REPORT TO THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION COMMITTEE ON PUBLIC WORKS UNITED STATES SENATE

Implementation Of Federal Water Pollution Control Act Amendments Of 1972 Is Slow

B-166506

Environmental Protection Agency

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-166506

The Honorable Edmund S. Muskie, Chairman
Subcommittee on Environmental Pollution
Committee on Public Works
United States Senate

Dear Mr. Chairman:

Pursuant to your request of June 29, 1973, this is our report on the slow implementation of Federal Water Pollution Control Act Amendments of 1972 by the Environmental Protection Agency.

As agreed to by your office, we are sending copies of this report to Congressmen John M. Murphy, Vernon W. Thomson, and Charles A. Vanik after your Subcommittee receives this report.

We believe that the contents of this report would be of interest to other committees and Members of the Congress. However, we do not plan to distribute this report further unless you agree or publicly announce its contents.

Sincerely yours,

Comptroller General
of the United States

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ABBREVIATIONS

GAO	General Accounting Office
EPA	Environmental Protection Agency
NPDES	National Pollutant Discharge Elimination System
PS&E	plans, specifications, and estimates

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D I G E S T

WHY THE REVIEW WAS MADE

GAO was asked to review and report on Environmental Protection Agency (EPA) policies, procedures, and regulations implementing provisions of the Federal Water Pollution Control Act Amendments of 1972.

FINDINGS AND CONCLUSIONS

The 1972 amendments established a national goal of eliminating discharge of pollutants into navigable waters by 1985 and an interim goal of providing water quality sufficient for protection and propagation of fish, shellfish, and wildlife and for recreation by 1983.

Many municipalities unlikely to achieve water quality goals

The 1972 amendments required grantees to meet many new and changing requirements. Many States and municipalities did not meet EPA's administrative requirements implementing legislative provisions and consequently were unable to qualify projects for available Federal funds.

At the slow pace in which EPA is awarding Federal grants--$3.2 billion through August 31, 1974--it is doubtful that many municipalities will achieve secondary treatment by July 1, 1977, as required by the amendments.

The President impounded $9 billion of the $18 billion authorized by the Congress to be allocated among States for fiscal years 1973-75 for constructing sewage treatment plants.

In fiscal year 1973, impoundment of funds reduced the number of construction grants that could have been awarded for projects ready for construction with State-approved design plans and specifications in one of six States--New York--included in GAO's review.

The President's impoundment could seriously hamper achieving the goal of eliminating discharge of pollutants into navigable waters by 1985 once administrative and legislative requirements are met.

However, funds needed by municipalities to construct facilities eligible under the 1972 amendments--$60 billion according to EPA--far exceed the funds authorized by the amendments. (See pp. 3 to 10.)

No evidence of funding discrimination among States

In May 1973, EPA established goals for its 10 regional offices to obligate $2 billion of the $5 billion

approved by the President to be allocated to States for fiscal years 1973-74 to construct sewage treatment plants. Each regional office goal equaled the amount of funds allocated to States in its region for fiscal year 1973.

These goals were not established to preclude regional offices from awarding each State's proportionate share of the $5 billion allocated for fiscal years 1973-74 and increases to individual regions were made where appropriate. (See pp. 11 to 13.)

Obligating construction grant funds before approving design plans not consistent with legislative provisions

EPA regulations provide for the award under certain specified conditions of project grants combining preparation of construction drawings and specifications and construction of sewage treatment facilities.

On July 1, 1974, GAO advised EPA that combination projects were not consistent with provisions of the 1972 amendments or its legislative history and that EPA should revise its regulations accordingly.

GAO said such grants to which the Government is already committed need not be annulled. EPA immediately instructed all regional administrators to discontinue awarding such grants. (See pp. 14 to 20.)

EPA behind schedule in issuing effluent limitation guidelines and discharge permits

The 1972 amendments required EPA to develop and publish by October 18, 1973, effluent limitation guidelines based on control technology to serve as a basis for limiting the amount of pollutants discharged into navigable waters from industrial sources.

Guidelines were to be developed by category of industrial dischargers of pollutants. If using this control technology does not achieve water quality standards, more stringent effluent limitations could be imposed based on information developed by the States.

To enforce effluent limitations, the amendments provide for establishing a National Pollutant Discharge Elimination System. Under this system EPA or States, with EPA-approved programs, issue permits to industrial dischargers setting forth effluent limitation and pollution abatement schedules.

States without approved programs are required to review and certify permits before issuance by EPA. EPA acted promptly in developing guidelines but did not meet the statutory deadline of publishing them primarily because of the complicated and time-consuming task involved.

EPA published the guidelines for the first industrial category in January 1974 and does not expect to complete guidelines for all industrial categories until 1975.

Delayed publication of the guidelines did not seriously affect the number of industrial permits EPA issued even though relatively few permits--5,275 out of 27,000--had been issued as of April 30, 1974.

Where final guidelines were not available, permits were issued on the basis of interim effluent instructions and/or individual assessments of the permit applicants' discharges.

Permits issued in this manner for the maximum 5-year period could result in some industrial dischargers not meeting the legislative requirement that industrial dischargers apply the best practicable control technology currently available by July 1, 1977.

EPA agreed that permits issued before final guidelines might contain effluent limitations less stringent than those subsequently prescribed in the guidelines but said that in most cases permits contained effluent limitations either equivalent to or more stringent than those prescribed in the final guidelines.

EPA also said it opposed modifying permits on a regular basis because industrial dischargers will not proceed with implementation of permit conditions under the threat of changing requirements and direction.

EPA attributed slow progress in issuing industrial pollution discharge permits to:

--Few States with approved permit programs, which placed an administrative burden on EPA regional offices in issuing permits. Amendments provided that States could be authorized to administer the permit program in their jurisdictions if they so desired.

--States' delays in certifying permits submitted by EPA regional offices before issuance.

--States' problems in obtaining information needed to establish more stringent effluent limitations to meet water quality standards.

The rate of drafting and issuing permits needed to be doubled if they were to be issued to the 27,000 industrial applicants by December 31, 1974.

Dischargers who have submitted applications for, but have not been issued, discharge permits by December 31, 1974, are no longer immune from either governmental or citizen legal actions, even though EPA or States with EPA-approved permit programs were unable to promptly process their permit applications. (See pp. 21 to 35.)

Delay in effective areawide planning to control water pollution

Section 208 of the act provided for developing and implementing areawide waste treatment management plans and required EPA to publish applicable guidelines by January 16, 1973. EPA did not publish final guidelines until September 14, 1973.

Because of the act's extended time frame for States to submit areawide waste treatment management plans for EPA's approval, EPA's delayed implementation of areawide planning will have a limited immediate effect on carrying out the act's regulatory provisions.

EPA's delayed publication of guidelines, however, has deferred designation and approval of planning organizations. Preparation and approval of areawide waste treatment management plans for areas with substantial pollution problems will be delayed about a year. This could delay

--implementing areawide waste treatment management requirements for control or treatment of point and nonpoint sources of pollution;

--establishing land use requirements and controlling the location, modification, and construction of discharging facilities; and

--establishing plans to insure that industries discharging into treatment plants meet applicable pretreatment requirements.

State officials said they were either reluctant to designate section 208 planning agencies or concerned with problems of implementing areawide planning.
(See pp. 36 to 42.)

EPA's assessment of U.S. construction capability to build more sewage treatment facilities

Reversing an earlier finding, EPA concluded in December 1973 that the U.S. construction industry should be able to build the required sewage treatment facilities without significantly contributing to inflation.

Many State, local government, and construction industry officials agreed that the construction industry could meet expanded construction demands for sewage treatment facilities. (See pp. 43 to 47.)

AGENCY ACTION AND UNRESOLVED ISSUES

This report was submitted to EPA and the water pollution control agencies of the six States included in GAO's review.

With respect to the termination of immunity from legal actions after December 31, 1974, for dischargers who have applied for, but have not been issued, discharge permits because the applications were not administratively completed, EPA said

--EPA did not intend to take enforcement action against such dischargers.

--EPA intended to discourage such actions by citizens groups.

--In the opinion of EPA's General Counsel, a court would not find a discharger in violation of the act for failure to have a permit when the administering agency has failed to take action on the permit application.

Even though it may be unlikely that a court would find a discharger in violation of the act, the discharger could still be subject to expensive and time-consuming litigation.
(See p. 50.)

Water pollution control agencies generally agreed with the facts pertaining to the activities in their States. Comments of EPA and the State agencies are discussed in chapter 8.

MATTER FOR CONSIDERATION BY THE SUBCOMMITTEE

To discourage the possibility of legal action against a discharger who has not been issued a permit by December 31, 1974, even though he has made proper application for it, the Subcommittee may wish to propose amending section 402(k) of the Federal Water Pollution Control Act, as amended, to provide that such a discharger shall not be in violation of applicable provisions of the act because a permit has not been issued.

CHAPTER 1

INTRODUCTION

The Chairman, Subcommittee on Environmental Pollution,[1] Senate Committee on Public Works, in a letter dated June 29, 1973 (see app. I), asked us to review certain Environmental Protection Agency (EPA) policies, procedures, and regulations implementing provisions of the Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1251).

The Chairman asked us to:

--Determine the effect of municipal sewage treatment construction grant funding restrictions on the overall implementation of the 1972 amendments.

--Find out if construction grant funds were being allocated on a State-by-State basis as required by the act.

--Review and comment on the legality of EPA's policy of approving and obligating Federal funds for a complete waste water treatment works project before preparation of plans, specifications, and estimates.

--Assess EPA's progress in promulgating effluent limitation guidelines and issuing permits for discharging pollutants from industrial sources into navigable waters.

--Analyze how EPA's restrained implementation of areawide waste treatment management will affect the overall operation of certain regulatory controls contained in the act.

--Ascertain whether the construction industry was capable of absorbing the $18 billion authorized by the act for constructing sewage treatment facilities.

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[1]Designation changed from the Subcommittee on Air and Water Pollution in January 1974.

The Chairman also asked us to review EPA's efforts to undertake research programs to implement the new concepts established by the 1972 amendments. Our January 16, 1974, report entitled "Research and Demonstration Programs to Achieve Water Quality Goals: What the Federal Government Needs to Do" (B-166506), covered EPA's research programs.

FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972

The 1972 amendments established a national goal of eliminating by 1985 the discharge of pollutants into navigable waters of the United States and by July 1, 1983, an interim goal of water quality sufficient for the protection and propagation of fish, shellfish, and wildlife and for recreation.

The 1972 amendments provided for (1) Federal grants of 75 percent of the costs of constructing publicly owned sewage treatment works, (2) limiting the amount of pollutants that can be discharged from point sources, (3) instituting a new permit system to regulate the amount of pollutants that can be discharged into receiving waters, (4) developing and implementing areawide waste treatment management planning processes for those areas that have major water quality problems because of urban-industrial concentrations or other factors, and (5) a major research and demonstration effort to develop technology to eliminate the discharge of pollutants into navigable waters, waters of the contiguous zone, and the oceans.

SCOPE OF REVIEW

To comply with the Chairman's request, we held discussions with officials at EPA headquarters in Washington, D.C.; EPA regional offices in Chicago (region V), New York (region II), and San Francisco (region IX); and State water pollution control agencies in Sacramento, California; Springfield, Illinois; Lansing, Michigan; Trenton, New Jersey; Albany, New York; and Columbus, Ohio. We also obtained information from other State agencies, municipalities, and construction industry associations and examined Federal and State agencies' documents, records, studies, and other literature.

CHAPTER 2

MANY MUNICIPALITIES UNLIKELY TO ACHIEVE WATER QUALITY GOALS

The 1972 amendments authorized EPA to allocate $18 billion to the States--$5 billion, $6 billion, and $7 billion for fiscal years 1973, 1974, and 1975, respectively--to finance 75 percent of the cost to construct publicly owned sewage treatment plants.

EPA was required to allocate the funds to the States pursuant to a prescribed ratio by January 1 preceeding the respective fiscal year, except that the allocation for fiscal year 1973 was to be made by November 17, 1972. The amounts allocated were to be immediately available for obligation.

These funds are to help municipalities meet the requirement to build new sewage treatment plants or to upgrade existing plants to achieve secondary treatment of waste by July 1, 1977. As generally defined by EPA, secondary treatment will remove at least 85 percent of the biochemical oxygen demand[1] and suspended solids from municipal sewage. Projects funded after June 30, 1974, are required to provide the best practicable waste treatment technology.

On November 22, 1972, the President instructed EPA to allocate to the States $5 billion--$2 billion for fiscal year 1973 and $3 billion for fiscal year 1974--of the $11 billion authorized for constructing sewage treatment plants for fiscal years 1973-74. Similarly, on January 1, 1974, the President instructed EPA to allocate $4 billion of the $7 billion authorized for fiscal year 1975 for a total allocation of $9 billion and an impoundment of $9 billion. The Chairman, Subcommittee on Environmental Pollution, asked us to determine the effect this impoundment would have on the overall implementation of the 1972 amendments.

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[1] A measure of the oxygen consumed in the biological processes that break down organic matter in water. Large quantities of organic waste require large amounts of dissolved oxygen. The more oxygen-demanding matter, the greater the pollution.

In New York impoundment reduced the number of municipal waste treatment grants that could have been awarded in fiscal year 1973. In the other five States we reviewed, Federal grant funds were available for all qualified projects. Many States and municipalities, however, did not meet the administrative and legislative requirements of the 1972 amendments, and therefore their projects did not qualify for available Federal funds.

At the slow pace in which EPA is awarding Federal grants--$3.2 billion through August 31, 1974--it is doubtful that many municipalities will achieve secondary treatment by July 1, 1977. According to EPA, funds which municipalities need to construct facilities eligible under the 1972 amendments--$60 billion[1]--far exceed the funds authorized by the 1972 amendments. Once the administrative and legislative requirements are met, the President's impoundment could seriously hamper the progress of many municipalities in achieving secondary treatment and the goal of the 1972 amendments of eliminating the discharge of pollutants into navigable waters by 1985.

The Chairman was also concerned that the Office of Management and Budget might have required EPA to further reduce available funds for Federal grants for fiscal years 1973-74 from $5 billion to $2.1 billion. In a November 23, 1973, letter, we told the Chairman that no further impoundment had been placed on these funds.

IMPOUNDING FUNDS DELAYED CONSTRUCTION OF PROJECTS IN NEW YORK

For fiscal years 1973-74, EPA allocated $2.4 billion, or $2.9 billion less than the $5.3 billion authorized under the 1972 amendments, to the six States included in our review. (See app. II.) Only in New York were we able to identify projects ready for construction, with State-approved design plans and specifications, that could have been funded in fiscal year 1973 but were not because of the impoundment.

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[1] In a preliminary report to the Congress dated September 3, 1974, EPA said that the States had estimated costs of $115 billion for treatment facilities and an additional $235 billion for abatement of stormwater pollution.

New York's project priority list for fiscal year 1973 listed 187 projects estimated to cost about $1.59 billion, with $1.19 billion as the applicable 75 percent Federal share. EPA would have considered all the projects on the priority list for funding during fiscal year 1973 if the Administration had made available the entire congressionally authorized $11 billion. Actual allocations to New York for fiscal years 1973-74 totaled about $553 million.

Projects considered for funding

EPA considered the allocations sufficient for funding 75 percent of the eligible construction costs of the first 34 projects on New York's 1973 priority list. The State had estimated that these projects would cost about $760 million.

New York submitted grant applications for the construction of 18 of the 34 projects. It did not submit grant applications for the remaining 16 projects because

--6 were technically deficient,

--funds for 3 were to be used to help finance 2 large projects in New York City,

--1 was incorporated with another project, and

--6 were not ready for construction.

EPA awarded grants of about $221 million for 15 of the projects and returned grant applications for 3 because they did not meet EPA requirements.

Projects not considered for construction grants

New York had an additional 39 projects with State-approved design plans and specifications ready for construction which were below the first 34 projects on the 1973 priority list. The estimated construction costs of these 39 projects totaled about $329 million, of which about $247 million would be the applicable Federal share.

New York submitted grant applications to EPA for 15 of the 39 projects estimated to cost about $56 million. EPA returned the applications without considering them because they could not be covered with the available allocations without jeopardizing the funding of projects with higher priorities. The State did not submit grant applications for the remaining 24 projects, with estimated costs of $273 million, after EPA's notification that it would return all applications for projects which were not high enough on the priority list to be covered by the 1973-74 allocations.

Also, New York did not submit grant applications for major portions of two large New York City projects ready for construction because of the limited Federal funds. The estimated costs of these two projects totaled $404 million. The State used a phased construction approach and submitted applications for Federal grants totaling $93 million--included in the 15 projects awarded grants of $221 million--with estimated costs of $124 million. New York does not expect to submit grant applications for the remainder of the two projects with estimated costs of $280 million until fiscal year 1975 or later.

State officials told us that New York could have had 11 more projects ready for construction before June 30, 1973, if the Federal grants had been available.

Adverse effect of delaying the funding of 41 projects

New York State officials told us that by delaying the funding of the 41 projects--39 projects too low on the priority list for funding plus the 2 large New York City projects--the plans for almost all the projects may have to be revised before construction can begin because of changing technical requirements. Also, many municipalities will continue to discharge either raw or inadequately treated sewage.

Of the 15 municipalities whose grant applications were returned by EPA because the projects were too low on the priority list for funding

--7 have no treatment facilities and are dumping raw sewage into receiving waters or into the ground through septic tanks,

--7 have only primary treatment,[1] and

--1 is providing substandard secondary treatment.

In addition, pending completion of one of the two New York City treatment facilities, the city will continue to discharge 70 million gallons of raw sewage daily into the East River.

AWARDING OF CONSTRUCTION GRANTS SLOWED

Through December 31, 1973, EPA awarded 676 grants to municipalities to construct or upgrade sewage treatment plants totaling $1.77 billion--35 percent of the $5 billion allocated for fiscal years 1973-74. (See app. III.) The grants were awarded sporadically as shown in the following table.

	Number of grants	Amounts of grants (including subsequent adjustments) (000 omitted)
February 28 and March 1, 1973	43	$ 496,785
April 1973	1	330
May 30 to June 30, 1973	430	1,108,847
July 1973	149	132,327
August to December 1973	53	36,198
Total	676	$1,774,487

The slow pace in which EPA has been awarding these grants was caused primarily because of new and changing requirements in EPA's regulations implementing the following legislative provisions for awarding construction grants.

[1]The first stage in waste water treatment in which floating or settleable solids are mechanically removed by screening and sedimentation.

User charge system

Section 204(b)(1) of the 1972 amendments specifies that, effective March 2, 1973, EPA will not approve any grant unless the applicant (1) has adopted or will adopt a system of charges to insure that each recipient of waste treatment service will pay its proportionate share of the cost of the plant's operation and maintenance and (2) has made provisions to recover from industrial users their proportionate Federal share of the plant's capital costs.

To preclude a rush of applications before the March 2, 1973, deadline, EPA established stringent criteria for selecting projects for funding: (1) projects which would be jeopardized if funding were delayed after March 1, 1973, because of withdrawal of industrial sources which were committed to the municipal treatment service and (2) projects where the applicants had plans and specifications ready for bidding.

On February 28 and March 1, 1973, EPA awarded 43 grants totaling about $497 million in 5 of EPA's 10 regions. EPA awarded only one additional grant of $330,000 before it published proposed user charge and industrial recovery regulations on May 22, 1973, (38 F.R. 13524)--final guidelines were published on August 21, 1973 (38 F.R. 22524). The amendments required EPA to publish applicable guidelines by April 16, 1973. The short time between May 22 and July 1, 1973, when additional requirements--establishing new State priority systems and insuring that sewer collection systems are not subject to excessive infiltration[1]--would be imposed, placed a heavy burden on State agencies in preparing grant proposals and on EPA in reviewing and approving grant applications before July 1, 1973.

EPA recognized this problem and extended the deadline for complying with additional requirements to July 31, 1973, for applications received before July 1, 1973.

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[1]Water entering a sewer system through defective pipes, pipe joints, connections, or manhole walls.

From May 22 to June 30, 1973, EPA awarded 430 grants totaling about $1.1 billion, and during July 1973 awarded 149 grants totaling about $132 million.

Officials in two of the six States told us they had submitted as many grant applications as possible before July 1, 1973, but had other projects that could have been submitted if they had had more time. Officials in one State said that they had submitted all the projects to EPA that were ready for grants. Shortages of personnel limited the number of applications two States were able to submit to EPA. The impoundment of funds delayed construction of projects in one State. (See p. 4.)

State project priority lists and infiltration of ground water into collection systems

Before the 1972 amendments, municipalities' financial needs were a principal factor in establishing State priorities for EPA sewage treatment construction grants. The 1972 amendments required States to establish a new priority system as part of a continuing planning process. EPA required that, to be eligible for grants beginning July 1, 1973, sewage treatment projects be included in State project priority lists prepared in conformance with the new and more complex system.

The 1972 amendments also provided that EPA not approve any grant after July 1, 1973, unless the applicant shows that each sewer collection system discharging into a sewage treatment plant is not subject to excessive infiltration of ground water. EPA's interim regulations governing grants for construction of treatment works were published on February 28, 1973 (38 F R. 5329).

Because States and municipalities were having difficulties in meeting the above requirements, EPA awarded only 53 grants totaling about $36 million from August 1 to December 31, 1973. Of the six States reviewed, only California received construction grants during this 5-month period; EPA awarded six grants totaling about $2.4 million. Four other States did not have approved project priority lists, and one State did not qualify for grants because its projects did not meet the excessive infiltration requirements.

As of December 31, 1973, EPA had approved the priority lists of 37 of the 56 States and territories covered by the construction grant program.

FEDERAL FUNDS INSUFFICIENT TO MEET MUNICIPALITIES' NEEDS

In November 1973 EPA reported to the Congress that municipalities would need $60.1 billion to construct sewage treatment and collection systems to meet the water quality goals established by the amendments.

Officials in the six States said they were concerned because Federal funds would not sufficiently meet municipalities' financial needs for constructing sewage treatment facilities even if the full $18 billion authorized was allocated to the States.

Officials in the six States said that they did not plan to take enforcement action against municipal dischargers who fail to meet the 1977 secondary treatment requirement because of a lack of Federal construction grant funds.

Officials also said that States or municipalities might be reluctant to spend funds on planning the construction of projects for which grants might not be available or which might become obsolete because of changing technical requirements, such as excessive infiltration.

Officials of two States said they had limited or proposed to limit the reserve capacity of sewage treatment plants from a 20- to 10-year growth basis because of insufficient Federal funds.

CHAPTER 3

NO EVIDENCE OF FEDERAL-FUNDING DISCRIMINATION AMONG STATES

In May 1973 EPA established municipal sewage treatment construction grant obligation goals for its 10 regional offices to obligate $2 billion of the $5 billion allocated for fiscal years 1973-74 by December 31, 1973. The amount of each regional office goal was equal to the sum of the individual State allocations in its region for fiscal year 1973. EPA told regional administrators that the obligation goals were regional targets and that distributing funds among the States was their prerogative.

The Subcommittee Chairman was concerned that EPA's decision to allocate funds by region, rather than on a State-by-State basis as required by the amendments, could result in discrimination because EPA could refuse to fund projects in some States in a region and could fund projects in others up to their proportionate shares of the allocation. However, there was no evidence that the three EPA regional offices where we made our review discriminated between States in distributing funds under the established regional obligation goals.

PURPOSE OF REGIONAL OBLIGATION GOALS

In a teletype dated June 11, 1973, the acting EPA administrator told the regional administrators that:

--The purpose of the obligation goals was not to control the pace of the program but was to insure that each region accurately estimated the planned State obligations consistent with the requirements of the law and applicable regulations.

--If project needs in a given region required a revision to the regional obligation goal, a request for such a revision would be granted as long as adequate estimates were provided to EPA headquarters.

Subsequently, the EPA administrators of regions I, II, and X requested, and EPA headquarters granted, increases in their obligation goals totaling $335,469,600.

Region	Date of increase	Amount
I	6/20/73	$236,046,000
II	6/30/73	34,000,000
	7/30/73	25,000,000
X	5/29/73	20,423,600
	7/26/73	10,000,000
	11/21/73	10,000,000
		$335,469,600

As of December 31, 1973, regional obligation goals had been increased from $2 billion to $2.3 billion.

In a memorandum to EPA regional administrators dated January 9, 1974, EPA headquarters extended the previously approved regional obligation goals through January 31, 1974, and established a formal system for issuing quarterly regional obligation goals. EPA headquarters would determine the goals on the basis of regional office quarterly submissions of State-by-State obligation plans. According to the memorandum, the regions would need headquarters approval to exceed the quarterly obligation goal but generally headquarters would not alter the regional estimates unless they included nonapprovable projects or were clearly unrealistic.

ADMINISTRATION OF OBLIGATION GOALS

Each regional obligation goal, established in May 1973, equaled the sum of the individual State allocations in that region for fiscal year 1973. Therefore, if the regional obligation goals were to act as a constraint, the funding of one State's projects exceeding its fiscal year 1973 allocation could result in other States' not being able to obligate funds up to their full fiscal year 1973 allocations.

In two of the three regions included in our review, Federal construction grant awards in certain States exceeded the States' fiscal year 1973 allocations. However, there was no indication that the EPA regional office had denied grants for projects in other States because of the grants made in excess of that year's allocations.

State and EPA regional officials told us that no certified projects had been denied Federal grants as a result of the May 1973 regional obligation goals.

EPA regional officials said the only limits placed on the Federal funds available to the States were the limits established in EPA's grant regulations and the funds were still allocated on a State-by-State basis. EPA regional officials view the regional obligation goals primarily as an in-house fund control which could have been readily increased if the States had submitted acceptable applications for additional projects.

CHAPTER 4

OBLIGATING CONSTRUCTION GRANT FUNDS BEFORE APPROVING DESIGN PLANS NOT CONSISTENT WITH LEGISLATIVE PROVISIONS

Section 203(a) of the act requires that (1) each applicant for a grant submit plans, specifications, and estimates (PS&E) for each proposed treatment works construction project to EPA for approval and (2) EPA act upon such PS&E as soon as practicable and its approval be deemed a contractual obligation of the United States for the payment of its proportional contribution to such projects.

EPA regulations implementing the act provide that grants for projects be awarded in three steps: (1) developing preliminary plans, (2) developing detailed plans and specifications, and (3) constructing the facility. Regulations also provide for combination grants for preparing plans and specifications and constructing the facility (step 2 + 3 grants). Through December 1973 EPA had awarded 187 step 2 + 3 grants, totaling about $329 million.

The Subcommittee Chairman asked us to review EPA's regulations for committing funds for combination projects (step 2 + 3) rather than for discrete segments of the construction process to determine whether such regulations are contrary to the legislative intent of the Congress.

On July 1, 1974, the Comptroller General told the Administrator, EPA, that EPA's regulations were inconsistent with congressional intent and should be revised to preclude step 2 + 3 grants.

TYPES OF CONSTRUCTION GRANTS AUTHORIZED

Senate report 92-1236 (p. 111) explained the grant approval process to be followed under section 203:

> "The conferees want to emphasize the complete change in the mechanics of the administration of the grant program that is authorized under the conference substitute. Under existing law and procedure, the Environmental Protection

Agency makes the first payment upon certification that 25 percent of the actual construction is completed. The remaining Federal payments are also made in reference to the percentage of completion of the entire waste treatment facility. This results in applicants absorbing enormous interest expense and other costs while awaiting the irregular flow of Federal funds.

"Under the conference substitute, which is a program modeled after the authority and procedures under the Federal-Aid Highway Act, each stage in construction of a waste treatment facility is a separate project. Consequently, the applicant for a grant furnishes plans, specifications and estimates (PS&E) for each stage (which is a project) in the overall waste treatment facility which is included in the term 'construction' as defined in section 212. Upon approval of the PS&E for any project, the United States is obligated to pay 75 percent of the costs of that project. Thus, for instance, the applicant may file a PS&E for a project to determine the feasibility of a treatment works, another PS&E for a project for engineering, architectural, legal, fiscal or economic investigations, another PS&E for actual building, etc.

"In such a program, the States and communities are assured of an orderly flow of Federal payments and this should result in substantial savings and efficiency.

"It cannot be emphasized too strongly that the procedure adopted in the conference substitute represents a complete and thorough change of the present practice of making payments of the Federal share of treatment works. The conferees urge the Administrator, the States, and local governments to draw from the experience of the highway program to improve the efficiency of the waste treatment grant program.

"When funding the construction of waste treatment plants, the Administrator, upon the request of a State, should encourage the use of a phased approach to the construction

of treatment works, and the funding thereof, on a State's priority list. Such a phased program, which the committee notes has been developed and approved in the State of Delaware, has enabled the State to accelerate the construction of sewage treatment facilities, and thus accelerate the attainment of clean water." (Underscoring supplied.)

EPA's interim regulations governing grants for constructing treatment works provided that grants may be awarded for the following types of projects.

1. Projects for preparing preliminary plans and studies (the step 1 project grant).

2. Projects for preparing construction drawings and specifications (the step 2 project grant).

3. Projects for the actual building and erection of treatment works (the step 3 project grant).

4. Step 2 + 3 projects when warranted on the basis of compelling water quality enforcement considerations or serious public health problems or minimizing administrative requirements for projects not requiring a large amount of Federal assistance.

5. Projects to be conducted under the so-called design-construct method involving assumption by a single party of the responsibility for both design and construction of a treatment works.[1]

EPA's final regulations, published February 11, 1974, restated the grant award authority to show the division of the Federal fiscal obligation and the Federal contractual obligation for step 2 + 3 project grant awards. The final regulations state in pertinent part that:

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[1]EPA reported that it has not awarded any such grants and that it is studying the guidelines which should apply; accordingly, we have not discussed this type of grant.

"* * * the United States will be contractually obligated to pay only the Federal share of the approved Step 2 work and will not be contractually obligated to pay the Federal share of Step 3 project costs unless and until the plans and specifications developed during Step 2 are approved; and (c) funds fiscally obligated for Step 3 will be deobligated unless two sets of construction drawings and specifications suitable for bidding purposes are submitted to the Regional Administrator and approved prior to initiation of construction for the building and erection of the treatment works."

TYPES OF CONSTRUCTION GRANTS AWARDED

As of December 31, 1973, EPA had awarded construction grants totaling about $1.77 billion for 676 projects.

Type of project grant	Funds awarded (000 omitted)	Number of projects
Step 1	$ 2,290	29
Step 2	25,508	78
Step 3	1,417,350	382
Step 2 + 3	329,339[a]	187
Total	$1,774,487	676

[a]Step 2 + 3 project grants ranged from $11,850 to $80,190,000.

Step 2 + 3 project grant awards in region V

Of the three EPA regions covered in our review, only region V had awarded step 2 + 3 project grants. These grant awards, which were all made in June and July 1973, accounted for 59 percent of all such grant funds EPA awarded through December 31, 1973.

The following table shows the distribution of step 2 + 3 grants among the States in region V.

	Funds awarded (000 omitted)	Number of projects
Illinois	$ 15,425	15
Michigan	121,625	14
Minnesota	18,231	4
Ohio	37,592	4
Total	$192,873	37

Our review of the 33 step 2 + 3 grants awarded in Illinois, Michigan, and Ohio showed that the grants were justified by the State water pollution control agencies on the basis of one or more of the three criteria specified in EPA's regulations: water quality enforcement considerations, serious public health problems, or administrative efficiency when projects do not require a large amount of Federal assistance. One step 2 + 3 project was justified solely on the basis of administrative efficiency.

The data provided by State agencies to justify step 2 + 3 grants varied considerably. For example, one State agency provided EPA with documentation showing that 11 grant applicants had been ordered either by the courts or by the State to abate pollution of various lakes, rivers, and creeks. However, the water pollution control agency of another State merely told the EPA regional office by letter that public health and water quality enforcement warranted the awards of step 2 + 3 grants without providing supporting documentation.

Region V officials told us that step 2 + 3 grants were approved only when the applicant could be expected, or made a commitment, to submit completed construction PS&E shortly after approval of the grant. As of November 30, 1973, the construction PS&E had been approved for all 15 projects in Illinois, 11 of the 14 projects in Michigan, and 1 of the 4 projects in Ohio.

EPA awarded step 2 + 3 grants, rather than step 3 grants, for four Ohio projects because of a change in project scope, at EPA s direction, or because of the absence of plans and specifications for a minor part of a project. For example, one Ohio project lacked only the plans and specifications for landscaping.

A region V official told us in December 1973 that the regional office was actively following up on the six projects in Michigan and Ohio for which complete plans and specifications had not been received.

LEGALITY OF STEP 2 + 3 GRANTS

In our letter to the Chairman dated November 23, 1973, we concluded that, as authorized by EPA's regulations, a step 2 + 3 project was not consistent with provisions of the 1972 act or its legislative history and that the regulations should be revised.

In a letter dated March 18, 1974, EPA's Assistant Administrator for Enforcement and General Counsel told us of EPA's disagreement with our interpretation of the act concerning the award authority for step 2 + 3 project grants.

The Assistant Administrator explained the need to fiscally obligate the full amount of the step 2 + 3 project grant award as follows:

> "* * * Pursuant to Section 25.1 of OMB Circular A-34 and EPA General Grant Regulations (40 CFR 30. 305-2), the approval of a project constitutes the basis for an obligation of Federal funds, in this and other state and local assistance programs. (This Federal practice reflects the necessity to fiscally obligate Federal funds upon approval of most state and local assistance projects and prior to a contractual obligation, or with such obligation as a condition subsequent, because communities require firm assurance and precise definition of the Federal assistance before they can initiate actions * * * necessary to obtain the non-Federal project funds)."

The Assistant Administrator justified the use of the step 2 + 3 project grant awards on the basis of (1) relatively high administrative costs which would be incurred if low-dollar grant awards were processed through separate project steps, (2) time savings when reconstruction of a sewage treatment works following a natural disaster is urgently required, and (3) a strong interest by some States in retaining the step 2 + 3 project grant award authority.

In a decision dated July 1, 1974, affirming a decision dated February 4, 1974, the Comptroller General concluded that EPA's regulations authorizing the award of a step 2 + 3 grant were inconsistent with the provisions of the Federal Water Pollution Control Act, as amended, and must be changed primarily because the act authorized a Government commitment to pay a share of the costs of a particular stage only upon approval of PS&E which were lacking for the construction portion at its time of the grant award. Also, the Congress wished to eliminate making large charges against a State's allotment before they were necessary. The Comptroller General further concluded that grants to which the Government was already committed did not need to be annulled. EPA headquarters immediately instructed all regional administrators to discontinue awarding step 2 + 3 grants after June 30, 1974.

CHAPTER 5

EPA BEHIND SCHEDULE IN ISSUING EFFLUENT LIMITATION GUIDELINES AND DISCHARGE PERMITS

To help restore the Nation's water quality, the 1972 amendments provided for establishing effluent guidelines limiting the amount of pollutants that can be discharged from point sources into navigable waters. By July 1, 1977, industrial dischargers are to apply the best practicable control technology currently available and by July 1, 1983, the best available technology economically achievable. However, if using this control technology does not achieve water quality standards, more stringent limitations could be imposed.

To enforce limitations, the amendments provide for establishing a pollution discharge permit system--the National Pollutant Discharge Elimination System (NPDES). Under this system, EPA or States with EPA-approved programs issue permits to dischargers establishing effluent limitations and, if necessary, compliance time schedules. Before a Federal permit is issued, the State in which the discharge originates is required to certify that the discharge will comply with applicable statutory requirements. EPA's goal is to issue all permits by December 31, 1974.

The Subcommittee Chairman asked us to assess EPA's performance in issuing guidelines and the effect it had on implementing the discharge permit program.

EPA took prompt action to develop industrial effluent limitation guidelines defining the best practicable and best available control technology. It did not meet the statutory deadline of publishing the guidelines by October 18, 1973, however, primarily because of the extremely complicated and time-consuming task of developing the guidelines which included determining the level of technology developed for industrial categories and the time-consuming rulemaking process which involved preparing regulations and obtaining comments from Federal, State, and local officials and interested parties before promulgation.

Although the first guidelines were not published until January 1974, this had not considerably affected the number of industrial permits processed by EPA regional offices and States. EPA and States issued permits on the basis of interim instructions and/or assessments of pollution discharges of individual permit applicants. On the basis of the record through April 1974--5,275 permits issued--it is unlikely that permits will be issued by December 31, 1974, to the approximately 27,000 industrial dischargers who have applied for them.

The slow progress of issuing permits was attributed to:

--Few States, with approved permit programs, which placed an administrative burden on EPA regional offices in issuing permits.

--States' delays in certifying permits submitted by EPA regional offices before issuance.

--States' problems in obtaining information needed to establish more stringent effluent limitations to meet water quality standards.

As of June 30, 1974, 7,965 permits had been issued to industrial dischargers.

DELAYED PUBLICATION OF GUIDELINES

As of April 30, 1974, final guidelines had been published for 23 industrial categories or subcategories representing about 15 percent of the estimated 27,000 industrial permit applcations on hand.

Although EPA was unable to publish guidelines by October 18, 1973, it appeared to have acted promptly in developng guidelines for those industrial categories which EPA said represented the worst sources of water pollution in the Nation--the 27 industrial categories identified in section 306 of the act. According to EPA, these 27 categories represented 78 percent of the estimated 2,800 major industrial dischargers of pollution into the Nation's waterways.

For these 27 categories, EPA planned to simultaneously develop effluent limitation guidelines, new source performance

standards, and pretreatment standards for new industrial sources discharging into municipal sewage treatment plants. From November 1972 to February 1973, EPA awarded 26 contracts to private organizations to develop in-depth technical and economic reports on the industrial categories as a basis for establishing effluent limitation guidelines and new source performance and pretreatment standards.

EPA also identified an additional 15 industrial categories for which EPA planned to develop guidelines and standards, after it did so for the 27 industrial categories. EPA said it did not simultaneously develop guidelines for all industrial categories because

--it did not have in-house all the technical expertise and manpower needed for simultaneous development,

--it was necessary to contract with private institutions to aid in the development, and

--technical problems and the size of the projects required that some of the contracts be carried out in two phases.

To insure that guidelines would be published in time to be used in the permit program, a Federal District Court, as a result of a suit filed by a public interest organization, ordered EPA to publish by November 1974 guidelines based on best practicable control technology for all point sources of industrial dischargers of pollution. EPA does not expect to be able to publish these guidelines by this date.

Status of guidelines and standards for 27 industrial categories

To cover the industries with the most extreme pollution problems first, EPA decided to issue guidelines for 27 industrial categories in two phases--30 subcategories to be covered in the first phase and 19 in the second.

EPA developed in-house the guidelines and standards for two subcategories covered in the first phase and divided the work to be done by 26 contractors into two separate phases. The first phase

included developing guidelines and standards for about 9,700 of the estimated 27,000 industrial dischargers that had submitted applications for discharge permits which covered about 1,700 of the 2,800 major industrial dischargers. The second phase included developing guidelines and standards for about 3,000 of the estimated 27,000 industrial dischargers that had submitted applications for discharge permits which covered about 500 of the 2,800 major industrial dischargers.

In June and July 1973, EPA contractors submitted their reports to EPA on the first phase. EPA reported that it immediately began reviewing the reports and preparing regulations, but finalizing regulations was slow because of the need for interagency, State, and public participation in the rulemaking process. EPA finalized these regulations early in October 1974.

EPA's contractors submitted their reports during January to August 1974 on the second phase. It expects to finalize these regulations by mid-1975.

Status of guidelines and standards for 15 industrial categories

EPA plans to develop guidelines and standards for 15 additional industrial categories, covering about 12,800 of the estimated 27,000 industrial dischargers, including about 600 of the 2,800 major dischargers. EPA plans to contract for 9 of the 15 industrial categories and to develop 6 in-house.

EPA expects to finalize regulations by the end of 1974 for the standards and guidelines to be developed in-house and by July 1975 or later for those developed by contractors.

Court order to publish guidelines

In November 1973, a Federal District Court ordered EPA to develop and publish, as promptly as possible, effluent limitation guidelines to provide comprehensive coverage of at least 95 percent of point source dischargers that have applied for discharge permits in compliance with the 1972 amendments.

To insure that the guidelines would be published in time to be meaningfully used in the permit program, the court order directed EPA to promulgate final guidelines for the industrial categories no later than certain specified dates which extended from January 15 to November 29, 1974.

As of April 30, 1974, EPA had published final guidelines for 23 industrial categories or subcategories and expected to publish guidelines for an additional 20 categories by November 29, 1974.

EPA does not expect to publish all final guidelines for the remaining categories until mid-1975 or later. Therefore, it will not be able to fully adhere to the court order.

An EPA official attributed the problem, in part, to shortages of qualified personnel and to subsequent court-ordered extensions of the periods for public comment for six industrial categories which delayed the promulgation of some of the guidelines.

SLOW PROGRESS IN ISSUING PERMITS

The 1972 amendments provide immunity from prosecution until December 31, 1974, to any discharger who has applied for a permit but has not been issued one if the application has not been administratively completed. EPA established the goal of issuing all permits by that date.

As of April 30, 1974, EPA and the States had on file approximately 27,000 discharge permit applications from industrial dischargers and had issued 5,275 permits, or 19 percent. EPA's records indicated that the rate of drafting and issuing permits needed to be doubled to meet the December 31, 1974, deadline. EPA regional offices expected that all major permits would be issued by March 31, 1975.

The lack of final effluent limitation guidelines was not the main reason for the small number of permits issued to industrial dischargers. When final effluent limitation guidelines were not available, EPA regional offices and States issued permits on the basis of interim effluent instructions and/or assessments of an individual permit applicant's discharges.

In its revised water strategy paper dated March 1974, EPA stated that, if final effluent limitation guidelines were not published for an industrial category in time for the December 1974 deadline, permits to industrial dischargers would be written on the basis of the best technical judgment of feasible control technology for that category.

Implementation of permit program

According to EPA's policy, discharge permits are issued on the basis of:

--Final guidelines outlining the best practicable control technology when water quality standards do not call for more stringent limitations.

--Interim effluent instructions[1] in the absence of applicable final guidelines.

--Water quality standards when the standards dictate more stringent limitations than provided by best practicable technology. However, when adequate water quality data would not be available by mid-1974, the discharge permits were issued on the basis of existing guidelines and the best technical judgment of ambient conditions.

--Best technical judgment of feasible control technology when applicable guidelines are not expected to be issued before the December 31, 1974, deadline.

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[1]EPA had developed interim effluent instructions which were applicable to major dischargers in 21 industrial categories and had determined that permits could be issued on the basis of the interim instructions if the instructions were thorough enough to insure that permits would not be inconsistent with limitations subsequently issued.

Permits issued before publication of final guidelines

As of December 31, 1973, before the publication of any effluent limitation guidelines, EPA and the States had issued 2,472 industrial discharge permits--1,975, or 80 percent, were based on feasible control technology and 497, or 20 percent, were based on water quality standards.

Probably many more permits had been prepared on the basis of feasible control technology without the benefit of the guidelines. EPA regional offices reported that, through December 31, 1973, they had submitted 6,735 final draft discharge permits to States for certification before EPA issued the permits, and the States had issued 455 permits. Therefore, on the assumption that 80 percent of these permits were based on feasible control technology as were the 2,472 issued permits, potentially about 5,750 draft and issued permits--about 21 percent of the total industrial permit applications--may have been prepared on the basis of feasible control technology through December 31, 1973, before the publication of guidelines.

Many more industrial discharge permits are likely to be prepared before the publication of applicable final guidelines, since only 23 final guidelines had been issued through April 30, 1974. EPA's records indicated that these 23 guidelines were applicable to only about 15 percent of the total discharge permit applications.

Few States have approved permit programs

The 1972 amendments contemplated a Federal-State partnership under which States could be authorized to administer the permit program for discharges into the navigable waters of their jurisdictions.

As of June 30, 1974, EPA had authorized 15 States--California, Michigan, Oregon, Wisconsin, Ohio, Washington, Vermont, Delaware, Connecticut, Mississippi, Montana, Nebraska, Georgia, Kansas, and Minnesota--to issue discharge permits.

Of the 5,275 permits issued to industrial dischargers through April 30, 1974, States issued 1,024, or 19 percent, including 183 permits under the interim authority whereby 18 States had been

authorized to issue permits during the 90-day period from December 18, 1972, to March 19, 1973. The grant of interim authority was intended to be a step toward final approval when the State desired to permanently administer the discharge permit program within its jurisdiction. However, the States' low participation has left most of the burden with EPA. In September 1973 the EPA Administrator said it was unlikely that all permits could be issued by December 31, 1974, without more State participation.

The States' low participation was exemplified in EPA's region V. The region V work plan for fiscal year 1974 showed that four of the six States in the region were expected to have an approved permit program by September 30, 1973. The regional office also expected an early shifting of the burden of issuing permits to the States and estimated that during the 3-month period ended September 30, 1973, it would issue 300 permits and the States would issue 366 permits.

During fiscal year 1974, the States were expected to issue 86 percent of all the permits in the region. Only three States in region V received EPA approval to operate a permanent permit program--Michigan in October 1973, Wisconsin in February 1974, and Ohio in March 1974. As of April 30, 1974, 1,153 industrial permits had been issued in region V--758 by the EPA regional office and 395 by the States.

EPA officials attributed the following reasons for the delays in State submissions of requests for EPA approval of their permit programs.

--Time needed by States to write and obtain enactment of required State legislation, prepare regulations, and prepare a request for a State program.

--Demands placed on limited State agency resources, staffing, and funding.

EPA officials gave the following reasons for withholding approval of some State programs.

--Several States requested EPA to waive its authority to review their permits.

--One State was reluctant to impose noncompliance penalities large enough to be an economic deterrent to violations.

Region V officials said the key to success in the permit program is obtaining States' full cooperation, but the States had not placed an early priority on obtaining approved programs. The officials said further that the regional office would not have sufficient personnel to process permits if the States did not obtain approved programs and that they were also concerned about whether the States would have the necessary staffing after their programs are approved.

In a letter to us dated October 4, 1974, New York's Department of Environmental Conservation, in commenting on the few States with approved permit programs, stated that:

> "None of the reasons ascribed to reluctance in taking over the federal permit program apply to New York. The basic reason for not taking over is the unrealistic date of December 31, 1974 for issuance of all permits. The transition from federal to state administration has been shown to result in a hiatus of three to five months during which few if any permits are issued. Since New York industries numerically outrank those for any other State, it is considered to the best interest of the total NPDES program not to impair permit issuance procedures for the large number of dischargers in New York by transfer of authority during the critical period preceding December 31, 1974."

The potential for accelerating the discharge permit program by approving State permit programs early, however, is exemplified in EPA's region IX, where California's program was approved in May 1973. EPA records indicated that, of 454 industrial permits issued in region IX through April 30, 1974, 342, or 75 percent, were issued by California and 112, or 25 percent, were issued by the EPA regional office in San Francisco.

Data not available for issuing permits on the basis of water quality standards

Water quality standards are closely integrated with the 1983 interim goal of protecting fish, shellfish, and wildlife and for

recreation in and on the water. In the permit program, water quality standards will serve as a mechanism to determine whether effluent limitations based on control technology are meeting the water quality goals of the act. Where effluent limitations are not sufficient to meet water quality standards, EPA or the States may establish more stringent limitations and impose them in the permits.

States must undertake adequate monitoring programs to gather accurate information on water quality from each segment of every basin[1] to determine whether controlling discharges from point and nonpoint sources will achieve water quality standards. From this information, each segment of a waterway will be classified either as (1) a water-quality-limited segment in which water quality standards cannot be met by controlling discharges from point sources on the basis of control technology or (2) an effluent-limited segment in which water quality standards can be met or in which there is reasonable assurance that such standards can be met by applying effluent limitation guidelines.

For any segment that is classified as water quality limited, States must assign maximum daily load limits to facilities restricting the discharge of pollutants from point sources. EPA's water strategy paper, dated March 15, 1974, provides that:

> "If, by the beginning of FY 1975, analysis for load allocations has not been performed in water quality limited segments, industrial permits to dischargers in those segments should be written on the basis of effluent guidelines. If, by the same time, guidelines have not been published for a category of sources, and are not expected to issue in time for the December 1974 deadline, permits to industrial dischargers should be written on the basis of the best technical judgment of feasible control technology for that category."

As of June 30, 1974, of 2,087 water-quality-limited segments requiring analysis, 1,222, or 59 percent, had been analyzed. An EPA official said that early in the process of classifying segments and making waste-load allocations, EPA recognized that all water quality

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[1]Streams, rivers, and tributaries, and the total land and surface water area.

segments could not be adequately analyzed by the July 1, 1974, deadline for use in permits, because the mass and complexity of the problem was much more than could be handled with available resources. Therefore, EPA identified a manageable portion of the segments and established goals for completing those segments. According to this official, the completion goal for July 1, 1974, was exceeded.

The States in region V had identified 459 of 849 river basin segments as water quality limited. As of November 1, 1973, however, waste-load allocations had been completed for 150, or about one-third, of the identified water quality limited segments. Estimated completion dates for waste-load allocation data for the other water-quality-limited segments ranged from November 1973 to sometime in fiscal year 1975.

To help achieve the goal of issuing permits by December 31, 1974, region V had agreed with one State to process and issue permits on the basis of best practicable control technology for water-quality-limited segments of two rivers. The agreements affected about 66 dischargers and were made on the basis that the waste-load allocation data would not be available in time to issue the permits by December 31, 1974, and that the application of best practicable control technology would be sufficient to meet the water quality standards for these segments.

Region V officials said that, although many major dischargers were in areas where the waste-load allocations had not been established, they had already drafted most of the industrial permits, some of which were based on the best practicable technology.

In region II at least 625 of about 1,800 industrial dischargers are located in water-quality-limited segments for which waste-load allocations were not expected by mid-1974. Consequently, the permits for these 625 industrial dischargers were to be issued on the basis of technology.

Because States have not completed waste-load allocation data in river basin segments identified as water quality limited, many dischargers are likely to be issued permits containing effluent limitations based on technology which may not be sufficiently stringent to achieve water quality standards.

Review of EPA regional office permit program operations

We reviewed the operating procedures followed by three regional offices--Chicago, San Francisco, New York--to implement the permit program. Each office and the States in their regions had issued permits to less than 35 percent of the permit applicants, and they were experiencing some of the same problems in carrying out the program.

The following schedule shows the number of applications received and the number of permits issued by the three regional offices or the States in their regions as of April 30, 1974.

	Applications received	Permits issued	Percent
Chicago	4,948	1,153	23
San Francisco	1,396	455	33
New York	1,789	232	13

To demonstrate how these regional offices were operating the permit program, the operating procedures followed by the New York regional office are discussed below. It should be pointed out, however, that each of the regional offices had peculiar circumstances that differed from the other regional offices' operations.

The New York regional office established a goal to issue about 1,350 industrial discharge permits by December 31, 1974; the remaining 439 permits were not expected to be issued to applicants until 1975. Regional office officials told us that the permits to be issued in 1975 were for minor dischargers who had little effect on the environment.

As of April 30, 1974, EPA's New York regional office had issued 232 industrial permits--70 to major dischargers and 162 to minor dischargers. However, the regional office had prepared and submitted 979 final draft permits to States for their certification before issuing the permits.

The Chief of EPA's New York regional office, Industrial Water Facilities Branch, told us the lack of effluent limitation guidelines was not deterring the issuance of permits.

Two prime reasons given for the small number of permits issued were

--States' delays in certifying final draft permits submitted by the regional office and

--States' slowness in developing waste-load allocation data for water-quality-limited river basin segments.

Contributing to the slowness of issuing permits was the fact that none of the States in the New York region had approved permit programs. New York regional officials told us that, in establishing effluent limitations in permits applying best practicable control technology, they used either EPA interim effluent guidelines or their best technical judgment of control technology when the interim guidelines did not apply. The regional office had issued 24 permits to industrial dischargers and had submitted 490 draft permits to States for their certification through December 1973, before EPA's publication of any final guidelines.

Of the 10 permits we reviewed in the New York regional office, 9 showed that pollutant limitations were established primarily on the basis of either EPA inerim guidelines or State water quality standards. According to EPA regional officials, the regional office issued one permit to a large chemical industry discharger on the basis of the regional office's assessment of best practicable technology because no usable interim effluent guidelines existed and the office felt compelled to get this major polluter on an abatement schedule.

The company countered with its own proposals and the two parties negotiated the differences. EPA officials said that, because of the multiplicity of products and processes in the chemical industry, personal judgment would be required in determining permit conditions even after EPA published final guidelines.

All permits issued in region II were for a fixed term of 5 years, the maximum period allowed by the act. Region II officials believed that it would be unfair to issue permits with shorter durations and then require more stringent limitations within a few years on the basis of guidelines. They also believed that water pollution control would not be aided by allowing dischargers to continue to pollute while awaiting final guidelines.

Potential conflict between provisions of permits and final guidelines

As many as 5,750 discharge permits--about 21 percent of the total industrial discharge permit applications on file with EPA--may have been drafted or issued through December 31, 1973, incorporating effluent limitations determined on the basis of EPA's interim effluent instructions or the judgment of the EPA regional offices or the States.

Since EPA does not expect to publish all final guidelines until 1975, and since its policy calls for issuing all discharge permits by December 31, 1974, many more permits probably will be prepared before the publication of final effluent limitation guidelines.

Although guidelines had not yet been published, EPA regional and State officials in regions II and IX preferred issuing discharge permits for the statutory maximum 5-year period on the basis that

--it would be unfair to the dischargers to issue permits with shorter durations and then require more stringent limitations within a few years on the basis of final guidelines,

--the issuance of permits for the maximum 5-year period would ease the administrative workload of the permit program, and

--it was not acceptable to allow dischargers to continue to pollute the Nation's waters while awaiting final guidelines.

We recognize the desirability of placing polluters under pollution abatement schedules as soon as possible and the need to process as many permits as possible by December 31, 1974, so that permit applicants will not be subject to prosecution. However, such permits may contain effluent limitations less stringent than those prescribed in the subsequently issued guidelines. If issued for the maximum 5-year period, this could result in some industrial dischargers' not meeting the legislative requirements that they apply the best practicable control technology currently available by July 1, 1977.

EPA agreed that permits issued before final guidelines may contain effluent limitations less stringent than those subsequently pre-

scribed in the guidelines. EPA stated, however, that in most cases the permits contained effluent limitations either equivalent to or more stringent than those prescribed in the final guidelines. EPA further stated that it opposed modifying permits on a regular basis because industrial dischargers would not proceed with the implementation of permit conditions under the threat of changing requirements and direction. Therefore, the minor added accuracy to be achieved through permit modification would not be worth the resultant delay of water cleanup.

CHAPTER 6

DELAY IN EFFECTIVE AREAWIDE PLANNING TO CONTROL WATER POLLUTION

Section 208 of the act provides for the development and implementation of areawide waste treatment management plans. Pursuant to this section of the act, States are to designate areas which have major water quality problems and a single representative organization capable of developing effective areawide waste treatment management plans for the area. The amendments required EPA to publish areawide planning guidelines by January 16, 1973, but EPA did not publish final guidelines until September 14, 1973.

The Subcommittee Chairman asked us to analyze the effect the delayed publication of areawide planning guidelines would have on carrying out regulatory provisions of the act, as amended in 1972 (sections 301, 302, 306, 307, and 402). Because of the extended time frame provided by the act for the States to submit areawide waste treatment management plans for EPA's approval, the delayed publication of these guidelines will have only a limited immediate effect.

EPA's delayed publication of areawide planning guidelines deferred EPA's approval of planning organizations and the preparation and approval of areawide waste treatment management plans. The regulatory powers in section 208 will probably not be effectively used to control and abate water pollution until fiscal year 1977 or later. Consequently, implementation of areawide planning for areas with major pollution problems could be delayed about a year which could also delay

- --implementing areawide waste treatment management requirements for controlling or treating point and nonpoint sources of pollution;

- --establishing land use requirements and controlling the location, modification, and construction of discharging facilities; and

- --establishing plans to insure that industries discharging into treatment plants meet applicable pretreatment requirements.

State officials in the six States reviewed told us they were either reluctant to designate section 208 planning agencies or concerned with problems of implementing areawide planning.

The Chairman was also concerned that EPA's areawide planning regulations permitted a single agency to be responsible for planning in more than one planning area. In a letter dated November 23, 1973, we told the Chairman that we had found nothing to preclude a section 208 planning agency from serving more than one area so long as all the requirements of the act were met.

SLOW IMPLEMENTATION OF AREAWIDE MANAGEMENT PLANNING

The stated purpose of section 208 is to encourage and facilitate the development and implementation of areawide waste treatment management plans. It provides, in part, that:

--EPA shall publish by January 16, 1973, guidelines for identifying those areas which, as a result of urban-industrial concentrations or other factors, have major water quality control problems.

--State Governors will identify each area and designate (1) the boundaries and (2) a single representative organization, including elected officials from local governments or their designees, capable of developing effective areawide waste treatment management plans for the area. If a Governor does not act either by designating or by determining not to make a designation within 180 days after publication of the guidelines, the chief elected officials of local governments within an area may, by agreement, make the designations.

--The planning organization for an area has 1 year from the date of designation to establish a continuing areawide waste treatment management planning process. Within 2 years after the planning process is in operation, the Governor will certify an initial plan prepared according to the planning process and submit it to EPA for approval.

--EPA will make grants to designated planning agencies for paying the costs of developing and operating continuing areawide waste treatment management planning processes.

On May 30, 1973, EPA published proposed guidelines for identifying the areas having major water quality control problems and for designating areawide waste treatment management planning agencies and on September 14, 1973, published final guidelines.

EPA said it failed to publish guidelines by the statutory date of January 16, 1973, because of the time needed to obtain comments from State and local governments who were interested in the regulations and the nature of areawide planning agencies and because areawide planning needed to be coordinated with other Federal regional planning programs. EPA officials told us that limited resources also contributed to the delay.

After EPA guidelines were issued, the States had 180 days (by March 1974) to submit their designations of planning areas and agencies to EPA for approval. EPA headquarters retained the final approval authority for area and agency designations and did not plan to approve any fiscal year 1974 designations until all designations had been received from the States--designation approvals were expected to be made in April 1974. As of September 30, 1974, EPA had approved 19 designations--1 in April 1974, 13 in June 1974, 1 in July 1974, 2 in August 1974, and 2 in September 1974--and 5 designations were under review at EPA headquarters.

If EPA had published the guidelines by January 16, 1973, as required by section 208, the State Governors would have been required to certify and submit the initial areawide waste treatment management plan to EPA's Administrator no later than mid-July 1976.

Because EPA delayed publication of areawide planning guidelines and deferred approval of designated planning organizations until April 1974, the States will have until April 1977 or later to submit the plans. Consequently, implementation of areawide planning for areas with major pollution problems could be delayed about a year.

EPA believes that the delayed issuance of guidelines would not be detrimental to achieving the objectives of the program. In February

1973 EPA's Deputy Administrator said:

> "It would be impossible to get a section 208 agency up and running in time to influence the actions that will lead to the attainment of the 1977 goal. Therefore, we view the 208 agency as a device to target in on the very difficult problems that are not solved by 1977, but must be by 1983."

Government funds for section 208 planning

To finance the costs of developing and operating a continuing areawide waste treatment management planning process, section 208 authorizes EPA to award designated areawide planning agencies grants totaling $50 million, $100 million, and $150 million for fiscal years 1973, 1974, and 1975, respectively. Section 208 also provides that EPA's approval of a grant application be deemed a contractual obligation of the United States.

Because guidelines were not published by January 16, 1973, no portion of fiscal year 1973 funds was requested by EPA nor apportioned or released by the Office of Management and Budget, and only $25 million of the $100 million available for fiscal year 1974 was apportioned. For fiscal year 1975, $120 million of the $150 million authorized by the 1972 amendments was apportioned.

Since section 208 affords the State Governors up to 180 days following the issuance of EPA guidelines to submit designations of planning areas and agencies, Governors' time for implementation could have extended beyond the end of fiscal year 1973 even if EPA had issued the guidelines by the January 16, 1973, deadline, thereby precluding EPA from awarding grants to areawide planning agencies in their States during fiscal year 1973.

States' problems with areawide planning

State water pollution control agency officials in the six States reviewed told us they were concerned with the problems entailed in implementing section 208. Three States were reluctant to designate section 208 areas and waste treatment management planning agencies.

One State had selected several areas for consideration as potential section 208 areas subject to public hearings. Officials of

this State told us, however, that their State would not designate a section 208 area unless a local plan could resolve serious water pollution problems better than State areawide planning. Subsequently, this State designated two section 208 areas which EPA was reviewing in May 1974.

State officials also said that:

--Areawide planning agencies were not needed if the State had been active in planning and implementing a water quality program.

--Abatement actions included in State areawide plans could be delayed while section 208 planning agencies developed their own plans which are not required to be submitted until 3 years after the agencies are designated.

--Many municipalities would view areawide planning as an encroachment on their local zoning authority which they were unwilling to relinquish; therefore, these municipalities might not enter into required cooperative agreements.

--Designations of multiarea planning organizations would compound the problems of getting local cooperation and agreement because of municipalities' strong home rule attitude.

EFFECT ON AMENDMENTS' REGULATORY PROVISIONS

EPA's delayed publication of the areawide waste treatment management planning guidelnes will have only a minor immediate effect on the operation of controls applied through sections 301, 302, 306, 307, and 402 of the act. If EPA had met the statutory deadline, the States would not have been required to submit initial plans to EPA for approval until mid-July 1976. It appears that the planning agencies would have only a limited opportunity to help meet the 1977 requirements. Therefore, the principal impact of section 208 in carrying out regulatory provisions would be on efforts to meet the 1983 requirements.

Sections 301, 302, and 402

Section 301 requires, in part, the achievement of effluent limitations for industry on the basis of best practicable technology

currently available by July 1, 1977, and best available technology economically achievable by July 1, 1983. It also requires the achievement of effluent limitations on the basis of (1) secondary treatment for publicly owned treatment works in existence on July 1, 1977, or approved before June 30, 1974, and constructed within 4 years of approval and (2) best practicable waste treatment technology for publicly owned treatment works by July 1, 1983.

Section 301 further requires the achievement by July 1, 1977, of any more stringent limitations, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any Federal or State law or regulations.

Section 302 provides that, whenever effluent limitations for a point source based on best available technology or best practicable waste treatment technology required by July 1, 1983, interfere with attaining or maintaining water quality in a specific portion of the navigable waters, more stringent effluent limitations be established.

Section 402 provides for the issuance of permits to enforce the effluent limitations. (The issuance of permits to industrial dischargers is discussed in chapter 5.) These effluent limitations will be applicable nationwide, except in those areas where more stringent limitations are needed to meet water quality standards or certain other requirements.

EPA's goal under the permit system is to issue initial discharge permits to all dischargers by December 31, 1974. The permits may be issued for a maximum of 5 years. Since section 208 areawide planning program probably will not be implemented for several years, the program will have no apparent effect on the effluent limitations in the first round of permit issuance.

Section 208 areawide management plans could affect effluent limitations in the second round of permit issuances if the need to meet water quality standards calls for more stringent limitations than provided by EPA's effluent limitation guidelines. Section 208 planning agencies could control the number and types of new dischargers through their regulatory powers governing land use and the location, modification, and construction of discharging facilities.

Section 306

This section requires EPA to publish regulations establishing Federal standards of performance for new discharge sources. These standards relate to the control of pollutant discharges and encourage the greatest degree of effluent reduction achievable. They are based on technology and are independent of section 208. However, the standards could be used by a section 208 planning agency in carrying out its regulatory controls over new discharging facilities.

Section 307

Section 307 requires EPA to promulgate standards for toxic materials and for pretreating pollutants discharged into publicly owned treatment works. The pretreatment standards would apply to pollutants which could not be treated by a treatment plant or which could interfere with its operation. Both standards would be applicable nationwide without regard to specific section 208 implementation.

Implementation of the standards could be facilitated by areawide planning agencies. Section 208 requires that areawide waste treatment management plans include a regulatory program to insure that industrial or commercial wastes discharged into an area treatment plant meet applicable pretreatment requirements.

CHAPTER 7

EPA'S ASSESSMENT OF U.S. CONSTRUCTION CAPABILITY TO BUILD MORE SEWAGE TREATMENT FACILITIES

Early in 1972 EPA stated in an in-house study that the construction industry was experiencing increasing difficulty in supplying the services needed for sewage construction at the rate matching available Federal funding.

The Subcommittee Chairman asked us to review in several States EPA's claim that the construction industry could not provide the services needed for constructing publicly owned waste treatment facilities under the 1972 amendments.

After the Chairman's request, EPA concluded on the basis of three studies that the construction industry should be able to build the required waste treatment facilities without large price increases. Many State and construction industry officials also told us that the construction industry could meet the demands for constructing treatment facilities.

After the three contractor reports on U.S. construction capability were received in December 1972, April 1973, and October 1973, EPA stated in its December 1973 report to the Congress entitled "The Economics of Clean Water," that:

> "The economic impacts and other constraining factors examined, other things being equal, in EPA's view should not significantly retard the accelerated program launched by the 1972 amendments to control pollution from municipal and industrial sources.***"

* * * * *

> "The results of econometric models indicate that the construction industry should be able to build the required facilities with real price increases of less than 1 percent attributable solely to EPA-stimulated demand, assuming resource transferability within the construction industry. The skilled labor needed

should be available but there will be some impact on wages. In some localities, the construction industry may lack adequate short-term capacity, especially in light of changes in the Nation's economy that may result from the recent devaluations and the energy crisis."

Two of the three EPA contractors reported that assessments of construction industry capability in individual States was not feasible because needed data was not available and State construction trends frequently varied from national trends.

REVIEW IN SIX STATES

Our review of construction industry's capability to build more sewage treatment facilities included examining records on construction activity, interviewing officials of State and local governments and of the construction industry, and inquiring into the availability of data which might show the construction industry's capacity to construct treatment facilities authorized by the 1972 amendments.

Our analysis in the six States showed reasonably active bidder interest in projects for constructing treatment facilities. However, we were unable to assess on a State-by-State basis the construction industry's capability to build sewage treatment facilities at a rate matching the funding authorized by the 1972 amendments because resources could be drawn from other States and statistical data and studies were not available.

Mobility of construction industry resources

Many contractors are mobile and bid on distant out-of-State projects. For example, of eight contractors who bid on a contract for constructing an interceptor sewer in New York in 1973, only one was based in that State. The other seven contractors were based in other States, including Nebraska and Illinois.

With full funding as authorized by the 1972 amendments and the increased construction of sewage treatment facilities nationwide, contractors would have less incentive to compete for distant projects, thereby possibly reducing construction capacity in some areas.

An officer of a large consulting engineering firm told us that an expanded waste treatment facilities construction program would require engineers from an out-of-State office and full funding of the program might cause difficulty in getting enough engineers in certain locations.

Analysis of contractors' bids

To get an indication of construction industry interest in building treatment facilities, we analyzed the bids received in 1973 on selected projects in the six States. The results of our analysis are summarized in the following table.

	Number of contracts	Number of bids	Average number of bids per contract
California	19	155	8.2
Illinois	11	58[a]	5.3
Michigan	3	17	5.7
Ohio	12	64	5.3
New Jersey	2	26	13.0
New York	25	142	5.7

[a]The consulting engineer for a project for constructing an interceptor sewer in southern Illinois on which no bids had been submitted blamed a saturated construction market in the area and a tight 12-month completion schedule.

STATE, LOCAL GOVERNMENT, AND INDUSTRY OFFICIALS' COMMENTS

State, local government, and construction industry officials differed in their opinions as to whether the construction industry was capable of constructing a large number of additional facilities. Some questioned the availability of special equipment and experienced design engineers, but many believed that the construction industry would encounter no serious problems in meeting increased treatment facilities construction demands. However, they were unable to identify any studies or data showing the extent of the construction industry's capacity to construct additional treatment facilities in the six States.

California

An official of a major contractor's assocation in California told us that the construction industry could handle a greatly increased workload and, in fact, many California-based firms were seeking work outside the State. He said, however, that the licensed contractors with the engineering design capability required for public utility-type construction, such as waste treatment projects, were not looking for work to the same extent as other general contractors.

He doubted that these contractors could handle the number of projects that would be initiated under the full funding of the act; the problem was not in obtaining the general-type construction workers or the skilled craftsmen but was in obtaining the needed number of experienced design engineers. It would take time to either train additional water quality engineers or bring them in from other areas.

State water pollution control agency officials told us that they believed the construction industry was capable of handling an expanded waste treatment construction program. The executive director cited discussions with representatives of contractors, labor, engineering consultants, and equipment suppliers who assured him that they could service a greatly expanded treatment facilities construction program. The executive director acknowledged, however, that some manpower resources would have to be drawn from other parts of the country to help meet the needs of the expanded program.

The State water pollution control agency officials also told us that, although they had neither experienced nor heard of problems with the construction industry, they had had problems with the work of inexperienced design engineers.

Illinois, Michigan, and Ohio

Officials of the State environmental agencies in Illinois, Michigan, and Ohio, as well as officials of various construction industry professional societies and trade associations, agreed that the construction industry could have provided the necessary services to construct more projects if more Federal funds had been made available. Some cited cutbacks in Federal highway and housing construction, thereby making more construction resources available for waste treatment construction.

New York and New Jersey

Some State and local government and industry officials were doubtful about the availability of certain materials, special equipment, and engineering capability. The officials generally agreed, however, that the construction industry could provide the necessary services to construct more facilities. Some of the officials cited the following factors to support their opinions.

--Local contractors were operating much below their capacity and were competing against other contractors from across the country.

--Bidding for projects was active and most bids were lower than the engineering cost estimates.

--Construction of highways and buildings had decreased, thereby making more resources available for constructing treatment facilities. Contractors and engineers could easily convert to sewage treatment construction.

--The labor force was available for construction work. For example, many unemployed skilled and unskilled construction workers were in New York City.

CHAPTER 8

CONCLUSIONS, AGENCY AND STATE COMMENTS, AND MATTER FOR CONSIDERATION BY THE SUBCOMMITTEE

The 1972 amendments established a national goal of eliminating the discharge of pollutants into navigable waters by 1985 and an interim goal of water quality sufficient for the protection and propagation of fish, shellfish, and wildlife and for recreation by 1983. It is doubtful that these goals will be achieved unless greater progress is made in implementing provisions of the 1972 amendments.

Many States and municipalities did not meet EPA requirements in its regulations for awarding construction grants. As a result, there were delays in EPA's providing financial assistance to municipalities to construct sewage treatment plants that would meet secondary treatment standards by July 1, 1977, as required by the amendments.

EPA has encountered considerable problems in meeting the timetables established by the amendments. It apparently took prompt action to develop industrial effluent limitation guidelines but was unable to publish them by the required date of October 18, 1973.

Because the guidelines were not available when needed, EPA and States issued pollution discharge permits to industrial dischargers on the basis of interim instructions and assessments of control technology for pollution discharges of individual permit applicants. Such permits may contain effluent limitations less stringent than those prescribed in the guidelines and, if issued for the statutory 5-year maximum, could result in some industrial dischargers' not meeting the legislative requirement that they apply the best practicable control technology currently available by July 1, 1977.

EPA is also experiencing problems issuing industrial pollution discharge permits, and it is unlikely that permits will be issued to all dischargers by December 31, 1974. After this date, dischargers who have submitted applications for, but have not received discharge permits, are no longer immune from either governmental or citizen legal actions even though EPA or States with EPA-approved permit programs were unable to promptly process their permit applications.

The 1972 amendments required EPA to publish areawide waste treatment planning guidelines by January 16, 1973, but EPA did not publish final guidelines until September 14, 1973. The delayed publication of the guidelines and the reluctance of some States to designate planning organizations has deferred for about a year the preparation and approval of areawide waste treatment management plans for areas with substantial pollution problems.

Consequently, most planning organizations probably won't use regulatory powers to effectively plan for the control and abatement of water pollution in areas with major water pollution problems until fiscal year 1977 or later.

Also:

--The President's impoundment of $9 billion of the $18 billion authorized by the amendments for construction grants could seriously hamper the progress of many municipalities, once the administrative and legislative requirements are met, in achieving secondary treatment and the goal of the 1972 amendments of eliminating the discharge of pollutants into navigable waters by 1985. Further, funds needed by municipalities to construct eligible facilities--$60 billion according to EPA--far exceed the funds authorized by the amendments.

--EPA's regional goals for obligating funds for constructing municipal sewage treatment facilities did not preclude regional offices from awarding each State's proportionate share of the $5 billion allocated for fiscal years 1973-74, and increases to individual regions were made where appropriate.

--Funding of step 2 + 3 projects was not consistent with the provisions of the 1972 amendments or its legislative history, and on July 1, 1974, the Comptroller General told the Administrator, EPA, that the regulations should be revised to preclude such projects.

--EPA concluded that the U.S. construction industry should be able to build treatment facilities at a rate matching available Federal funding without significantly contributing to inflation.

AGENCY AND STATE COMMENTS

In August 1974 this report was submitted to EPA and the water pollution control agencies of the six States included in our review.

With respect to the termination of immunity from legal actions after December 31, 1974, for dischargers who have submitted applications for, but have not received, discharge permits because the applications were not administratively completed, EPA said that it was committed to issue substantially all major permits by December 31, 1974. EPA said also that:

--EPA did not intend to take enforcement action against any applicant whose permit could not be issued by the deadline and intended to discourage such action by citizen groups. Since a citizen is required to notify EPA 60 days before commencing legal action, EPA would try to issue the permit during that period.

--In the opinion of EPA's General Counsel, a court would not find a discharger in violation of the act for failure to have a permit when the administering agency has failed to take action on the permit application.

According to the cited EPA legal opinion, the opinion was based on "an interpretation of rather sparse and confused case law and an ambiguous section of the statute." Even if, as EPA believes, a court would be unlikely to find a discharger in violation of the act when the administering agency had failed to take action on the permit application, a discharger could still be subject to expensive and time-consuming litigation.

The EPA legal opinion also recognized that there will be a large number of permits which will not be issued by December 31, 1974, to those sources who filed applications. Therefore, many dischargers would no longer be immune from legal actions after that date.

Five of the six States water pollution control agencies submitted comments which we evaluated and appropriately considered in the report. An official of the sixth State agency told us that the agency

agreed, in general, with our findings but did not intend to submit comments.

--The California Water Resources Control Board stated that the goals of the act would not be met primarily because Federal funding was inadequate and achievement of the goals was too big a job for the amount of time and engineering manpower available.

--The Michigan Department of Natural Resources stated that the slowdown of the construction grant program was caused by EPA s inability to timely promulgate regulations and by the constantly changing requirements a community had to meet before a grant was made.

--The New York Department of Environmental Conservation attributed the responsibility for the slow implementation of the act to EPA's rigorous application of stringent requirements.

--The New Jersey Department of Environmental Protection and the Illinois Environmental Protection Agency indicated substantial agreement with the information presented.

MATTER FOR CONSIDERATION BY THE SUBCOMMITTEE

To discourage the possibility of legal action against a discharger who has not been issued a permit by December 31, 1974, even though he has made proper application, the Subcommittee may wish to propose amending section 402(k) of the Federal Water Pollution Control Act, as amended, to provide that such a discharger shall not be in violation of applicable provisions of the act because a permit has not been issued.

United States Senate

COMMITTEE ON PUBLIC WORKS
WASHINGTON, D.C. 20510

June 29, 1973

Honorable Elmer B. Staats
Comptroller General
General Accounting Office
441 G Street, N.W.
Washington, D.C.

Dear Mr. Comptroller:

Recent decisions of the Environmental Protection Agency relating to the 1972 Federal Water Pollution Control Act Amendments, taken in proposed and promulgated regulations, internal policy documents, and through the issuance of discharge permits appear to be inconsistent with the requirements of the law. These decisions require an analysis and documentation of their extent.

Most recently, several decisions discussed below have come to the attention of the staff of the Subcommittee on Air and Water Pollution on which your review and recommendation is requested.

1. The Agency has apparently been instructed by the Office of Management and Budget to impound $2.9 billion of allocated funds for FY 1973 and FY 1974. Recently, the Agency "learned" that the new formula under the law, which requires immediate payment to communities as project work is completed and requires that final plans, specifications and estimates must precede the actual contractual obligation of the United States, has radically revised the level of outlays to be expected as a result of Federal grant obligations.

In other words, while the Agency only expected $200 million in outlays in fiscal 1974, it now appears that that figure will be considerably higher (as much as $600 million) and will rise in proportion to any obligations in excess of the OMB-permitted $2.1 billion for FY '73-'74. The Office of Management and Budget has told the Agency that they cannot enter into obligations which would require an outlay of expenditures in excess of $600 million in fiscal 1974. Thus, in addition to cutting back the allocation to States from $11 billion to $5 billion for those two fiscal years, the Agency has further cut back the available funds for obligation to $2.1 billion. This means of course that the program will proceed at a pace which is almost equal to the pace that was set in 1972 and 1973 when $2 billion was authorized (prior to enactment of the 1972 Act which raised FY 1973 authorization to $5 billion).

The Subcommittee on Air and Water Pollution is very concerned about what effect this will have on the overall implementation of the 1972 Act.

2. The Agency has made a decision to allocate, regionally, the limited funds available as the result of the allocation and further impoundment decisions. In other words, rather than having money available on a State-by-State basis in proportion to the State's share of the apportioned funds, each regional Administrator will be permitted to approve projects without regard to State share of its overall allocation. This means that the regional Administrator could refuse to fund projects entirely in certain States while funding projects in other States at or near the maximum apportionment that that State might receive under the $5 billion figure.

The Subcommittee is concerned that this will operate to discriminate between State programs in a manner not anticipated or authorized by the 1972 Act and would violate the mandatory requirements of Section 203.

3. Even in the face of clear legislative history, the Agency has determined that the Congress did not intend that the project approval grant obligation process should be similar to the Federal-Aid Highway Program which requires a submission of plans, specifications and estimates suitable for bidding prior to grant obligation on the part of the United States. Rather, EPA has determined that a complete treatment works project can be approved before preparation of plans, specifications and estimates with each portion of the project or the entire project subject to approval at some later date, though a contractual obligation to pay the Federal share of the completed projects cost would occur at the time of initial approval.

The EPA policy is adopted in the face of the following statement of the Managers:

> "Under the conference substitute, which is a program modeled after the authority and procedures under the Federal-Aid Highway Act, each stage in construction of a waste treatment facility is a separate project. Consequently, the applicant for a grant furnishes plans, specifications and estimates (PS&E) for each stage (which is a project) in the overall waste treatment facility which is included in the term 'construction' as defined in section 212. Upon approval of the PS&E for any project, the United States is obligated to pay 75 percent of the costs of that project. Thus, for instance, the applicant may file a PS&E for a project to determine the feasibility of a treatment works, another PS&E for a project for engineering, architectural, legal, fiscal, or economic investigations, another PS&E for actual building, etc.
>
> "In such a program, the States and communities are assured of an orderly flow of Federal payments and this should result in substantial savings and efficiency."

Also, this policy means that the Agency will be committing funds for total projects rather than for discrete segments of projects. The Congress intended this to be a method of making more funds available at a more rapid rate to assure initiation and steady progress toward completion of more projects. The effect of the Agency's policy is to force all of the funds available in the present tight money situation into a few limited areas rather than to have construction proceed on a broad front.

4. At this time, EPA has not promulgated any effluent guidelines for classes or categories of sources under section 304. Few permits have been issued under section 402 and those that have been are the result of individualized negotiation rather than any assessment of "best practicable technology" nationwide.

Could you assess this program in issuing guidelines under section 304 and the effect of the performance of the Agency in this area on implementation of the permit program under section 402.

5. Planning - The Act moved planning decisively toward management and regulation through the areawide control structure set up under section 208. These plans are directed at sources rather than ambient controls as developed under the 1965 Act. To support this new planning mechanism, section 208 authorized 100% grants with contract authority for 2 years. EPA has only recently published proposed guidelines to initiate the implementation of this authority and these guidelines hardly merit the name. For instance, they provide that 208 planning agencies can serve more than one 208 area. This is apparently to allow HUD established Regional Planning Commissions and others to serve as 208 agencies. Could you analyze the restrained implementation of the 208 program by the Agency as it will affect the overall operation of the controls applied through sections 301, 302, 306, 307 and 402?

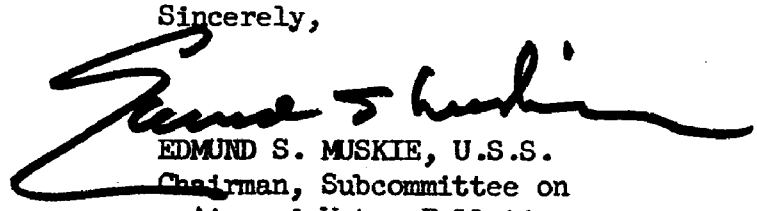
6. The EPA has alleged the construction industry is not capable of absorbing more than the funds they are making available - after refusal to allocate and impoundment - under the 1972 Act. Could you review this allegation with respect to at least some representative states?

7. Under Section 101(a)(6) and further elaborated especially in Section 104(d)(1) (relating to municipal systems under section 201 which confine and contain pollutants) EPA is mandated to conduct and support research. The Subcommittee is concerned that the Agency has not undertaken satisfactorily the research programs necessary to implement the new concepts established in the 1972 Amendments. Would you please review the Agency's efforts in pursuing these new concepts?

Honorable Elmer B. Staats
Page Four
June 29, 1973

The Subcommittee on Air and Water Pollution would appreciate your review of the Agency's actions in the above described areas, documenting their actions, proposed or promulgated, against the timetables and standards set out in the Act. The Subcommittee would also appreciate your recommendation for remedies, including any need for legislation.

Sincerely,



EDMUND S. MUSKIE, U.S.S.
Chairman, Subcommittee on
Air and Water Pollution

COMPARISON OF EPA'S ALLOCATIONS OF CONSTRUCTION GRANT FUNDS TO SIX STATES WITH AMOUNTS AUTHORIZED BY 1972 AMENDMENTS

	Allocated by EPA for		Authorized by 1972 amendments		Difference	
	FY 1973	FY 1974	FY 1973	FY 1974	FY 1973	FY 1974
	(000 omitted)					
Region II:						
New Jersey	$154,080	$ 231,120	$ 385,200	$ 462,240	$ 231,120	$ 231,120
New York	221,156	331,734	552,890	663,468	331,734	331,734
Region V:						
Illinois	124,978	187,467	312,445	374,934	187,467	187,467
Michigan	159,628	239,442	399,070	478,884	239,442	239,442
Ohio	115,474	173,211	288,685	346,422	173,211	173,211
Region IX:						
California	196,352	294,528	490,880	589,056	294,528	294,528
Total	$971,668	$1,457,502	$2,429,170	$2,915,004	$1,457,502	$1,457,502

COMPARISON OF EPA'S ALLOCATIONS FOR FISCAL YEARS 1973-74 WITH OBLIGATIONS THROUGH DECEMBER 1973 FOR CONSTRUCTING SEWAGE TREATMENT FACILITIES UNDER PUBLIC LAW 92-500

	Allocations			Obligations[a]	
	FY 1973	FY 1974	Total	Amount	Percent obligated
	(000 omitted)				
Region I:					
Connecticut	$ 33,620	$ 50,430	$ 84,050	$ 40,747	48.5
Maine	19,350	29,025	48,375	34,181	70.7
Massachusetts	75,152	112,728	187,880	136,865	72.8
New Hampshire	16,618	24,927	41,545	25,171	60.6
Rhode Island	9,778	14,667	24,445	8,367	34.2
Vermont	4,436	6,654	11,090	2,525	22.8
	158,954	238,431	397,385	247,856	62.4
Region II:					
New Jersey	154,080	231,120	385,200	214,314	55.6
New York	221,156	331,734	552,890	221,285	40.0
Puerto Rico	17,690	26,535	44,225	---	--
Virgin Islands	1,786	2,679	4,465	---	--
	394,712	592,068	986,780	435,599	44.1
Region III:					
Delaware	13,130	19,695	32,825	---	--
Maryland	85,164	127,746	212,910	91,569	43.0
Pennsylvania	108,428	162,642	271,070	69,195	25.5
Virginia	58,286	87,429	145,715	84,173	57.8
West Virginia	9,998	14,997	24,995	2,955	11.8
District of Columbia	14,228	21,342	35,570	35,363	99.4
	289,234	433,851	723,085	283,255	39.2
Region IV:					
Alabama	7,224	10,836	18,060	212	1.2
Florida	72,528	108,792	181,320	18,793	10.4
Georgia	19,460	29,190	48,650	18,439	37.9
Kentucky	13,198	19,797	32,995	10,433	31.6
Mississippi	7,870	11,805	19,675	534	2.7
North Carolina	18,458	27,687	46,145	6,532	14.2
South Carolina	12,910	19,365	32,275	6,731	20.9
Tennessee	23,210	34,815	58,025	12,211	21.0
	174,858	262,287	437,145	73,885	16.9

	Allocations			Obligations[a]	
	FY 1973	FY 1974	Total	Amount	Percent obligated
	(000 omitted)				
Region V:					
Illinois	124,978	187,467	312,445	79,561	25.5
Indiana	67,324	100,986	168,310	26,192	15.6
Michigan	159,628	239,442	399,070	168,227	42.2
Minnesota	40,638	60,957	101,595	46,635	45.9
Ohio	115,474	173,211	288,685	112,706	39.0
Wisconsin	34,830	52,245	87,075	2,419	2.8
	542,872	814,308	1,357,180	435,740	32.1
Region VI:					
Arkansas	7,072	10,608	17,680	15,148	85.7
Louisiana	18,856	28,284	47,140	13,527	28.7
New Mexico	4,216	6,324	10,540	1,677	15.9
Oklahoma	9,216	13,824	23,040	6,434	27.9
Texas	55,388	83,082	138,470	52,713	38.1
	94,748	142,122	236,870	89,499	37.8
Region VII:					
Iowa	23,114	34,671	57,785	28,736	49.7
Kansas	7,484	11,226	18,710	5,358	28.6
Missouri	33,112	49,668	82,780	21,537	26.0
Nebraska	7,416	11,124	18,540	5,301	28.6
	71,126	106,689	177,815	60,932	34.3
Region VIII:					
Colorado	6,332	9,498	15,830	---	--
Montana	3,324	4,986	8,310	2,985	35.9
North Dakota	934	1,401	2,335	708	30.3
South Dakota	1,896	2,844	4,740	992	20.9
Utah	2,816	4,224	7,040	---	--
Wyoming	536	804	1,340	426	31.8
	15,838	23,757	39,595	5,111	12.9
Region IX:					
Arizona	2,692	4,038	6,730	1,468	21.8
California	196,352	294,528	490,880	62,666	12.8
Hawaii	6,606	9,909	16,515	---	--
Nevada	5,754	8,631	14,385	4,819	33.5
American Samoa	96	144	240	---	--
Guam	1,744	2,616	4,360	---	--
Trust Territory of Pacific	756	1,134	1,890	298	15.8
	214,000	321,000	535,000	69,251	12.9

	Allocations			Obligations[a]	
	FY 1973	FY 1974	Total	Amount	Percent obligated
	(000 omitted)				
Region X:					
Alaska	4,504	6,756	11,260	10,344	91.9
Idaho	4,354	6,531	10,885	3,477	31.9
Oregon	16,988	25,482	42,470	37,353	88.0
Washington	17,812	26,718	44,530	22,185	49.8
	43,658	65,487	109,145	73,359	67.2
Total (all States)	$2,000,000	$3,000,000	$5,000,000	$1,774,487	35.5

[a]Obligations include subsequent adjustments to grants through February 5, 1974.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Mr. Henry Eschwege
Director, Resources and Economic
Development Division
U.S. General Accounting Office
Washington, D. C. 20548

September 27, 1974

Dear Mr. Eschwege:

Your letter of August 9, 1974, to Mr. Train, requested our comments on the General Accounting Office's (GAO) report entitled "Slow Implementation of Federal Water Pollution Control Act Amendments of 1972." The draft has been reviewed by those in EPA having management responsibilities for the activities discussed in the report.

Specifically we would like to comment on two findings as follows:

The report states that because the guidelines were not available when needed, EPA and the states have issued pollution discharge permits to industrial dischargers on the basis of "interim instructions and assessments of control technology for pollution discharges of individual permit applicants." Such permits may contain effluent limitations less stringent than those prescribed in the final guidelines. This is true. However, in most cases our permits have contained effluent limitations that are either equivalent to or more stringent than those prescribed in the final guidelines. This is because we attempted to apply the same standards used for the final industrial guidelines on the earlier permits.

[See GAO note p. 62.]

Although at present all our permits contain a provision making them subject to modification for cause--as required by the Act, we oppose modifying the permits on a regular basis. We are primarily interested in cleaning the waters and unless industry is assured of the relative continuity of the permit conditions, they will not proceed with the implementation of their plans under the threat of changing requirements and direction. Considering how close our old permit conditions come to the current versions, we do not feel that the minor added accuracy is worth the unquestionable delay of water clean-up.

[See GAO note.]

We are committed to issue substantially all major permits by December 31, 1974. In those cases where we are unable to issue them on the deadline, we do not intend to take enforcement action against the applicant, and we intend to discourage such action from citizen groups. Any citizen action must comply with a 60-day notice provision to EPA during which time we would assuredly try to issue the permit.

We have a legal opinion from our General Counsel on this subject which has been transmitted to Congress. It describes the present state of the law as that, if a discharger has submitted a timely application for a permit, a court would not find a discharger in violation of the Act, even after December 31, 1974, for failure to have a permit when the administering agency has failed to take action on the permit application.

We appreciate the opportunity to review GAO's finding in draft form.

Sincerely yours,

Alvin L. Alm
Assistant Administrator
for Planning and Management

[GAO note: Material related to matters no longer discussed in the report has been deleted.]