW officials have stated that the removal allowance provision is unworkable, especially for large municipal systems. This opinion was frequently shared by the municipalities and POTWs we visited. Only one of these POTWs planned to grant removal allowances, although two others indicated that some allowances might be granted in the future. Officials at the other POTWs told us that they do not plan to grant removal allowances because calculating and awarding the allowances was too complex.

POTWs also have little incentive to provide industry with removal allowances. Removal allowances will be an administrative burden for the POTW and, in reality, only industry benefits. Neither the Clean Water Act nor EPA regulations require POTWs to grant removal credits, even if a POTW removes 100 percent of an industry's pollutants. EPA pretreatment officials stated that little can be done to require a POTW to grant removal allowances, which is in keeping with EPA's local self-determination and flexibility goals.

EPA does not agree that the removal allowance provisions are unworkable. EPA stated that both the Clean Water Act and good environmental policy dictate that actual removal be demonstrated. EPA admits, however, that the continued demonstration of actual removal will require special effort by the POTW. In July 1980, following hearings on the Clean Water Act, the House Subcommittee on Oversight and Review asked EPA to further explain its regulatory determination that the absence of (or inability to detect) a pollutant coming into a POTW is insufficient evidence to justify a removal allowance for that pollutant. EPA explained that the pollutant may be masked by dilution and thus may be present in concentration beyond the detection limits of available equipment. EPA's explanation in the general pretreatment regulation amendments, issued in January 1981, stated

that "where the POTW, for whatever reason, cannot detect regulated pollutants in its influent it may nevertheless demonstrate to EPA or the regulatory State that such pollutants are indeed removed." Again, however, the burden of proof is placed on the POTW.

If removal credits are not used, redundant treatment will occur because the categorical standards will continue to require industry pretreatment. In responding to questions from the House Subcommittee on Oversight and Review, following the July 1980 hearings, EPA indicated that it recognizes this potential for redundant treatment but stated, "if faced with a choice***the Agency is required by virtue of its mandate from Congress to choose the more environmentally protective option" (that is, redundant treatment).

Ironically, if removal credits are granted to avoid redundant treatment, equity questions may arise because companies in the same industry could be required to meet different standards for the same pollutants--depending on the POTW's pollutant removal efficiencies and the POTW's willingness to apply for the allowance.

Removal credit provisions in the general pretreatment regulations were suspended by EPA in January 1982, but may be reconstituted in the future.

NEEDED RESOURCES ARE NOT AVAILABLE

The ability of POTWs, States, and EPA to meet the substantial resource commitment that the Federal pretreatment program will require is highly questionable. Pretreatment imposes additional complex requirements and enforcement responsibilities on local POTWs, States, and EPA. This major regulatory program will further drain already scarce technical and financial resources. Moreover, the trend in recent years is that less, rather than more, Federal financial support for these programs can be anticipated. EPA, the States, and POTWs face major funding reductions which will impair their ability to finance the implementation and enforcement of the pretreatment program.

Considerable expertise and resources will be needed to successfully develop, implement, and enforce the pretreatment requirements. Given the interdependence of POTWs, States, and EPA in this pretreatment effort, failure at any one level will likely result in (1) unreasonable demands being placed on the other levels and/or (2) an ineffective program. Unless the question of resources is resolved, the pretreatment program's viability is doubtful.

POTWs will play a crucial role in developing, implementing, and enforcing the pretreatment program and ensuring that industry complies with pretreatment requirements, but many POTWs, particularly the smaller ones, lack the necessary expertise and resources. In the past, POTWs have also experienced difficulty in designing and operating treatment plants and needed technical assistance has not always been available from the States or EPA. Because POTWs obtain grants from the Federal Government to establish pretreatment programs, Federal budget reductions will diminish the POTWs' ability to finance the staff and equipment needed to enforce the complex pretreatment regulations.

In a prior report, 1/ we pointed out that the same POTWs which are to develop and enforce this technically complex pretreatment program have difficulty carrying out other aspects of the overall water pollution control program, particularly with respect to designing and operating wastewater treatment facilities.

The States have historically played an important role in environmental programs. The States are often responsible for implementation of Federal pollution control legislation within parameters set by EPA. The Clean Water Act is no exception, and the States are expected to play a major role in the pretreatment program.

State water pollution control programs are being squeezed for resources because of static or declining Federal funding during a period of rapidly increasing costs. As a result, many States have insufficient resources to implement new Federal water programs without additional support. This situation could result in States either abandoning pretreatment, and thus relinquishing permit authority, or implementing poorly run, underfunded programs. Proposed cuts in Federal support for State programs promise even more severe constraints.

While the monitoring and compliance scheme set out in the pretreatment regulations calls upon States to encourage continued compliance by POTWs and industries through inspection, surveillance, and monitoring, EPA also has an oversight role and needs resources to carry it out. Moreover, some States may be unable to adequately finance or implement their pretreatment responsibilities and these duties and costs will be transferred to EPA. A basic premise of the current emphasis on State and local enforcement, however, was EPA's own limited resources. EPA

1/"Costly Wastewater Treatment Plants Fail To Perform as Expected" (CED 81-9, Nov. 14, 1981).

historically has not had sufficient resources to meet its many responsibilities. The pretreatment program will add substantially to EPA's resource needs, particularly in nonpermit States. The prospect of EPA's obtaining increased resources is not likely because of current economic and budgetary conditions.

REGULATORY IMPACT ANALYSIS TIME FRAME
IS VERY AMBITIOUS

When EPA promulgated the general pretreatment regulations in January 1981, they fell within the scope of Executive Order 12291 on "Federal Regulation," ^{1/} which requires a regulatory impact analysis for "major" Federal rules. In working with the Office of Management and Budget as part of the Vice-President's Task Force on Regulatory Relief, EPA has developed an approach for the regulatory impact analysis to cover the general pretreatment regulations and categorical pretreatment standards.

As a first step in the analysis process, EPA will identify and evaluate the problems that can be addressed by pretreatment--determining whether the needs are uniform nationally or site-specific in nature. The second step is to identify problems that will remain, assuming no Federal involvement. A full range of options to address identified problems will then be developed. In its evaluation of the various options, EPA plans to consider the degree of Federal involvement, costs, environmental impact, cost effectiveness, equity between direct and indirect dischargers, efficiency, administrative feasibility, and necessary statutory changes.

In October 1981, EPA set an effective date of January 31, 1982, for the general pretreatment regulation amendments and at the same time proposed that the effective date be postponed indefinitely pending completion of the regulatory impact analysis. In January 1982, EPA suspended several of more controversial portions of the proposed amendments but allowed other proposed provisions to go into effect on January 31, 1982. Included in the provisions which became effective on January 31, are provisions requiring States and POTWs to have approved pretreatment programs by July 1, 1983.

The timetable for EPA's pretreatment regulatory impact analysis is relatively short. In addition to considering cost, equity, and efficiency, EPA plans to provide for public participation and comment following the initial data gathering and

^{1/}Issued on Feb. 17, 1981, and published in the "Federal Register" on Feb. 19, 1981.

analysis. EPA had tentatively scheduled its preliminary selection of an option in January 1982 with public comments and a final selection of the preferred option by April 1982. Although EPA had not made its preliminary selection as of February 16, 1982, it still plans to make its final selection by April 1982. If EPA's preferred alternative requires statutory changes, then EPA plans to recommend changes to the Congress. Accordingly, EPA anticipates that program changes will not become final until late 1982 at the earliest.

CONCLUSIONS

Almost from its inception, the pretreatment program has been surrounded by controversy and has generated considerable uncertainty and confusion. The existing program is highly complex, and prospects for its acceptance by program participants and its implementation in the near future are not good. We believe it is highly unlikely that the program can be implemented within the existing time frames.

The regulatory impact analysis is a good first step in re-assessing the pretreatment program, but the time frame for completing the analysis and selecting an option is very ambitious. Too many controversies and uncertainties remain about critical pretreatment program factors, including

- the nature, scope, and impact of toxics on the environment;
- the number of POTWs and industries to be included in the program, the nature of their involvement, and the cost to comply with program requirements;
- the use of national technology-based standards and a system of removal allowances which have not resolved equity and redundant treatment problems; and
- the questionable availability of resources to develop and implement the program.

Given the many uncertainties about toxic pollution problems, we are concerned about EPA's ability to resolve these issues quickly. EPA needs to pay close attention to the problems and unresolved issues associated with the present pretreatment program. Should EPA act too quickly in selecting a pretreatment alternative, it may commit itself to a course of action that has many of the same problems as the present program and that is equally unacceptable to those involved.

RECOMMENDATIONS TO ADMINISTRATOR, EPA

To provide sufficient time for completing the regulatory impact analysis and to assist in ensuring that the many complex issues surrounding pretreatment are fully considered, we recommend that you advise the Congress that the deadlines established for implementing the pretreatment program cannot be met until significant problems and issues concerning toxic pollution are resolved and that you provide an estimated time frame needed to resolve these matters.

If, after completing its regulatory impact analysis, EPA needs to propose changes to the current pretreatment legislation, we recommend that you include in a legislative package to the Congress information on (1) the pretreatment options considered, (2) the estimated effect of the various options on the environment, water quality, and public health, (3) the resources needed to implement various options, and (4) the estimated time frame for full program implementation under the various options.

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As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Operations not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Director, Office of Management and Budget; the four committees mentioned above; the Chairman, Senate Committee on Environment and Public Works; and the Chairman, House Committee on Public Works and Transportation.

Sincerely yours,



Henry Eschwege
Director

INFORMATION ON
OBJECTIVE, SCOPE, AND METHODOLOGY

To obtain information on pretreatment program regulations and requirements, problems being experienced, and other factors affecting the pretreatment program, we interviewed EPA headquarters and regional officials, including (1) pretreatment program managers in the Office of Water Enforcement, Permits Division, and regional staff responsible for overall pretreatment program development and implementation, issuing the general pretreatment regulations, and coordinating pretreatment program efforts with other EPA offices, (2) project managers in the Office of Water Regulations and Standards responsible for developing and promulgating pretreatment standards for the affected industries, (3) EPA Office of Solid Waste and regional staff officials responsible for hazardous and industrial wastes and land disposal efforts, and (4) Office of Water Program Operations officials and regional staff responsible for grants to finance local government pretreatment program development and construction. We also contacted EPA's Office of General Counsel for legal interpretations on certain aspects of the pretreatment regulations and requirements. Information on EPA research related to the control of toxics in wastewater was obtained from and discussed with officials at EPA headquarters and at EPA's Municipal Environmental Research Laboratory in Cincinnati, Ohio.

Due to the developmental status of the pretreatment program, our work was concentrated at those locations and industries most immediately affected by pretreatment requirements--the larger POTWs, States with many industrial dischargers, and industries for which pretreatment standards were already formulated. We visited 4 of EPA's 10 regional offices, 2 States within each region, and 12 municipal treatment authorities, as shown below.

EPA regional offices:

Region 2	New York, N.Y.
Region 3	Philadelphia, Pa.
Region 5	Chicago, Ill.
Region 6	Dallas, Tex.

State agencies:

Illinois	Environmental Protection Agency; Springfield
Louisiana	Department of Natural Resources; Baton Rouge
	Department of Public Health; New Orleans
Maryland	Department of Natural Resources, Water Resources Administration; Annapolis

New Jersey	Department of Environmental Protection; Trenton
New York	Department of Environmental Conservation; Albany
Texas	Department of Water Resources; Austin
Virginia	State Water Control Board; Richmond
Wisconsin	Department of Natural Resources; Madison

Municipal treatment authorities:

Illinois	Metropolitan Sanitary District; Chicago Sanitary District of Rockford
Maryland	City of Baltimore, Bureau of Water and Waste- water Commissioners of Perryville
Michigan	Upper Potomac River Commission; Westernport Grand Rapids Sewage Disposal System
New Jersey	Passaic Valley Sewer Commission; Newark Wayne Township Department of Public Works; Wayne
New York	Buffalo Sewer Authority City of Glen Cove Department of Public Works New York City Department of Environmental Protection Onondaga County Department of Drainage and Sanitation; Syracuse
Wisconsin	City of Eau Claire

We selected States after discussing the status of State pretreatment programs and the general approach of State officials toward the program with EPA officials. Our selections were based on:

- The impact of pretreatment on the municipalities and industry within the States.
- The permit status of States.
- The status of the State efforts to develop a pretreatment program.
- The general attitude of State officials toward pretreatment.

Municipal authorities were generally selected from locations within selected States that (1) were identified as being subject to pretreatment requirements, (2) already had developed local pretreatment programs, or (3) had industrial dischargers that will be subject to the categorical standards for the 34 industries. Grand Rapids, Michigan, was included (although Michigan was not a selected State) because EPA officials said the Grand Rapids program demonstrates that pretreatment can work and was used as a model in developing the Federal program.

We concentrated on the electroplating metal finishing industry to determine the impact of pretreatment on industry because at the start of our review only the electroplating pretreatment standards were issued in final form. We contacted several other industries to determine the impact of pretreatment but found many industrial dischargers may not yet realize the potential implication that national categorical pretreatment discharge standards could have on them. Again, the concerns of industry as expressed in congressional hearings and conferences were used to supplement the industry contacts we made. Also, legal counsel representing several of the major affected industries provided us with their positions regarding the pretreatment program.

We also contacted and obtained information from organizations identified by EPA and others as representing municipal, State, industry, and environmental interest, and we incorporated their viewpoints on the pretreatment program where appropriate. These organizations included:

- Association of Metropolitan Sewerage Agencies, Washington, D.C.
- Association of State and Interstate Water Pollution Control Administration, Washington, D.C.
- Environmental Planning Lobby, New York, N.Y.
- Natural Resources Defense Council, Washington, D.C.
- National Association of Metal Finishers, Chicago, Ill. and New York, N.Y.
- American Electroplaters Society, Chicago, Ill.
- Northeastern Illinois Planning Commission, Chicago, Ill.
- Erie and Niagara Counties Regional Planning Board, Amherst, N.Y.

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