

GAO

Report to the Ranking Minority Member,
Committee on Environment and Public
Works, U.S. Senate

March 1996

WATER POLLUTION

Many Violations Have Not Received Appropriate Enforcement Attention





United States
General Accounting Office
Washington, D.C. 20548

**Resources, Community, and
Economic Development Division**

B-270622

March 20, 1996

The Honorable Max S. Baucus
Ranking Minority Member
Committee on Environment
and Public Works
United States Senate

Dear Senator Baucus:

The quality of our nation's waters has improved since the Clean Water Act¹ was revised in 1972. This progress can be attributed, in part, to the permit program authorized by the act, which prohibits facilities from discharging pollutants in amounts exceeding those authorized in the facilities' discharge permits. If the progress made thus far against water pollution is to be sustained over the long term, facilities must continually control the pollutants they discharge as required by their permits.

Concerned about whether the major facilities² that discharge pollutants into the nation's waters have been complying with their discharge permits, you asked us to provide you with information on the frequency with which such facilities have violated their discharge permits. In response, we analyzed data from the Environmental Protection Agency's (EPA) Permit Compliance System and reviewed studies that EPA completed in 1992 and 1994. Our work revealed that the system, which was operating in accordance with EPA's existing policy, had not been classifying a substantial portion of violations appropriately. In view of this limitation and as requested, we agreed to obtain information on (1) the frequency of the facilities' violations, (2) the limitation in EPA's system and its effects, and (3) EPA's plans to take corrective action.

Results in Brief

Our analysis of EPA's compliance data for fiscal years 1992 through 1994 shows that major facilities have frequently violated their permits. For fiscal year 1994, for example, our analysis indicates that about 1 in 6 of the nation's 7,053 major regulated facilities significantly violated the discharge

¹The Federal Water Pollution Control Act, 33 U.S.C. 1251-1387, is generally referred to as the Clean Water Act.

²EPA classifies facilities (including municipal wastewater treatment plants and industrial and federal facilities) as major or minor, depending on the risk to the environment posed by the pollutants being discharged from the facility; the volume of pollutants being discharged; and, in the case of municipal wastewater treatment facilities, the size of the population being served.

limits in their permits.³ However, according to EPA officials and EPA's 1992 and 1994 studies, the actual number of significant violations of discharge limits may be nearly twice as high as EPA's compliance data have shown.⁴ In addition, the violations that EPA has not identified may be as serious from an environmental perspective as those that it has identified.

EPA does not identify all significant violations of discharge limits because its criterion for screening violations has not remained consistent with the types of discharge limits used in permits. EPA's screening is important because EPA's and states' enforcement resources are concentrated on the violations that the screening identifies as cases of significant noncompliance. EPA's criterion for significant noncompliance was developed about 10 years ago and does not recognize all of the types of discharge limits that have frequently been written into permits.

In September 1995, EPA expanded its criterion for identifying cases of significant noncompliance and, hence, for assigning priorities for enforcement action. The new criterion, which will become effective in September 1996, will enable EPA to identify major violators that were overlooked in the past.⁵ EPA's studies also found an inequity in the penalties that are to be assessed for cases of significant noncompliance under the new criterion. EPA officials said that the penalties associated with its enforcement efforts should be equitable. However, EPA has not yet revised its penalty policy.

Background

The Clean Water Act established the National Pollutant Discharge Elimination System (NPDES), which directs EPA and states to issue and enforce permits for controlling water pollution. EPA has approved 40 states to operate the NPDES program. EPA's regional offices oversee these states' operation of the program and administer the program for the 10 states that have not received EPA's approval to operate the program.⁶

³EPA considers facilities to be in significant noncompliance when, for example, they discharge pollutants in excess of the effluent limits in their permits by 20 percent or more in at least 2 months of a 6-month period. EPA's definition of significant noncompliance is further described later in this report.

⁴In commenting on a draft of this report, EPA officials said that the agency initiated its studies after detecting the possible existence of a problem. According to these officials, the studies were expedited to arrive quickly at a very general indication of the scope of the problem with the criterion for significant noncompliance.

⁵In its report on significant noncompliance covering the first quarter of fiscal year 1997, EPA will, for the first time, include the cases that have been overlooked.

⁶The 10 states are Alaska, Arizona, Idaho, Louisiana, Maine, Massachusetts, New Hampshire, New Mexico, Oklahoma, and Texas.

A NPDES permit may contain, among other requirements, (1) effluent limits that specify the concentration and quantity of the specific pollutants that a facility may legally discharge into a body of water and (2) monitoring requirements that specify where and how frequently the discharger must sample its waste streams and how frequently it must report the results to EPA or the state. To assess a facility's compliance, EPA or the state reviews the discharger's self-monitoring report and may also inspect the facility or sample its wastewater.

From the compliance monitoring information, EPA compiles quarterly reports to (1) identify cases of "significant noncompliance" and (2) track these cases and the enforcement actions that have been taken against the responsible facilities. Cases of significant noncompliance are the more severe and chronic violations of the discharge limits or monitoring requirements established in a facility's discharge permit. EPA's regions and the states are expected to take timely and appropriate enforcement action against these cases and track them until they have been resolved.

EPA defines significant noncompliance for violations of effluent limits for both toxic and conventional pollutants.⁷ Significant noncompliance is defined (1) for toxic pollutants as exceeding an average monthly limit by 20 percent or more in any 2 months of a 6-month period and (2) for conventional pollutants as exceeding an average monthly limit by 40 percent in any 2 months of a 6-month period. Additionally, exceeding a permit's monthly average limit for either type of pollutant by any amount in 4 of 6 months is defined as significant noncompliance. EPA also considers dischargers to be in significant noncompliance for major scheduling or reporting violations, such as missing by 90 days or more the scheduled date for starting or ending a construction project needed to achieve compliance or missing by 30 days or more a date for submitting a discharge monitoring report.

As of fiscal year 1994, EPA's regions and the states had issued 7,053 active permits to major facilities, according to EPA's data. About 57 percent were for municipal facilities, about 41 percent were for industrial facilities, and 2 percent were for federal facilities.

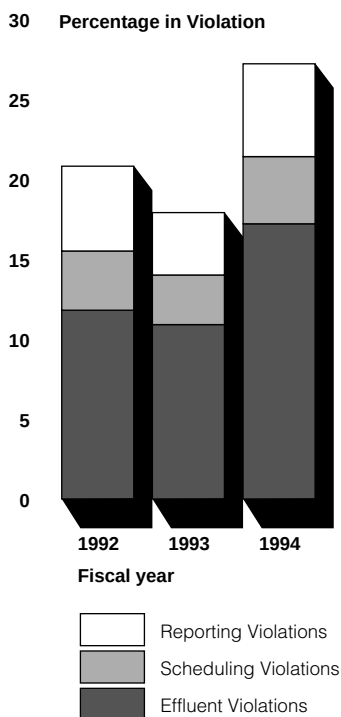
⁷Both toxic and conventional pollutants can cause adverse health and environmental effects. Toxic pollutants generally include organic chemicals such as solvents, dioxins, and PCBs; metals such as mercury, lead, copper, chromium, and cadmium; and pesticides. Conventional pollutants include hydrocarbons, fats, acids, bacteria, and organic wastes.

We have previously reported that compliance with discharge permits has been problematic. Appendix I lists our relevant reports and testimony, as well as relevant reports from EPA's Inspector General.

Significant Noncompliance With Discharge Permits Is Frequent and Understated

Our analysis of EPA's compliance data for fiscal years 1992 through 1994—the last 3 fiscal years for which complete-year data are available—shows that from 18 to 27 percent (1,272 in 1993 and 1,917 in 1994) of the major regulated facilities were in significant noncompliance. As figure 1 shows, violations of effluent limits were a frequent cause of significant noncompliance, occurring at about 1 in 6 major facilities in 1994.

Figure 1: Annual Percentage of Major Dischargers in Significant Noncompliance



Note: This chart presents the percentage of permittees in significant noncompliance during each year. Permittees were counted only once for each category of noncompliance, even if they had violations in more than one category. The priority for reporting facilities' violations in the chart was as follows: (1) effluent violations (considered the most significant), (2) scheduling violations, and (3) reporting violations. For example, a facility that had both effluent and other violations was counted once in the effluent violation category.

Source: GAO's analysis of data from EPA's Office of Enforcement and Compliance Assurance.

During fiscal year 1994, 1,213, or 63 percent of the 1,917 facilities in significant noncompliance, had violated their effluent limits. The remaining 704, or 37 percent of the facilities in significant noncompliance, had missed major milestones in their compliance schedules or had missed a required reporting date by 30 days or more. While missing a reporting date may simply indicate an administrative problem, it may also indicate that unreported violations of effluent limits have occurred.

Appendix II contains additional data from EPA's Permit Compliance System on the frequency with which major facilities violated their discharge permits. Information about variations among EPA's regions and the states

appears in the appendix, together with a chart displaying the frequency of major dischargers' overall noncompliance with their permits. During fiscal year 1994, 50 percent of the major dischargers were in noncompliance with the requirements in their permits at some time during the year; this statistic includes both lesser infractions and the significant violations of requirements discussed in the preceding paragraphs.

Data on the length of time that major facilities remained in significant noncompliance were readily available only for 1993 and 1994. These data show that EPA generally removed dischargers from the category of significant noncompliance within 6 months. Either the discharger had returned to compliance or EPA or a state had taken enforcement action requiring the facility to return to compliance within a specified time. According to EPA's data as of the end of 1994, 82, or only 1 percent of the facilities, had been in significant noncompliance for 6 months or more; 43, or 0.6 percent, had been in significant noncompliance for over 9 months, and 14 had been in significant noncompliance for more than 1 year. The data for 1993 exhibit a similar pattern.

EPA's System Understates Significant Noncompliance

EPA's Permit Compliance System does not identify many cases of significant noncompliance, even though the system contains the information needed to do so. According to EPA officials and studies that EPA performed in 1992 and 1994,⁸ the actual rate of significant noncompliance for effluent violations may be twice as high as the system now indicates.

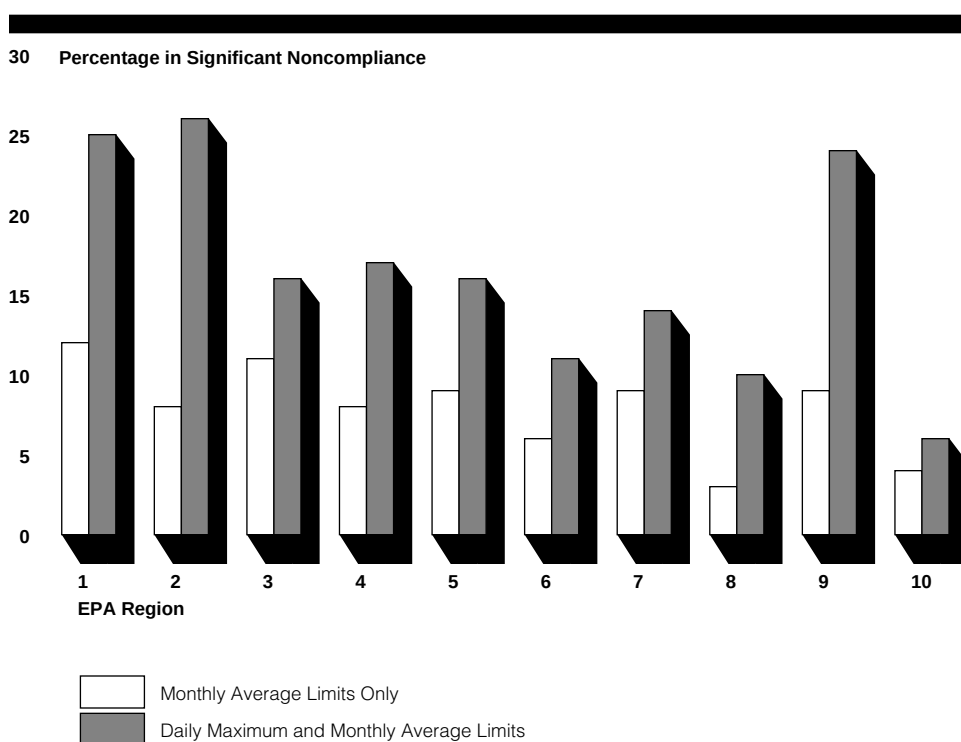
The dimensions of the problem are illustrated by analyses contained in EPA's 1992 and 1994 studies. These analyses were based on the same information sources that the agency regularly uses to identify cases of significant noncompliance.

- The 1992 analysis focused on the 6-month period from April 1992 through September 1992, when EPA's system found 445 major facilities nationwide in significant noncompliance for effluent violations. However, EPA's analysis found that an additional 635 facilities, or 1080 in total, had significant violations of effluent limits during this period.
- The 1994 analysis focused on the 6-month period from December 1993 through May 1994, when EPA's system found 580 major facilities nationwide in significant noncompliance for effluent violations. However,

⁸RNC/SNC Monthly Averages, Office of Wastewater Enforcement and Compliance, EPA, 1992 (unpublished); and 1994 Study of Monthly Averages and Related Impacts, Office of Regulatory Enforcement, EPA, 1994 (unpublished).

EPA's analysis found that an additional 574 facilities, or 1,154 in total, had significant violations of effluent limits during this period. Figure 2 shows how the rate of significant noncompliance would increase if the significant violations of daily maximum limits were added to the violations of monthly average limits.

Figure 2: Percentage of Major Dischargers Violating Effluent Limits With and Without Daily Maximum Limits



Note: Because this chart is based on data for 6 months, the rate of significant noncompliance varies from the annual rates discussed earlier in this report.

Source: GAO's analysis of data from EPA's Office of Regulatory Enforcement's 1994 Study of Monthly Averages and Related Impacts for the period from December 1993 through May 1994.

EPA's Criterion for Screening Excludes Many Cases of Significant Noncompliance

EPA's Permit Compliance System understates significant noncompliance because its criterion for screening cases has not remained consistent with the types of discharge limits used in permits. The cases that this criterion misses may be as serious from an environmental perspective as the cases that it identifies.

EPA's Criterion Is Outdated

When EPA screens facilities' discharge monitoring reports and its own and the states' reports of inspections for cases of significant noncompliance each quarter, it identifies only violations of effluent limits expressed in the discharge permits as monthly average limits. This criterion excludes violations of effluent limits expressed in other terms, primarily as daily maximum limits. Effluent limits can be written into permits in a variety of terms—such as daily maximum limits, weekly average limits, or monthly average limits—all of which restrict the quantities of pollutants that can be discharged over time.⁹ Many effluent limits are written as daily maximum or other limits as well as monthly average limits, and EPA's studies determined that many violations of daily maximum and other limits have occurred.

EPA officials explained that the agency developed its criterion for identifying significant noncompliance about 10 years ago, when it expected that the discharge limits for pollutants would most likely be expressed as monthly average limits, as called for by EPA's regulations. EPA's regulations require permit writers, whenever practicable, to establish monthly average limits for pollutants that are discharged continuously.¹⁰ EPA's training manual for permit writers states that permit writers should usually establish both a maximum limit, such as a daily maximum limit, and an average limit, such as a monthly average limit, when limiting pollutant discharges.

Despite EPA's regulations and instructions, many facilities do not have monthly average limits written into their permits for pollutants that are discharged continuously. EPA reported in its 1992 and 1994 studies that many permits contain a daily maximum limit for a pollutant, but not a corresponding monthly average limit. EPA's studies estimated that 45 percent of all discharge permits express some effluent limits in terms

⁹For example, a monthly average discharge limit is defined as the highest allowable average of daily discharges over a month. A daily maximum limit is defined as the maximum allowable discharge for any single observation in a given day.

¹⁰40 C.F.R. sec. 122.45(d).

other than monthly averages. Also, according to EPA, 15 percent of the permits for major facilities were issued without monthly average limits for half of the pollutants with numeric limits.

EPA enforcement and permitting officials suggested several reasons why so many discharge limits would be expressed only as daily maximum limits. First, only daily maximum limits are appropriate for some facilities when discharges are occasional. Second, some permit writers had difficulty interpreting EPA's technical guidance in the mid-1980s and therefore established daily maximum limits even when discharges were continuous. Third, according to EPA enforcement officials, dischargers may sometimes urge permit writers to establish only daily maximum limits while their permits are being developed because they believe such limits will prove less costly. The officials explained that a pollutant can be discharged in greater amounts under a daily maximum limit because such a limit is based on the peak, or highest allowable, pollutant discharge. In contrast, a monthly average limit incorporates off-peak discharges and is therefore more stringent. Finally, according to EPA enforcement officials, some dischargers are aware that EPA uses the monthly average limits for setting enforcement priorities, and they may seek to obtain effluent limits that will not trigger a finding of significant noncompliance for violations.

Unidentified Cases of Significant Noncompliance Can Have Serious Environmental Effects

According to EPA enforcement officials, the violations of daily maximum limits that the Permit Compliance System's criterion does not identify as cases of significant noncompliance may be no less serious from an environmental perspective than the violations that are identified as such. Toxic pollutants have frequently been involved. Included among the significant violations were discharges of ammonia, chlorine, and oxygen-demanding pollutants, which are leading causes of fish kills, according to EPA. About 70 percent of the violations that the criterion did not identify as cases of significant noncompliance were violations of water-quality-based discharge limits that are based on analyses of risks to affected organisms posed by exposure to pollutants. Table 1 lists the 20 toxic and conventional pollutants that EPA found were being most frequently discharged in excess of daily maximum limits that EPA identified in its 1994 study as significant violations.

Table 1: Most Frequently Violated Daily Maximum Limits, by Pollutant, From December 1993 Through May 1994

Type of pollutant ^a	Number of significant violations
Toxic	
Chlorine	532
Zinc	124
Copper	120
Phenolics	50
Lead	46
Cyanide	42
Mercury	41
Cadmium	40
Copper	34
Nickel	30
Conventional	
Total suspended solids	439
BOD ^b	288
Nitrogen, ammonia	168
Settleable solids	146
Phosphorus	86
Carbonaceous BOD ^b	74
Iron	73
Oil and grease	48
Sulfide	34
Surfactants	32

^aThis table accounts for 2,540 of the 2,957 significant violations of effluent limits that EPA identified for 20 conventional and 63 toxic pollutants. For the 20 pollutants listed in the table, the limits were exceeded 30 times or more.

^bBiochemical oxygen-demanding pollutants.

Source: EPA's Office of Regulatory Enforcement's 1994 Study of Monthly Averages and Related Impacts for the period from December 1993 through May 1994.

Enforcement Is Limited, and Penalties Can Vary

EPA assigns priorities for enforcement action to facilities whose violations have met its criterion for significant noncompliance, and it bases its penalties, in part, on the types of limits that the facilities have violated. Consequently, EPA and the states have taken limited formal enforcement action against facilities that have violated daily maximum and other limits that do not meet the criterion for significant noncompliance. Also, permittees whose continuous discharges are subject to daily maximum

limits only are subject to much smaller penalties for significant violations than permittees whose discharges are subject to both daily maximum and monthly average limits.

Enforcement

EPA's regions and the states concentrate their enforcement resources on facilities that the Permit Compliance System has identified as being in significant noncompliance. Consequently, according to EPA officials, EPA and the states have given much less attention to violations of daily maximum limits, which do not meet the system's criterion for significant noncompliance, than to violations of monthly average limits, which do meet the criterion. Not surprisingly, EPA's 1992 and 1994 studies determined that few formal enforcement actions¹¹ had been taken by EPA or the states for violations of effluent limits that were not expressed as monthly average limits.

EPA also found that when significant violations of limits other than monthly average limits were identified, they were not resolved quickly. For example, an EPA analysis of data from December 1993 through October 1994 identified 276 facilities with significant violations of effluent limits expressed as daily maximum limits. The analysis showed that the violations had occurred at 192 of these facilities for over 6 months and at 116 facilities for 9 months. In May 1993, after identifying these disparities in enforcement, EPA notified its regions that violations of daily maximum limits and limits other than monthly average limits might be occurring without a prompt enforcement response, and it indicated that additional cases should be considered for action. Then, in an August 1993 memorandum, the agency called for its regions and the states to increase their attention to violations of daily maximum limits and to review permits to ensure that monthly average limits were being specified whenever practicable. Nevertheless, EPA's 1994 study shows that compliance and enforcement remained problematic in such cases. After completing this study, EPA reviewed its criterion for significant noncompliance.

Penalties

EPA's enforcement policy calls for penalties for significant violations that are at least as great as the financial benefits derived from the violations. Because most formal enforcement actions have been taken for significant

¹¹EPA's policy requires formal action before a facility has been in significant noncompliance for two consecutive quarters. EPA defines formal enforcement actions as those that require action to achieve compliance, specify a timetable for those actions, contain consequences for noncompliance, and subject the permittee to adverse legal consequences for noncompliance. Formal actions include administrative orders and judicial actions.

violations of monthly average limits, comparatively few penalties have been assessed for significant violations of other limits. During fiscal year 1994, EPA assessed penalties of about \$25 million in 323 cases of Clean Water Act violations.¹² EPA's 1992 and 1994 studies indicate that very few penalties were assessed for significant violations of daily maximum limits.

In addition, because some dischargers' permits contain monthly average limits for continuous discharges while other dischargers' permits contain daily maximum limits only, the penalties these dischargers can be assessed for violations can differ significantly, and inequities can result. EPA officials said that a penalty for a violation of a daily maximum limit could be assessed only for the day when the violation was identified, even though violations might have been occurring continuously for an extended period. In contrast, a penalty for a violation of a monthly average limit could be assessed for every day of the month in which the violation occurred. Thus, according to the officials, a violation of a monthly average limit for a pollutant could result in a penalty of \$750,000 (30 times the maximum penalty of \$25,000 per day), whereas a violation of a daily maximum limit for the same pollutant over the same period of time could result in a penalty of \$25,000. EPA officials explained that the agency's penalty policy was consistent with the use of monthly average limits for continuous discharges and that when the policy was designed, they had not anticipated that daily maximum limits would be used widely for such discharges. EPA's 1992 and 1994 studies do not provide information on the actual penalties assessed or the revisions that may be needed to ensure that penalties are assessed equitably.

EPA officials agreed that the agency may need to revise its assessment of penalties. Criteria for enforcing NPDES permits, according to the act, include (1) the severity of the violation, (2) the degree of economic benefit obtained by the facility through the violation, (3) and the previous enforcement actions taken against the violator. Also important, according to EPA, are the deterrent effect of the agency's enforcement response on permittees in comparable situations, considerations of fairness and equity, national consistency, and the NPDES program's integrity. As we noted in our 1991 report,¹³ penalties play a key role in environmental enforcement by deterring violators and by ensuring that regulated entities are treated fairly and consistently so that no one gains a competitive advantage by violating environmental regulations. We also stated that the Clean Water Act and

¹²See EPA's 1995 report (EPA 300-R-95-004).

¹³Environmental Enforcement: Penalties May Not Recover Economic Benefits Gained by Violators (GAO/RCED-91-166, June 17, 1991).

other environmental statutes have been violated repeatedly when penalties have not been applied.

EPA Is Revising Its Criterion for Significant Noncompliance

On September 21, 1995, EPA's Assistant Administrator for Enforcement and Compliance Assurance announced that, effective in 1 year, the agency would implement a revised criterion for significant noncompliance. According to EPA's decision memorandum, the revised criterion will (1) capture significant violations without including marginal violations, (2) include the monthly average limits that are now included, and (3) include other types of average limits, such as weekly average limits, and maximum limits, such as daily maximum limits.

During the 1-year delay, EPA will incorporate the revised criterion for significant noncompliance into the Permit Compliance System. EPA's decision memorandum does not discuss the penalties that may be assessed for the different types of violations. Neither does it tell the regions or the states how to develop appropriate penalties for violations of the types of discharge limits, such as daily maximum limits for continuous discharges, that will now receive formal enforcement action.

Conclusions

EPA's decision to expand the criterion for significant noncompliance is important because it should enable the agency's regions and the states to more completely identify those dischargers in significant violation of their permits. More comprehensive identification of significant noncompliance should also allow the regions and states to set priorities for enforcement that consider the environmental threats posed by the violations. We believe that this action is appropriate and will strengthen the integrity of the NPDES program.

In addition, some adjustment appears warranted to make the assessment of penalties for significant and comparable violations of different types of discharge limits more equitable. EPA itself is aware that its current assessment of penalties may not be consistent with its criteria for enforcement of the Clean Water Act.

Recommendation

We recommend that the Administrator, EPA, revise the assessment of penalties for violations of the Clean Water Act to ensure that the penalties for significant and comparable violations of different types of discharge limits are equitable. In developing the changes, the Administrator should

consider the economic benefits gained from noncompliance, the severity of the violations, the permittee's previous compliance record, and the deterrent effect of the penalty.

Agency Comments

We provided copies of a draft of this report to EPA for its review and comment. The Director of EPA's Office of Enforcement and Compliance Assurance, Water Enforcement Division, provided us with clarifying and technical comments, which we incorporated into the report as appropriate. According to the Director, EPA is considering our recommendation.

Scope and Methodology

To accomplish our objectives, we interviewed officials in EPA's Office of Water and Office of Enforcement and Compliance Assurance. We obtained and reviewed EPA reports and documents and analyzed relevant data from EPA's Permit Compliance System. We did not verify the completeness, accuracy, and reliability of the data maintained in the Permit Compliance System's database. Such verification would have required a significant investment of time and resources because EPA's database contains a large volume of data.¹⁴ We also did not determine independently whether EPA's regions have increased their attention to violations of daily maximum or other types of effluent limits. Our work was conducted from May 1995 through February 1996 in accordance with generally accepted government auditing standards.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 7 days from the date of this letter. At that time, we will make copies available to interested congressional committees; the Administrator, EPA; and other interested parties. We will make copies available to others on request.

¹⁴We have also pointed out that the NPDES program does not have the controls needed to ensure the accuracy of dischargers' self-reported monitoring data. See Environmental Enforcement: EPA Cannot Ensure the Accuracy of Self-Reported Compliance Monitoring Data (GAO/RCED-93-21, Mar. 31, 1993).

Please call me at (202) 512-6111 if you or your staff have any questions about this report. Major contributors to this report are listed in appendix III.

Sincerely yours,

A handwritten signature in black ink, appearing to read "P. F. Guerrero", with a stylized, sweeping flourish extending to the right.

Peter F. Guerrero
Director, Environmental
Protection Issues

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Abbreviations

EPA	Environmental Protection Agency
GAO	General Accounting Office
NPDES	National Pollutant Discharge Elimination System

Selected GAO and EPA Reports on Water Program Enforcement

Water Pollution: Differences Among the States in Issuing Permits Limiting the Discharge of Pollutants (GAO/RCED-96-42, January 23, 1996).

Observations on Compliance and Enforcement Activities Under the Clean Water Act (GAO/T-RCED-91-80, July 18, 1991).

Water Pollution: Serious Problems Confront Emerging Municipal Sludge Management Program (GAO/RCED-90-57, Mar. 5, 1990).

Consolidated Report on the National Pollutant Discharge Elimination System Permit Enforcement Program (EPA/IG E1H28-01-0200-0100154, Jan. 4, 1990).

Capping Report on the Computation, Negotiation, Mitigation, and Assessment of Penalties Under EPA Programs (EPA/IG E1G8E9-05-0087-9100485, Sept. 27, 1989).

Office of Water Enforcement and Permits National Mid-Year Evaluation (EPA/OWEP, July 1989).

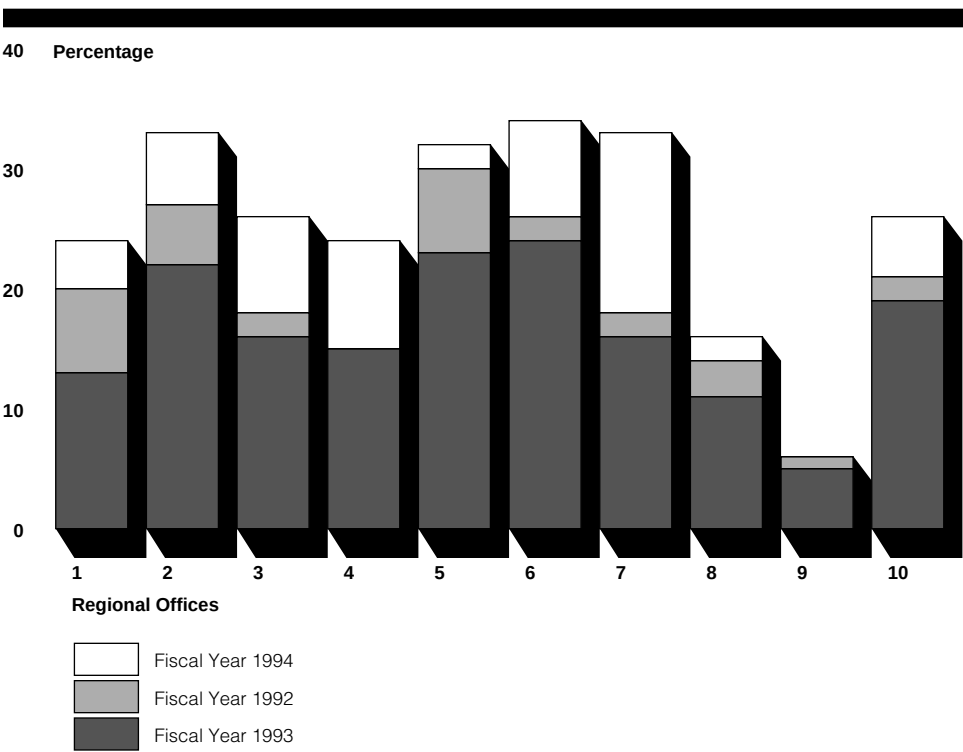
Water Pollution: Improved Monitoring and Enforcement Needed for Toxic Pollutants Entering Sewers (GAO/RCED-89-13, Dec. 27, 1988).

Water Pollution: Stronger Enforcement Needed to Improve Compliance at Federal Facilities (GAO/RCED-89-13, Dec. 27, 1988).

Additional Information About Violations of the Clean Water Act

Figure II.1 shows that the rate of significant noncompliance varies substantially by EPA region. Similarly, table II.1 indicates significant variation from state to state. Figure II.2 shows the overall percentage of major dischargers that are not in compliance with their permit requirements for both significant and other reasons.

Figure II.1: Percentage of Major Dischargers in Significant Noncompliance, by EPA Region



Note: The rate of significant noncompliance for Region 4 for fiscal year 1992 was 15 percent; for Region 9, the rate for fiscal year 1994 was 6 percent.

Source: GAO's analysis of data from EPA's Office of Enforcement and Compliance Assurance.

Appendix II
Additional Information About Violations of
the Clean Water Act

Table II.1: Major Dischargers in Significant Noncompliance, by State, for Fiscal Year 1994

State	Number of major dischargers	Number with effluent violations	Number in significant noncompliance^b	Percent in significant noncompliance
AK ^a	211	12	42	19.9
AL	221	37	59	26.7
AR	100	19	27	27.0
AZ ^a	38	6	9	23.7
CA	247	9	9	3.6
CO	111	15	23	20.7
CT	116	17	32	27.6
DC ^a	4	0	2	50.0
DE	32	11	12	37.5
FL	295	17	34	11.5
GA	179	22	27	15.1
HI	27	0	0	0.0
IA	112	27	37	33.0
ID ^a	69	8	12	17.4
IL	270	54	61	22.6
IN	181	54	70	38.7
KS	57	11	18	31.6
KY	122	43	44	36.1
LA ^a	249	54	86	34.5
MA ^a	163	39	41	25.2
MD	98	12	13	13.3
ME ^a	98	17	20	20.4
MI	183	23	65	35.5
MN	81	13	30	37.0
MO	129	28	49	38.0
MS	85	9	10	11.8
MT	45	1	1	2.2
NC	227	37	44	19.4
ND	25	4	4	16.0
NE	67	13	18	26.9
NH ^a	69	9	11	15.9
NJ	206	35	64	31.1
NM ^a	34	1	7	20.6
NV	10	2	3	30.0
NY	367	55	105	28.6
OH	294	62	118	40.1

(continued)

Appendix II
Additional Information About Violations of
the Clean Water Act

State	Number of major dischargers	Number with effluent violations	Number in significant noncompliance^b	Percent in significant noncompliance
OK ^a	96	27	36	37.5
OR	70	6	8	11.4
PA	404	106	118	29.2
RI	29	11	12	41.4
SC	184	57	98	53.3
SD	33	2	4	12.1
TN	147	24	39	26.5
TX ^a	590	89	210	35.6
UT	39	5	10	25.6
VA	124	20	20	16.1
VT	34	3	6	17.6
WA	93	14	34	36.6
WI	137	15	26	19.0
WV	104	29	33	31.7
WY	29	4	4	13.8

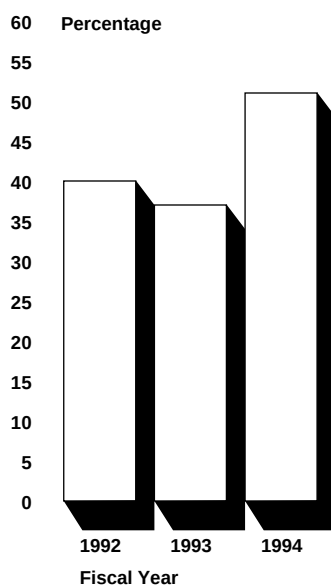
^aThese states and the District of Columbia have not been approved to operate the NPDES program.

^bIncludes dischargers with effluent violations and scheduling and reporting violations.

Source: GAO's analysis of data from EPA's Office of Enforcement and Compliance Assurance.

Appendix II
Additional Information About Violations of
the Clean Water Act

Figure II.2: Percentage of Major Dischargers Not in Compliance With Permit Requirements



Note: This figure includes cases of significant noncompliance and all other violations, including not complying with narrative requirements, not enforcing requirements placed on indirect dischargers, and submitting incomplete or deficient reports.

Source: GAO's analysis of data from EPA's Office of Enforcement and Compliance Assurance.

Major Contributors to This Report

Charles M. Adams, Assistant Director
Ronald Morgan, Evaluator-in-Charge

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

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