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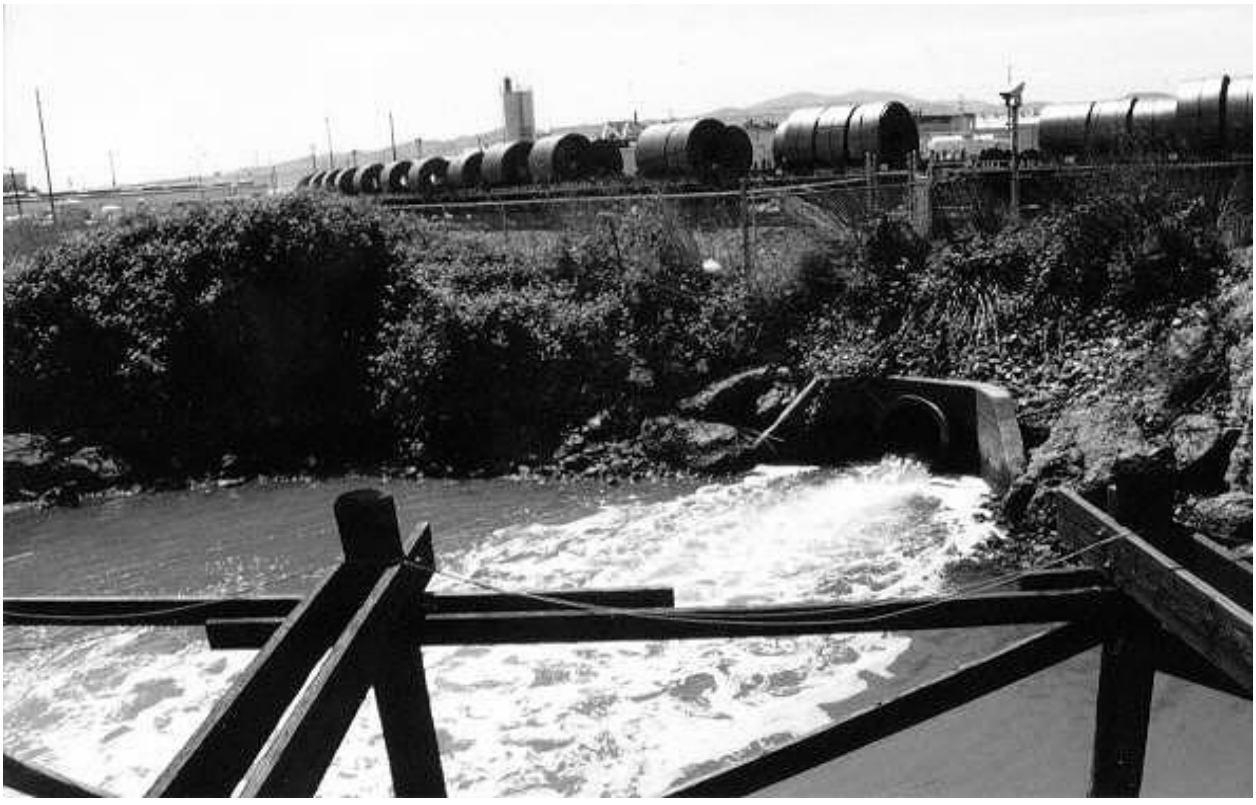
August 2001

Office of Inspector General

Audit Report

Water Enforcement:

State Enforcement of Clean Water Act Dischargers Can Be More Effective



Inspector General Divisions Conducting the Audit:	Western Audit Division, San Francisco, CA Southern Audit Division, Atlanta, GA Central Audit Division, Kansas City, KS
Program Office and Regions Involved:	Office of Enforcement and Compliance Assurance EPA Regions 4, 8, and 9

Cover Photo: Wastewater discharge from a California facility into Suisun Bay
(Photo by Dan Cox, EPA OIG)

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August 14, 2001

MEMORANDUM

SUBJECT: Final Report No. 2001-P-00013
State Enforcement of Clean Water Act Dischargers Can Be More Effective

FROM: Charles McCollum /s/
Divisional Inspector General for Audit
Western Division

TO: Sylvia Lowrance
Acting Assistant Administrator for
Enforcement and Compliance Assurance

Attached is our final report, "*State Enforcement of Clean Water Act Dischargers Can Be More Effective.*" The purpose of the audit was to determine whether EPA-authorized state enforcement programs protect the environment and human health. Our audit included your office, three regions, and one state within each region. We also took into account the results from a National State Auditors' Association joint review of state water programs.

This audit report contains findings that describe problems we have identified and corrective actions we recommend. This report represents the opinion of the OIG; the findings in this report do not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers according to EPA audit resolution procedures.

ACTION REQUIRED

According to EPA Order 2750, you (as the action official) are required to provide this office with a written response to this report within 90 days of its issuance. For corrective actions planned but not completed by the response date, please provide the specific milestone dates for completing these actions.

If you or your staff have any questions, please contact me at (415) 744-2445, or Katherine Thompson, Team Leader, at (916) 498-6535. Additional copies of this report may be obtained from us or our website, www.epa.gov/oigearth/.

Executive Summary

Objective

The objective of the audit was to determine whether state enforcement of Clean Water Act discharge programs protect human health and the environment. This audit resulted from concerns over the effectiveness of state enforcement programs.

Forty-four states play a major role in implementing the Clean Water Act's National Pollutant Discharge Elimination System program. These states have EPA approval to issue and enforce permits that set limits on pollutants that can be discharged into our nation's surface waters. We evaluated state enforcement of discharge programs in three regions; within each region, we evaluated one EPA-approved state program. We also took into account information from five state audits.

Results in Brief

We believe that state enforcement programs could be much more effective in deterring noncompliance with discharge permits and, ultimately, improving the quality of the nation's water. EPA and the states have been successful in reducing point source pollution since the Clean Water Act passed in 1972. However, despite tremendous progress, nearly 40 percent of the nation's assessed waters are not meeting the standards states have set for them.

Strategies Need Reconsideration

The state enforcement strategies we evaluated needed to be modified to better address environmental risks, including contaminated runoff. Contaminated runoff, including agricultural and urban runoff, was widely accepted as causing the majority of the nation's remaining water quality problems. Although many sources of contaminated runoff were regulated, some were not.

EPA's Office of Enforcement and Compliance Assurance had set national enforcement priorities for urban and agricultural runoff, including storm water dischargers, sewer overflows, and concentrated animal feeding operations. However, its core program and monitoring systems have emphasized major industrial facilities and larger sewage treatment plants. State strategies were also inhibited by:

- Inadequate water quality data.
- Incomplete permit data.
- EPA-state relationships.
- State concerns over regulating small and economically vital businesses and industries.

Compliance and Enforcement Systems Deficient

The states we evaluated did not have sufficient information on dischargers to effectively implement their programs. A major barrier to state program management was the lack of information about hundreds of thousands of dischargers that contributed to water quality problems.

One critical missing component of the Permit Compliance System was electronic transmission of self-monitoring reports. Without electronic reporting by dischargers, it was virtually impossible for states to monitor compliance with all permits.

EPA's Permit Compliance System—its national permitting and enforcement system—was incomplete, inaccurate and obsolete. The growth, variety and complexity of the regulated community had greatly outstripped the system capabilities. Hundreds of thousands of dischargers were not monitored by the system. Although many states were developing their own systems, they did not fill the information void.

State Enforcement Program Deficiencies

- Compliance systems lacked data for hundreds of thousands of smaller dischargers
- Serious toxicity violations and other violations were not reported
- Strategies for identifying unpermitted storm water dischargers were incomplete
- Enforcement actions were issued a year or more after violation
- Penalties failed to recover economic benefit of noncompliance
- Proactive strategies to avoid serious violations needed further development

States also had weaknesses in their compliance monitoring and enforcement systems, including not reporting serious, significant violations. The states we evaluated did not implement effective storm water compliance monitoring programs to detect and correct noncompliance in higher risk areas. Moreover, states needed to improve their enforcement response to significant violations to prevent further violations. Most of the enforcement actions we reviewed did not meet EPA's criteria for timeliness and often did not recover the economic benefit gained by violators.

Finally, to ensure fair and effective enforcement of the Clean Water Act, EPA regions need to improve their in-depth program evaluations and annual performance evaluations of state performance. These evaluations need to be consistent, continue toward a goal of measuring the effectiveness of performance, and be made easily accessible to the public.

Other Matters

In determining the status of EPA's plan to modernize its Permit Compliance System, we found that the Office of Enforcement and Compliance Assurance had not successfully collaborated with the Office of Water and the states in the design of the new system requirements.

Recommendations

> *"A modernized [Permit Compliance] system should fulfill many programmatic needs and contribute to the demonstration of environmental outcomes and results."*
>
> -EPA Office of Water

We are recommending that the Office of Enforcement and Compliance Assurance, in partnership with the Office of Water and EPA regions, collaborate with states to develop risk-based enforcement priorities. EPA also should make modernizing its Permit Compliance System a high priority. Teaming with EPA's Office of Water and the states, the Office of Enforcement and Compliance Assurance should ensure that the new system will meet both federal and state needs.

We are also recommending that the Office of Enforcement and Compliance Assurance revise its enforcement guidance to better define significant violations for toxicity test failures, minor facilities, and storm water dischargers.

Lastly, the Office of Enforcement and Compliance Assurance should routinely determine whether states are fulfilling their obligations to monitor and enforce discharge programs. To do so, the Office should develop consistent criteria for in-depth program evaluations of state programs. These evaluations, along with state performance measures, should be accessible to the public.

Agency Comments

The Office of Enforcement and Compliance Assurance agreed with several of the conclusions in the report, including that states need to implement risk-based approaches to water enforcement and that it would be useful to have a process for periodic evaluation of the Clean Water Act program in each state. It agreed that modernizing the Permit Compliance System should be a high priority.

However, the Office expressed concern about the way some of the issues, as well as EPA's role, were characterized in the report, and claimed that many of the findings were based on "anecdotal information." The Office stated the draft report did not recognize that (1) it had an exhaustive process for setting national enforcement priorities, (2) states should be responsible for setting watershed-specific enforcement priorities, and (3) permit program requirements had flexibility that supported state enforcement strategies. The Office also believed the issues related to the Permit Compliance System were oversimplified.

The Office of Enforcement and Compliance Assurance believed that existing national enforcement guidance had the necessary flexibility to address toxicity, minors, and storm water violations. It agreed to work with EPA regions to ensure that the states were aware of the guidance. The Office agreed to consider the OIG's specific recommendations

when guidance is updated in the future. The Office also agreed that elements of state compliance and enforcement programs need to be periodically evaluated.

OIG Position

The Office of Enforcement and Compliance Assurance either specifically agreed with the vast majority of our conclusions or did not dispute them. However, in many cases it did not agree to a specific course of action to correct the problem. Instead, the Office defended existing guidance, processes, and systems. It agreed to reassess some of its guidance, but did not state when. It proposed alternative recommendations, but did not agree to take them.

In short, the Office was reluctant to change its current way of conducting business. However, the current way of conducting business was marginally effective.

We agree that states have helped develop national priorities and that they are responsible for developing risk-based strategies. However, states cannot be fully effective until the Office of Enforcement and Compliance Assurance allows states more latitude in the redirection of their resources.

Also, EPA had taken too long to modernize the Permit Compliance System, leaving huge information gaps for minor and storm water dischargers that rendered the system inadequate. Further, the existing guidance and processes for ensuring the prevention or correction of significant toxicity, minor discharger, and storm water violations were not working – thousands of toxicity violations occurred nationally and numerous facilities had recurring violations. The guidance needs updating.

Although the Office of Enforcement and Compliance Assurance asserted our conclusions in this report were based on "anecdotal" evidence, we disagree. Anecdotal information was only used to provide examples. As discussed with the Office, our audit was based on extensive data analysis, document reviews, interviews, surveys, and observations. Details on our scope and methodology are in Exhibit 1, page 65.

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Part I
Introduction

Chapter 1
Objective, Background, and Scope and Methodology

Objective

The objective of the audit was to determine whether state enforcement of Clean Water Act discharge programs protects human health and the environment.

Background

The purpose of the Clean Water Act's discharge permit program is to protect human health and the environment by setting limits on pollutants that can be discharged into our nation's surface waters. The goal of the Clean Water Act is for all rivers, lakes, and estuaries to be swimmable and fishable.

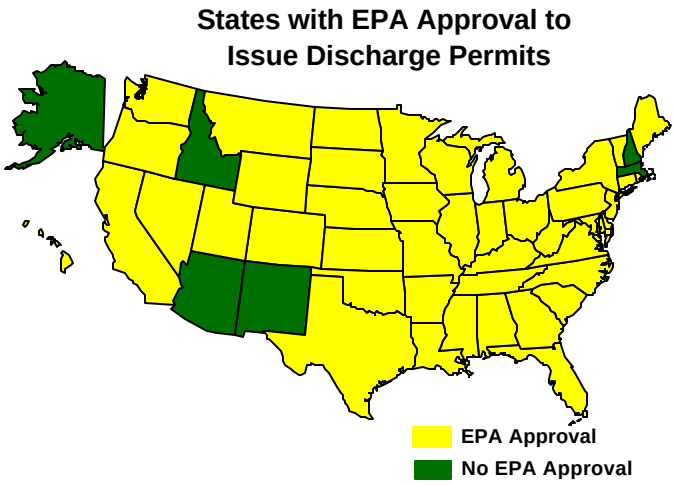
Citizens, industries, states, local governments, and the federal government have done much to improve the quality of our nation's waters in the last 30 years:

- More than a trillion dollars, much of it authorized under the Clean Water Act, was spent to build, upgrade, and expand wastewater treatment facilities.
- EPA and the states have written and enforced over 70,000 permits to limit pollutants.

Controlling point sources has removed billions of pounds of pollutants from our waters and doubled the number of waters safe for drinking and swimming. Much of this success can be credited to the Clean Water Act, which was enacted in 1972.

Despite the successes of the Act, EPA reports that a majority of Americans live within 10 miles of a polluted river, lake, stream or coastal area. Although there is not an accurate portrayal of water quality conditions nationwide, the 1998 National Water Quality Inventory found that nearly 40 percent of the nation's assessed waters were not meeting the standards states have set for them.

Discharge System



Much of the Clean Water Act's improvements can be attributed to the National Pollutant Discharge Elimination System, a program to control discharges from "point sources" of pollution. Point sources are discrete conveyances, such as pipes or man-made ditches.

Forty-four states play a major role in implementing the Clean Water Act's discharge program. These states have EPA approval to issue and enforce permits that set limits on pollutants that can be discharged into our nation's surface waters. EPA regions issue permits in the remaining states.

Several categories of discharges are covered under the permit program, including municipal waste water and industrial process waste water. These facilities are generally classified as major or minor, depending on size and nature of the discharges. For example, a major municipal treatment plant typically discharges one million gallons or more per day.

Runoff Permits

In 1987, Congress added provisions to the Clean Water Act that called attention to another source of problems that was believed to be responsible for continuing water quality problems: contaminated runoff from agriculture, airborne pollution, forestry, and urban development.

Idaho animal feeding operation runoff drains into a Snake River tributary

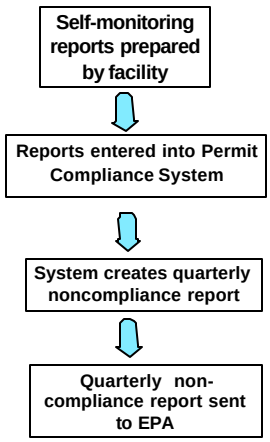
Amendments to the Clean Water Act and subsequent regulations require permits for storm water runoff from industrial activity, large and medium municipal storm water systems, and construction activities. Also, certain concentrated animal feeding operations, primarily those with over 1,000 animals and those discharging into waters,

are subject to permit requirements. By law, most irrigated agricultural discharges have been excluded from permit requirements.

State Enforcement Systems

In order for states to have effective enforcement systems, they need sound enforcement strategies and compliance monitoring systems. They also need to take prompt and appropriate enforcement actions that deter future noncompliance not only at the facility, but at other facilities. EPA has developed an enforcement management system which sets criteria for identifying and reporting significant violations. In addition to enforcement guidance, the Office of Enforcement and Compliance Assurance issues the *Memorandum of Agreement Guidance* that establishes national priorities for enforcement programs.

Self-Monitoring Reports



States monitor facility compliance through inspections and self-monitoring reports. EPA recommends that states inspect major facilities annually. Also, facilities are required to regularly analyze their discharge and report the results on self-monitoring reports. States compare self-monitoring reports to permit limits to determine compliance. In addition, major dischargers are required to report significant violations to states within 24 hours.

States report significant violations to EPA in a quarterly noncompliance report. This report identifies major dischargers with significant violations, the nature of the violation, and the type of enforcement actions taken in response to those violations. EPA has defined violations of a sufficient magnitude or duration as "significant" in order to target those violations for a high enforcement priority.

EPA has established standards for taking enforcement actions on significant violations. Generally, if a major facility has two significant violations in two consecutive quarters, a state is expected to take a formal enforcement action before the end of the following quarter. EPA also recommends assessing penalties that recover the economic benefit of noncompliance gained by the violator.

Issues Impacting Enforcement Effectiveness

Nationally, there are two important issues that impact the effectiveness of permit enforcement in protecting human health and the environment.

- The backlog of expired discharge permits.
- The implementation of the Total Maximum Daily Load Program.

• Expired Permits

A backlog of expired permits is an ongoing, national problem that impairs enforcement. In fiscal 2000, about 25 percent of discharger permits for major facilities nationwide were expired. Federal law requires permits to be updated every five years. Permits are updated and reissued in order to

conform with changing state and federal laws, pollution control technology, and water quality conditions. Outdated permits may not reflect new technology or water quality objectives, thereby impairing enforcement effectiveness.

- **Total Maximum Daily Load Program**

In the future, permit compliance will take on more importance in meeting water quality standards because of the Clean Water Act's Total Maximum Daily Load Program. A total maximum daily load is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources.

Total maximum daily load = sum of non-point sources + sum of point sources + margin of safety

States are required to:

- Identify water bodies not meeting water quality standards;
- Set priorities for calculating total maximum daily load;
- Develop a total maximum daily load for each pollutant in each listed waterway; and,
- Allocate loadings to both permitted dischargers and to non-point sources.

States have just begun to implement this program for water bodies identified as impaired. It is likely that permit limits for some pollutants will be more stringent after total maximum daily load calculations are completed. And, if limits are exceeded, it may prevent the water body from meeting water quality standards.

Scope and Methodology

This audit resulted from concerns over the effectiveness of state enforcement programs. We focused on the Clean Water Act discharge program because of a lack of recent audit coverage in this area.

In addition to evaluating national data, we evaluated three EPA regions: 4, 8, and 9. In each region, we evaluated one state with EPA approval to issue discharge permits: California (Region 9), North Carolina (Region 4), and Utah (Region 8). We also took into account recent audit reports from the following states: Arkansas, Colorado, Louisiana, Maryland, and Oregon. Our scope and methodology are further discussed in Exhibit 1, page 65.

Part II
Strategies Need Reconsideration

Chapter 2
State Enforcement Strategies Need to Be Modified

State enforcement strategies and systems needed to be modified to meet the goals of the Clean Water Act and to better protect human health and the environment. In the three states we reviewed, there were opportunities to better align enforcement strategies and resources with water quality impairments.

> *"...nearly 40 percent of the nation's assessed waters are not meeting the standards states have set for them."*
> -Office of Water, May 2000

EPA and the states have been successful in reducing point source pollution since the Clean Water Act passed in 1972. However, despite tremendous progress, nearly 40 percent of the nation's assessed waters are not meeting the standards states have set for them. Contaminated runoff, both regulated and unregulated, is widely accepted as causing the majority of the nation's remaining water quality problems.

In the past, EPA and the states have focused their efforts on major dischargers because they were relatively few in number but discharged large quantities of pollutants. We believe enforcement strategies should be environmentally risk-based and better address:

- The relative risks presented by contaminated runoff, such as storm water and concentrated animal feeding operations.
- A rapidly growing number of smaller dischargers.
- Unique problems causing impairments in individual watersheds.

EPA's Office of Enforcement and Compliance Assurance had set national enforcement priorities and developed strategies for addressing runoff, including storm water dischargers, sewer overflows, and concentrated animal feeding operations. However, its core program and monitoring systems emphasized major industrial facilities and larger sewage treatment plants. State strategies were also inhibited by:

- Inadequate water quality data.
- Incomplete permit data.
- EPA-state relationships.

- State concerns over regulating small and economically vital businesses and industries.

EPA's Strategic Plan

EPA's Strategic Plan lays out the Agency's 10 long-term goals for protecting human health and safeguarding the environment. In addition to long-term goals for achieving clean air, clean water, and safe food, one of EPA's 10 goals is to ensure full compliance with laws intended to protect human health and the environment.

EPA cannot achieve its goals without partnerships with states. States play a major role in implementing the Clean Water Act's discharge program. Forty-four states have EPA approval to issue and enforce Clean Water Act discharge permits. EPA regions issue discharge permits in the remaining states. States write more than 90 percent of all federal environmental permits and take over 75 percent of enforcement actions.

Need for New Strategies

In the past, EPA and the states have focused their efforts on major dischargers because they were relatively few in number but discharged large quantities of pollutants. We believe enforcement strategies should be environmentally risk-based and better address:

- Changing sources of pollution;
- An increasing universe of permit holders; and
- Watershed approaches to improving water quality.

Changing Sources of Pollution

Contaminated runoff, such as agricultural and urban runoff, was widely accepted as causing the majority of the nation's remaining water quality problems. Agricultural runoff (crops and animal husbandry) was ranked as the number one cause of impaired rivers, streams, and lakes. Some of these sources have been regulated; others, such as irrigation runoff, have not.

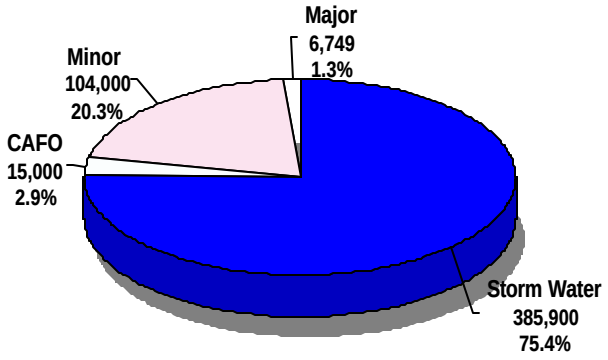
Swimmers frolic in Southern California waters often posted as unsafe due to urban runoff. (Photograph by Chas Mativier, Orange County Register.)

EPA issued regulations in 1976 to permit discharges from concentrated animal feeding operations; since that time, the livestock industry substantially increased both the number and size of these large animal feeding operations. Combined releases of more than 30 million gallons of animal waste to surface

water in a number of states have highlighted the adverse environmental impacts of concentrated animal feeding operations. By law, agricultural storm water discharges and return flows from irrigated agriculture have been excluded from permit requirements.

In order to address urban runoff, the Clean Water Act was amended in 1987 to regulate municipal and industrial storm water discharges. Phase II of these regulations was added in 1999, thereby regulating a large number of smaller facilities. Storm water is a continuing concern; it was the largest source of water pollution in urban areas, such as Los Angeles.

Clean Water Act Permits
(Includes Phase II Storm Water Permits)



CAFO is concentrated animal feeding operation
Source: EPA Office of Water

In response to changing regulations and sources of water impairments, the Office of Enforcement and Compliance Assurance has suggested enforcement strategies for storm water dischargers and concentrated animal feeding operations. These strategies are accessible by states.

Increasing Permit Universe

The addition of storm water regulations more than tripled the regulated universe. The ballooning regulated universe, along with other issues, such as the backlog of out-of-date permits and the lack of data systems, has made it virtually impossible for states to fully permit, monitor, and enforce the regulated universe.

Watershed Strategies

The watershed approach to solving water quality problems calls for individual strategies tailored to each watershed rather than a focus on major dischargers or types of agricultural or urban runoff.

"To achieve the nation's clean and safe water goals, EPA will implement the watershed approach...."
-EPA's Fiscal 2001 Annual Plan

EPA's annual plan calls for a watershed approach to fulfill the goal of the Clean Water Act. EPA regions have partnered with states, local governments, private industry, and environmental organizations to create some effective watershed strategies.

States Can Improve Effectiveness

The states we reviewed continued to emphasize inspecting and monitoring major dischargers, although contaminated runoff, including storm water runoff, was widely accepted as causing the majority of the nation's remaining water quality problems. EPA and the states could improve the effectiveness of state enforcement programs by developing risk-based enforcement strategies. EPA has a role in evaluating the effectiveness of state strategies and supplementing them, when necessary and feasible.

> Contaminated runoff is widely accepted as causing the majority of the nation's water quality problems.

In the three states we reviewed, there were opportunities to better align enforcement strategies and resources with water quality impairments.

California

> *"The polluted runoff problem is the number one water pollution problem in California."*
> -California Resources Secretary

California identified storm water as its most serious water quality problem. However, it had invested relatively little resources in inspecting and monitoring storm water. Meanwhile, storm water runoff continued to cause water impairments and beach closures. At the same time, the state had a relatively significant investment in monitoring and enforcing its major dischargers, although the state reported a relatively high compliance rate. In fiscal 2000, the state increased its storm water staffing; however, it needed to further evaluate whether its enforcement resources would yield a better return by monitoring other sources.

North Carolina

North Carolina had not developed a strategy for monitoring compliance with storm water permits, although storm water was a significant contributor to its water quality impairments. As discussed in Chapter 6 (page 53), North Carolina was taking actions to better measure the effectiveness of its enforcement strategies.

Utah

We found indicators that Utah could more effectively use its enforcement resources to address the risks that agricultural and urban runoff presented to Utah's water quality. Specifically, agricultural practices, land development, and urban runoff were listed as sources of impairments of surface waters or ground water. However, we found that monitoring strategies were not fully

developed for either its storm water or concentrated animal feeding operation dischargers.

Reasons for Emphasis on Major Dischargers

We believe the emphasis on major dischargers was typical of many states because EPA's implementation of the Clean Water Act focused on major dischargers. Due to limited resources, EPA and the states had decided many years ago to focus on major dischargers because they were relatively few in number but discharged large quantities of waste water. Subsequently, EPA and state management systems were well developed for major dischargers but not for other sources, such as storm water, which had new types of permit limits.

States needed more latitude in the redirection of their resources. The state programs we reviewed did not have the resources and systems to permit, monitor, and fully regulate smaller dischargers, such as storm water. States did not have mechanisms to evaluate tradeoffs in different enforcement strategies. Also, states were not encouraged to divest in major dischargers.

Implementation Focuses on Major Dischargers

Much of the Clean Water Act's implementation over the last quarter of a century focused on addressing point sources, particularly major dischargers:

- EPA and many of the EPA regions emphasized inspecting, monitoring, and enforcing major discharger permits in program guidance, performance measures, and oversight reviews.

- The Code of Federal Regulations required states to have the capability to inspect all major dischargers annually. EPA and its regions stressed and monitored the annual inspection of all major dischargers. Utah cited EPA's 100 percent inspection requirement of major dischargers as one reason it was difficult to shift to other priorities.

- EPA's Permit Compliance System included little data for nonmajor dischargers. Because of states' concerns over the cost of data entry requirements, EPA policy did not require data from other dischargers to be entered into the system.

- National standards were set for taking action on significant violations by major dischargers but standards were unclear for other dischargers.

Contaminated Runoff Not Easily Regulated

The state programs we reviewed did not have the resources and information systems to permit, monitor, and fully enforce regulated runoff, such as storm water. As discussed more fully in Chapter 4 (page 35), the states we

reviewed had minimal coverage of storm water dischargers. The addition of storm water regulations greatly increased the size of the regulated universe without a commensurate increase in resources or information systems. Thus, states were limited in their ability to implement, monitor, and enforce storm water regulations. Further, as one EPA region noted, states were expected to fully implement the "core" program before moving onto programs to regulate contaminated runoff.

Mechanisms for Evaluating Tradeoffs Not in Place

The states we evaluated did not have mechanisms in place to weigh the relative merits of divesting in major discharger enforcement in order to more heavily invest enforcement resources in minor dischargers, agricultural feeding operations, storm water dischargers, industrial sectors, or watersheds. Although the Office of Enforcement and Compliance Assurance's program guidance allowed states to change their enforcement priorities, it did not encourage divesting in major dischargers.

Best Practice: Strategy Evaluation Process

One notable "best practice" we found was in Region 10's process for evaluating the impacts of different state enforcement strategies. Region 10 issued the Clean Water Act discharge permits for Idaho and Alaska.

Region 10 Best Practice: Strategy Evaluation Process

- Evaluated shifting resources between monitoring different types of permits.
- Changed enforcement priorities.
- Quantified improvements to water quality resulting from shifting resources.

The Region had established a process to evaluate the effectiveness of investing resources in monitoring and enforcement of all categories of permit holders, including minor facilities and concentrated animal feeding operations.

As a result of its evaluation, the Region changed its enforcement priorities and ultimately caused improvements in water quality. The Region moved some of its resources from monitoring major dischargers to other sources, such as storm water. It also created a cost-effective system to monitor minor dischargers. As a result, the Region:

- Realized substantial reductions of pollutant loadings.
- Significantly increased compliance rates.
- Provided an impetus for municipality infrastructure investments that were necessary for long-term improvements in water quality.

State Enforcement Priorities Need Development

EPA, its regions and the states need to jointly develop priorities that address each state's risks to water quality and maximize the effectiveness of enforcement resources.

> *"Section 106 grants continue to support the compliance and enforcement efforts undertaken at the State level to protect surface water quality."*
>
> -EPA Office of Water

EPA impacts state enforcement priorities in several ways. First, EPA must approve state enforcement programs before they can operate. EPA also provides states with Clean Water Act water pollution control grants and negotiates related grant agreements. For fiscal 2001, Congress appropriated about $170 million for states, territories, and Indian tribes for administering water pollution control programs. Further, the Office of Enforcement and Compliance Assurance sets national priorities in its program guidance; regions use this guidance to develop enforcement priorities with states.

In its program guidance, the Office of Enforcement and Compliance Assurance set national priorities for enforcing "wet weather" dischargers, including sewer overflows, concentrated animal feeding operations, and storm water. It also identified two industrial sectors as priorities: petroleum refineries and metal electroplating.

EPA's Wet Weather Enforcement Priorities

- Combined sewer overflow policy
- Sanitary sewer overflow enforcement system
- Concentrated animal feeding operations sector strategy
- Storm water regulations

-Fiscal 2000/2001 guidance

The Office of Enforcement and Compliance Assurance consulted with states (and EPA regions and Office of Water) in setting these priorities. It also considered public health and environmental risk as reported by states and the Office of Water. As a result of its process, wet weather issues, such as sewer overflows and contaminated urban and agricultural runoff, along with storm water, were identified as national enforcement priorities for fiscal years 2000 and 2001.

However, these enforcement priorities did not necessarily reflect a state's or region's watershed-specific impairment problems. For example, some watersheds were impacted by surface mining. Also, wet weather priorities encompassed a large universe of dischargers that could not be easily

addressed by states without finding new resources or divesting in other areas. Divesting in major dischargers was somewhat difficult because EPA grant work plans continued to contain requirements for inspecting major dischargers, a resource-intensive requirement.

Finally, agreed-upon state enforcement priorities were not necessarily followed. For example, for fiscal 1999, Utah agreed that three industrial sectors would be given priority: refineries, mineral mining, and steel making. We were unable to substantiate that the state took any priority actions for these sectors, which included some minor permit holders. The state's year-end report stated that the mineral mining and steel making sectors ended the year with zero and 50 percent compliance rates, respectively.

Barriers to Strategy Development

EPA and the states have been hampered by a number of significant barriers to developing and evaluating the effectiveness of enforcement strategies. They include:

- **Water Quality Data Gaps.** The General Accounting Office's (GAO) survey of all 50 states found that their abilities to identify and set priorities among water quality problems were impacted by (1) a lack of water quality assessments and (2) data limitations on causes and sources of water impairments. These data gaps were particularly serious in the case of diffuse non-point sources, which were widely accepted as contributing to the majority of the nation's water quality problems.

> *"Only six states reported that they have a majority of the data they need to assess whether their waters meet water quality standards."*
>
> -GAO, March 2000

- **Incomplete Compliance Data**. Due to limited resources, EPA's Permit Compliance System and state systems had incomplete data on smaller dischargers, concentrated animal feeding operations, and storm water dischargers. There were serious data gaps on the amounts and types of pollutant discharges, the number of facilities without required permits, and compliance rates. These gaps hampered the development of risk-based strategies. (This issue is discussed further in Chapter 3, page 19.)

- **Compliance Standards Not Established**. EPA and the states we reviewed had not set compliance standards for types of

dischargers, sectors, watersheds, or other specific categories. Without some standard, there was no objective basis for making decisions to invest or divest in certain sectors, areas, or programs.

- **Environmental Outcomes Difficult to Measure**. GAO found environmental outcomes were inherently difficult to measure for a number of reasons: the absence of baseline data, the inherent difficulty and expense involved in quantifying the outcomes, and the difficulty in establishing causal links that isolate the effect of a particular strategy.

- **Reluctance to Address Certain Sectors**. EPA enforcement officials told us some states were reluctant to address small businesses and economically vital industries.

We recognize these impediments impact EPA's and the states' abilities to set priorities and improve the effectiveness of enforcement investments. Nonetheless, as evidenced by the actions taken by Region 10, there is much that can be done to improve the effectiveness of enforcement with some relatively minor system changes and resource realignments. Further, the establishment of compliance standards would greatly aid the decision-making process.

State Partnerships Need Strengthening

EPA, its regions, and states needed to forge strong partnerships in order to improve the effectiveness of enforcement and help solve environmental problems. State enforcement priorities were sometimes not made in a partnership fashion.

"It is of great importance to the states and to the nation that our partnership [with EPA] be strengthened."
-Environmental Council of the States

As pointed out by the National Academy of Public Administration, there are many impediments to a performance-based EPA-state relationship. Certainly, the lack of data is a major impediment. The Academy concluded that other impediments were EPA's state oversight role and a concern that states will weaken environmental protection.

However, actions by Region 10 and some states show that enforcement effectiveness can be greatly improved. We believe EPA-state collaboration is essential to maximize the effectiveness of limited enforcement resources, to

reach EPA's goal of compliance with environmental laws, and to improve our nation's waters.

Recommendations

We recommend that the Assistant Administrator for Enforcement and Compliance Assurance:

3- 1. In partnership with the Office of Water and EPA regions, collaborate with states to develop risk-based enforcement priorities. Encourage states to develop mechanisms to evaluate tradeoffs in enforcement investments.

3- 2. Provide states more latitude in the redirection of their resources. In this respect, eliminate the goal to inspect all major dischargers annually.

Agency Response and OIG Position

*2-1. **Risk-Based Priorities**. The Office of Enforcement and Compliance Assurance explained that it already has a consultation process in place in which EPA regions, states, EPA's Office of Water, and other stakeholders are extensively consulted in determining the national water enforcement priorities for each 2-year cycle. A major factor in identifying the candidates for priorities is the element of risk. This consultation process was being used to shape the 2002/2003 Memorandum of Agreement guidance. The Office believed the OIG should recognize state involvement in identifying national priorities and recommend that the Office of Enforcement and Compliance Assurance develop a process to ensure states are implementing its risk-based strategies.*

The Office of Enforcement and Compliance Assurance asserted that its actions are not keeping the states from implementing a risk-based approach or from addressing watershed priorities. Its guidance and strategies provide states with the flexible framework they need to implement a risk-based program. While EPA regions can and do recommend that states participate in national water priorities, suggest where states might focus their resources, and meet with states to conduct joint work planning, the Office stated that, ultimately, it is a state's decision as to the priorities it will set. The Office stated that a "constructive" recommendation would be that EPA should place more emphasis on program reviews and improve its efforts to share best practices with the states.

The Office disagreed with the finding that the "core" permit program inhibits the development of state strategies. The Office's guidance allows regions and states flexibility in shifting a portion of their total inspection resources from major to minor facilities, particularly in priority watersheds, where those minor facilities represent a significant risk. The Office also defended the Agency goal to inspect 100 percent of all major point sources annually because:

- *Major point sources generate the majority of effluent flow and toxic pollutant loadings which can significantly affect water quality in receiving waters.*
- *Significant environmental benefits associated with higher levels of compliance among majors would be lost if "we were to allow a total shift to minors."*

OIG Position: The Office's response partially addresses our recommendations. We recognize that states have been involved in setting national priorities. We agree that EPA should evaluate state enforcement strategies and share best practices. However, the Office of Enforcement and Compliance Assurance needs to further collaborate with EPA's Office of Water, regions, and states so that each state has an effective, risk-based enforcement strategy that addresses its unique risks to water quality. Further, the Office should foster the development of tools that states can use to evaluate tradeoffs in enforcement investments.

States have not been allowed total flexibility in deciding how to best invest their enforcement resources. EPA does, to some extent, control state enforcement programs. It authorizes states to operate these programs and sets rules, regulations, and goals for permitting, inspecting, monitoring, and enforcing discharge permits, especially those for major facilities. EPA state grants were typically contingent upon work plans which required states to perform a certain number of inspections of major and minor dischargers and perform other actions.

*2-2. **Inspections.** The Office of Enforcement and Compliance Assurance believed that state programs needed to have the ability to inspect all major dischargers annually. It cited several reasons, including:*

- *States should have minimum, quantifiable standards for procedures and resources.*
- *Major dischargers were high risk because they generate the majority of the effluent flow and toxic pollutant loadings.*

- *Numerous noncompliance problems existed with major dischargers.*

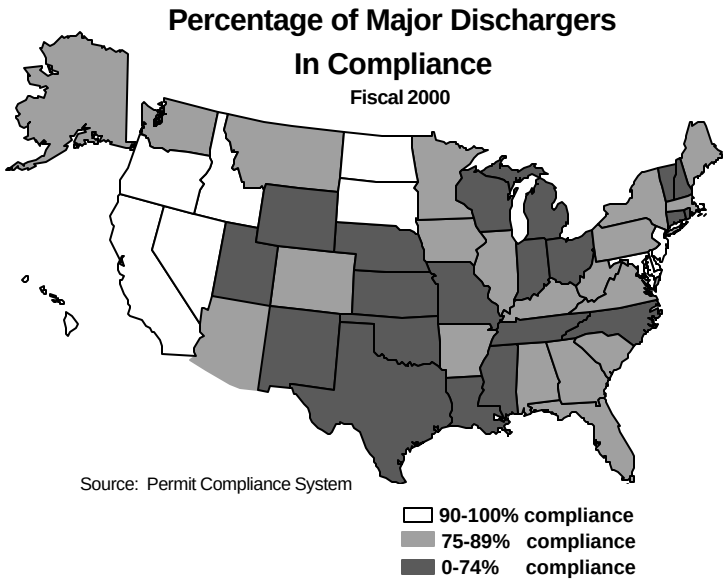
The Office of Enforcement and Compliance Assurance also pointed out that it has issued guidance that allows minor facility inspections to be traded for major facilities at a 2:1 ratio, using risk-based rationale. The Office believed an appropriate alternative recommendation would be to ensure that any state that does not commit to inspect 100 percent of its major facilities develops and implements an inspection plan that targets an appropriate mixture of high risk dischargers (i.e., majors and minors) in priority areas such as impaired watersheds.

OIG Position: The Office of Enforcement and Compliance Assurance's response illustrates its reluctance to commit to a risk-based approach. We believe it is the impact state resources have on compliance and, ultimately, water quality, that should be used to determine the adequacy of a state's resource investment in major inspections and other activities.

Part III
Compliance Monitoring and Enforcement Systems Deficient

The states we evaluated did not have sufficient information on dischargers to effectively implement their enforcement programs. One reason was that EPA's Permit Compliance System was incomplete, inaccurate and obsolete. The growth, variety and complexity of the regulated community had greatly outstripped the system capabilities. Compliance data for hundreds of thousands of dischargers were not monitored by the system because it was too costly to enter the data. Although many states were developing their own systems, they did not fill the information void.

States had other weaknesses in their compliance monitoring and enforcement systems, including not reporting serious, significant violations. The states we evaluated had not implemented effective storm water compliance monitoring programs to detect and correct noncompliance in higher risk areas.



Moreover, states needed to improve their enforcement response to significant violations to prevent further violations. Although EPA's goal was full compliance, only 10 states reported a compliance rate of 90 percent or better during fiscal 2000. Twenty states reported that less than 75 percent of their major dischargers were in compliance during the year. A discharger was defined as out of compliance with its permit when it had two significant, repeated violations of its permit within two consecutive quarters.

We recognize the compliance rate was not completely accurate because of deficiencies in EPA's Permit Compliance System. However, it provided an

indicator of the states' compliance status. National compliance rates were not available for other sources such as minor facilities and storm water dischargers. As detailed later in this section, EPA and the states estimated a very large number of storm water dischargers were not in compliance because they had not obtained permits.

Chapter 3

Permit and Other Information Systems Inadequate

The states we evaluated did not have sufficient information on regulated dischargers to determine the effectiveness of their enforcement programs.

A major barrier in state program management was the lack of information about hundreds of thousands of smaller dischargers that contributed to water quality problems. EPA's Permit Compliance System—its national permitting and enforcement system—was incomplete, inaccurate and obsolete. The system lacked data from these smaller dischargers. Although many states were developing their own systems, they did not fill the information void. As a result, states could not effectively implement the discharge program.

Without electronic reporting by dischargers, it will be virtually impossible for states to monitor compliance with permits.

One critical missing component of the Permit Compliance System was electronic transmission of self-monitoring reports. Without electronic reporting by dischargers, it will be virtually impossible for states to monitor compliance with all permits.

Further, serious toxicity violations were not classified as "significant," thereby overstating the national compliance rate. The states we evaluated had other weaknesses in their procedures for identifying significant violations.

Without sound compliance monitoring systems, significant permit violations that adversely impact water quality went uncorrected. At two of the three states, toxic discharges were released into impaired water bodies.

Permit Compliance System Had Serious Problems

EPA's Permit Compliance System Data

- Pollutant discharges
- Permit limits
- Permit violations
- Enforcement actions

EPA's permitting and enforcement information system— the Permit Compliance System—was incomplete, inaccurate and difficult to use. Compliance data from hundreds of thousands of smaller dischargers was not captured by the system and information in the system had serious limitations. Some states had created their own systems and, to some extent, duplicated the Agency's system. EPA was aware of these problems and, in 1999, identified the system as an Agency weakness. Until the system is upgraded, expanded, and reasonably accurate, its usefulness as a management and program evaluation tool will be seriously limited. As

such, the system should continue to be reported as an Agency weakness until these problems are corrected.

EPA and state permitting and enforcement programs rely on EPA's compliance system; of the 44 states approved to issue permits, 39 states enter data into the system. EPA uses the system for program management and oversight purposes, including assisting in targeting enforcement activity to the areas experiencing compliance and environmental problems. The data are analyzed to help determine the quality of the nation's water bodies and will serve as the source of data for reporting purposes on EPA's progress in reducing pollutant loadings.

State Enforcement Program Deficiencies

- Compliance system excluded data for smaller dischargers
- Serious toxicity violations and other violations not reported
- Strategies for identifying unpermitted storm water dischargers needed development
- Many enforcement actions issued a year or more after violations
- Penalties failed to recover economic benefit of noncompliance
- Proactive strategies needed to avoid serious violations

System Capabilities Exclude Many Dischargers

The growth, variety, and complexity of the regulated community had greatly outstripped the system's capabilities. Dischargers not monitored by the system included:

- Storm water,
- Concentrated animal feeding operations, and
- Sewer overflows.

- *Permits Have Different Requirements*

The system was not designed for these type of permits, which had different permit requirements than the more traditional major and minor discharger permits. Generally, states were not entering discharge information on minor and storm water dischargers, concentrated animal feeding operations, and sewer overflows because EPA did not require it.

The lack of a sound monitoring system was particularly evident for storm water dischargers. The system was not designed to track storm water compliance data, and states did not maintain their own complete and

Number of Permits in EPA's Permit Compliance System

Type of Permit	Estimated Number of Permits	Number in System
Storm water	400,000	16,417
Concentrated animal feeding operations	15,000	5,608

consistent data systems
for tracking and monitoring storm water compliance activities.

- *Thousands of Permits Need Data Entry*

Another reason data was excluded for smaller permits was because data entry was time-consuming. The Office of Water estimated there were about 400,000 storm water and 100,000 minor discharger permits. Compared to 7,000 major discharger permits, these permits represented a substantial workload. As such, EPA and the states had agreed that data only for major dischargers was required to be in the system.

In order for states to effectively monitor the myriad of smaller dischargers and others, electronic self-monitoring reports are critical. As noted later in this report, storm water and minor permit violations went undetected and uncorrected largely due to a lack of monitoring. Also, EPA had not yet been successful in its efforts to introduce electronic self-reporting. To effectively monitor all sources, EPA should set a high priority for implementing electronic reporting for all dischargers nationwide.

Best Practice: Electronic Reporting

California was testing electronic submission of self-monitoring reports and reported successful results. In addition to providing necessary environmental decision-making information, electronic self-reporting eliminates costs associated with preparing paper reports and repeat data entry by states and EPA. It also helps eliminate the failure of facilities and states to accurately report and categorize violations.

Best Practice: Electronic Self-Reporting

- Eliminates costs associated with preparing and reviewing paper reports
- Minimizes repeat data entry by EPA and the states
- Helps eliminate inaccurate reporting by facilities and states
- Facilitates the prompt review of discharge reports
- Allows large volumes of discharge data to be included in state and national data bases efficiently

System Inaccurate for Major Dischargers

In addition to excluding a large number of dischargers, the Permit Compliance System was inaccurate for a number of other reasons. For example:

- **California Data Not Entered**. Beginning in fiscal 2000, the Office of Enforcement and Compliance Assurance had agreed to allow only about 30 percent of California's major facility compliance data to be entered into the system. These facilities represented the greatest amount of municipal flow and the industries of greatest concern.

- **Utah's Noncompliance Rate Overstated.** A compliance system report showed that 65 percent of Utah's major facilities were in significant noncompliance for fiscal 1999. This rate was substantially overstated because the state had not entered self-monitoring reports into the system on time. The system did not have the capability to correct this error.

- **Report Unusable in Maryland.** A recent Maryland state audit report found the system generated many violations that did not represent actual violations.

- **Toxicity Violations Excluded**. As detailed later in this chapter, whole effluent toxicity violations were not classified as significant violations and, in many cases, overstated the compliance rate.

As shown, it was questionable whether the compliance system fairly represented the compliance status of major facilities nationwide. It did not reflect the national compliance rate of other facilities. Without complete and accurate information, it was difficult to evaluate the effectiveness of permitting, compliance, and enforcement strategies.

System Obsolete

EPA readily acknowledged its compliance system was obsolete, resource intensive, and difficult to use. In spite of these factors, the system had not had any major redesigns in nearly 20 years.

The Permit Compliance System was first developed in 1974 and its last modernization effort was in 1982, nearly 20 years ago. Further, the system was:

- **Hard to use.** Due to the age and inflexibility of the system, it was not user friendly. The system was dependent on user coding and some users only saw the large quantity of data that was entered.

- **Resource Intensive**. The system required the manual entry of all data including facility self-monitoring reports. As a result, data entry was very labor intensive.

For example, the state of Colorado estimated the cost to enter data was about $70,000 per year. Further, the system was costly for EPA to

State Data Systems

	California	North Carolina	Utah
Uses its own system	U	U	
Enters data into Permit Compliance System		U	U

U = Condition occurs

maintain.

States Create Their Own Systems

The lack of an effective compliance system resulted in the development of unique state systems. Unique systems have created problems for EPA and the states. Some state systems did not interface with the Permit Compliance System. As a result, either states or regions had to reenter state data into the Permit Compliance System. To remedy this problem of duplicate data entry, EPA has proposed an Interim Data Exchange Format to overcome the data transfer difficulties. However, this system has not been fielded.

Further, the Office of Enforcement and Compliance Assurance had not addressed the risk that new state systems would not include the data elements required by the modernized Permit Compliance System. To illustrate, California was designing a new enforcement system to meet its own needs; however, Region 9 was not involved with the development to ensure all data elements needed for the new Permit Compliance System were included. In order to do this, the Office of Enforcement and Compliance Assurance and Office of Water need to complete the policy statement for mandatory data elements.

Compliance System Modernization Project

The Office of Enforcement and Compliance Assurance had three major initiatives underway for its Permit Compliance System which were intended to address system problems and improve its usefulness as a management tool:

1. System modernization,
2. State interim data exchange format, and
3. Electronic reporting.

In determining the status of EPA's plan to modernize its Permit Compliance System, we found that the Office of Enforcement and Compliance Assurance had not successfully collaborated with EPA's Office of Water and the states in the design of the new system requirements. This issue is discussed in more detail in Exhibit 2, *Other Matters*, found on page 69.

A wastewater treatment plant in North Carolina failed 27 out of 36 toxicity tests since 1996. None of these violations were designated as significant and, therefore, the state did not include them on quarterly non-compliance reports to EPA.

Other Aspects of Compliance Systems Need Improvement

We found other fundamental weaknesses in EPA and state compliance monitoring systems for major and minor facilities. Our review of three states, along with results from recent state audits, found:

- Many serious toxicity violations were not classified as "significant" and thus were not subject to corrective or enforcement actions.
- Numerous other major and minor facility violations went unreported.
- State inspection procedures for major facilities needed some improvements.

Without sound compliance monitoring systems, significant permit violations that adversely impact water quality go undetected. For example, we found serious toxicity violations in two states that went uncorrected; they were not reported to EPA as significant violations. In at least one case, the toxic discharge was released into an impaired water body. Further, when violations are not identified, enforcement actions that penalize noncompliance cannot be taken.

Serious Toxicity Violations Not Identified as Significant

Serious toxicity violations, found through whole effluent toxicity tests, were not categorized as significant violations. The states we evaluated told us they were not aware toxicity test failures met EPA's criteria for a "significant" violation. Also, Office of Enforcement and Compliance Assurance guidance (a 1995 memorandum) did not clearly identify toxicity text violations as significant violations. As a result, facilities continued to discharge toxic waste water into water bodies.

"In addition, the [toxicity] test itself is intended to measure the direct potential for impairment of fish and aquatic life communities related to substances present in effluents at toxic concentrations. Thus, any failure of the effluent limitation should be considered class I [serious] and appropriate action taken."

-Wisconsin Department of Natural Resources

Whole effluent toxicity tests are one of the most important measures of assessing the impact of wastewater discharges. Toxicity tests expose aquatic organisms and fish to discharges for a specific time period, in order to predict at what levels the discharges may cause harm to the organisms. When a toxicity violation occurs, it shows the discharge is toxic enough to harm or kill fish and organisms.

Our sample of nine facilities in California and our review of North Carolina's data base identified three facilities in California and four facilities in North Carolina that had toxicity violations. The seven California and North Carolina facilities did not categorize their toxicity violations as significant. If EPA had been aware of the toxicity violations, it could have worked with state officials, obtained enforcement orders, and resolved the toxic problems.

Utah did not report any toxicity violations in the sample of facilities we reviewed. Region 8 told us that Utah had a policy in place to take actions on whole effluent toxicity test violations.

Best Practice: Utah's Toxicity Violation Policy

- Violations must be reported within 24 hours
- Accelerated testing is required
- Investigation of the cause of toxicity is required for patterns of toxicity

There was a large number of toxic violations nationwide that went unreported as significant violations. EPA's Permit Compliance System reported 6,552 toxicity violations nationwide between October 1, 1998 and December 31, 1999. We estimate that less than 10 percent of these violations were designated as significant and, thus, were not subject to the requirements for taking enforcement actions.

Although EPA guidance categorized effluent violations that may cause environmental harm as significant, it did not specifically designate whole effluent toxicity violations as significant. EPA officials told us this stemmed from industry opposition years earlier based on concerns over the reliability of toxicity tests. However, EPA officials confirmed that toxicity tests were very reliable. Also, they noted that toxicity tests allowed dischargers to eliminate other tests of specific chemicals. As such, EPA needs to require dischargers to categorize toxicity test failures as significant violations.

Violations by Major Dischargers Not Identified

Significant violations by major dischargers were not always identified and reported. In California, the state's manual reviews of monitoring reports missed significant violations at three of the nine facilities we reviewed. As a result, none of these violations were identified and reported. Many of these problems could be eliminated by having dischargers submit monitoring reports electronically.

Refinery in Northern California, a major discharger

A 1999 California study also found that violations were not identified and reported. The study found many self-monitoring reports were not received, and many that were received were not reviewed in sufficient detail to identify violations.

Because it did not identify daily and weekly violations, North Carolina delayed 15 months in issuing an enforcement action for mercury violations. The violator, a town's waste water treatment plant, was the cause of pollution of an environmentally-impaired stream with designated poor water quality, non-supporting of its intended uses.

In North Carolina, permits contained daily or weekly limits which were sometimes violated but not identified or reported. In at least one case we reviewed, the violations of mercury limits were directly attributable to impairing a stream. As a result of our audit, North Carolina developed a separate software system to detect violations of daily maximum limits in permits.

State audit reports identified problems with the accurate identification of violations. For example, Arkansas's Legislative Auditor found discrepancies between the violations reported on the self-monitoring reports and those reported on in-house summary reports.

Significant Violations Not Identified for Minor Facilities

Significant violations were not identified for minor facilities. There were two main reasons for this condition:

- States were not tracking compliance at minor facilities and entering information into EPA's system.
- EPA had not explicitly defined a "significant" violation for minor dischargers.

Minor dischargers have been implicated as causes of water impairments in some water bodies. A recent Region 10 initiative to monitor compliance at minor facilities found high noncompliance rates. After the region developed an oversight system and began enforcing permit limits, pollutant discharges dropped dramatically.

Region 10 Best Practice
Minor Permit Compliance System

- Created oversight system for minor facility dischargers
- Identified violations with minimal effort
- Identified when an enforcement action should be taken

EPA's Permit Compliance System identifies violations based on data entered from permits and discharger self-monitoring reports. As discussed previously, generally states only enter data for major facilities. Even this limited data entry process is time-consuming and expensive; however, the system calculates discharge violations.

Generally, states were not reporting information on minor facility compliance to EPA. Although North Carolina was reviewing minor facility violations, we found:

- **Data Not Entered into EPA System.** None of the three states we evaluated were consistently entering minor facility data into the Agency's compliance system. Thus, minor discharger violations weren't reported to EPA.

- **Annual Reports Missing**. Many states did not submit annual reports describing compliance and enforcement activities at minor facilities, as required by federal regulation. None of the states we reviewed submitted this report and only two of the ten states in Regions 8 and 9 submitted this report.

- **States Were Not Evaluating Compliance.** Two of the three states we evaluated did not have a state system for evaluating minor facility compliance.

- **Conditions Noted in Other Reports**. These conditions were noted in state audit reports. For example, Louisiana auditors found 21 percent of the required self-monitoring reports for minor facilities in their sample had not been submitted. Also, the state was not reviewing the monitoring reports that were submitted.

Without these annual reports on the compliance status of minor dischargers, EPA was unaware of compliance problems and was unable to take unilateral action or assist the states in helping permit-violating facilities come back into compliance.

Further, EPA had not established criteria for significant violations at minor facilities or significant minor facilities. EPA guidance stated that the inventory data for "significant minors" should be entered directly into the Permit Compliance System, but significant minors was not defined. At a minimum, minors that adversely impact impaired watersheds should be identified as significant. Also, nonsubmission of discharge monitoring reports should be identified as a significant violation. If this criteria were established, states, regions and EPA would have better data to evaluate compliance by minor facilities.

Inspections of Major Facilities Need Improvements

States needed to improve the quality of their inspections to ensure facilities were accurately reporting monitoring data. Self-monitoring reports are the backbone of the Clean Water Act's compliance monitoring system; major facilities must submit them monthly. States rely on facilities to promptly and accurately report their violations to regulators. Facilities are required to report significant violations to states within 24 hours.

Changes Needed to State Inspection Procedures

- Inspections need to be unannounced
- Inspections need to evaluate the accuracy and reliability of self-monitoring reports

California performed cursory inspections of a sugar refinery, missing violations of chlorine limits. When the state analyzed reporting documentation in August 1999, it found several years of unreported violations of chlorine limits. The chlorine was discharged into an impaired waterway.

Two of the three states we reviewed needed to improve their inspection procedures. For the sites we reviewed, neither California nor Utah performed unannounced inspections and California did not uniformly verify the accuracy and reliability of self-monitoring reports during site visits. As a result, California missed unreported significant violations by at least one facility. This facility discharged chlorine into an impaired waterway.

Other reports found inspection quality issues in state programs. For example, the Environmental Working Group reported in July 2000 that 42 percent of all Clean Water Act inspections were a brief visual inspection of a facility. Visual inspections typically do not evaluate the accuracy of self-monitoring reports. Although most state audit reports did not evaluate the quality of inspections, a recent Oregon audit report found that the Department of Environmental Quality was not ensuring self-monitoring reports were accurate.

Oregon Department of Environmental Quality *"...was unaware of numerous instances of falsified reporting occurring over a 5-year period at one permitted facility..."*

-Oregon Audits Division

In California, inspections were not thorough because inspections were deemed lower priority than issuing permits and taking enforcement actions. The goal of inspecting all major facilities annually took precedence over a thorough inspection. States did not perform unannounced inspections because staff were concerned no one would be available at the facility and time would be wasted.

Conclusion

EPA's Permit Compliance System was obsolete and insufficient to evaluate the effectiveness of state enforcement programs. The system lacked data from thousands of smaller dischargers. Although many states were developing their own systems, these systems did not fill the information void.

One critical missing component of the Permit Compliance System was electronic transmission of self-monitoring reports. Without electronic reporting by dischargers, it will be virtually impossible for states to monitor compliance with all permits.

We also found many states were not classifying thousands of serious toxicity violations as "significant." Without this designation, states were not subject to EPA requirements for taking enforcement and corrective actions. Moreover, in some states, toxic effluent continued to be discharged into impaired waterways.

Other aspects of discharge compliance were not being addressed by states. Two of the three states we reviewed were not evaluating compliance by minor dischargers. We also found procedures for conducting inspections and reviewing self-monitoring data was insufficient at two states. Since self-monitoring reports are the cornerstone of the discharge system, these procedural weaknesses are serious.

Recommendations

We recommend that the Assistant Administrator for Enforcement and Compliance Assurance:

3- 1. Make modernizing the Permit Compliance System a high priority. Further, ensure that future systems:
   - Require electronic submission and evaluation of self-monitoring reports for all dischargers, including minor facilities and storm water.
   - Track storm water permits, inspections, compliance rates, and enforcement actions.

3- 2. Accelerate the development of the Interim Data Exchange Format for the Permit Compliance System. Also, before proceeding further into design and development, work with the Office of Water to ensure there is an up-to-date policy statement for water system criteria.

3- 3. Have regions work with states to help ensure data elements needed for the new Permit Compliance System are included in state systems being developed.

3- 4. Continue to report the Permit Compliance System as an Agency-level weakness until the modernization project is implemented and the system data is reasonably accurate and complete.

3- 5. Revise guidance to specify that whole effluent toxicity violations are significant violations. Revise regulations to require whole effluent toxicity violations to be reported on quarterly noncompliance reports.

3- 6. Establish a definition of significant violations for minor facilities, including storm water dischargers. At a minimum, include nonsubmission of self-monitoring reports in this definition. Also, define "significant" minor facilities. Include facilities impacting impaired waterways in this definition.

Additional suggestions for modernizing the Permit Compliance System can be found at Exhibit 2, page 69.

Agency Response and OIG Position

3-1. ***System Modernization.*** *The Office of Enforcement and Compliance Assurance stated that modernizing the Permit Compliance System was, and will continue to be, a high priority. The modernized system will allow for entry of data element fields needed to track all dischargers, including minor facilities and storm water facilities. Information tracked for those dischargers will include permit limits, inspections, compliance and enforcement action data. System modernization is scheduled for implementation by the end of 2003.*

OIG Position: While the Office asserted that the Permit Compliance System was a high priority, the system has been obsolete for over 10 years and the new system schedule has continually slipped. Further, the Office has not yet identified the data elements the system will include. These facts indicate that the system has not been a high priority.

3-2. ***State Data Transfer System****. The Office of Enforcement and Compliance Assurance said it and the EPA Office of Environmental Information had worked closely with their state partners in implementing the Interim Data Exchange Format over the last year.*

The EPA Office of Environmental Information is the lead for implementing the Exchange Format project, has developed the schedule for project implementation, and must address acceleration. Currently, the Exchange Format is scheduled for full implementation by March 2002.

While Office of Enforcement and Compliance Assurance agreed that there was a need to update the Policy Statement to address new data requirements, it did not agree that this must occur before design and software development. Broad capacity will be built into the system as indicated in the response to 3-1. Only a subset of that capacity is likely to be federally required. Therefore, the Policy Statement can be updated during system design and development.

OIG Position: The Agency's response does not fully address our conclusions and recommendations. According to the Office of Enforcement and Compliance Assurance's Fiscal 2000 Integrity Act Annual Assurance Letter, the Exchange Format was scheduled to be implemented in the third quarter of fiscal 2001. Thus, the Exchange Format system has been delayed nearly a year since the letter was prepared in October 2000. Further, the Office needs to work with the Office of Environmental Information to accelerate the Exchange

Format system, since the Office of Enforcement and Compliance Assurance is responsible for the system.

The Policy Statement is obsolete and needs to be updated immediately. This critical Agency document excludes federal information requirements for storm water permits, which now compromise the largest number of permits. Further, changes to the Policy Statement should be completed before software design, so that the changes can be incorporated into the modernized system. Data entry requirements are essential for determining system requirements.

3-3. ***State Systems.*** *The Office of Enforcement and Compliance Assurance explained that it was finalizing the overall data requirements for the modernized Permit Compliance System. It stated it will continue to work closely with the states in developing detailed data requirements. Until those requirements are finalized, those states modernizing their systems should include in their modernized system the data entry requirements specified in the current Policy Statement.*

For the most part, states do not coordinate or consult with the Office of Enforcement and Compliance Assurance when modernizing their systems, as these systems are built primarily to accommodate state needs. However, the Office agreed to request of regions that they make a special effort to discuss state modernization plans during their program status meetings. Additionally, it hoped that extensive involvement of state representatives in the modernization process will have a spill over effect in getting states to include the necessary data elements in their systems.

OIG Position: We do not agree an updated policy statement is unnecessary at this time. EPA regions need an updated policy statement to engage in constructive discussions with states about which state data is needed at the national level. Existing data requirements are insufficient.

3-4. ***Agency Control Weakness.*** *The Office of Enforcement and Compliance Assurance agreed to continue to report the Permit Compliance System as an Agency-level weakness until all milestones were met. One of the milestones was the completion of modernization which is scheduled to occur by the end of 2003.*

OIG Position: The response only partially addresses our recommendation. The system should continue to be reported as an Agency weakness until the data is reasonably accurate and complete.

3-5. ***Toxicity Violations.*** *The Office of Enforcement and Compliance Assurance pointed out that, in many ways, whole effluent toxicity is treated like any other parameter in the permit program; i.e., the permittee reports self-monitoring data on its discharge report, results are entered into the permit compliance system and tracked, and violations should be reviewed and are subject to a range of enforcement responses. The major exception is that toxicity violations are not automatically flagged as significant noncompliance. Because of the variability in permit requirements and in the frequency of compliance monitoring required, toxicity violations do not neatly fit under existing "significant noncompliance" criteria.*

However, EPA's existing regulations and guidance provide EPA regions and states with the flexibility to identify toxicity violations as significant:

- *40 CFR Part 123.45(a) provides states with the flexibility to report any violation of substantial concern on quarterly noncompliance reports.*
- *EPA's "Whole Effluent Toxicity Permitting Principles and Enforcement Strategy" prescribes review of toxicity limit violations.*
- *EPA's enforcement response guide recommends responses to toxicity violations.*

The Office of Enforcement and Compliance Assurance agreed to reconsider the applicability of significant noncompliance to whole effluent toxicity violations when it revises the definition of significant noncompliance.

OIG Position: There is no reason to delay categorizing whole effluent toxicity violations as significant violations. The current process is not working. While states have had the flexibility to identify whole effluent toxicity violations as "significant" violations, they generally have not. According to the Permit Compliance System, only 5.6 percent of the fiscal 2000 toxicity violations were identified as significant violations. Facilities nationwide had large numbers of recurring toxicity violations that were not designated as significant. For example:

- One facility in Massachusetts had 16 toxicity violations; none were categorized as significant.
- One facility in New Jersey had nine toxicity violations; none were categorized as significant.
- One facility in Florida had 19 toxicity violations; none were labeled as significant.

By not labeling toxic violations as "significant," states obfuscate EPA oversight of the appropriateness and effectiveness of state enforcement actions.

3-6. ***Other Significant Violations****. The Office of Enforcement and Compliance Assurance noted that a state has the discretion to designate any facility with violations of concern as a "major" discharger thereby subjecting the facility to "significant" noncompliance criteria. 40 CFR Part 123.45(a) provides a state with the discretion to report any violation of "substantial concern" on a quarterly noncompliance report.*

The Office of Enforcement and Compliance Assurance committed to consider developing guidance on when a minor discharger should be designated as a major discharger and to include factors such as non-submission of discharge monitoring reports and impact of the discharge on impaired waterways.

OIG Position: The Office's response does not address our recommendation to establish a definition of significant violations for minor facilities, including storm water dischargers, and to define "significant" minor facilities. We are recommending that EPA establish a uniform definition for significant violations at all minor dischargers, including storm water. Designating minor dischargers as major dischargers does not address our recommendation or the problems that exist.

Chapter 4

Storm Water Compliance Systems Have Deficiencies

"Urban runoff from seven south Orange County [California] cities is so noxious that it exceeds safe-swimming water standards at all but three of 35 sites–and by 100-fold at four..."
-Orange County Register

Storm water pollution posed significant water quality problems and health risks—in 1999, more than 6,000 beaches were closed or had health advisories issued due to polluted waters caused mainly by storm water runoff.

The states we evaluated were not effectively monitoring compliance by storm water dischargers, resulting in violations going undetected and unaddressed. We found:

California estimated there could be as many as 19,000 facilities operating without proper storm water permits.

- **State strategies were needed for identifying storm water non-filers**. States estimated thousands of facilities had not obtained storm water permits.
- **Risk-based inspection programs were lacking**. The thousands of relatively small dischargers in this program dictated a risk-based approach that had not been well developed.
- **Processes were needed to monitor discharge reports**. States did not maintain adequate processes or systems for reviewing self-monitoring reports, identifying major violations, and taking appropriate action.
- **Tracking systems for citizen complaints were insufficient**. Although citizen complaints were a primary means of identifying violations, complaint tracking systems were not implemented.

The main impediments to effective storm water monitoring systems were a lack of resources and information. Although the storm water program involved nearly 400,000 dischargers nationwide, state resources were not significantly increased to implement this program. Further, EPA's Permit Compliance System and state systems did not track storm water permit compliance data, resulting in significant data gaps. As a result, the states we reviewed did not have effective storm water compliance monitoring programs to detect and correct noncompliance in higher risk areas.

Numerous Storm Water Non-filers

The states we evaluated did not have adequate strategies for identifying storm water dischargers that had failed to file for a proper permit. Although some "non-filers" were identified through citizen complaints, states did not have systematic processes to search for and identify non-filers because of inadequate resources and data.

The number of unpermitted dischargers was substantial. For example, Utah estimated it had about 500 unpermitted facilities subject to storm water regulations. California estimated that at least 19,000 facilities might be subject to storm water regulations, but had yet to apply for a permit. Because the identification of non-filers continued to be a challenge in the state, the state was investigating the feasibility of accessing other state agency databases to assist in identifying non-filers.

Inadequate Inspection Programs

The states we evaluated were not employing sound, risk-based inspection programs of storm water dischargers:

Storm Water Inspection Programs

	California (Los Angeles)	Utah	North Carolina
Number of permitted facilities	16,641 (3,304)	690	6,227
Estimated annual rate of facilities inspected	12 %	2 %*	Construction-100%; others unknown
Risk-based inspection schedule developed	No	No	No
Inspections documented	Yes	Sometimes	Yes
Inspection results tracked and violations followed up	No	No	No, except construction sites

** Number of inspections performed could not be substantiated.*

Inspection Statistics Unreliable

State-reported inspection statistics were generally overstated or unsubstantiated at the states we reviewed. For example, California's Los Angeles region included searches for non-filers in its tally. Fortunately, the Los Angeles region had recently increased its inspection field presence from previous years. Utah's reported inspections could not be fully substantiated; the state did not consistently document or track inspection results.

Although most state audit reports did not evaluate storm water inspections, the Louisiana Legislative Auditor reported in January 2001 that most of the uninspected facilities were storm water dischargers.

States Need Strategies

We recognize that it is not realistic to inspect hundreds or thousands of storm water dischargers every year with limited resources. Therefore, states should develop risk-based strategies to target inspections that provide maximum benefit to improving total water quality.

Best Practice: Risk-Based Inspection Strategy

California was developing a risk-based inspection plan: the Los Angeles region's work plan for fiscal year 2000/2001 showed that it intended to start targeting industrial and construction inspections at the highest risk dischargers using specific criteria, such as administrative or technical non-compliance, high-risk industries, large construction sites, and complaints. Other criteria states could use to focus inspection resources are impaired waters or high priority watersheds, and repeat violators.

California Best Practice: Risk-Based Inspection Plan

- Focuses limited resources on highest risk dischargers
- Uses criteria to identify highest risk dischargers

States Need to Follow Up on Inspection Results

The states we evaluated were not consistently tracking or following up on inspection results. Four of eleven inspection reports reviewed in California and Utah detected violations that were not tracked or acted upon. Therefore, facilities with major violations, such as failure to prepare a storm water pollution prevention plan or implement storm water best management practices, did not come into compliance promptly, if at all. And there was no evidence to determine if or when compliance was achieved.

"The heart of a general permit is the pollution prevention plan..."

- EPA Region 9

Self-Monitoring System Not Identifying Major Violations

The states we evaluated were not reviewing self-monitoring reports for compliance with permits and regulations. In California, one of four monitoring reports we reviewed did not meet regulatory requirements. The Los Angeles region acknowledged that in the past they have had to focus limited resources on requiring dischargers to submit reports, as opposed to addressing noncompliance items in reports.

Utah did not track which facilities were required to submit self-monitoring reports; thus, the state could not ensure all required reports were received.

Significant Storm Water Violations Found: California

- Missing sampling analysis during the required test period
- Missing descriptions of best management practices implemented at the facility
- Reporting results which were not based on storm events
- Not submitting monitoring reports

EPA and state systems did not facilitate a review of self-monitoring reports. The Permit Compliance System was not designed to track storm water compliance data. State data systems did not fill this gap, either. However, storm water data was critical, not only for determining compliance, but for evaluating the effectiveness of the storm water program.

Control of sediment into storm drain

Due to the large volume of storm water self-monitoring reports, states need an electronic scoring process that cost-effectively identifies significant violations and other important information. Several low-cost viable options need to be seriously considered including scan sheets (commonly used for electronic scoring of tests) and web-based reporting. This would make efficient use of limited resources, as well as provide assurance that required reports are submitted and noncompliance is detected.

Complaint Tracking Systems Lacking

The states we reviewed did not maintain adequate or consistent tracking systems for citizen complaints. Complaints were an important source of violation information. Without consistently tracking when and how citizen complaints were resolved, there was no evidence that the states addressed the complaints or provided a formal or informal response addressing citizen concerns.

Barriers

Deficiencies in the state storm water programs occurred primarily because of incomplete and inconsistent data systems for tracking storm water activities and inadequate resources. Also, states were reluctant to place additional burdens on small and economically vital business.

Fed by urban runoff, Munger Creek in Orange County, California, had an increased fecal-coliform count. (Photo by Orange County Register.)

Inadequate Data Systems

As previously discussed in Chapter 3, one major impediment to storm water self-monitoring systems was data systems. Storm water data was critical, not only for determining compliance, but for evaluating the effectiveness of the storm water program. We found EPA's Permit Compliance System:

- Included only about 16,500 of an estimated 400,000 storm water permits.
- Did not require states to enter storm water permit data. This was due to concerns over the increased state and federal data entry workload.
- Was not designed to track storm water compliance data.

State data systems did not fill this gap, either. The states we evaluated did not maintain their own complete and consistent data systems for tracking and monitoring storm water compliance activities. All three state data systems were not tracking one or more pieces of critical storm water data.

For example, Utah did not track critical compliance data and could not support an internal report citing 100 percent compliance. Utah also did not maintain an information system on its current construction site permits. Our sample included an instance where a construction facility was operating with an expired permit until a complaint was lodged.

Inadequate Resources

The promulgation of the Phase I storm water regulations in November 1990 substantially increased the universe of permit holders under the Clean Water Act. Implementation of the Phase II regulations beginning in 2000 further increases the universe. However, minimum resources have been dedicated to carry out storm water activities. In addition, permit fees were generally inadequate to help fund storm water programs.

Staff Years Dedicated to Storm Water
Fiscal 1999

State	Storm Water Permits	Staff Years
California (Los Angeles Region)	3,304	2.5
North Carolina	6,227	7
Utah	690	1+

For example, at the time of our audit, California's Los Angeles region only had 2.5 staff years to monitor more than 3,300 storm water permit holders and conduct searches for as many as 10,000 unpermitted facilities that were subject to regulation. The program was grossly underfunded and as a result, was identified as not meeting federal standards for controlling pollution caused by storm water runoff. This was a serious concern because storm water runoff was the largest single source

"...the Los Angeles Regional Board inexplicably devotes the least amount of resources to its worst water quality problem: polluted runoff."
- Natural Resources Defense Council

of water pollution in this region. To help address this concern, the Los Angeles region requested and received a substantial increase in its 2000/2001 storm water budget, which enabled it to hire additional storm water staff.

Risk-Based Strategies

Because of limited resources and the large number of storm water dischargers, states should engage in risk-based strategies to focus their resources on the most significant water quality issues. Urban runoff, including storm sewers, is one of the top three sources of pollutants in rivers, lakes, and estuaries. Storm water dischargers now make up about 75 percent of the number of discharge permits. However, as further discussed in Chapter 2, state water programs have generally given higher priority to major "point source" dischargers, such as municipal waste water treatment plants and industrial facilities.

States Taking Enforcement Actions

The three states in our review took some substantial storm water enforcement actions. The three states assessed penalties of over $500,000. North Carolina took one enforcement action for $50,975.

Storm Water Enforcement Actions
Fiscal Year 1999

	Number of Enforcement Actions	Penalties
California (Los Angeles Region)	28	$256,100
North Carolina	12	$248,741
Utah	2	$ 86,609

Recommendations

We recommend that the Assistant Administrator for Enforcement and Compliance Assurance:

4-1. Work with EPA regions in assisting states to:
- Develop mechanisms to better balance their limited resources between all categories of dischargers, as indicated by the states' analysis of risks to water quality.
- Create effective strategies for identifying storm water non-filers.
- Develop sound storm water inspection programs which include risk-based inspection schedules and tracking and follow-up of inspection results.
- Establish tracking systems for citizen complaints.

4-2. Facilitate the development of a system which allows self-monitoring reports to be electronically scored for compliance. Consider low-cost options such as scan sheets (commonly used for electronic scoring of tests) and web-based reporting.

Agency Response and OIG Position

*4-1. **State Strategies and Systems**. The Office of Enforcement and Compliance Assurance agreed to continue to work with the EPA regions and states to implement risk-based approaches to water enforcement. It noted that the Office's Memorandum guidance and national strategies provide flexibility to address majors as well as minors. The 2000 Storm Water Enforcement Strategy outlines a recommended "sweep" approach of targeting a priority watershed or geographic area, then focusing storm water inspections and enforcement actions on a category of non-filers (e.g., a priority industrial sector or large construction sites) in that area.*

The Office noted that while EPA can assist the states by providing direction, guidance, training, and work-sharing, states must take responsibility to develop appropriate planning mechanisms to develop and implement risk-based strategies (which should include a sound inspection program and a system to track citizen complaints), and balance their limited resources.

OIG Position: The Office's Memorandum Guidance does not address our recommendation. While the guidance allowed "trading" major inspections for minor inspections at a 2:1 ratio, the guidance did not address trading major inspections for storm water inspections. Nor did it address the other aspects of our recommendation. Moreover the storm water enforcement strategy was developed for EPA regions, not states.

We agree that states are responsible for their enforcement strategies. However, we do not agree there is sufficient flexibility in the existing system. EPA-driven requirements for major facility inspections, oversight, and enforcement actions focus state programs on major dischargers. Instead of setting rules for divesting in major facility oversight, it would be more useful if EPA used its national perspective and expertise to help states develop and fine-tune risk-based enforcement strategies, including those for monitoring storm water permits.

*4-2. **Electronic Submission of Storm Water Reports**. The current Permit Compliance System already determines compliance based on electronic review of the discharge monitoring reports, though some improvements are needed in the system. The modernized system will certainly have this capability. Additionally, the modernized system will provide the capability for facilities and states to electronically report information using the Agency's Central Data Exchange portal and the National Environmental Information Exchange Network for the transfer of permit data.*

OIG Position: The Permit Compliance System does not determine compliance for storm water permits because it does not have the capability to accept storm

water compliance data. Further, for various reasons, the system does not accept compliance data electronically. As a result, states must enter compliance data manually. Manual data entry is a huge obstacle, especially for the hundreds of thousands of storm water and minor permits.

One obvious solution to the data entry problem is to have permit holders submit their reports electronically. Low-cost, common platform options are electronic score sheets (used for testing) and web-based reporting. We have no evidence the new system will address these issues; however, in meetings with the Office, it indicated it would explore these options.

Chapter 5

Enforcement Actions Late and Penalties Insufficient

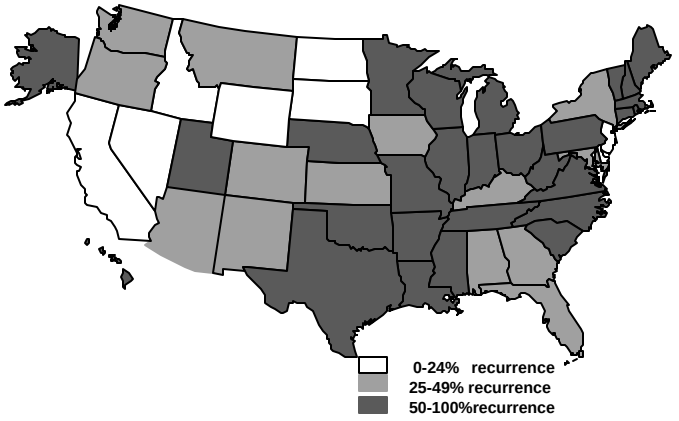
"Regulations are not self-implementing; they have impact only when regulated parties decide to comply or agencies force them to do so."

-National Academy of Public Administration

Although the states we evaluated generally took enforcement actions on significant violations, we found these actions were often taken a year or more after the violation occurred. Further, penalties were sometimes insufficient to prevent further violations and were not always collected. This may have contributed to a large number of recurring violations. Over one-third of the states reported that over half of their major facilities with significant violations in 1999 also had recurring significant violations in fiscal 2000. (Data was not available for non-major facilities.)

Major Facilities with Recurring Violations

Facilities With Significant Violations Recurring in 2000



Source: Permit Compliance System

Some states were taking actions to improve the effectiveness of their enforcement programs by:

- Requiring penalties to include recovery of the economic benefit of noncompliance.
- Using minimum penalties.
- Publicizing violations and responses.

States could further improve the effectiveness of enforcement actions by taking actions promptly and improving proactive strategies that help avoid violations.

Delayed Enforcement Actions

The three states we evaluated were oftentimes taking a year or more to respond to significant violations at major facilities:

Enforcement Actions Delayed Over 1 Year

State	Percentage of Late Actions	Months Late (Violation to Action)
California (San Francisco Region)	50%	15
North Carolina	100%	26 to 41
Utah	100%	12 to 41

[We evaluated 15% and 67% of the formal enforcement actions taken on major dischargers in North Carolina and Utah, respectively. In California, we evaluated 67% of the actions on major dischargers taken by the San Francisco Region.]

There was evidence this problem extended to other states. For example, the Louisiana Legislative Auditor found the state took over a year to issue nearly 40 percent of its actions.

Discharge from a Northern California facility

Not taking prompt enforcement action increases water pollution as violations go unchecked. States must take swift action not only to bring violators into compliance quickly, but also to establish credible enforcement programs. For example, a California municipality failed to meet its deadline to replace its obsolete treatment plant by 1997. Although the state issued a cease and desist order in 1993, at the time of our audit, no penalties were assessed. Delays continued and the plant continued to pollute the Pacific coast until the new plant demonstrated full compliance in January 2001.

There were a number of reasons states enforcement actions were delayed:

- **Enforcement Process**. Enforcement actions generally had to be approved by higher management levels and, in California, Governor-appointed boards. These approval processes delayed actions. Also, states negotiated enforcement orders or penalty amounts with dischargers, which was a time-consuming process. Further, in order to compute penalties, states needed to obtain cost data from the discharger, further delaying actions.

- **Reluctance.** States were reluctant to take immediate action on violations, especially when violators were making efforts to comply. Staff tended to work closely with the discharger, developing a working relationship they believed would be threatened by a formal enforcement action. Also, North Carolina and Utah negotiated formal orders or penalty amounts due to concerns over litigation; negotiations caused further time delays.

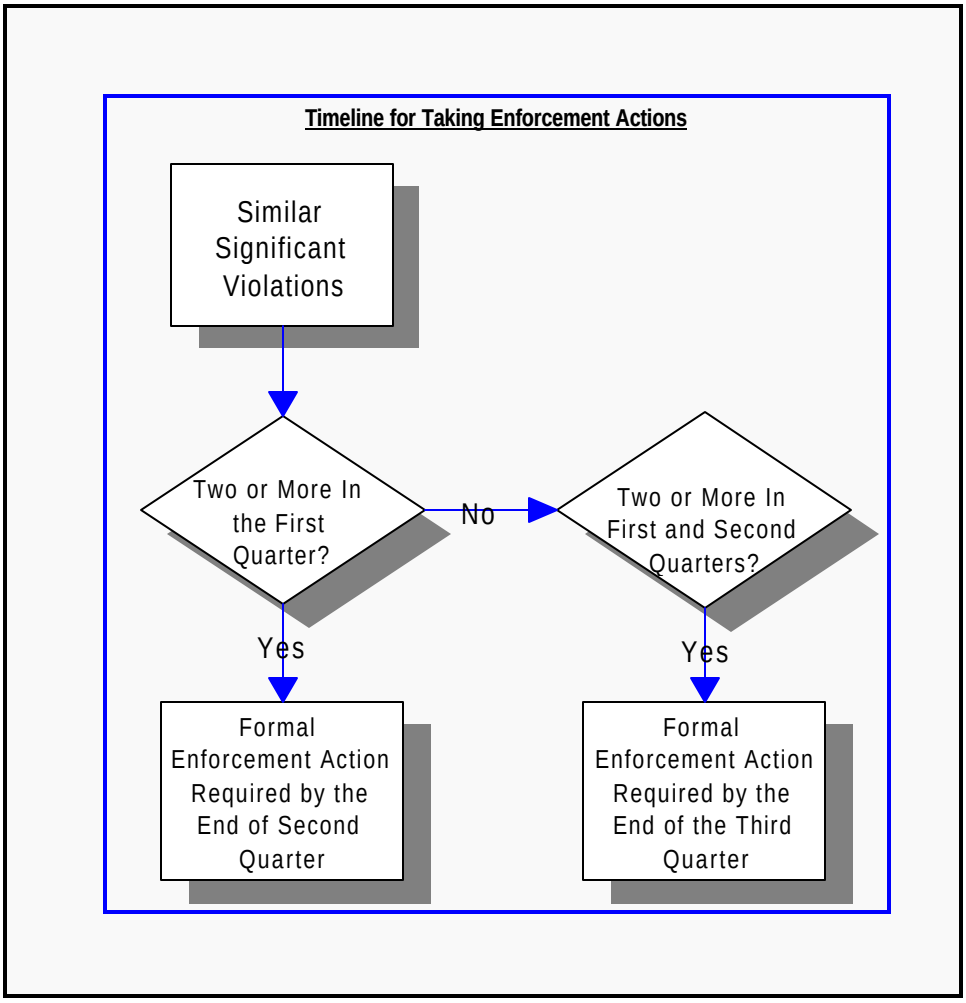
- **Consequences**. There were limited adverse consequences associated with delayed enforcement actions. The Office of Enforcement and Compliance Assurance told us that states not taking actions on repeat violators received phone calls from EPA; generally, EPA took no other actions. The most obvious adverse consequence of delay enforcement was the continued discharge of pollutants in excess of permit limits. However, this consequence usually had no immediate impact on a state.

Another factor may have been the lack of time standards for taking enforcement actions. The states we evaluated had not set standards for taking enforcement actions. EPA's standard was variable and not embraced by the states we evaluated.

> *"The Enforcement Response Guide... addresses timely responses to... violations...Even though some of the language can be seen as ambiguous..."*
>
> - EPA Office of Enforcement and Compliance Assurance

EPA's Enforcement Response Guide set a variable time standard for taking enforcement actions. It required a formal enforcement action when there was a repeated, significant violation in the same or a consecutive quarter. A state was expected to complete a formal action before the end of the quarter following the second violation. Thus, the timing of the second violation determined how long a state had to take a "timely response." For example, if the repeat violation occurred April 1, the state had

6 months to complete the action; if it occurred on June 30, the state had only 3 months to complete the action. Three months may not be enough time to issue an enforcement action. We recommend that EPA set a clear and consistent time standard for taking enforcement actions.



Penalties Did Not Recover Economic Benefit

Two of the three states were not calculating or recovering the economic benefit of noncompliance, although both states had recently instituted changes to do so. The failure of states (and EPA) to recover the economic benefit of noncompliance has been a long-standing problem. EPA oversight should continue to evaluate the effectiveness of penalties, including the recovery of economic benefit.

Adverse Impacts of Insufficient Penalties

- Financial gain realized when economic benefit of violation not recovered
- Violator implicitly rewarded for each violation
- Violator gains an economic advantage over compliers

"EPA expects states to make a reasonable effort to calculate economic benefit and encourages states to recover this amount in negotiations and litigation."

-EPA's 1986 Oversight Framework

Frequently, violators have economic gains from postponing compliance actions. These savings can come from:

- Delaying or avoiding purchase of equipment.
- Delaying the construction of new facilities.
- Avoiding annually recurring costs of operating and maintaining equipment over the period of noncompliance.

To ensure everyone is thus treated fairly and consistently, economic benefit should be recovered for all significant violations.

At the time of our review, neither California nor North Carolina required or prescribed the recovery of economic benefit. Also, they had not developed procedures for calculating economic benefit:

Recovery of Economic Benefit

	California	North Carolina	Utah
State law requires recovery of economic benefit?	No*	No	No
Policy requires recovery of economic benefit?	Yes	Yes	Yes
Policy prescribes methods to compute economic benefit?	No	No	Yes
Economic benefit recovered?	No	No	Yes

**California passed a law effective January 1, 2000 requiring the recovery of economic benefit. It did not impact the actions we reviewed.*

Although recent state audit reports did not address recovery of economic benefit, EPA Region 9's evaluation of Nevada's program and a 1997 Virginia audit found that these states were not recovering economic benefit.

When states did not recover economic benefit, violators could realize substantial financial gains and be implicitly rewarded for noncompliance. To illustrate, a California municipality's waste water treatment plant was not completed by the deadline required by the state's cease-and-desist order. However, a penalty was not assessed. The municipality saved at least $1.5 million by delaying construction of the $50 million plant.

Besides the lack of a requirement and methodology, there were other reasons states did not recover economic benefit. One of the main reasons economic benefit was not calculated was because obtaining necessary cost data was cumbersome and time consuming. Minimum penalties also sometimes prevented the recovery of economic benefit. For example, a North Carolina treatment plant was fined repeatedly for failing to meet its permit limits. The state's environmental specialist concluded paying minimum penalties was less costly than complying with permit requirements.

Reasons States Did Not Recover Economic Benefit in Penalties

- Lack of methodology
- Difficult and time-consuming to obtain cost data
- Time-consuming to compute penalties
- Penalties generally higher; states reluctant to assess higher penalties
- Not required to by state law or policy
- Minimum penalties used instead

Economic Benefit Recognized As Deterrent

Recently, both California and North Carolina had recognized the importance of recovering economic benefit in improving compliance. California passed a law requiring the recovery of economic benefit. North Carolina issued its *Principles of Enforcement* which call for the cost of noncompliance to be greater than the cost of compliance. North Carolina stated that it was committed to incorporate economic benefit into penalties for serious violations and chronic repeat violations.

Lack of Consistent Penalties

Penalties were not consistent nationwide or within states. In order to maintain a level playing field, penalties should recoup the economic benefit the violator gained through noncompliance. As GAO concluded, a key difference among state enforcement authorities is the recovery of economic benefit. Economic benefit tends to be a large portion of computed penalties. When it is not computed, it can lead to smaller penalties and an unfair economic advantage to the violator. To make enforcement consistent nationally, economic benefit should be recovered in state penalties.

Internal studies by California and Arkansas had found problems with the consistency of penalties. In 1999, California reported that there were inconsistencies in enforcement actions amongst its regional boards. In 2000, Arkansas reported that "the current formal enforcement structure allows for inconsistencies in the initiation of formal enforcement actions and the levying of fines."

To ensure the regulated community is treated fairly, states should have uniform penalty structures that have specific guidelines and equitable formulas.

Uncollected Penalties

Penalties must be collected to establish credibility. We found some penalties for storm water permit violations were not collected in California. There was evidence penalty collection was problematic in other states. Louisiana's Legislative Audit report showed the state had not collected $441,188 in penalties for the years 1998 and 1999. A Maryland audit found the state did not assess or collect penalties of $100 per day for not meeting consent order milestones. In this last case, the discharger continued to violate its permit 13 times between October 1997 and March 2000 without paying assessed penalties.

Proactive Actions Could Prevent Significant Violations

The states we evaluated needed to improve strategies to prevent violations from occurring at overused facilities. Many significant violations occurred because waste water treatment facilities were obsolete, worn out, or exceeding capacity. Further, an expanding population taxed existing systems beyond capacity.

> *"If you ignore the (sewage) systems for 20 or 30 years, it's going to come back and haunt you."*
>
> -Orange County CoastKeeper, environmental advocate

We found states had vehicles available to address future discharges that would violate permits. For example, California could issue a time schedule order for threatened discharges of waste in violation of requirements.

We found numerous violations due to plant obsolescence and capacity limits. For example:

- In North Carolina, one small city's waste water treatment plant capacity had not kept pace with population growth, leading to pollution violations. The treatment plant discharged pollutants into a stream which ran through a residential area.

- In Northern California, one small city's population growth outstripped the capacity of its sewage collection system. Sewage spills occurred because the collection system lacked necessary capacity. Some of these spills ended up in drinking water sources.

Many of these violations could not be prevented without major capital investments, including new plants, that required months or years to finance and construct.

EPA should continue to work with states to establish proactive strategies, such as time schedule orders, to hold dischargers accountable for compliance. As one North Carolina official observed, when discharge rates reach 80 percent of the limit, consideration should be given to expanding the plant. When discharges approach 90 percent, plant expansion should have begun.

Best Practices: Deterring Noncompliance

Best Practices: Deterrence

- Minimum penalties
- Publicity of enforcement actions
- Compliance report card

States had several best management practices that were effective in improving compliance. These practices included:

- **Minimum Penalties**. Both California and North Carolina had instituted minimum penalties for certain violations. They followed the lead of New Jersey, which reported improvements in water quality by using minimum penalties for large sewage spills and other water quality violations. However, as found by North Carolina, minimum penalties may not be effective for more severe violations if they are too low.

Minimum Penalties: Pros and Cons

+ Penalties assessed for normally unaddressed minor violations

+Relatively quick consequence to violations

+Ensures consistent, dependable response from regulators

-Serious violations may receive the same penalties as minor violations

-Minimum penalty may be substantially less than recovering economic benefit

- **Publicity of Enforcement Actions.** EPA's sector facility indexing project and North Carolina's website provided some measure of public accountability over violators and regulator responses. By accessing these Internet sites, the public can identify violators, locations, and penalties assessed. States can gain an additional deterrent effect by publicizing their enforcement responses widely, using vehicles such as state websites and press releases.

- **Compliance Report Card**. California planned to publicize the results of its enforcement program to keep managers, policy makers, and the public informed about violations and actions taken. Its planned compliance report card would be produced annually, showing compliance rates, enforcement actions taken, the use of penalty funds and supplemental

environmental projects. Ongoing compliance rates of dischargers and the report card would be placed on the Internet.

Recommendations

We recommend that the Assistant Administrator for Enforcement and Compliance Assurance:

5- 1. Establish a clear and consistent standard for measuring the promptness of enforcement actions.

5- 2. Continue to work with the regions to assist states in establishing proactive enforcement strategies to help facilities avoid long-term serious violations due to plant or system obsolescence or capacity limits.

Chapter 6 also contains a recommendation for setting standards for enforcement actions. See page 60.

Agency Response and OIG Position

*5-1. **Time Standard.** The Office of Enforcement and Compliance Assurance explained that the permit program already had a "timely and appropriate" standard described in the Enforcement Management System. It believed that a more appropriate recommendation would be for the Office to review the consistency of its standard and ensure that the regions and states are aware of it.*

OIG Position: We agree with the Office's alternative recommendation and ask it to address the recommendation's implementation.

*5-2. **Proactive Strategies**. The Office of Enforcement and Compliance Assurance stated that it, in conjunction with the EPA Office of Water, had developed guidance documents and training workshops to assist the regulated community in avoiding noncompliance due to plant or system obsolescence or capacity problems. Some specific examples were guidance for implementation of nine minimum controls and a long-term control plan for combined sewer overflows, as well as guidance documents and training workshops for municipal officials, system operators, and consultants on procedures to eliminate and prevent combined and sanitary sewer overflows.*

The Office of Enforcement and Compliance Assurance said it was involved in the development of the Guide for Evaluating Capacity Management, Operation and Maintenance Programs at Sanitary Sewer Collection Systems which describes management practices and operation and maintenance techniques that have served municipalities best in the

reduction and elimination of sanitary sewer overflows from their systems. The audience for this guidance is state and EPA personnel who are assisting municipalities to comply with sanitary sewer overflow requirements. The guidance will also help municipalities make decisions on the rehabilitation and repair of their collection systems and ways to better operate those systems. The guidance was scheduled for release as an interim-final document early in fiscal 2002, and was planned to be finalized following the final publication of the Sanitary Sewer Overflow Rule.

The Guide for Evaluating Capacity Management, Operation and Maintenance Programs at Wastewater Treatment Plants will assist inspectors in determining whether a capacity management, operation and maintenance program was adequate for a particular wastewater treatment plant. The guidance will also be useful to municipalities for determining whether their plants were following accepted practices and for addressing any discrepancies as needed in order to improve or maintain compliance. The guidance was scheduled for release as an interim-final document early in fiscal 2002.

OIG Position: The Office's reply partially addresses the issue and recommendation. The guides are excellent references and will provide some measure of compliance assistance to EPA regions and states. However, the guides in and of themselves are not proactive enforcement strategies.

Chapter 6

Improved Performance Evaluation and Measurement Needed

To ensure fair and effective enforcement of the Clean Water Act, EPA regions need to continue performing both periodic, in-depth program evaluations and annual performance evaluations of states' performance. These evaluations need to be consistent, continue toward a goal of measuring the effectiveness of performance, and be made easily accessible to the public.

> *"EPA must balance the new expectations raised by the Government Performance and Results Act, the [National Environmental Performance] partnership approach suggesting more flexibility in state oversight, and the more traditional measures used to assess performance of state enforcement programs."*
>
> -EPA Office of Regulatory Enforcement

Oversight Tools

EPA had developed several tools to evaluate state enforcement performance:

- **Quarterly Non-Compliance Reports.** States are required to report on major facilities that have significant violations of their permits on a quarterly basis, along with the enforcement actions the state has taken. Further, the Office of Enforcement and Compliance Assurance has developed an automated system called "SNC [Significant Noncompliance] Tracker" which allows both states and regions to evaluate compliance records of major facilities at any time.

- **Policy Framework**. In 1986, EPA established a framework for evaluating enforcement programs. In addition, Clean Water Act-specific guidance provides additional criteria.

- **Core Performance Measures.** Under the National Environmental Performance Partnership System, EPA and the Environmental Council

EPA's Oversight Criteria and Measures

- Clear identification of and priorities for the regulated community
- Clear and enforceable requirements
- Accurate and reliable compliance monitoring
- High or improving rates of continuing compliance
- Timely and appropriate enforcement response
- Appropriate use of civil, judicial, and administrative penalty authorities

-EPA 1986 Policy Framework

of the States have agreed upon seven "core" performance measures for evaluating state enforcement and compliance performance.

Regions Performed Valuable Evaluations

"While states and local government have primary responsibility for compliance and enforcement actions... EPA retains the responsibility for ensuring fair and effective enforcement of federal requirements, and a credible national deterrence to noncompliance."
-EPA's 1986 Policy Framework for EPA-State Enforcement Agreements

We found that at least eight regions were performing in-depth evaluations of state programs. (We were unable to obtain information from two regions.) The three regions we audited were performing in-depth evaluations that had important findings that were used, or should have been used, to improve state programs. To illustrate:

- In February 2000, Region 9 presented its findings on California's Clean Water Act discharge program to a California joint legislative committee hearing on water quality issues. Its findings included the lack of storm water inspections and inadequate recovery of economic benefit in penalties. Both of these issues were being addressed by revisions in California's enforcement strategy and policy.

- In June 1999, Region 4's issued its findings from a review of North Carolina's Clean Water Act discharge program. These findings included the lack of an effective storm water program and weaknesses in the state's enforcement policy concerning identifying toxicity test failures as permit violations.

Although regional evaluations found significant weaknesses with state programs, they were inconsistent. The regions that responded to our survey had developed their own evaluation programs; these programs evaluated many of the same program elements but did not evaluate others.

The frequency of in-depth evaluations also varied substantially. Region 4 performed in-depth evaluations every 8 years or so because of the large number of states in the region. Region 6 told us it performed a detailed program review on a semiannual basis.

Best Practice: Region 8's Scoring System

- Performance measured objectively and consistently
- Clear expectations set for performance
- States challenged to improve scores
- Areas needing improvement specifically identified
- Region could focus resources on areas where state needed assistance

EPA should develop and use consistent criteria and measures for in-depth program evaluations. At a minimum, all of the oversight criteria and measures in EPA's 1986 Policy Framework should be included along with additional elements

included in the Clean Water Act discharge guidance, such as the adequacy of pretreatment programs.

Further, to ensure consistent oversight, there should be a uniform, objective scoring mechanism. In this regard, Region 8 used an objective scoring system in 1999 for measuring state performance.

We also believe regional evaluations should be made easily accessible to the public. Publicity apparently caused North Carolina to improve its storm water program. Although EPA Region 4's evaluation of North Carolina's enforcement program in 1999 found serious deficiencies in management of the storm water program, the state did not agree to make investments in the program until we reported these same problems a year later.

Performance Measures Need Focus on Effectiveness

EPA regions needed to use core performance measures to consistently measure the effectiveness of state enforcement programs. Under the National Environmental Performance Partnership System, EPA and the Environmental Council of the States had agreed upon seven "core" performance measures for evaluating enforcement programs.

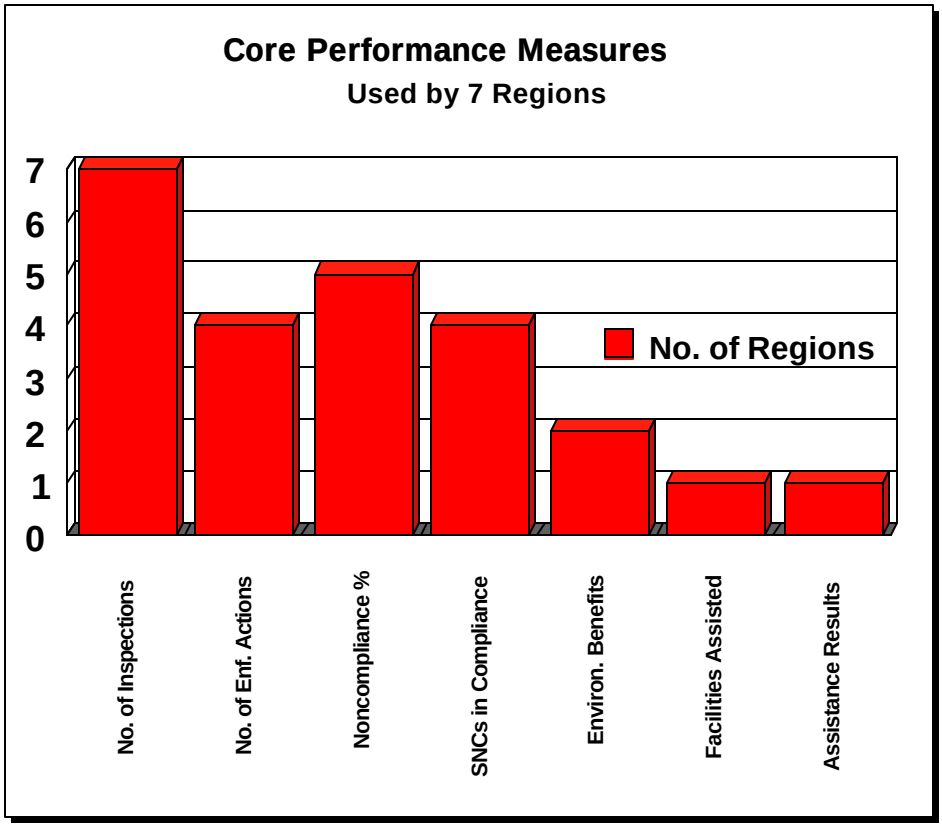
Core Performance Measures

- Number of major inspections and percentage in priority areas
- Number of enforcement actions
- Number of facilities reached through compliance assistance*
- Rates of significant noncompliance*
- Percentage of significant noncompliers returned to compliance
- Environmental or health benefits achieved by enforcement activities*
- Results of using alternative compliance approaches*

**Optional*

While there was state resistence to collecting and reporting state data, EPA should continue to press its state partners, including the Environmental Council of the States, to use core performance measures that address the effectiveness of enforcement programs. Further, these measures should be reported annually and be easily accessible to the public.

Core performance measures were not consistently used by regions or states to evaluate performance. Core performance measures are a limited set of measures designed to help gauge progress toward protection of the environment and public health. Only part of one core measure, the number of major facility inspections, was used to evaluate state performance by all seven regions that responded to our survey.



SNC=Major Facilities in Significant Noncompliance

We believe the core performance measures needed further evolution in order to achieve their national objective of "managing for environmental results" for a number of reasons:

- **Bean Counts.** Three of the measures counted activities, such as the number of major facilities inspected. These "bean counts" would be more meaningful if they were converted into rates, such as the percentage of the targeted universe inspected.

- **Measuring Success.** Rates, such as compliance rates, were not evaluated against benchmarks, standards, industry averages or geographic norms. It was unclear what a successful, average, or unsuccessful rate was.

- **Environmental Outcomes**. The states we reviewed were not measuring environmental outcomes from enforcement activities or assistance activities.

- **Correlation Analysis.** Except for North Carolina, the states we evaluated had not attempted to analyze correlations between monitoring activities, enforcement actions and compliance rates. Analyzing such correlations

"What is the relationship between enforcement and compliance, and how can we use this information to improve compliance and meet other [North Carolina] objectives?"

-North Carolina's Enforcement Assessment 2000

would be useful in evaluating the effectiveness of inspections, monitoring, notices of violations, and penalties.

> *"Many [states] were not enthusiastic about the prospect of an EPA report with comparable performance measures for all 50 states...."*
>
> -National Academy of Public Administration, November 2000

As found by the National Academy of Public Administration, there were several reasons that the core performance measures did not fully shift the focus from "bean counting" to environmental results. Four of the most important core performance measures were optional, such as environmental benefits achieved through concluded enforcement activities. Further, states refused to collect and report on many measures. They claimed the measures did not always address their problems and added to their reporting burden.

EPA had its problems with core performance measures as well, the Academy reported. EPA was unwilling to abandon its traditional practice of negotiating agreements on activities states will conduct. Further, the core measures were developed separately from the Agency's own goals and measures under the Government Performance and Results Act. States believed there was a significant disconnect between the Agency's own goals and core performance measures.

> *"All states should compile core performance measures; EPA should gather them and make them publicly available."*
>
> -National Academy of Public Administration, November 2000

In spite of these weaknesses, core performance measures can provide an important measure of success and public accountability. By reporting on compliance rates and environmental benefits, the core performance measures provide indicators of state program accomplishments and success. The National Academy of Public Administration has recommended that all states compile core performance measures and EPA consolidate them and make them publicly available. We agree. As California observed, state officials "must be regularly informed as to how their actions, policies, and staff are affecting the rate of compliance." States (and EPA) should be held accountable for their results.

Developing core outcome performance measures will be more difficult. GAO recently concluded that enforcement outcome measures have been difficult to create because of:

- The frequent absence of baseline data needed to determine whether compliance rates or environmental quality have improved under new strategies.
- The inherent greater difficulty and expense in quantifying outcomes as compared to counting and reporting enforcement activities.
- Difficulty in establishing causal links between enforcement strategies and compliance rates or environmental quality.

States' Efforts to Develop Performance Measures

While core performance measures may not have addressed each state's problems, the states we evaluated had not made much progress in developing more appropriate measures.

Best Practice: Using Outcome Measures

"Florida was one of the few states to have attempted to quantify outcomes, noting that calculating accurate industrywide compliance rates was an important part of the state's effort to focus programs on results."

-GAO Testimony, June 1998

Utah and North Carolina were tracking their compliance rates, although there were some serious limitations. California was not routinely evaluating its compliance rates state wide. However, states were making efforts to develop better measures.

North Carolina had formed a work group to develop performance measures to assess the effectiveness of its enforcement programs, including water quality. The three performance measures developed for enforcement were the (1) number of repeat violators, (2) compliance rate per number of regulated facilities, and (3) compliance rate per inspections.

Utah and Region 8 had also partnered in an attempt to develop better enforcement performance measures, including environmental improvement measures. After much effort, the project came to a halt. The Region and state decided not to proceed because the effort would not reduce reporting; instead, it would increase data gathering.

California was in the midst of a major initiative to improve its compliance rates for water dischargers. It recognized the serious limits of its monitoring and data systems and was in the process of implementing new systems.

"...The attractiveness of performance measures is exceeded only by the difficulty of their design and implementation."

-National Academy of Public Administration

Only one of the seven regions that responded to our survey was aware of a state that used outcome-based performance measures. As previously noted, developing outcome-based measures was inherently difficult. The Office of Enforcement and Compliance Assurance had issued grants to states to develop better performance measures. The results of these studies should be used to further refine the core performance measures.

Lack of Goals and Standards

Although it was EPA's goal to increase compliance, this goal had not been articulated into specific measures of success by EPA or the states we reviewed. Both Utah and California had set some compliance goals; however, there were not specific goals or standards for most aspects of the program. For example, compliance goals were not established for watersheds, priority programs, high-risk sources, or priority industrial sectors. None of the states we reviewed had specific goals or objectives for increasing compliance, reducing recidivism, or improving water quality by specific amounts or percentages.

The lack of standards and goals made it difficult for decision-makers to make decisions on whether to invest or divest in certain strategies, target areas, sectors, watersheds, or sources. Also, without goals or standards, it was difficult to evaluate the relative success of programs.

Recommendations

We recommend that the Assistant Administrator for Enforcement and Compliance Assurance routinely determine whether states are fulfilling their obligations to monitor and enforce discharge programs. Specifically:

6- 1. Develop consistent criteria and measures for in-depth program evaluations of state programs:
   a. At a minimum, all of the oversight criteria and measures in the 1986 Policy Framework should be included along with additional elements included in the Clean Water Act discharge guidance. Include the accuracy and completeness of data systems, the quality of inspections, and the reliability of self-monitoring reports.
   b. Evaluate all significant discharge programs including storm water, minor dischargers, and concentrated animal feeding operations.
   c. Use a uniform, objective scoring mechanism.

6- 2. Have regions perform in-depth evaluations of state enforcement programs every two to three years. Make these evaluations available to the public through publicity releases or the EPA website.

6- 3. Continue to remind state partners, including the Environmental Council of the States, of their obligation to use core performance measures that address the effectiveness of enforcement programs.

6- 4. Have regions collect and use all core performance measures to consistently measure the effectiveness of state enforcement programs on an annual basis. Consolidate these measures nationwide and make them public.

6- 5. Work with regions to assist states in setting specific goals and standards for compliance, recidivism, the timeliness of enforcement actions and other important measures.

Agency Response and OIG Position

*6-1. **Consistent Criteria and Measures**. The Office of Enforcement and Compliance Assurance agreed that a process for periodic evaluation of the Clean Water Act discharge program in each state would be useful. It stated that most regions conducted assessments of state water enforcement programs, either annually or bi-annually, though the nature of the assessment varied. Some variability in the assessment process was necessary since priorities varied by state, as did work sharing with EPA regions. The Office asserted that the review content of state performance for any program, not just the Clean Water Act discharge program, must be governed principally by the authorization agreements, grant work plans and agreements and the performance partnership agreement between a region and a state. Those policies and agreements should define priorities, describe work sharing arrangements between a region and a state, and define the evaluation process to be used, among other things.*

The Office of Enforcement and Compliance Assurance stated it had a national evaluation process which focused on "program element reviews" among programs. These reviews examine policy and implementation of a particular program element in all EPA regions and a sample of states. The Office noted it was responsible for working with EPA regions and states to evaluate a wide scope of statutory programs, and while resources did not permit a commitment to ensure a top to bottom evaluation of the enforcement of the discharge program in every state, the Office agreed to consider how best to concentrate on key concerns of the program.

The Office of Enforcement and Compliance Assurance noted that since the program element reviews will each address a different program or problem, there will not be a standing uniform scoring mechanism. However, within each review, the questions used and the weight assigned

to the answers will be the same. The Office agreed to continue to develop a consistent set of criteria and measures as part of its design for each program element review. All applicable policy is considered in designing each review. For discharge permits, this will include criteria from the 1986 Policy Framework. However, the Office was not yet in a position to identify what reviews will be undertaken in the future.

OIG Position: We laud the Office of Enforcement and Compliance Assurance's efforts to develop a consistent set of criteria and measures for "key concerns" of state enforcement programs. However, the plan to evaluate a single element of a state enforcement program is less than optimal and merits serious reconsideration. EPA should be aware of significant weaknesses in the state programs it has authorized. A single program element review will not evaluate all of the state's significant discharge programs. Morever, single program element reviews fail to consider how resource constraints drive program management.

As the Office noted, it has uniform criteria to evaluate state enforcement programs: (1) EPA 1986 Policy Framework, and (2) core performance measures developed by EPA and the Environmental Council of the States. These criteria provide a sound foundation for consistently evaluating state performance nationally.

Further, as detailed in this report, all of the regions that responded to our survey indicated they were performing comprehensive state evaluations. Thus, lack of resources does not seem to be a major issue.

*6-2. **In-Depth Evaluations.** The Office of Enforcement and Compliance Assurance pointed out that many regions performed in-depth evaluations of state enforcement programs on a rotating basis, using the Performance Partnership Agreement, grant agreement, and existing policy as a basis. The Office agreed that it would be ideal to have these evaluations of enforcement programs in all states every 2 or 3 years; however, resources simply would not allow that in some EPA regions. The Office also agreed that publicity can be an effective factor to ensure competent program operations; however, active publication of all evaluations on a website may exacerbate federal-state tensions and inhibit a frank, open review process. The Office reserved to use the website as conditions dictate.*

OIG Position: It appears EPA regions have adequate resources for evaluating state programs; all of the regions that responded to our survey indicated they were performing comprehensive evaluations of state programs. Further, the Office of Enforcement and Compliance Assurance could team with the Office

of Water to better leverage federal resources directed at evaluating state performance.

One weakness in the existing state evaluation process was the lack of consistent criteria and measures. For evaluations to be equitable, comparable, and valuable, they need to be consistent, objective, continue toward a goal of measuring the effectiveness of performance, and easily accessible to the public.

The public should be aware of serious deficiencies in a state's ability to protect human health and the environment. While public information about state performance may exacerbate federal-state tensions, it would provide an important means for holding states accountable for their environmental performance.

6-3. ***State Use of Core Performance Measures.*** *The Office of Enforcement and Compliance Assurance agreed to continue to remind states of their obligation to use core performance measures, and suggested that OIG encourage the states directly where possible to do so as well. In fiscal 1999, $1.8 million was awarded to 11 states to develop outcome measures, and, in fiscal 2000, another $1.2 million was awarded to 10 states to develop outcome measures specifically for compliance assistance. The Office was also discussing with states possibilities for funding performance measurement work within the National Environmental Performance Partnership System framework.*

6-4. ***EPA Use of Core Performance Measures.*** *The Office of Enforcement and Compliance Assurance advised that states report on the required core measures through national data systems. It is the optional measures which the states have opted not to use. The Office agreed to continue to promote the use of the optional measures through all means available, including grants. The Office consolidates information on required core measures of outputs nationally, and this information is used by EPA regions in their performance discussions with their states and is available to the public on request.*

6-5. ***Compliance Measures.*** *The Office of Enforcement and Compliance Assurance noted that while measures for compliance, recidivism, and the timeliness of enforcement actions were not "core measures" for states, it had established performance standards for the timeliness of enforcement actions which, for the most part, were derived directly from the 1986 Policy Framework. Regions have worked with states to have them adopt these standards. In fact, the Office included state performance on this standard in some of its program management reports.*

Since the measure for recidivism is new, the Office of Enforcement and Compliance Assurance wanted to get some experience with the measure before establishing performance goals. Likewise, it has not set performance goals for compliance rates, recognizing that compliance rates are the product of many factors, not just EPA activities. The Office planned to work with the states through a grant to the Environmental Council of the States to assist in developing a consistent approach to determining compliance rates.

The Office of Enforcement and Compliance Assurance stated it monitored and reported on recidivism and timeliness on a national basis. It was considering setting a national target for recidivism for all programs, as well as a national target for improving compliance.

OIG Position: The Office's response partially addressed recommendation 6-5. The Office's efforts to set goals and standards for compliance, recidivism, and timeliness are critical to evaluating the effectiveness of state (and EPA) performance and should be continued. We are recommending, however, that regions work with states to establish specific performance goals in these areas. We look forward to the Agency's response to this recommendation in its reply to this report.

Exhibit 1

Details on Scope and Methodology

Scope

This audit resulted from concerns over the effectiveness of state enforcement programs. We focused on the Clean Water Act discharge program because of a lack of recent audit coverage in this area.

Forty-four states have EPA approval to issue, monitor, and enforce permits under the Clean Water Act's National Pollutant Discharge Elimination System program. EPA regions issue permits in the remaining states. The purpose of the discharge program is to protect human health and the environment by preventing the discharge of pollutants.

In addition to evaluating national data, we evaluated three EPA regions: 4, 8, and 9. In each region, we evaluated one state authorized to issue discharge permits. We selected states with a range of population, economy and sources of water pollution: California, North Carolina, and Utah. These states represent about 16 percent of the U.S. population.

We issued a separate report on North Carolina entitled *"North Carolina's NPDES Enforcement and EPA Region 4 Oversight"* in September 2000. This report addressed matters not included in this report, such as water testing methodology. Issues pertaining to this audit are included in this report. Additional details on the scope and methodology of our North Carolina evaluation are discussed in the North Carolina report.

We considered the results from a National State Auditors' Association-coordinated audit that included enforcement of the Clean Water Act. As of April 1, 2001, five state audit reports had been issued that addressed Clean Water Act enforcement to some degree: Arkansas, Colorado, Louisiana, Oregon, and Maryland. We considered the results of these audits in this report.

We performed our audit according to Government Auditing Standards issued by the Comptroller General. Our field work was conducted from February 2000 to October 2000. The audit included management procedures in effect as of fiscal 1999. We evaluated strategies, compliance monitoring systems, and enforcement actions taken from October 1, 1998 to December 31, 1999.

Methodology

As part of our evaluation of management controls, we performed a risk assessment. This risk assessment identified the potential threats to state water enforcement and the management controls to address these threats. Based on this risk assessment and interviews with EPA officials, we identified critical management controls.

Management Controls

In assessing management controls, we also considered the Agency's own assessment. EPA's Permit Compliance System was identified in 1999 as an Agency weakness during EPA's annual self-assessment process. In EPA's fiscal 2000 Integrity Act Report to the Office of Management and Budget, EPA reported it had three major initiatives underway, in conjunction with the states, which were intended to address the issues involved with the Permit Compliance System and improve the usefulness of the system as a management tool: (1) system modernization; (2) interim data exchange format; and (3) electronic reporting. The status of these initiatives is discussed in Exhibit 2, page 69.

The management control weaknesses we found are described in this report, along with recommendations for corrective action. These weaknesses were a significant contributing cause to enforcement effectiveness problems.

Management Controls Over State Water Enforcement Programs

- Clean Water Act and amendments
- EPA approval process for state programs
- 40 CFR 122 and 123
- State laws, policies and guidance
- EPA's Permit Compliance System and state data systems
- 1986 Policy Framework for State/EPA enforcement agreements
- EPA Memorandum Of Agreement Guidance
- EPA's Enforcement Management System, Enforcement Response Guide, and enforcement policies
- Regional performance partnership grant agreements, work plans, and evaluations
- Regional audits and evaluations of state programs
- Regional memorandum of agreements
- EPA Inspection Manual
- Inspections
- Self-monitoring reports
- Quarterly noncompliance reports

Analysis Techniques

In evaluating state strategies, we considered compliance monitoring activities performed in high-risk areas.

To evaluate compliance monitoring and enforcement systems, we evaluated a judgmental sample of facilities to see if violations were properly identified and enforcement actions were appropriately taken. In California, we selected a judgmental sample of nine major facilities in the San Francisco Bay Regional

Water Quality Control Board. We also evaluated the storm water compliance monitoring systems of the Los Angeles Regional Water Quality Control Board. Both boards are part of California's State Water Resources Control Board. Moreover, we considered Region 9's audits of Clean Water programs that had been performed in California's three other regional water boards. In evaluating compliance monitoring and enforcement systems in Utah, we selected a judgmental sample of six major facilities.

We also evaluated a sample of 34 major facility inspections in California and Utah; California's were selected from the San Francisco region. We evaluated four storm water inspections in the Los Angeles region and seven from Utah. These were judgmental samples; however, we believe they were representative.

To evaluate regional oversight of state programs and performance measures, we conducted a survey of 10 regions; seven regions responded. We also obtained information on oversight procedures for another region. In evaluating oversight, we compared annual and in-depth state evaluation criteria to EPA's 1986 Policy Framework and the National Environmental Performance Partnership System's core performance measures.

Evidence Considered

In analyzing state strategies, we considered the National Water Quality Inventory; EPA's Strategic Plan and annual plans; state plans, strategies, and grant agreements; EPA's 2000/2001 Memorandum of Agreement Guidance; Office of Water's report, *"Liquid Assets 2000";* regional memoranda of agreement, strategies and plans; and GAO reports. We interviewed responsible EPA headquarters, regional, and state personnel.

We considered the following evidence in evaluating compliance monitoring and enforcement:

- State compliance monitoring activities, including receipt and review of discharge monitoring reports, discharger inspections, and handling of complaints.
- State enforcement actions, including timeliness and appropriateness of the response, appropriateness of the penalty, and penalty collection.

We reviewed inspection procedures and examined state inspection reports. We also considered state and regional board policies and practices, management reports and interviews with responsible officials.

For the three regions we reviewed, we obtained regional evaluations of state performance.

Data Limitations

There were serious limitations in the scope of the management information available to evaluate state enforcement programs. EPA's permit compliance system was inaccurate and incomplete. (This problem is described in Chapter 3, page 19.) Thousands of smaller discharge permits were not required to be included in the system. Further, state systems were limited, especially for storm water program compliance status and activities. These issues are also further discussed in Chapter 3, page 19 and Chapter 4, page 35.

Prior Audit Coverage

Neither EPA Office of Inspector General nor GAO have conducted any recent national audits of state enforcement of Clean Water Act dischargers.

The National Academy of Public Administration issued a report in November 2000 which included evaluations of EPA's water and enforcement programs.

Exhibit 2: Other Matters

Key Management Decisions Needed for the Permit Compliance System

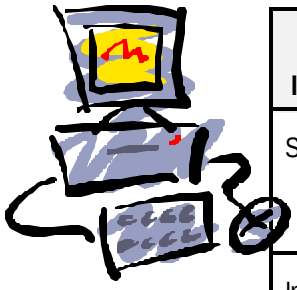
During the audit we attempted to determine if the plans for the modernized Permit Compliance System would remedy data gaps in EPA and state water enforcement information. These data gaps are discussed in Chapter 3 of this report (page 19). We were unable to ascertain whether the modernized system and its components would remedy these data gaps. We also identified management decisions the Office of Enforcement and Compliance Assurance should address promptly to ensure the system will meet both EPA and state needs.

Permit Compliance System Modernization Projects

EPA is redesigning the Permit Compliance System to better address current requirements of discharge permitting and enforcement programs and to meet new Office of Water initiatives, such as tracking reduced pollutant loadings, capturing information on storm water sources, and assessing the health of individual watersheds. EPA estimates that the cost for modernizing the system is between $12 and $14 million.

The Office of Enforcement and Compliance Assurance has three major initiatives currently underway for its Permit Compliance System, in conjunction with the states, which are intended to address system problems and improve its usefulness as a management tool:

- System modernization,
- State interim data exchange format, and
- Electronic reporting.



Permit Compliance System Initiatives

Initiative	Target Date (Fiscal)	New Functions
System Modernization	2003	Tracks reduced pollutant loadings, captures information on storm water sources, assesses health of watersheds
Interim Data Exchange Format	2001	Eases entry of state data into system; simplifies transition to modernized system
Electronic Self Reporting	2002	Discharger self-monitoring reports submitted electronically

Efforts to modernize the system have been frustrated over the years by a lack of funding and other Agency priorities. In addition, there have been regulatory hurdles to overcome. For example, to enable electronic reporting, the Agency had to modify federal discharge regulations to allow the regulated community to use electronic reporting to submit discharge information to EPA.

Concerns

In evaluating whether the modernized system would remedy problems with data gaps, we identified several concerns that we believe should be promptly addressed:

- **Data Entry Requirements Were Not Updated**. The Agency policy that identifies data that EPA and states are required to enter into the national information system had not been updated for over a decade and excluded storm water data. Meanwhile, the functional requirements documents for the new system had been completed and the project had started the detailed design phase. Data entry requirements are critical for determining system requirements, identifying system costs and benefits, and developing electronic reporting regulations.

- **Requirements Documents Were Incomplete**. The requirements documents for the new system were incomplete. We were told that new data elements had been established for storm water and concentrated animal feeding operation permits and, potentially, new data elements will be needed for certain minor facility operation permits. However, this will not be fully known until the data entry policy is updated. Also, the Office of Enforcement and Compliance Assurance had not determined how the compliance status would be determined for storm water, concentrated animal feeding operations, and other new permits.

- **Formal Consensus Was Not Reached**. The Office had not successfully collaborated with the Office of Water in the design of the system requirements. Further, the states had not formally bought into system requirements. Although the Office of Water and states had been included in workshops to determine system requirements, they had not reached a formal consensus on the modernized system requirements to ensure the new system will meet the users' needs.

- **Cost-Benefit Analysis Was Incomplete**. System modernization for the Permit Compliance System had begun the detailed design phase without completing the required life cycle cost-benefit analysis. Office of Management and Budget Circular No. A-11**,** Part 3 - *Planning, Budgeting, and Acquisition of Capital Assets* (July 2000), and OMB

Circular No. A-130, *Management of Federal Information Resources* (November 2000), require agencies to prepare and update cost benefit analyses for information systems. An accurate cost-benefit analysis is necessary to identify the most cost-effective solution for the new system. Also, the expected benefits of the new system need to be quantified for evaluating the return on investment.

- **Key Decision Documents Were Needed.** Although the modernized system was estimated to cost more than $10 million in life cycle costs, the required system charter and system management plan decision papers had not been prepared or approved by appropriate levels of management. According to EPA's Information Resources Management Policy, the system charter should have been developed during project initiation, included an estimate of life cycle costs, and identified appropriate management levels for approval of decision papers. Further, the decision paper for the system management plan should have been produced at the conclusion of the analysis stage and updated as the project progressed.

Suggestions

We suggest that the Office of Enforcement and Compliance Assurance collaborate with the Office of Water to create an updated data entry policy. Upon completion of this policy, we suggest that the Assistant Administrator for Enforcement and Compliance Assurance:

- Complete the system requirements document.
- Execute memoranda of agreements with the Office of Water and state participants to help ensure (1) that the baseline requirements for the new system design are formally agreed to and (2) that both federal and state needs are addressed in the design of the new system.
- Perform a cost-benefit analysis of the new system that addresses the electronic reporting and data entry requirements, the system development costs, and the projected operational and maintenance costs over the life of the system.
- Establish and approve a system charter and system management plan.

Agency Response and OIG Position

The Office of Enforcement and Compliance Assurance agreed with the suggestions, except for the suggestion to execute memoranda of agreements with the Office of Water and the states on the system requirements and design. It explained that the schedule below addresses the tasks it will perform, with the involvement of EPA regions and states:

Update system management plan	*5/01-12/01*
Complete system design specification document	*7/01-3/02*
Update federally required data element list	*4/02-9/02*
Update system policy statement	*Ongoing-9/02*

- ***System Requirements Document****. The Office of Enforcement and Compliance Assurance informed us that data requirements were collected from EPA (the Office of Water and the Office of Enforcement and Compliance Assurance) and states to determine the scope of the modernized Permit Compliance System. The next phase of system modernization is the design phase. One of the major products from that phase will be a design specification document. This document will be developed with very intense participation by EPA and states (both direct users and interface states). The design specification includes data elements to be collected in the system, data entry screens, report formats, and specific functionality to be supported, including electronic reporting efforts being managed elsewhere in the Agency. This effort will begin in July 2001 with the national Permit Compliance System meeting and will be completed by March of 2002.*

OIG Position: The finalization of the data requirements has the potential to affect the design phase and the cost benefits of system modernization. Accordingly, we suggest that extensive work on the design phase not be initiated until after the finalization of the data and functional requirements.

- ***Memoranda of agreements with the Office of Water and state participants.*** *The Office of Enforcement and Compliance Assurance agreed that full consultation and coordination with the Office of Water and the states was necessary; however it did not agree that the development of agreements with these parties was necessary or desirable. The Office believed that such a process would be extremely time consuming and resource intensive, and the goals of such a process can be achieved in other ways. Coordination had already occurred (and will continue) with Association of State and Interstate Water Pollution Control Administrators and the Environmental Council of the States.*

  Decisions on policy and system issues will be handled at a senior level between the Office of Water and the Office of Enforcement and Compliance Assurance with recommendations coming from the Permit Compliance System Steering Committee (representing EPA headquarters, regions, and states). One of the tasks before the Steering Committee and senior water managers is the updating of the

system Policy Statement and the identification of federally-required data elements.

The Office of Enforcement and Compliance Assurance stated it had worked extensively with the Office of Water to identify data requirements. It intended to continue to work with the Office of Water and the states to finalize data requirements, both for existing programs and for new regulatory activities which were not well handled in the Permit Compliance System. In the next several months, system modernization managers will be working with the Office of Water to verify that requirements are still accurate and complete. Additionally, a data requirements team with representatives from the Office of Enforcement and Compliance Assurance, Office of Water, and state will be established at the Permit Compliance System national users meeting in July to review, validate, and finalize the identified requirements.

Once the data requirements are established, a workgroup, including EPA headquarters and regional representatives, as well as states, will be formed to identify the subset of data requirements which will be federally mandated for entry into the Permit Compliance System. The Policy Statement will then be modified to incorporate the data elements which states and regions are required to enter into the system as well as the universe to which those requirements will apply.

OIG Position: We believe it is critically important that the data and functional requirements for the modernized system be formally agreed to by the Office of Water and states to help ensure the system contains the agreed upon data, data definitions, data formats, and pertinent technical information needed to foster data quality and data integration. Without such agreements, there is an increased risk that the modernized system will not (1) meet the users' needs and (2) lower the costs to exchange data.

Formal agreements are also called for by the Exchange Network, an EPA project to improve environmental decision-making, improve data-quality and accuracy, and reduce data redundancy. The Exchange Network's Blueprint calls for EPA and the states to have "trading partner agreements" that contain the agreed upon data, formats, and related technical information. The Blueprint specifically cites Permit Compliance System data as an exchange of data to be governed by trading partner agreements.

- ***Cost-Benefit Analysis.*** *The Office of Enforcement and Compliance Assurance agreed to complete a cost-benefit analysis by September 2001.*

OIG Position: Because the finalization of the data requirements has the potential to affect the design phase and the costs and benefits of the Permit Compliance System modernization, we suggest that the cost-benefit analysis be completed after the finalization of the data and functional requirements.

- ***System charter and system management plan.*** *The Office of Enforcement and Compliance Assurance agreed to establish and approve a system charter and management plan by December 2001. However, the Office stated that a system management plan was done early in the planning phases of system modernization. It was replaced with the Information Technology Management Reform Act submission, which contained all of the information required in the system management plan and was approved by Deputy Assistant Administrator. This submission was provided to the Office of Management and Budget. As this document was updated each year, the Office believed that it served the purpose of the system management plan; however, it agreed to update the plan by December 2001.*

OIG Position: We concur with the decision to update the system management plan by December 2001. However, we were unable to substantiate that a system management plan was previously prepared. Further, a system management plan must be approved by the Assistant Administrator, rather than the Deputy Assistant Administrator. Also, a system management plan also must be linked with Agency and organizational information resource management strategic and multi-year implementation plans, and be updated to reflect actual and planned changes as new system decision papers are approved.

Exhibit 3

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Exhibit 4

Report Distribution

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- Deputy Administrator
- Chief Financial Officer
- Assistant Administrator for Water
- Assistant Administrator for Environmental Information
- Associate Administrator for Congressional and Intergovernmental Relations
- Agency Followup Official (2710)
- Agency Followup Coordinator (2724)
- Regional Administrators

State of California

- Environmental Protection Agency
- State Water Resources Control Board
- State Auditor

State of North Carolina

- Department of Environment and Natural Resources
- Division of Water Quality
- State Auditor

State of Utah

- Department of Environmental Quality
- Division of Water Quality
- State Auditor

Association of State and Interstate Water Pollution Control Administrators

Environmental Council of the States

General Accounting Office

National Academy of Public Administration

National State Auditors' Association

Natural Resources Defense Council

Appendix: Agency Response

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

JUN 29 2001

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: OECA Comments on the Draft Audit Report, "State Enforcement of Clean Water Act Dischargers Can Be More Effective"

FROM: Sylvia K. Lowrance
Acting Assistant Administrator

TO: Charles McCollum
Divisional Inspector General for Audit
Western Audit Division
Office of the Inspector General

Thank you for the opportunity to review and comment on the April 25, 2001 version of the Draft Audit Report, "State Enforcement of Clean Water Act Dischargers Can Be More Effective." We agree with several of the conclusions in the report, including that States need to implement risk-based approaches to water enforcement and that it would be useful to have a process for periodic evaluation of the Clean Water Act program in each State. We also agree that modernization of the Permit Compliance System (PCS) should be a high priority; in fact, the modernization of the Permit Compliance System (PCS) has been an OECA priority for the last four years. As we have informed you on at least two previous occasions, part of the justification for this work was to improve the quality of information in PCS. OECA has funded modernization efforts during this 4 year period and Agency funds have been provided since FY 2000. OECA's commitment to modernizing PCS is further demonstrated through our recommendations as early as 1999 that PCS be added as an Agency-level FMFIA weakness.

However, we remain very concerned about the way some of the issues, as well as EPA's role, are characterized in the report and that many of the findings are based on anecdotal information. In brief, the draft report does not recognize that: 1) the Office of Enforcement and Compliance Assurance (OECA) has an exhaustive process for setting national enforcement priorities, including stakeholder meetings and a Federal Register notice and comment period (p. ii), 2) States should be responsible for setting "watershed-specific enforcement priorities"(p. 13), and 3) flexibility in NPDES program requirements

(e.g., tradeoffs of major and minor inspections are allowed) supports State enforcement strategies (p. 7). We are also concerned that the issues related to PCS have been oversimplified in the report.

OECA's national enforcement priority setting process includes consultation with the Regions, States, Tribes, and the national program managers. In addition, the views of the public are solicited through the publication of a Federal Register notice identifying proposed priorities. Public health and environmental risk is a major criterion used in identifying possible priorities, and documents coming from States, such as the 305(b) report, are used in determining which environmental problems pose the greatest risks. Wet weather issues, such as sewer overflows and contaminated urban and agricultural runoff, were identified as major sources of water quality impairment in the 305(b) reports and were identified as an OECA priority for FY 2000-2001. Storm water was added at the request of EPA's Office of Water. A stakeholder meeting held in the fall of 2000, which included State representation, verified that "wet weather" should be a priority again for FY 2002-2003. The audit report fails to recognize the involvement of States in the OECA national priority setting process, as well as the significance given to environmental issues identified by the States. A chronology of OECA's stakeholder process is included in response 2-1 of the attachment.

OECA believes it has been sending a consistent and strong message to the Regions and the States that enforcement resources should be concentrated on the most significant pollution sources. OECA has developed national risk-based strategies for addressing sewer overflows, concentrated animal feedlot operations, and storm water; each of these emphasize the importance of focusing on impaired watersheds. We agree more needs to be done, but we question whether additional guidance documents and further rounds of consultation would help, or whether they would drain scarce resources in redundant and time consuming bureaucratic processes with little environmental result. We believe that the real issue is not OECA's priority setting process but whether risk-based strategies are being implemented in the field by the States. The draft report reveals that several States have no risk-based planning at all. States need to assume a greater share of responsibility in addressing significant pollution problems. For example, they are often in the best position to identify watershed-specific priorities and develop field level implementation plans. A constructive recommendation would be that EPA should place more emphasis on program reviews and improve its efforts to share information (e.g., on "best practices") with the States.

OECA disagrees with the finding that the core NPDES program inhibits the development of State strategies. In its FY 2000/2001 OECA Memorandum of Agreement (MOA) Guidance ("the MOA Guidance"), OECA's focus was not on major point sources, but on the same "wet weather" risks to water quality cited by OIG in its report, including CAFOs and storm water. The MOA Guidance does state that it is an Agency goal to inspect 100% of all major point sources annually because major point sources generate the majority of effluent flow and toxic pollutant loadings which can significantly affect water quality in receiving waters. OECA believes that implementing a risk-based approach means evaluating all dischargers contributing to water quality impairment and an important component of that is maintaining a field presence at major facilities. Consistently inspecting major facilities in the past may be responsible for the relatively high levels of compliance among majors. We need to recognize that we would lose significant environmental benefits associated with higher levels of compliance among majors if we were to allow a total shift to minors. OECA's MOA Guidance allows Regions/States flexibility in shifting a portion of their total inspection resources from major to minor facilities, particularly in priority watersheds, where those minor facilities represent a significant risk. OECA's guidance makes clear that minor inspections can be traded for major inspections at a 2:1 ratio, using a risk-based rationale, if the Region/State is willing to

report the minor inspection results in PCS. Resistance sometimes arises from a lack of rationale (e.g., no risk-based strategy), unwillingness to commit to the tradeoff ratio, and/or unwillingness to report minor data in PCS. Reporting and tracking outcomes from these inspections is critical to addressing OIG's concerns regarding the lack of data on minors and for EPA to document results under the Government Performance and Results Act (GPRA).

Other guidance documents issued by OECA (e.g., the "Revision to Inspection Coverage and Frequency Criteria of Clean Water Act Permittees," dated September 1, 1995, the "Compliance Assurance Implementation Plan for Concentrated Animal Feeding Operations," dated March 5, 1998, and the "2000 Storm Water Enforcement Strategy Update," dated February 1, 2000) also emphasize the importance of focusing Regional and State resources on non-major diffuse sources of pollution that carry a large risk to human health and the environment. In fact, historically, 45% of the formal enforcement actions tracked in PCS were against minor facilities.

OECA's actions are not keeping the States from implementing a risk-based approach or from addressing watershed priorities. Our MOA Guidance, national enforcement guidance, and strategies provide States with the flexible framework they need to implement a risk-based program. Where a State is authorized to implement and enforce the NPDES program, the State is responsible for identifying its high-risk priorities and focusing its resources in those areas.

In general, OECA agrees with many of the criticisms raised by OIG regarding the PCS system. OECA disagrees, however, with the conclusion that PCS is not designed to accept data on minor facilities or that EPA does not require States to input some minor data. Of the 55,660 facilities in PCS, 49,044 are minors and 6,616 are majors. Historically, of the total number of facilities with some information on them in PCS: 13,444 (27%) minors have enforcement action data, 29,883 (61%) minors have inspection data, and 22,128 (45%) have effluent limit data. The PCS system will accept data on minor sources, including CAFOs and storm water sources if the requirements for CAFOs and storm water monitoring are consistent with those for NPDES individual permits. Moreover, the PCS Policy Statement requires States to enter facility and inspection data into PCS for minor sources, and 40 CFR Part 123.45(c) requires authorized NPDES States to submit an annual statistical noncompliance report on "nonmajor" permittees indicating the total number reviewed, the number in noncompliance, and the number of enforcement actions. We recognize that the majority of storm water dischargers are covered under general permits and that EPA does not currently require storm water general permit data to be entered into PCS and we don't have guidance on PCS data entry for general permits. OECA is committed to modernizing PCS, updating the Policy Statement, pursuing the option of electronic reporting, and exploring ways of tracking new program areas (such as storm water). However, ultimately, it is up to the States to commit the resources needed to keep up with their responsibility to input data into PCS and to report on the noncompliance status of nonmajors.

Attached are detailed responses for each recommendation in the audit report. The Office of Enforcement and Compliance Assurance is working in all of the subject areas covered and will consider your recommendations as we continue to move forward.

Please give me a call if you have any questions or have your staff call Kathryn Greenwald at (202)564-3252.

cc: Eric Schaeffer, ORE
Michael Stahl, OC
Mary Kay Lynch, OPPA-C
Michael Cook, OW/OWM

ATTACHMENT

OECA Responses to Recommendations in Draft OIG Report,
"State Enforcement of Clean Water Act Dischargers Can Be More Effective"

I. Executive Summary

OIG is recommending that the Office of Enforcement and Compliance Assurance, in partnership with the Office of Water and EPA regions, collaborate with states to develop risk-based enforcement priorities. EPA also should make modernization of its Permit Compliance System a high priority. Teaming with the Office of Water and the states, the Office of Enforcement and Compliance Assurance should ensure that the new system will meet both federal and state needs.

OIG is also recommending that the Office of Enforcement and Compliance Assurance revise its enforcement guidance to better define significant violations for toxicity test failures, minor facilities, and storm water dischargers.

Lastly, the Office of Enforcement and Compliance Assurance should routinely determine whether states are fulfilling their obligations to monitor and enforce discharge programs. To do so, it should develop consistent criteria for in-depth program evaluations of state programs. These evaluations, along with state performance measures, should be accessible to the public.

EPA Response: The Office of Enforcement and Compliance Assurance (OECA) has an exhaustive stakeholder process in place to determine what the national enforcement priorities are; it includes consultation with the Regions, States, and the Office of Water (OW). OECA has developed national risk-based strategies for the wet weather priorities and will continue to assist the Regions in working with the States to implement them. Modernization of the Permit Compliance System (PCS) is and will continue to be a high priority for OECA. OW and the States have been involved in workshops to help identify the data requirements needed for management of the NPDES program. Additionally, an OECA/OW/State data requirements team will be established at the PCS national users meeting in July 2001 to review, validate, and finalize the identified requirements. The final data requirements as identified by OECA, OW, and the States will be incorporated in the modernized PCS system.

Existing national enforcement guidance has flexibility to address toxicity, minors, and storm water violations. OECA will work with the Regions to ensure that the States are aware of the guidance and will consider OIG's specific recommendations when guidance is updated in the future.

OECA agrees that State compliance and enforcement programs need to be periodically evaluated. EPA Regions do assess State programs on a rotating basis and OECA now has a national evaluation process which focuses on "program element reviews."

Chapter 2: State Enforcement Strategies Need to Be Modified

OIG recommends that the Acting Assistant Administrator for Enforcement and Compliance Assurance:

3- 1. In partnership with the Office of Water and EPA regions, collaborate with states to develop risk-based enforcement priorities. Encourage states to develop mechanisms to evaluate tradeoffs in enforcement investments.

EPA Response: OECA already has a consultation process in place, in which Regions, States, EPA's Office of Water, and other stakeholders are extensively consulted in determining what the national water enforcement priorities should be for each 2-year cycle. A major factor in identifying the candidates for priorities is the element of risk. To start the FY 2002/2003 process, in the Spring of 2000, Regions were asked to begin by engaging States and Tribes in a discussion of national priorities. We received comments, suggested changes for existing priorities, and recommendations for new

priorities from 16 individual States and their environmental agencies, as well as receiving collective State comments from 3 EPA Regional offices. Based on feedback received and combined with an analysis conducted at Headquarters, a Federal Register (FR) notice was published on September 28, 2000 soliciting public comment on a list of 15 potential priorities and encouraging suggestions for additional nominations. The comments received from the FR notice helped set the stage for OECA's "National Priorities Meeting" held on November 14, 2000. State, Tribal, Regional and Headquarters managers attended the meeting. Fifteen priority candidates were described and discussed and attendees were then requested to recommend their top choices for OECA's FY 2002/2003 MOA priorities. Six State representatives and 12 representatives from State associations attended the meeting and they all contributed to the outcome. The 6 recommended priorities are all current priorities, sending a clear signal that stakeholders and our regulatory partners want OECA to continue working on those national priorities in FY 2002/2003.

While Regions can and do recommend that States participate in national water priorities, suggest where States might focus their resources, and meet with States to conduct joint work planning, ultimately it is the State's decision as to the priorities it will set. We believe OIG should recognize State involvement in identifying national priorities and that a more appropriate recommendation would be for OECA to develop a process to ensure States are implementing the risk-based strategies we have.

3- 2. Initiate action to eliminate the regulatory requirement to inspect all major dischargers annually.

EPA Response: Our regulations at 40 CFR Part 123.26(e)(5) require that State programs have the "procedures and ability" to inspect all majors annually. We believe that it is important to retain this regulatory requirement because not all States are authorized to implement the NPDES program yet and this requirement sets a minimum, quantifiable standard for States to be held to (i.e., a State applying for approval to implement the NPDES program must have procedures and resources in place to at least inspect all of its largest dischargers annually). Major facilities are considered high risk facilities because they generate the majority of effluent flow and toxic pollutant loadings. As shown in the maps included in this audit report (p. 17 and 39), there still are numerous noncompliance problems with major dischargers indicating that it is important that we maintain a field presence at these facilities.

OECA recognizes that a risk-based approach, such as addressing impaired watersheds, requires addressing majors *and* minors which is why we issued the September 11, 1995 memorandum to the Regions entitled "Revision to Inspection Coverage and Frequency Criteria of Clean Water Act Permittees." This memorandum, as well as OECA's Memorandum of Agreement (MOA) Guidance, provides EPA Regions and States flexibility in shifting some inspection resources from lower risk majors to higher risk minors. OECA's guidance makes clear that minor inspections can be traded for major inspections at a 2:1 ratio, using a risk-based rationale, if the Region/State is willing to report the minor inspection results in PCS. Resistance sometimes arises from a lack of rationale (e.g., no risk-based strategy), unwillingness to commit to the tradeoff ratio, and/or unwillingness to report minor data in PCS. Reporting and tracking outcomes from these inspections is critical to addressing OIG's concerns regarding the lack of data on minors and for EPA to document results under the Government Performance and Results Act (GPRA).

We believe an appropriate alternative recommendation would be for OECA to ensure that any State that does not commit to inspect 100% of its majors develops and implements an inspection plan that targets an appropriate mixture of high risk dischargers (i.e., majors and minors) in priority areas such as impaired watersheds.

Chapter 3: Permit and Other Information Systems Inadequate

OIG recommends that the Acting Assistant Administrator for the Office of Enforcement and Compliance Assurance:

3-1. Make modernization of the Permit Compliance System a high priority. Further, ensure that future systems:

- ***Allows for submission and evaluation of self-monitoring reports for all dischargers, including minor facilities and storm water.***
- ***Tracks storm water permits, inspections, compliance rates, and enforcement actions.***

EPA Response: Modernization of PCS is, and will continue to be, a high priority for OECA. The modernized system will build in the capacity to allow for entry of all data element fields needed to track all dischargers, including minor facilities and storm water facilities. Information tracked for those dischargers will include permit limits, inspections, compliance and enforcement action data. PCS modernization is scheduled for implementation by the end of 2003.

3-2. Accelerate the development of the state data transfer system for the Permit Compliance System. Also, before proceeding further into design and development, work with the Office of Water to ensure there is an up-to-date policy statement for water system criteria.

EPA Response: Over the last year, OECA and the Office of Environmental Information (OEI) have been working closely with our State partners in implementing the PCS Interim Data Exchange Format (IDEF). IDEF will ease the States' entry of required information from their modernized State systems into legacy PCS, and will simplify the transition of that information entry into the modernized PCS. OEI is the lead for implementing the IDEF project and has developed the schedule for implementation of the project. Acceleration of that implementation schedule needs to be addressed by OEI. Currently IDEF is scheduled for full implementation in February/March 2002.

While OECA agrees that there is a need to update the PCS Policy Statement to address new data requirements, we do not agree that this must occur before design and software development. Broad capacity will be built into the system as indicated in the response to 3-1. Only a subset of that capacity is likely to be Federally required. Therefore, the Policy Statement can be updated during system design and development.

3-3. Have regions work with states to help ensure data elements needed for the new Permit Compliance System are included in state systems being developed.

EPA Response: OECA is in the process of finalizing the overall data requirements for the modernized PCS system. We will continue to work closely with the States in developing those detailed data requirements. Until those requirements are finalized, those States modernizing their systems should include in their modernized system the current PCS data entry requirements as referenced in the current PCS Policy Statement.

For the most part, States do not coordinate or consult with OECA when modernizing their State systems as they are built primarily to accommodate State needs. We will, however, request of Regions that they make a special effort to discuss State modernization plans during their EPA/State program status meetings. Additionally, we hope that extensive involvement of State representatives in the PCS modernization process will have a spill over effect in getting States to include the necessary data elements in their systems.

3-4. Continue to report the Permit Compliance System as an Agency-level weakness until the modernization project is implemented and the system data is reasonably accurate and complete.

EPA Response: OECA will continue to report PCS as an Agency-level weakness until all milestones have been met. One of the milestones is the completion of PCS modernization which is scheduled to occur by the end of 2003.

3-5. Revise guidance to specify that whole effluent toxicity violations are significant violations. Revise regulations to require whole effluent toxicity violations to be reported on quarterly noncompliance reports.

EPA Response: In many ways, whole effluent toxicity (WET) is treated like any other parameter in the NPDES program, i.e., the permittee reports self-monitoring data on its discharge monitoring report, WET results are entered into PCS and tracked, and violations should be reviewed and are subject to a range of enforcement responses. The major exception is that WET violations are not automatically flagged as significant noncompliance or "SNC." Because of the variability in permit requirements (e.g., many permits just require monitoring with a trigger for follow-up study instead of a numeric limit) and the variation in frequency of compliance monitoring required (e.g., quarterly or annually),WET violations do not neatly fit under our existing SNC criteria. However, EPA's existing regulations and guidance provide Regions and States flexibility to identify WET violations as significant. The regulations at 40 CFR Part 123.45(a)(2)(G) currently provide the Director with flexibility to report any violation of "substantial concern" on the QNCR. EPA's 1989 "Whole Effluent Toxicity Permitting Principles and Enforcement Strategy" states that any violation of a WET limit is of concern and should be reviewed. EPA's "Enforcement Management System" enforcement response guide was last revised in 1989 and recommended responses to WET violations were added.

When OECA revises the NPDES definition of SNC, we will re-consider the applicability of SNC criteria to WET.

3-6. Establish a definition of significant violations for minor facilities, including storm water dischargers. At a minimum, include nonsubmission of self-monitoring reports in this definition. Also, define "significant" minor facilities. Include facilities impacting impaired waterways in this definition.

EPA Response: The Director has discretion to designate any facility with violations of concern as a "major" thereby subjecting the facility to SNC criteria, and 40 CFR Part 123.45(a)(2)(G) currently provides the Director with discretion to report any violation of "substantial concern" on the QNCR. OECA will commit to consider developing guidance on when a minor should be designated as a major and to include factors such as non-submission of discharge monitoring reports and impact of the discharge on impaired waterways.

Chapter 4: Storm Water Compliance Systems Have Deficiencies

OIG recommends that the Acting Assistant Administrator for Enforcement and Compliance Assurance:

4-1. Work with EPA regions in assisting states to:

- ***Develop mechanisms to better balance their limited resources between all categories of dischargers, as is indicated by the states' analysis of risks to water quality.***
- ***Create effective strategies for identifying storm water nonfilers.***
- ***Develop sound storm water inspection programs which include risk-based inspection schedules and tracking and follow-up of inspection results.***
- ***Establish tracking systems for citizen complaints.***

EPA Response: OECA will continue to work with the Regions and States to implement risk-based approaches to water enforcement; OECA's MOA guidance and national strategies provide flexibility to address majors as well as minors. OECA's 2000 Storm Water Enforcement Strategy outlines a recommended "sweep" approach of targeting a priority watershed/geographic area, then focusing storm water inspections and enforcement actions on a category of non-filers (e.g., a priority industrial sector or large construction sites) in that area. While EPA can assist the States by providing direction, guidance, training, and work-sharing, States must take responsibility to develop appropriate planning mechanisms to develop and implement risk-based strategies (which should include a sound inspection program and a system to track citizen complaints), and balance their limited resources.

4-2. Facilitate the development of a system which allows self-monitoring reports to be electronically scored for compliance. Consider low- cost options such as scan sheets (commonly used for electronic scoring of tests) and web-based reporting.

EPA Response: The current PCS system already determines compliance based on the electronic review of the discharge monitoring reports, though some improvements are needed in the system. Modernized PCS will certainly have this capability. Additionally, modernized PCS will provide the capability for facilities and States to electronically report information utilizing the Agency's Central Data Exchange portal and the National Environmental Information Exchange Network for the transfer of NPDES data.

Chapter 5: Enforcement Actions Late and Penalties Insufficient

OIG recommends that the Acting Assistant Administrator for Enforcement and Compliance Assurance:

5-1. Establish a clear and consistent standard for measuring the promptness of enforcement actions.

EPA Response: The NPDES program already has a "timely and appropriate" standard described in the NPDES "Enforcement Management System." We believe that a more appropriate recommendation would be for OECA to review the consistency of its standard and ensure that the Regions and States are aware of it.

5-2. Continue to work with the regions to assist states in establishing proactive enforcement strategies to help facilities avoid long-term serious violations due to plant or system obsolescence or capacity limits.

EPA Response: OECA, in conjunction with OW, has developed guidance documents and training workshops to assist the regulated community in avoiding noncompliance due to plant or system obsolescence or capacity problems. Some

specific examples are guidance with regard to implementation of nine minimum controls and a long-term control plan for combined sewer overflows (CSOs) as well as guidance documents and training workshops for municipal officials and their system operators and consultants on procedures to eliminate and prevent sanitary sewer overflows (SSOs) and CSOs.

OECA is involved in the development of a *Guide for Evaluating Capacity Management, Operation and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems* which describes the management practices and operation and maintenance techniques that have served municipalities best in the reduction and elimination of SSOs from their systems. The audience for this guidance is State and EPA personnel who are assisting municipalities to comply with SSO requirements. The guidance will also help municipalities make decisions on the rehabilitation and repair of their collection systems and ways to better operate those systems. The guidance is scheduled for release as an interim-final document early in fiscal 2002, and is planned to be finalized following the final publication of the SSO Rule.

Guide for Evaluating Capacity Management, Operation and Maintenance Programs (CMOM) at Wastewater Treatment Plants will provide guidance to assist compliance monitoring inspectors in determining whether a CMOM program is adequate for a particular wastewater treatment plant. The guidance will also be useful to municipalities for determining whether their plants are following accepted practices and for addressing any discrepancies as needed in order to improve or maintain compliance. The guidance is scheduled for release as an interim-final document early in FY 2002, and is planned to be finalized following the final publication of the SSO Rule.

Chapter 6: Improved Performance Evaluation and Measurement Needed

OIG recommends that the Acting Assistant Administrator for Enforcement and Compliance Assurance routinely determine whether states are fulfilling their obligations to monitor and enforce discharge programs. Specifically:

6- 1. Develop consistent criteria and measures for in-depth program evaluations of state programs:

- ***a. At a minimum, all of the oversight criteria and measures in the 1986 Policy Framework should be included along with additional elements included in the Clean Water Act discharge guidance. Include the accuracy and completeness of data systems, the quality of inspections, and the reliability of self-monitoring reports.***
- ***b. Evaluate all significant discharge programs including storm water, minor dischargers, and concentrated animal feeding operations.***
- ***c. Use a uniform, objective scoring mechanism.***

EPA Response: OECA agrees that a process for periodic evaluation of the Clean Water Act (CWA) discharge program in each State would be useful. In fact, most Regions do conduct an assessment of State water enforcement programs, either annually or bi-annually, though the nature of the assessment varies. Some variability in the assessment process is necessary since priorities vary by State, as does work sharing with the Region. For your information, the content of the review of State performance for any program, not just the CWA discharge program, must be governed principally by the authorization agreements, grant work plans and agreements and the Performance Partnership agreement between the Region and State. Those policies and agreements should define priorities, describe work sharing arrangements between the Region and State, and define the evaluation process to be used, among other things.

OECA now has a national evaluation process which focuses on "program element reviews" among programs. These reviews focus on examining policy and implementation of a particular program element in all Regions and a sample of States. OECA is responsible for working with the Regions and States to evaluate a wide scope of statutory programs, and while resources do not permit a commitment to ensure a top to bottom evaluation of the enforcement of the CWA discharge program in every State, OECA will consider how best to concentrate on key concerns of the program.

Since the OECA program element reviews will each address a different program or problem, there will not be a standing uniform scoring mechanism. However, within each review, the questions used and the weight assigned to the answers will be the same. OECA agrees to continue to develop for each of its program element

reviews a consistent set of criteria and measures as part of its design for each review. All applicable policy is considered in designing each review. For NPDES, this will include criteria from the 1986 Policy Framework. However, we are not yet in a position to identify what reviews will be undertaken in the future.

6- 2. Have regions perform in-depth evaluations of state enforcement programs every two to three years. Make these evaluations available to the public through publicity releases or the EPA website.

EPA Response: Many Regions do perform in-depth evaluations of State enforcement programs on a rotating basis, using the Performance Partnership Agreement, grant agreements, and existing policy as a basis for those evaluations. Again, OECA agrees that it would be ideal to have these evaluations of enforcement programs in all States every 2 or 3 years; however, resources simply would not allow that in some Regions. OECA also agrees that publicity can be an effective factor to ensure competent program operations; however, active publication of all evaluations on a website may exacerbate Federal/State tensions and inhibit a frank, open review process. OECA reserves use of the website as conditions dictate.

6- 3. Continue to remind state partners, including the Environmental Council of the States, of their obligation to use core performance measures that address the effectiveness of enforcement programs.

EPA Response: OECA agrees to continue to do so, and suggests that OIG encourage the States directly where possible to do so as well. In FY 1999, $1.8 million was awarded to eleven States to develop outcome measures, and in FY 2000, another $1.2 million was awarded to 10 States to develop outcome measures specifically for compliance assistance. OECA is also discussing with States possibilities for funding performance measurement work within the NEPPS framework.

6- 4. Have regions collect and use all core performance measures to consistently measure the effectiveness of state enforcement programs on an annual basis. Consolidate these measures nationwide and make them public.

EPA Response: States currently report on the required core measures through national data systems. It is the optional measures which the States have opted not to use. OECA will continue to promote the use of the optional measures through all means available to us, including grants. OECA does consolidate information on required core measures of outputs nationally, and this information is used by the Regions in their performance discussions with their States and is available to the public on request.

6- 5. Work with regions to assist states in setting specific goals and standards for compliance, recidivism, the timeliness of enforcement actions and other important measures.

EPA Response: While the above measures are not "core measures" for States, OECA has established performance standards for the timeliness of enforcement actions which, for the most part, derive directly from the 1986 Policy Framework. Regions have worked with States to have them adopt these standards. In fact, OECA includes State performance on this standard in some of its program management reports. Since the measure for recidivism is new, OECA has wanted to get some experience with the measure before establishing performance goals. Likewise, we have not set performance goals for compliance rates, recognizing that compliance rates are the product of many factors, not just our OECA activities. OECA does plan to work with the States through an ECOS grant to assist in developing a consistent approach to determining compliance rates. OECA does monitor and report on recidivism and timeliness on a national basis and is considering setting a national target for recidivism for all programs as well as a national target for improving compliance.

Exhibit 2: Other Matters, Key Management Decisions Needed for PCS

In evaluating whether the modernized system and components would remedy problems with data gaps, OIG identified several concerns that they believe should be promptly addressed:

- ***Data Entry Requirements Not Updated.***
- ***Incomplete Requirements Document.***

EPA's Response: OECA has already worked extensively with OW, particularly the Permits Division, to identify data requirements. A number of special sessions were held with OW personnel when they were unable to attend the established sessions. We intend to continue to work with OW and the states to finalize data requirements, both for existing programs and for new regulatory activities which are not currently well handled in PCS. In the next several months, PCS modernization managers will be working with OW to verify that requirements provided previously by them are still accurate and complete. Additionally, an OECA/OW/State data requirements team will be established at the PCS national users meeting in July to review, validate, and finalize the identified requirements.

Once the data requirements are finally established, a workgroup, including EPA Headquarters and Regional representatives, as well as States, will be formed to identify the subset of data requirements which will be federally mandated for entry into PCS and, which currently required data elements can be eliminated. The PCS Policy Statement will then be modified to incorporate the data elements which States/Regions are required to enter into PCS as well as the universe to which those requirements will apply.

- ***Key Decision Documents Are Needed.***

EPA Response: The System Management Plan (SMP) is a document which contains information on why the system is needed, what contract will be used, who is the project manager, what is the estimated cost, etc. While such a plan was done very early in the planning phases of PCS modernization, it was replaced with the OECA ITMRA submission. This submission contains all of the information required in the SMP, is reviewed by all management levels and is approved by OECA's Deputy Assistant Administrator. It is then reviewed by peer review teams within the Agency and annually provided to OMB as part of the Agency's overall response to IT investment reporting requirements of the Clinger-Cohen Act. As this document is updated each year, we believe that it serves the purpose of the SMP; however, we will update the SMP by December 2001.

OIG suggests that the Office of Enforcement and Compliance Assurance collaborate with the Office of Water to create an updated data entry policy. Upon completion of this policy, OIG suggests that the Acting Assistant Administrator for Enforcement and Compliance Assurance:

- ***Complete the systems requirements document.***

EPA Response: Data requirements were collected from EPA (OW and OECA) and States to determine the scope of the modernized PCS system. The next phase of PCS modernization is the design phase. One of the major products from that phase is a design specification document. This document will be developed with very intense participation by EPA and States (both direct users and interface States). The design specification includes data elements to be collected in PCS, data entry screens, report formats, and specific functionality to be supported, including electronic reporting efforts being managed elsewhere in the Agency. This effort will begin in July of this year with the National PCS meeting and will be completed by March of 2002.

- ***Execute memoranda of agreements with the Office of Water and state participants to help ensure (1) that the baseline requirements for the new system design are formally agreed to and (2) that both federal and state needs are addressed in the design of the new system.***

EPA Response: While we agree that full consultation and coordination with the Office of Water and the States is necessary, we do not agree that the development of MOAs with these parties is necessary or desirable. Such a process would be extremely time consuming and resource intensive, and the goals of such a process can be achieved in other ways. Coordination has already occurred (and will continue) with ASWIPCA and the Water Subcommittee of ECOS. Decisions on policy and system issues will be handled at a senior level between OW and OECA with recommendations coming from the PCS Steering Committee (representing EPA Headquarters, Regions, and States). One of the tasks before the PCS Steering Committee and senior water managers is the updating of the PCS Policy Statement and the identification of Federally required data elements. The schedule below addresses this task. Again, Regions and States will be involved in regular formulation and decision on these issues.

Update System Management Plan	05/01-12/01
System Design Specification Document	07/01-03/02
Update Federally Required Data Element List	04/02-09/02
Update PCS Policy Statement	Ongoing-09/02

- ***Perform a cost-benefit analysis of the new system that addresses the electronic reporting and data entry requirements, the system development costs, and the projected operational and maintenance costs over the life of the system.***

EPA Response: This analysis is underway and should be completed by September 2001.

- ***Establish and approve a system charter and system management plan.***

EPA Response: We agree and will complete them by December 2001.