Mandatory Minimum Penalties

An Effective Tool for Enforcement of Clean Water Laws

TexPIRG Education Fund

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AN EFFECTIVE TOOL FOR ENFORCEMENT OF CLEAN WATER LAWS

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TexPIRG Education Fund
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EXECUTIVE SUMMARY

Mandatory Minimum Penalties laws (MMPs) have increased compliance with Clean Water Act permits in New Jersey and California.

Thirty years after the passage of the federal Clean Water Act (CWA), industrial pollution of our nation's waterways remains a serious threat to public health and the environment. This problem persists in large part because facilities continue to violate their CWA permits — dumping much more pollution into rivers, lakes, and sewage treatment systems than the law allows. And in many cases, these polluters are never held accountable. For this reason, new enforcement measures must be at the core of any strategy to preserve and protect our water resources.

Mandatory minimum penalties (MMPs) constitute an effective policy for achieving greater compliance with CWA permits. MMPs ensure that a specific set of permit violations are enforced automatically, by assessing penalties on the facilities that commit those violations.

As documented in this report, MMPs in New Jersey and California have dramatically cut illegal water pollution in those states. New Jersey's Mandatory Minimum Penalty program went into effect in 1991; in the first full year the law was in effect, the number of enforcement actions increased by 57% and the number of penalties assessed increased 45%. Over the next eight years, as violations declined by 76%, the number of enforcement actions dropped 77%, and the number of penalties assessed shrank 90%.

Although California's MMP program is relatively new, it is already showing a similar pattern of success. The first full year of data reveals that the number of enforcement actions has increased by 46% since the program's inception in January 2000. The number of enforcement actions with accompanying penalties increased by 35%, and the total amount of penalties grew from $5.4 million to $11.9 million, a 120% increase. Subsequently, violations of NPDES permits have decreased by 84%.

Policy Findings

New Jersey and California's experiences demonstrate that a well-constructed mandatory minimum penalty provision can provide state agencies and sewage treatment plants with an effective permit enforcement tool.

A review of New Jersey and California's provisions provides several important lessons for the design of future MMP systems. A comprehensive, effective MMP should incorporate the following principles:

- **1) The definition of violations subject to MMPs should be clear and inclusive of all relevant Clean Water Act violations.** Effluent and reporting violations, big and small, should be assessed mandatory penalties.
- **2) Polluters should be fined at levels high enough to deter the wealthiest businesses while being fair to small businesses.** Further, mandatory minimum penalty levels should be periodically readjusted to account for inflation.
- **3) Sewage treatment plants should be granted the necessary authority to enforce the permit standards of upstream polluters, including a mandate to assess MMPs for permit violations.** Many large industries discharge into sewage treatment plants. Without adequate enforcement authority, sewage

treatment plants have no means to control the discharges entering their facilities.

- **4) Penalties should be assessed promptly.** States cannot use MMPs to create a successful regulatory environment if violators do not expect swift enforcement responses.

Additional Recommendations

Furthermore, when designing and implementing an MMP program, states should consider these additional suggestions to ensure its success:

- **1) Permit holders should be held accountable through frequent, thorough inspections and consistent state review of self-monitoring reports.** Mandatory penalties for violations only make consistent state review of dischargers more important.
- **2) The policy should establish a clear set of legal exceptions and limited affirmative defenses for dischargers to prevent costly litigation.** Clearly defined affirmative defenses promote fairness and expedite the appeals process.
- **3) States should provide the public and the EPA with the information necessary to verify enforcement of the law.** A well-constructed MMP provision creates a strict enforcement environment. The public and EPA need the informational tools to hold dischargers and state agencies accountable to the law.

INTRODUCTION

Thirty years after passage of the Clean Water Act, the dreams of 1972 are still far from being realized. The CWA sought to eliminate the discharge of all pollutants by 1985 and, as an interim goal, to ensure that water quality was both "fishable and swimmable" by 1983. Unfortunately, in 2000, industries in the United States dumped over 260 million pounds of toxic chemicals into our rivers and streams, 25% more than were discharged in 1990. Today, 40% of our rivers remain un-fishable and un-swimmable.

The problem is not the lack of strong clean water laws, but the lack of enforcement of those laws. Despite a strong federal law mandating clean water, polluters face little threat of penalty if they violate their water permits. Plastics manufacturers exceed limits on discharging oil residue, paper mills release too much dioxin, oil refineries fail to submit monitoring reports — and all of these illegal actions take place with little chance of reprisal.

The general failure of enforcement has created a regulatory environment in which it pays to pollute. The likelihood of facing penalties or even just bad publicity is so small that many companies find it worth the risk to ignore environmental laws. Instead of investing in the technology and resources necessary for compliance, a polluter can invest the money in his business and create a competitive advantage for himself over businesses that do comply with the law.

Instead of attempting to correct this problem on a national level, the Environmental Protection Agency has correctly shifted enforcement authority to the states. States should control enforcement of environmental laws, having the closest interest in the criteria of the local environment. Since each state faces different local conditions, state officials know best how to promote compliance. And a single national enforcement program would be unmanageably large.

But state agencies must be given the tools to do the job right. When large companies use their financial muscle in endless court challenges, states often can't stand their ground. A streamlined enforcement process with clean and simple legal requirements would be a powerful tool for habitually underfunded and understaffed state agencies.

One of the best ways to accomplish this is to require that serious and chronic violations of environmental laws are consistently met by financial penalties that are strict enough to be taken seriously and transparent enough to be immune to court challenge. New Jersey and California have made great strides toward this goal by instituting mandatory minimum penalties for violators of Clean Water Act permits. Other states should follow suit.

In addressing the efficacy of MMPs, this report addresses only the enforcement piece of the effort to control water pollution. However, enforcement is just one aspect of an effective plan to control water pollution. Any comprehensive plan must include, along with strong enforcement, a strict pollution permitting program that sets stringent effluent limits for dischargers and decides judiciously when to permit new and expanded discharges. When states adopt MMPs, they should also consider the effectiveness of their permitting programs. Even with a perfect enforcement program, water pollution will only be reduced as far as permitted levels prescribe.

Mandatory Minimum Penalties (MMPs) for Clean Water Act violations can be effective enforcement tools for state agencies and sewage treatment plants that streamline the enforcement process and increase discharger compliance.

MMPs: An Effective Enforcement Tool

MMP laws are already at work in New Jersey and California and in both places are doing their intended jobs. In New Jersey, where the law has been in effect for more than ten years, compliance is exemplary. In California, where the law has been in effect for just two years, dramatic improvements are already evident.

Mandatory Minimum Penalties are a simple concept. A state classifies different Clean Water Act violations and then requires assessment of a penalty, of at least a preset amount, for each type of violation. With a well designed system, the effect is an efficient, predictable enforcement program that increases compliance with Clean Water Act permits and reduces pollution discharges from point sources.

New Jersey and California's MMP laws are well designed in many respects, but also have various aspects that in some cases undermine their effectiveness. When states consider crafting MMP statutes, they can profit from analysis of these two pioneers' experience.

The National Pollutant Discharge Elimination System

Water pollution degrades surface waters, making them unsafe for drinking, fishing, swimming, and other activities. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating "point source" discharges of pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must get permits if their discharges go directly to surface waters, and often larger industrial facilities that discharge into sewer systems are also required to obtain NPDES permits.

Mandatory Minimum Penalties in New Jersey

New Jersey's pioneering mandatory minimum penalties provision, enacted in 1990, is an effective enforcement tool that has increased compliance with Clean Water Act permits.

The New Jersey MMP system:

- Clearly defines specific violations.
- Sets mandatory minimum fine levels for those violations.
- Provides for a set of specific legal exceptions to those mandatory penalties.
- Establishes an effective system to regulate sewage treatment plants and their indirect dischargers.

New Jersey's law has seen great results. Violations are down. Enforcement rates are up. Overall compliance is improved.

However, the New Jersey MMP system is not perfect. Mandatory fine levels are low and not fixed to inflation. There is some evidence that MMPs do not deter the wealthiest polluters.

Background

The New Jersey MMP provision was enacted in 1990 after years of ineffective water policy enforcement and lagging water quality improvement statewide.

In 1981, the U.S. Environmental Protection Agency (EPA) delegated the primary permitting and enforcement responsibilities under the Clean Water Act to the state of New Jersey. In response, the state created the New Jersey Pollutant Discharge Elimination System (NJPDES) to regulate discharges into state waterways from point sources, including both industrial sources and municipal sewage treatment plants.

Prior to the 1987 amendments to the federal Clean Water Act, permits emphasized "state minimum treatment requirements and uniform national technology-based effluent limits developed by the EPA for sewage plants and each type of major industrial process" [1] instead of water quality-based effluent limits. But these regulations failed to address the individual capacities of different waterways to assimilate waste depending on size, flow rates, etc. After the 1987 amendments, the emphasis of the NJPDES program shifted to develop water quality-based effluent limits for toxic substances and other water pollutants.

Within two years there was rising concern among New Jersey environmentalists and many lawmakers that the NJPDES program was not being taken seriously by either the department or its permittees. According to the New Jersey Department of Environmental Protection (DEP), data from the late 1980s demonstrates a high incidence of noncompliance by municipal and industrial dischargers as well as a chronic lack of enforcement by the DEP. There was also a growing general frustration with a lagging process in improving surface water quality standards throughout the state.[2]

The other major problem that arose in the late 1980s was the inability of sewage treatment plants to effectively enforce industrial pretreatment programs. Many industrial dischargers do not discharge wastewater directly into state waterways but instead feed into the sewer system, leading to a sewage treatment plant. Therefore, sewage treatment plants receive large quantities of untreated toxic and nontoxic pollutants from these dischargers, who are technically referred to as "indirect users." Without the ability to adequately control the discharges of indirect users, plants were often unable to meet their own discharge permit requirements.

Consequently, the legislature and Governor James Florio passed the New Jersey Clean Water Enforcement Act (CWEA) of 1990 that substantially amended the Water Pollution Control Act to require enforcement actions that would successfully deter polluters and to bolster the role of sewage treatment plants in the prevention and control of water pollution. The CWEA included the country's first system of mandatory minimum penalties for Clean Water Act violations.

Key Provisions

Violation definitions, fine levels, sewage treatment plant enforcement authority, inspection requirements, and an appeals process are all important provisions of the CWEA.

Defining Violations

The New Jersey CWEA establishes comprehensive definitions of MMP violations that encompass all major categories of possible infractions. The act attempts to identify the most egregious polluters by defining two specific classifications of violations: "serious violations" and "significant non-compliers."

A "serious violation" is an exceedance of an effluent limitation for a discharge point source by 20% or more for a hazardous pollutant, or by 40% or more for a non-hazardous pollutant. All regulated pollutants are categorized by the EPA as either hazardous or non-hazardous.[3]

A "significant non-complier" is a label fixed to any polluter who chronically commits a set number and type of violations. A "significant non-complier" is defined as any permittee who:

- Commits a "serious violation" involving the same hazardous pollutant at the same discharge point source, in

any two months out of any six-month period.

- Exceeds an effluent limitation, whether "serious" or not, for the same pollutant at the same discharge point source by any amount in any four months of any six-month period.
- Fails to submit a completed discharge monitoring report in any two months of any six-month period.[4]

Calculating Penalties

With respect to calculating penalties, New Jersey's MMP provisions are powerful in many respects despite opening one potential loophole.

For example, dischargers that commit "serious violations" or are labeled "significant non-compliers" are assessed mandatory civil administrative penalties. A minimum fine of $1,000 is assessed to the discharger for each "serious" violation. A minimum violation of $5,000 is assessed for each violation to those dischargers considered to be "significant non-compliers." Significantly, each of these penalty amounts is a floor, not a ceiling, for enforcement sanctions: depending on the gravity of the violation, DEP can always pursue higher penalties against a specific facility.

Reporting violations — instances where dischargers submit an incomplete or incorrect report or fail to submit their required monitoring reports to the DEP altogether — have a separate penalty system. Dischargers are fined $100 per day for each effluent parameter omitted from a discharge monitoring report required to be submitted to the department, and each day during which the effluent parameter is overdue counts as a distinct and separate offense. The DEP may continue to assess penalties for overdue discharge monitoring reports until the reports are submitted, with a maximum fine of $50,000 per month. Dischargers who fail to submit completed discharge reports may also be classified as "significant non-compliers."

Additionally, the New Jersey law mandates a specific timeline in which the penalties must be assessed. For each serious violation the penalty assessment must be made within six months of the date of the violation.

Unfortunately, the New Jersey MMP law opened a loophole regarding settlements, reducing the minimum level for settlements of disputed mandatory minimum penalties. Before the MMP law came into effect under the 1990 CWEA, the minimum settlement had to be at least 75% of the original assessment. The new law reduced that percentage to 50%.

Sewage Treatment Plant Regulation

New Jersey sets a valuable example for the regulation of sewage treatment plants and their upstream dischargers. New Jersey law gives authority to many sewage treatment plants to assess the same mandatory minimum penalties to their indirect upstream dischargers as New Jersey DEP assesses to surface water dischargers.

Sewage treatment plants are responsible for treating wastewater from a variety of industrial sources, in addition to thousands of homes and small businesses. Many industrial dischargers use hazardous chemicals in their processes, and are required to follow strict guidelines for pretreatment before their wastewater is discharged to the sewage treatment plant. Because sewage plants are permitted facilities with strict effluent guidelines of their own and are directly discharging treated water into the surface water of the state, it is in the interest of the plant and the public to make sure that their upstream dischargers, also

called indirect users, are in compliance with permitted standards.

Delegated Local Agencies (DLAs) are operators of sewage plants to whom the department has given enforcement authority. Under the 1990 CWEA, the DLAs have the following authorities and responsibilities:

- Control discharges from indirect users through permit, order or similar means to ensure compliance with applicable pretreatment standards.
- Randomly sample and analyze the effluent from indirect users and conduct surveillance activities in order to identify, independent of information supplied by indirect users, occasional and continuing non-compliance with pretreatment standards.
- Inspect and sample the effluent from each significant indirect user at least once a year.
- Investigate and respond to instances of Non-compliance through appropriate enforcement action.

Initially the CWEA left the new DLAs without the authority to issue MMPs to their respective indirect users. Regulations that went into effect in January 1999 gave the DLAs a powerful enforcement tool by requiring them to assess mandatory minimum penalties to an indirect user under the same terms that any violator with a surface water discharge permit would face.

Additionally, New Jersey DEP itself takes enforcement and regulatory responsibility for the largest and most dangerous upstream dischargers, acknowledging their regulation as a top priority for the state's water quality and relieving pressure on the small enforcement programs run by sewage treatment plants. By taking responsibility for these upstream dischargers, the DEP allows sewage plants to concentrate on many of the medium and small sized indirect users.

Inspections and Monitoring

The New Jersey Clean Water Enforcement Act gives the DEP an effective framework for evaluating the activities of dischargers, the industrial processes they use, and the quality and quantity of their effluent. Monthly self-monitoring reports and mandatory facility inspections and are the main tools that DEP uses to monitor these activities.

The CWEA requires all major facilities, local agencies, and upstream dischargers to sewage treatment plants to submit monthly monitoring reports to the DEP or the delegated local agency. In addition, upstream dischargers, major facilities, and local agencies are required to report any discharge that may cause injury to persons, damage the environment, or pose a threat to human health or the environment within two hours of its occurrence. Upstream dischargers, major facilities, and delegated local agencies are also required to report any serious violation to the DEP within 30 days of the violation, explaining the nature of the violation and the steps being taken to remedy the situation.

Required monthly self-monitoring reports allow the DEP to continuously and efficiently monitor the content of dischargers' effluent. With nearly a thousand permittees, the process would be prohibitively expensive if the DEP had to perform monthly samplings of effluent itself.[5]

With MMPs in place and the DEP relying on dischargers to report their own violations, facility inspections become an increasingly important regulatory tool. Frequent, thorough inspections are the best way to ensure that dischargers provide accurate information in their reports regarding their effluent.

Under the CWEA, each permitted facility or municipal sewage treatment works (other than one discharging only stormwater or non-contact cooling water) must be inspected by the regulating agency at least once a year. Each permitted facility discharging into a municipal sewage treatment works of a local agency with regulating authority is inspected by that delegated agency once a year. Additionally, at least once every three years the permittee must perform an analysis of a sample of effluent. Municipal sewage treatment works must analyze discharge from and inflow to the treatment works at least once a year. The commissioner of the DEP has access to all premises in which a discharge source is located or in which monitoring equipment is kept.

Facility inspections are important for several reasons. First, they give the DEP an understanding of the industrial processes taking place, helping them calculate appropriate permit levels. Additionally, the inspections allow the agency to take their own random samples of effluent and ensure that dischargers are submitting accurate self-monitoring reports. In an annual facility inspection, the DEP reviews all Discharge Monitoring Reports (DMRs) and evaluates the entire water pollution control process for each discharge, including operation and maintenance practices, as well as monitoring and sampling procedures.[6]

Affirmative Defenses

New Jersey's MMP law provides a clear set of legal exceptions, called affirmative defenses, that protect dischargers that violate their permits due to circumstances beyond their control. By defining specific affirmative defenses, the law greatly streamlines what can be a time-consuming appeals process.

The law elaborates on the definitions of the two main categories of affirmative defenses: operational upsets, and bypasses. An upset refers to an exceptional incident, such as a storm or other natural event, beyond the control of the permittee. An upset does not include Non-compliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. A bypass refers to an anticipated or unanticipated diversion of wastewater from a municipal sewage treatment works. A user may allow any bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is required for essential maintenance to assure efficient operation.

Effectiveness

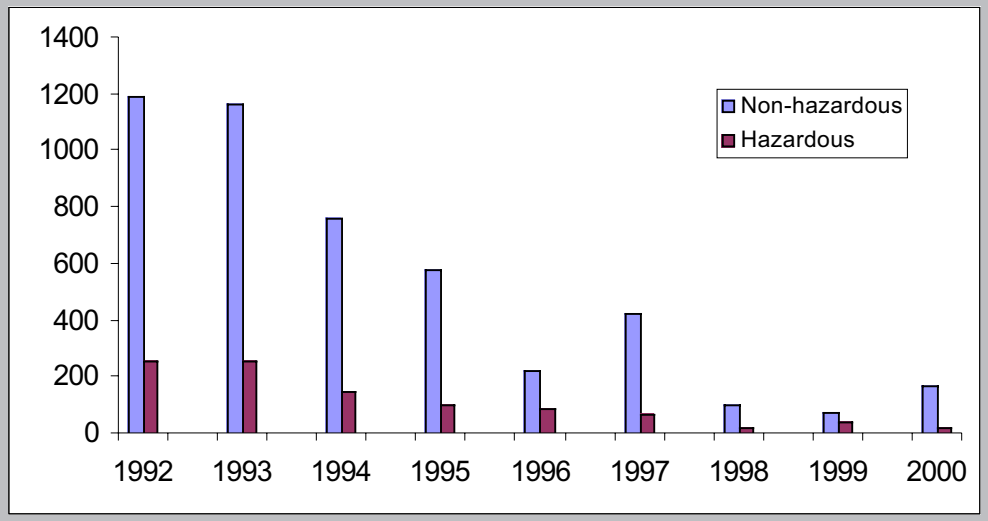
Ten years after implementation, the mandatory minimum penalty provision in New Jersey has substantially increased compliance with Clean Water Act permits. Dischargers are providing more accurate and prompt self monitoring information. Violations of all kinds have decreased dramatically while enforcements continue at a high rate.

Effluent Violations

Effluent violations of Clean Water Act permits have decreased dramatically since the passage of the New Jersey CWEA in 1990. An effluent violation includes any instance where a discharger releases more of a permitted pollutant in their effluent than is legally allowed in their permit.

From 1992, the first year for which complete NJPDES data is available, until 2000, effluent violations decreased 87%. In 1992, there were 1,446 effluent violations. By 2000, this had declined

Figure 1. Effluent Violations of NJPDES Permits[9]



to 184.[7]

Effluent violations of permits for hazardous pollutants dropped 95%. Non-hazardous pollutant violations decreased 92%.[8] (See Figure 1.)

"Serious" effluent violations have also plummeted under MMPs, dropping 87% since 1992. A serious violation exceeds an effluent limitation by 20% for hazardous pollutants and 40% for non-hazardous pollutants.[10] (See Figure 2.)

The number of permittees identified as "significant non-compliers" has also declined over the past decade. In 1992, 81 permittees were identified as significant non-compliers. In 2000, only 16 permittees were labeled "significant non-compliers", a reduction of 80%.[12] (See Appendix A for definition.)

In addition, violations committed by upstream dischargers to sewage treatment plants also decreased between 1992 and 2000. In 1992, 455 effluent violations were committed by upstream dischargers. By 2000 that number had dropped 83% to 76 violations. (See Figure 3.)

Figure 2. Serious Violations of NJPDES Permits[11]

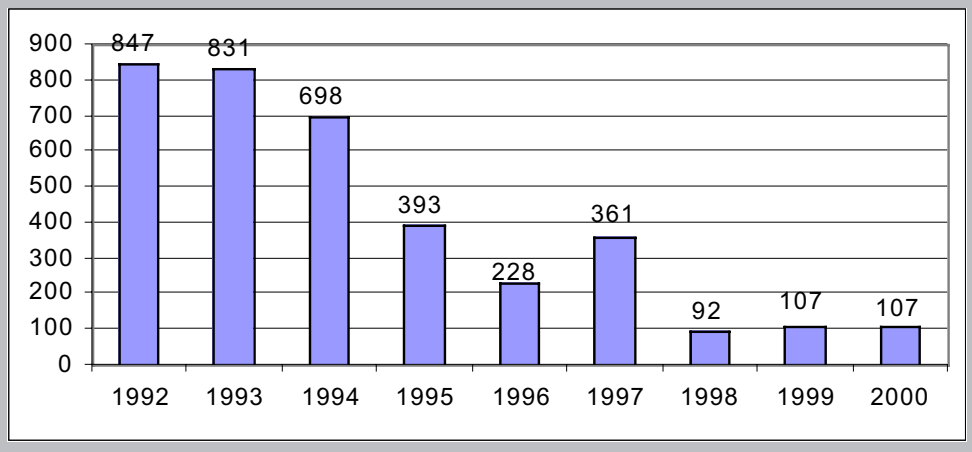
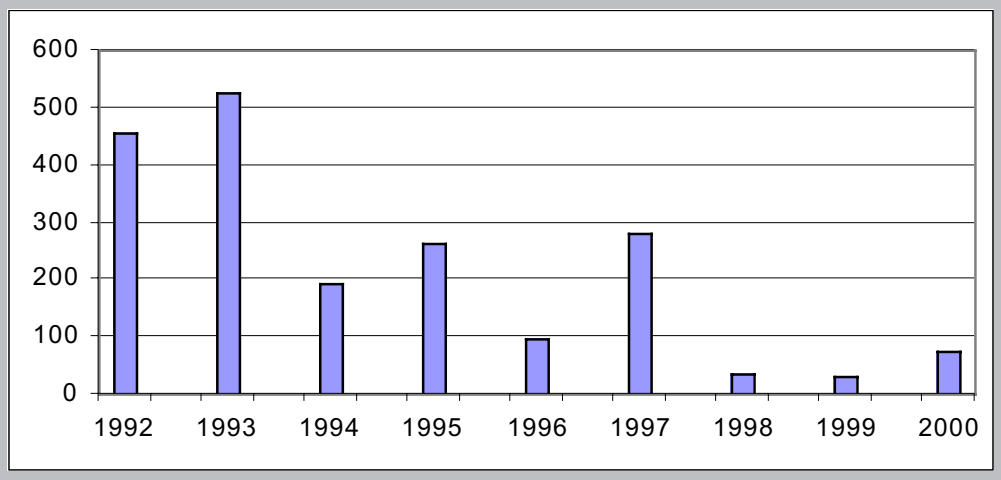


Figure 3. Effluent Violations by Upstream Dischargers to Sewage Treatment Plants[13]



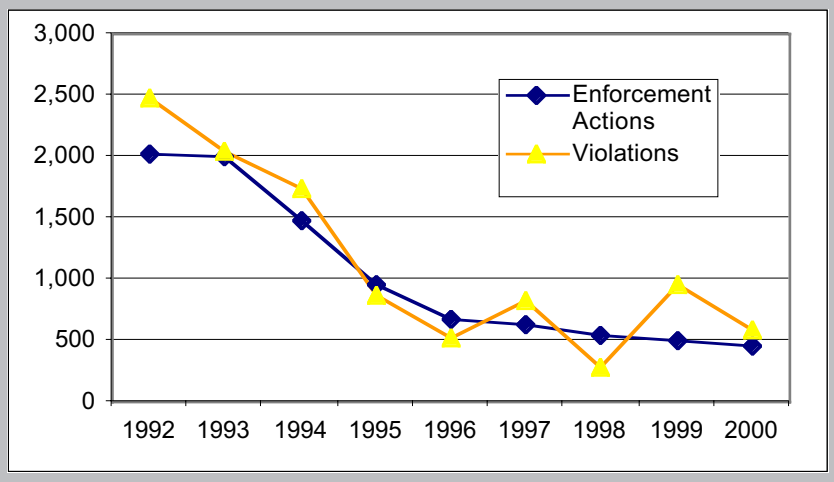
Enforcement Actions

Since MMPs went into effect, total enforcement actions — both formal and informal — have decreased with the number of violations. The percentage of violations receiving enforcement action has remained high.

Overall enforcements have decreased along with violations, from 2,025 in 1992 to 463 in 2000 — a 77% decrease.[14] (See Figure 4.)

While the number of enforcements has dropped, enforcement rates have stayed high since the passage of MMPs. In the last 10 years the average number of enforcement actions taken per violation is 0.9, just under one enforcement action per violation.[16]

Figure 4. Violations and Enforcement Actions Related to NJPDES Permits [15]



Penalties

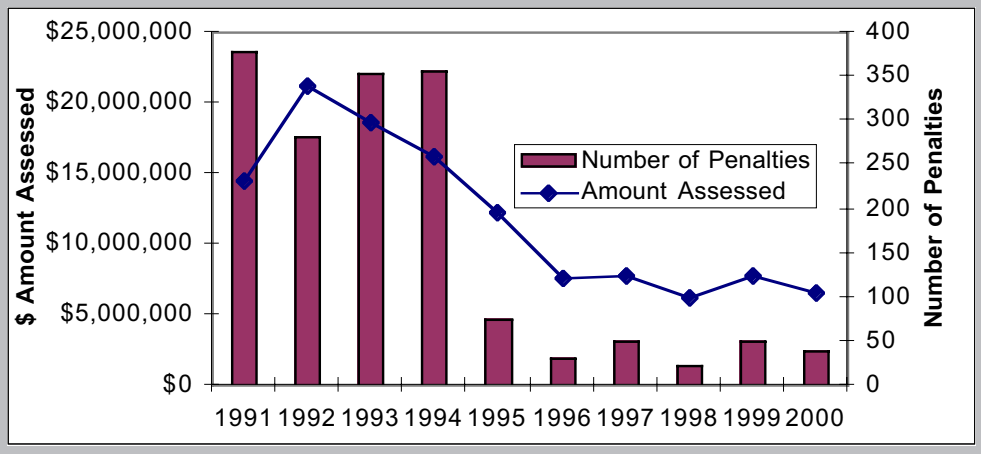
Penalties assessed and collected have declined since the early 1990s along with the total number of violations, while the percentage of violations receiving penalties has increased. Additionally, evidence demonstrates that even the most egregious polluters are receiving large penalties and being forced to come into compliance under the MMP law.

Penalties totaling $2.3 million were assessed in 2000, 90% less than the $23.7 million assessed in 1991. In 2000, 105 penalties were assessed, compared to 233 in 1991 and a high of 297 in 1993.[17] It should be noted that each penalty assessed can represent the penalty for several violations. (See Figure 5.)

A general decreasing trend in the number of penalties assessed is expected as the number of violations decrease. However, it is likely that the large decrease between 1994 and 1995 was in large part due to political changes. Governor Whitman succeeded Governor James Florio in 1994 and immediately declared New Jersey "open for business". In 1994 she abolished the Office of the Environmental Prosecutor, and appointed Robert Shinn, a local politician with no college degree that had owned his own equipment supply company, to head the Department of Environmental Protection. In the same year Governor Whitman cut the DEP budget by 10%, further weakening state environmental enforcement. [18]

Although penalties assessed have decreased in number and dollar amount, the percentage of violations facing monetary penalties has increased. Over the past eight years the percentage of violations receiving monetary penalties has increased from 15% to 23%. [20] (See Figure 6.)

Figure 5. Penalties Assessed for NJPDES Violations [19]



New Jersey's MMP law has proved to be effective in dealing with the states most egregious polluters. The New Jersey DEP has issued large fines to scofflaw facilities under the mandatory minimum penalty statutes. Two examples:

- Between 1998 and 1999, Philips, the international electronics conglomerate, incurred 22 violations for Total

Figure 6. Percentage of NJPDES Violations Receiving Penalties[21]

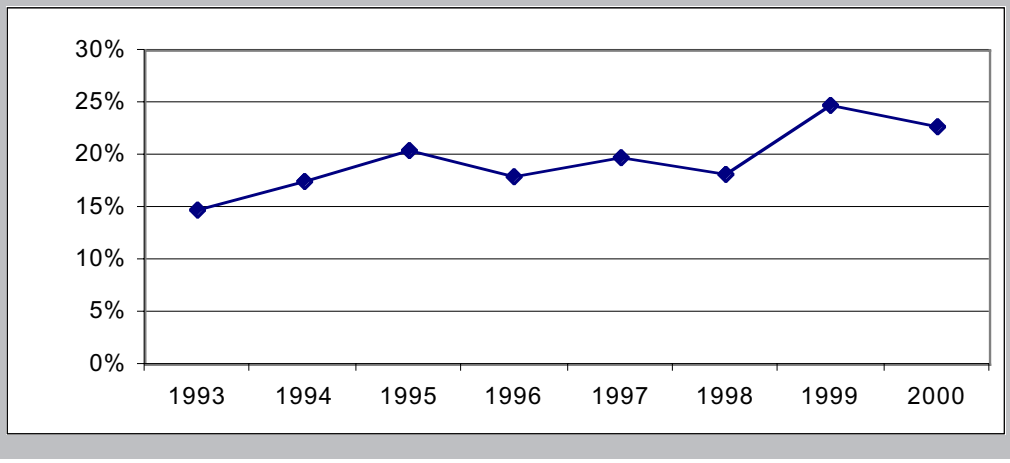
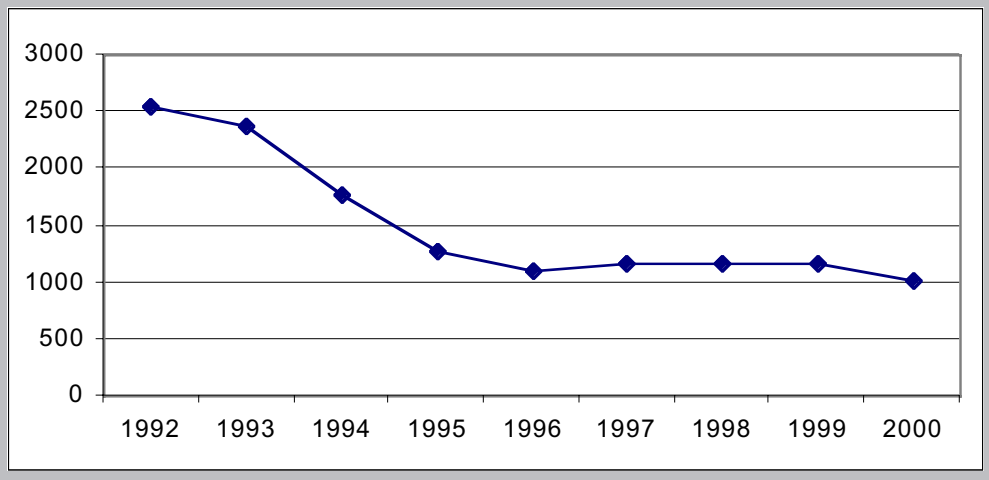


Figure 7. NJ DEP Inspections of Surface Water Dischargers [23]



Organic Compounds, Total Suspended Solids, Petrol Hydrocarbon, pH, and Volatile Organics. Philips executed a settlement agreement with the DEP for $75,114, and has subsequently returned to compliance.

- Kearfott Guidance and Navigation, which makes inertial navigation systems, committed 120 violations between 1991 and 1993 for Chemical Oxygen Demand, Total Suspended Solids, Petroleum Hydrocarbons, pH, and temperature. Kearfott paid two penalty assessments of $365,000. Kearfott has since avoided significant non-complier status.

Monitoring Dischargers

In New Jersey, inspections are occurring at least once annually for each permitted facility, but are occurring less frequently than in previous years.

In order to enforce the law, environmental officials must verify the self-reported compliance status of permittees. When inspections are too few or inadequate, or monitoring reports are infrequent, incomplete, or inaccurate, states are incapable of identifying lawbreakers.

Inspections

Inspections are occurring less frequently since the CWEA went into effect. The total number of inspections has decreased 43% from 1992 to 2000. Inspections of surface water dischargers decreased from 2,550 in 1992 to only 1,015 in 2000.[22] (See Figure 7.)

The number of facility inspections of significant indirect users (SIUs), the largest upstream dischargers to sewage treatment plants, dropped from 185 in 1992 to only 65 in 2000.[24] (See Figure 8.)

Reporting Violations

Since 1992, reporting violations have decreased but still happen frequently. Any discharge monitoring report that is submitted more than 5 days late, is incomplete, or is not filed altogether constitutes a reporting violation. Reporting violations are subject to MMPs for significant non-compliers.

Required monthly self-monitoring reports are the backbone of the DEP's enforcement process. They are the only means by which the DEP can continually monitor the content of dischargers' effluent. When dischargers fail to submit required reports, or omit data, the

Figure 8. NJ DEP Inspections of Significant Indirect Users of Sewage Treatment Plants[25]

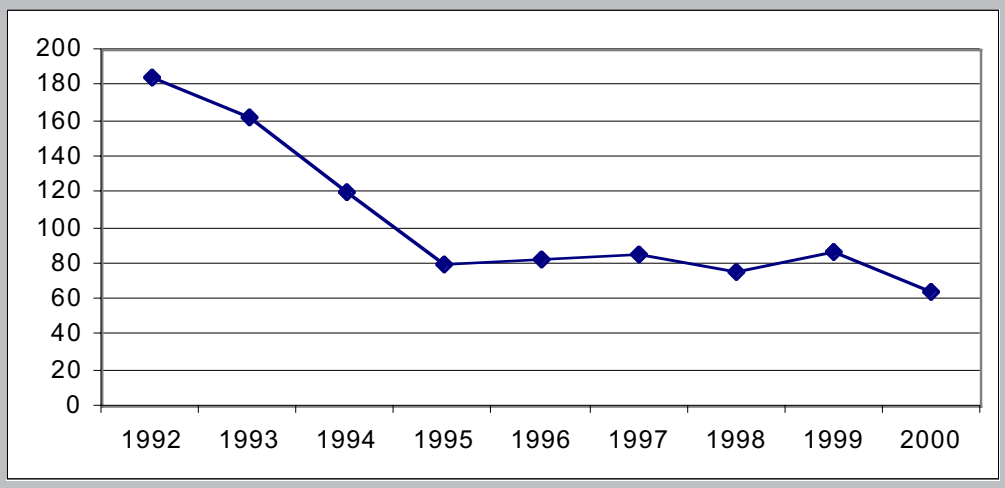
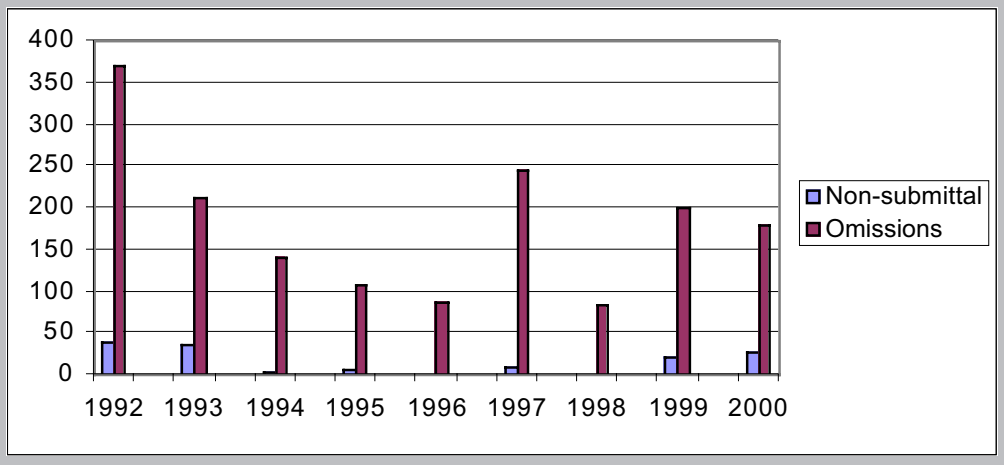


Figure 9. Reporting Violations by NJPDES Permit Holders [27]



DEP cannot tell whether a discharger is in compliance with their permits, and the system breaks down.

Reporting violations decreased 50% between 1992 and 2000. Violations for non-submittal dropped 29% in that time period and omissions decreased 51%.[26] (See Figure 9.)

Although this decline is significant, 200 reporting violations still occurred in 2000, suggesting that the penalties for reporting violations may not be strong enough.

MANDATORY MINIMUM PENALTIES IN CALIFORNIA

After only two years, California's mandatory minimum penalty law has shown early signs of success as a tool for environmental enforcement. However, several policy loopholes could limit its effectiveness.

California's mandatory minimum penalty provision provides a framework for enforcement action that will increase permitted dischargers' compliance with their Clean Water Act permits. A set of strict definitions of serious effluent violations mandate penalties for the most egregious violations. A set of affirmative defenses, or legal exceptions, is clearly prescribed to protect dischargers that commit violations beyond their control. In addition, clear language in the law mandates the annual public release of information regarding compliance and enforcement activity.

The initial effects of the law are already apparent. Effluent violations have dropped 86% from January 2001 through September 2001. More formal enforcement actions are being issued since the passage of the MMP provision than before. The number and dollar amount of penalties being assessed are higher than before MMPs were in place.

However, several key loopholes could threaten the effectiveness of California's law. First, reporting violations are not subject to mandatory minimum penalties, creating a disincentive for violators to report. Second, California does not provide sewage treatment plants with the authority to assess MMPs to their upstream dischargers.

Background

Similar to New Jersey, California's MMP provision was signed into law after it became apparent that the state was not enforcing the Clean Water Act.

In the late 1990s, the California Legislature became concerned that the State Water Resource Control Board (SWRCB) and its nine regional boards were failing to implement state and federal clean water law pertaining to point-source discharges to surface water. A report by the Legislative Analyst's Office in 1999 described in detail the SWRCB's shortcomings:

- Authorities were inspecting facilities less frequently than required by law.
- Only 5% of Clean Water Act violations in 1996-1997 resulted in formal enforcement actions.
- Only 1% of these violations were ever assessed a fine.
- SWRCB's regional boards were enforcing clean water laws inconsistently.
- Violation and enforcement tracking information was incomplete and inconsistent.[28]

To address these problems, the report endorsed the mandatory minimum penalties proposed in AB 50 (Midgen) — the Clean Water Enforcement and Pollution Prevention Act (CWEA). With the support of numerous environmental and public interest groups, the Legislature soon agreed, and CWEA became law in 1999.

Key Provisions

Like the New Jersey MMP law, CWEA defines violations, sets penalty levels, grants enforcement authority to sewage treatment facilities, and establishes an appeals process.

Defining Violations

The California CWEA clearly defines effluent violations, but fails to include

reporting violations a major loophole.

Similar to New Jersey, the California CWEA classifies violations into two main categories: serious violations, and ongoing violations.

The California CWEA classifies serious violations exactly the same way as New Jersey does:

A serious violation constitutes any waste discharge that exceeds permitted levels for a hazardous pollutant by 20% or more, or for a non-hazardous pollutant by 40% or more. Federal regulations define pollutants, each with a list that contains specific constituents.

The definition of "ongoing" violations addresses minor infractions. Ongoing violations are broken into four groups:

- Exceeding an effluent limitation.
- Failing to file an initial permit application report (as pursuant to California Water Code 13260).
- Filing an incomplete initial permit application report (as pursuant to California Water Code 13260).
- Exceeding a toxicity discharge limitation where the waste discharge requirements do not contain pollutant-specific effluent limitations for toxic pollutants.[29]

The definitions of ongoing violations do not include reporting violations. The reporting violations mentioned in this section refer to only one specific type of report — a report that is filed only once in order to first receive an NPDES permit. This section does not mention the discharge monitoring reports used by the SWRCB to evaluate permit compliance. The definitions as written ensure that no mandatory minimum penalties can be issued to dischargers who fail to file their discharge monitoring reports, or who file incomplete reports. Moreover, toxicity effluent limits are also extremely rare, because most facilities are not tested for toxicity. For these reasons, exceeding an effluent limit at a level less than is considered serious is the only way that most dischargers might ever face an MMP due to ongoing violations.

Calculating Penalties

The California Clean Water Enforcement Act establishes a system of mandatory minimum penalties for specific violations of NPDES permits.

The Regional Water Quality Control Boards assess a mandatory minimum penalty of $3,000 for each serious violation.

The CWEA also assesses mandatory minimum penalties of $3,000 for certain ongoing violations. An MMP is only assessed for a facility that commits four or more "ongoing violations" in a six month period. As discussed in the previous section, MMPs for ongoing violations, according to the California definitions, rarely occur.[30]

In some cases, violators may implement a supplemental environmental project (SEP) in lieu of a mandatory penalty. SEPs and pollution prevention plans are potential alternatives to mandatory penalties for a serious violation as long as it is the first such violation in the previous six months. An SEP is defined as measures that go above and beyond the obligation of the discharger. An example is a discharger that establishes a habitat restoration program in the vicinity of discharges. Once a project is agreed upon, a pollution prevention plan is designed to prevent the circumstances that caused the violation from occurring again.[31]

There are several exceptions in place for mandatory minimum penalties. The SWRCB cannot issue an MMP to those dischargers that are in compliance with a cease-and-desist order or time schedule order (both are court orders to come

into compliance). The second set of exceptions is for sewage treatment plants that serve small communities. The Regional Boards can require a sewage treatment plant that serves a community with a population of 10,000 or less to spend the amount of the penalty toward the completion of an SEP in lieu of assessing the mandatory penalty. The project must be designed to correct the violations within five years.[32]

Sewage Treatment Plant Regulation

California sewage treatment plants receive NPDES permits themselves, but are not granted the authority to assess MMPs to upstream dischargers. Sewage treatment plants do have the ability to fine indirect users under state law, but due to a lack of data, it is difficult to determine the extent to which this occurs.

In New Jersey, MMPs are an important enforcement tool to keep upstream dischargers in compliance, thus making it easier for sewage treatment plants to meet their own effluent standards. In New Jersey, industry is dispersed, with most small treatment works servicing one or several industrial dischargers. Because many small sewage treatment works are operated by small municipal governments with limited resources, MMPs become an important enforcement tool. For municipalities to prosecute permit violators without MMPs, taking legal action would require many months of work and large amounts of staff time and money to bring legal action. This burdensome process could lead to enforcement backlogs and budgetary concerns that would let many violators go unpunished for years. MMPs allow the smallest municipal sewage treatment plants to enforce the permits of their upstream dischargers as effectively as the largest, wealthiest municipalities.

MMPs would enable even the smallest California municipalities to bring consistent, strict enforcement against upstream violators while using less money and staff time. Many municipalities are reeling from enormous budget deficits stemming from the $21 billion shortfall facing the state.

Furthermore, the state of California does not itself regulate any significant upstream dischargers to sewage treatment plants. In New Jersey the largest upstream dischargers to sewage treatment plants are classified as significant and regulated under the NPDES program administered by the Department of Environmental Protection. Since some upstream dischargers are high-volume dischargers and are often responsible for some of the most toxic pollution, it is important for the state to maintain enforcement authority over them.

Affirmative Defenses

California's CWEA provides sewage treatment plants with a set of affirmative defenses, but omits some important protections.

The CWEA provides for a set of affirmative defenses to protect dischargers who violate their permits due to circumstances out of their control.

The CWEA states that mandatory minimum penalties shall not be assessed if the violations are caused by one or any combination of (1) an act of war, (2) an unanticipated, grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight, or (3) an intentional act of a third party, the effects of which could not have been prohibited or avoided by the exercise of due care or foresight. [33]

The provision fails to address autho-

rized bypasses, an important affirmative defense for sewage treatment plants. An authorized bypass refers to an anticipated diversion of wastewater from a treatment works. Authorized bypasses are normal occurrences at treatment plants, often used during repairs and upgrades. As a result of this omission, sewage treatment plants may be fined under the MMP provision unfairly.

Effectiveness

Although the California MMP provision is young and data is limited, existing data indicates that MMPs have had a positive effect on compliance with NPDES permits. The overall number of violations committed each month is down considerably, enforcement rates are up, and the number and dollar amount of penalties assessed have increased.

Violations

California NPDES permit violations have declined since MMPs were instituted.

Total NPDES violations rose significantly in the first six months of MMPs compared to the previous six months, but have declined continually since then. In the six months before MMPs began, California averaged 567 violations per month, compared to 731 violations per month in the following six months. Despite the initial increase, the overall number of violations has decreased. The total number of violations in 2000 was 7,463. In 2001, that number was down to 5,002, a decrease of 33%.[34]

The sharp increase in violations in the first few months after January 2000 is most likely the result of an increase in the reporting of violations more than a real increase in the number of violations occurring. According to a California SWRCB official, "information related to violations has been more rigorously tracked since January 2000, and (violations) have been entered into our information system more systematically."[35]

The subsequent decline is most likely a result of steady enforcement action. Though slow economic growth in 2001 and 2002 may have been responsible for a small portion of the decline, NPDES violations have decreased at a much greater rate than has the California economy. California's non-agricultural wage and salary employment figures demonstrate growth of 3.5% in 2000 and 1.4% in 2001. Meanwhile, NPDES violations have decreased 84% between January 2000 and September 2002. (See Figure 10.)

Figure 10. NPDES Violations in California[36]

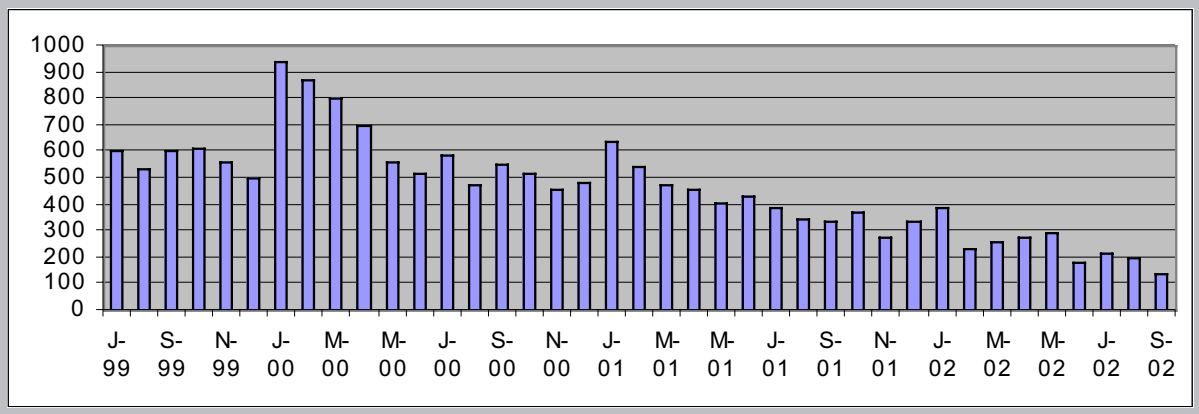
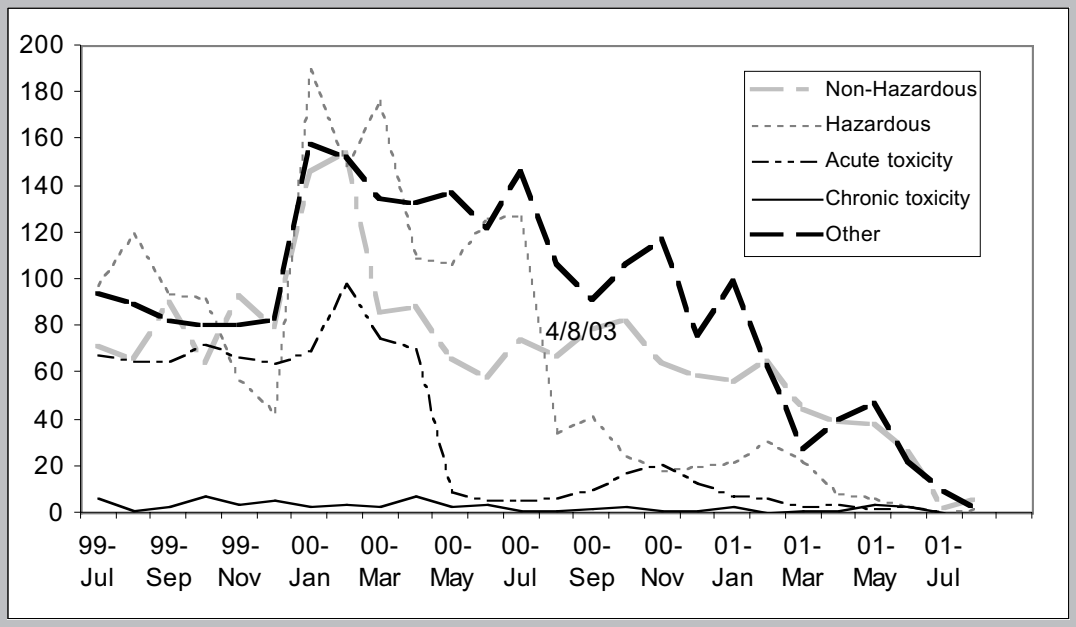


Figure 11. NPDES Effluent Violations by Month in California[37]



The reduction in violations was even greater for those considered to be "serious." In 2000, there were 942 significant violations. In 2001, that number dropped to 561.

Effluent Violations

Effluent violation trends mimic the trends in overall violations. In the first month of 2000 when the CWEA went into effect, the number of violations increased dramatically. But between January 2000 and September 2001, the number of NPDES effluent violations occurring each month decreased 86%, from 600 to 90. (See Figure 11.)

Reporting Violations

Although reporting violations have also decreased since 1999, the data suggests that MMPs would improve compliance even further. (See Figure 12.)

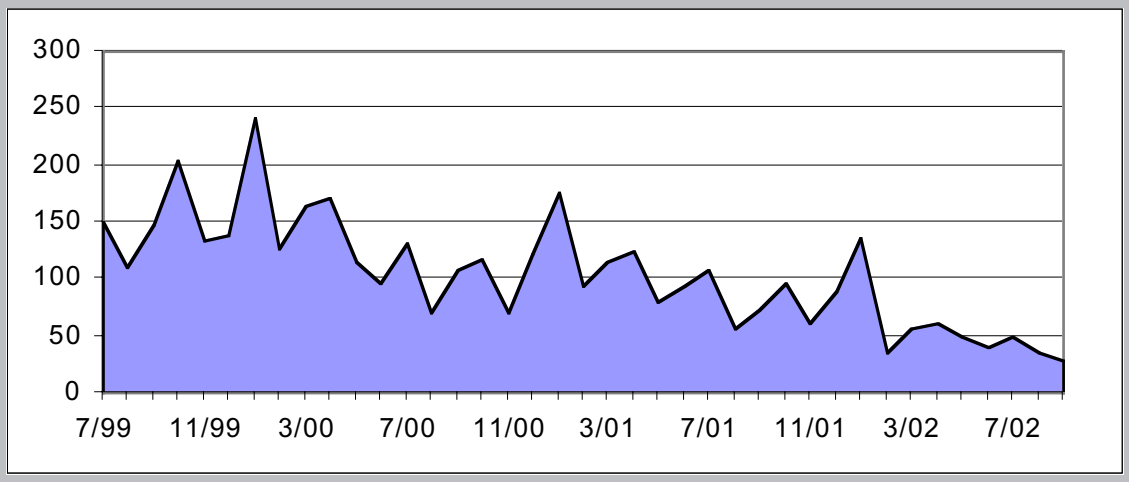
While the overall number of reporting violations has decreased, reporting violations constituted a greater percentage of all violations in 2001 than in 2000. In 2000, reporting violations were 20.5% of total violations. In 2001, they made up over 23%.[39] Thus, reporting violations have not decreased nearly as fast as effluent violations.

The higher rate of reporting violations compared to effluent violations is likely due an increase in enforcement of effluent violations combined with a lack of enforcement of reporting violations. Unlike effluent violations, reporting violations are not covered in the MMP provisions. Without the threat of MMPs for reporting violations, dischargers may be less inclined to make complete, timely monitoring reports.

Enforcements

More formal enforcement orders are being issued since the passage of the CWEA provision than before. Formal enforcements are any enforcement action taken other than informal calls notifying dischargers of non-compliance. They include notices to comply, technical reports and investigations, cleanup and

Figure 12. NPDES Reporting Violations in California[38]



abatement orders, time schedule orders, cease and desist orders, and monetary penalties (administrative civil liability or MMPs).

Despite steadily decreasing violations, formal enforcement orders have increased 46% from fiscal year 98-99 to FY 00-01. (See Figure 13.)

The trend in enforcement actions is encouraging. Similar to total and effluent violations, there was an immediate increase in 2000, and then a slight decrease in 2001. Looking at enforcement actions and violation trends together indicates that increased enforcement in 2000 has helped reduce violations in 2001.

Penalties

Both the number of enforcement actions with penalties and the total dollar amount of penalties assessed have increased since the CWEA went into effect.

Enforcement actions with penalties

Figure 13. Formal Enforcement Orders for NPDES Violations in California [40]

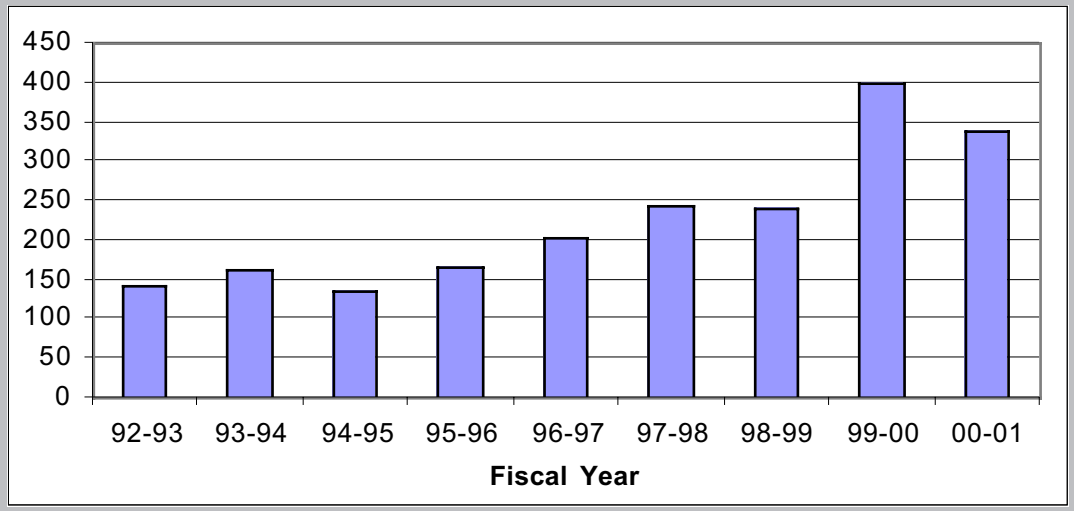
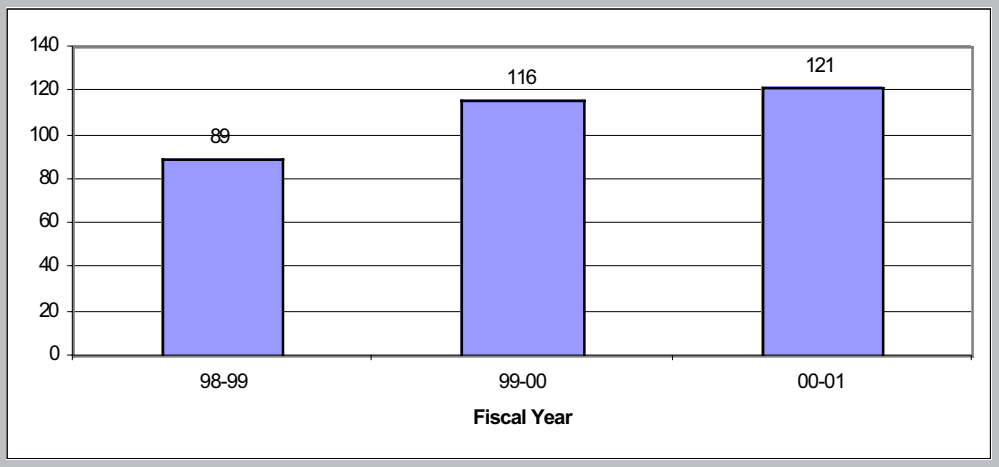


Figure 14. Number of Penalties for NPDES Permit Violations in California[41]

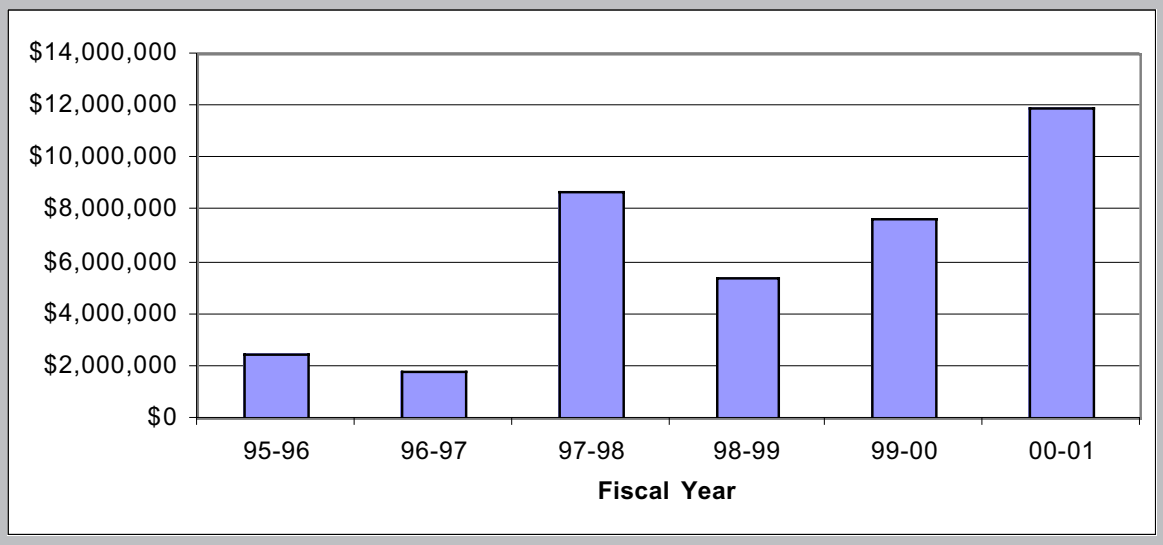


have increased from 89 in FY 98-99 to 121 in FY 00-01, despite a significant drop in the number of violations. The mandatory minimum penalty law has required enforcement action to be taken against hundreds of violations that may have previously gone un-enforced. (See Figure 14.)

In addition, the total dollar amount of penalties assessed increased 120% from fiscal year 98-99 to FY 00-01. (See Figure 15.)

This increased dollar amount appears to reflect the increased number of fines, as well as higher average fines. From the data in Figures 14 and 15, the average fine was $60,674 in 98-99, $66,379 in 99-00, and $98,347 in 00-01. Most likely, the higher average fine level means that more penalties are being assessed for multiple violations.

Figure 15. Dollar Amount of Penalties Assessed for NPDES Permits Violations[42]



Findings and Additional Recommendations

New Jersey and California's experiences demonstrate that a well-constructed mandatory minimum penalty provision can provide state agencies and sewage treatment plants with an effective permit enforcement tool.

Findings

The following set of principles delineates the key components of a successful MMP provision.

1) **The definition of violations subject to MMPs must be clear and inclusive of all relevant NPDES violations.**

Clean Water Act NPDES violations can be divided into two major categories: effluent violations and reporting violations. Although both New Jersey and California have effective definitions for effluent violations, both states' definitions fall short in their ability to deter reporting violations.

An effective framework for penalizing effluent and reporting violations distinguishes between individual "serious" violations, and significant non-compliers. The definition of serious violations identifies the most egregious individual violations. Significant non-compliers identify those dischargers that regularly commit violations.

Serious Violations

Serious MMP violations should be defined for both serious effluent violations and serious reporting violations. Following EPA guidelines, a serious effluent violation should be defined as either an exceedance of an effluent limit set forth in a permit by 20% or more for a hazardous pollutant, or by 40% or more for a non-hazardous pollutant as defined by the EPA. A serious reporting violation should be defined as a failure to submit a discharge monitoring report (after 30 days). An MMP should be issued for every serious violation committed.

Significant Non-Compliers

A "significant non-complier" is a label fixed to any polluter who commits a set number and type of violations repeatedly. A stringent definition of "significant non-complier" would be any discharger who:

- Commits a serious violation (either effluent or reporting) involving the same hazardous pollutant at the same discharge source, in any two months out of any six-month period.
- Exceeds any effluent limitation (including those violations not considered serious) for the same pollutant at the same discharge source by any amount in any three months of any six-month period.

Minor Reporting Violations

Aside from serious and chronic violations, there should be a separate class of minor reporting violations that can be fined at a smaller level on a per-day basis. Minor reporting violations should be issued for any report that is filed incompletely. Separate violations should be issued for each required pollutant parameter that is missing for each day until the permittee supplies the information.

Both New Jersey and California enacted strong definitions of effluent violations subject to MMPs. New Jersey also does a good job at establishing definitions for reporting violations. However, in California reporting violations regarding discharge monitoring reports are not fined under the MMP provisions at all. Thus, reporting violations today

constitute a higher percentage of all violations than before MMPs went into effect. Failure to submit a discharge monitoring report should be handled in exactly the same manner as the most serious effluent violations. The entire regulatory environment breaks down when enforcement agencies do not have information regarding the activities of the dischargers.

2) Polluters should be fined at levels high enough to deter the wealthiest businesses while being fair to small businesses. Furthermore, mandatory minimum penalty levels should be periodically readjusted to account for inflation.

An effective penalty structure would impose penalties at least as strong as those in enacted in New Jersey, plus an increase to account for inflation. Each serious MMP violation would be assessed a minimum fine of $1,400.[43] For those dischargers deemed in significant non-compliance, each violation would be assessed an MMP of $7,000.[44] Significantly, each of these penalty amounts is a floor, not a ceiling, for enforcement sanctions: depending on the gravity of the violation, DEP can always pursue higher penalties against a specific facility.

There should also be a separate fine system for minor reporting violations. Failure to report is already considered a serious violation and should be fined at the appropriate MMP level. For late reports, or omissions of data, the violator should be charged a reasonable amount per day per pollutant (New Jersey penalties late reports at $100 per day per pollutant).

Exemptions

The money collected from MMPs assessed to sewage treatment plants should go toward bringing the facilities into compliance. The regulating state agency should work with sewage treatment plant operators to use the money for appropriate plant upgrades and Supplemental Environmental Projects as are used in California.

Inflation

States should reevaluate MMP levels every five years to account for inflation. Neither New Jersey nor California tie their MMP provisions to inflation, costing those states millions of dollars in revenue. In New Jersey, penalty levels went into effect in 1992. In 2000, the dollar was worth 34% less than the dollar in 1992. Thus New Jersey lost $650,000 in 2000 by note reevaluating MMP levels to account for inflation.

3) Sewage treatment plants must be granted the necessary authority to enforce the permit standards of their upstream dischargers, which may include a mandate to assess MMPs for permit violations.

Sewage treatment plants' compliance with their own permits depends on the quality and quantity of influent from upstream dischargers.

Some of the most dangerous dischargers in the country discharge into sewage treatment plants. Refineries, large chemical companies, and other major industrial facilities are among these upstream dischargers. Additionally, tens of thousands of small businesses and industrial facilities discharge into sewage treatment plants.

Significant Upstream Dischargers

States should permit and directly regulate the largest upstream dischargers, so that sewage treatment plants can focus their regulatory attention on smaller upstream dischargers. In New Jersey, this mechanism has worked well, increasing the overall compliance of upstream dischargers.

Upstream Dischargers and MMPs

Sewage treatment plants must be awarded the enforcement power that they need to ensure compliance with the law. States should evaluate the enforcement programs of their sewage treatment plants and decide whether MMPs would aid treatment plants in their enforcement efforts.

California sewage treatment plants do not have the authority to assess MMPs to upstream dischargers. Sewage treatment plants do have the ability to fine indirect users under state law, but due to a lack of data, it is difficult to determine the extent to which this occurs.

New Jersey granted many sewage treatment plants enforcement authority over many upstream dischargers, calling the plants Delegated Local Agencies. The state then took over enforcement of the largest and most dangerous significant upstream dischargers to allow the sewage treatment plants to focus on the smaller upstream dischargers. The results have been increased compliance by all upstream dischargers and the sewage treatment plants themselves.

4) Penalties should be assessed within six months of the date of the violation.

Assessing penalties within a reasonable length of time after a violation occurs is important for establishing a regulatory environment conducive to compliance.

If penalties are assessed too long after a violation occurs, it may make economic sense for a polluter to continue to violate. Delayed penalties give polluters the leeway to enjoy the economic benefit associated with violating their permits, and thus possibly make more money during the delay period than the actual fine will cost. Delays in fine assessments also mean more pollution is entering our waterways, endangering water quality and the environment.

In California, where there is no legal time limit for assessing penalties after violations occur, many violations go more than a year without penalties, and some have yet to be fined. The 2001 Report to the Legislature on California's water enforcement record, completed in the spring of 2002, found that as of the publication of the report, only 60% of nonexempt violations had been assessed MMPs in the first 18 months of the program.

Additional Recommendations

Furthermore, states should consider the following points when designing and implementing an MMP program to ensure its success:

1) Permit holders should be held accountable through frequent, thorough inspections and consistent state review of self-monitoring reports.

Studies have shown that the existence of a strong enforcement presence "in the field" leads to improved compliance with the law.[45] State enforcement officials should commit to conducting at least the minimum number of inspections with the appropriate amount of detail, as required by the EPA policy. Inspections should be random, and without prior notice.

State enforcement officials cite poor data management as an important obstacle in the oversight process. States should streamline the gathering of self-reported data by initiating electronic reporting systems. Electronic reporting cuts down on errors that occur in data transfer and reduces agency response time to violations.

In addition, states should ensure that they have adequate systems in place to review and evaluate discharge monitor-

ing reports submitted by polluters — particularly those for minor facilities, whose violations tend to go unnoticed.

2) The policy should establish a clear set of legal exceptions and limited affirmative defenses to prevent costly litigation.

These legal exceptions, called affirmative defenses, protect dischargers from violations that occur due to circumstances beyond their control and streamline the appeals process.

Because circumstances beyond the control of the permittees may result in serious violations, there must be an appeal process that can determine whether in a specific instance the penalty is just and necessary.

An effective affirmative defense provision should include clear definitions of the two main categories of affirmative defenses: operational upsets and authorized bypasses.

An upset refers to an exceptional incident, such as a storm or other natural event, beyond the control of the permittee. An authorized bypass refers to an anticipated diversion of wastewater from a treatment works such as might occur during normal maintenance or facility upgrades.

New Jersey's affirmative defense provision effectively addresses both operational upsets and bypasses. California's MMP provision fails to address bypasses, an important affirmative defense for sewage treatment plants.

3) States should have a system to provide the public and the EPA with the necessary information to verify enforcement of the laws.

States should improve the quantity and quality of information available to the public about enforcement of clean water laws. Using the Internet, citizens should be able to obtain all relevant information about pollution permits in their neighborhood, assess the compliance history of permitted facilities, and trace how the state has enforced the law.

In addition, states should publish annual reports on enforcement listing the number of enforcement actions taken, the number of significant violations recorded, and the impact of state enforcement actions on the environment. Such data is important to ensure that states are fulfilling their basic functions under the law.

Similarly, regulated entities should not be granted blanket permission to withhold information about their compliance with clean water laws. States should not grant privileged status to information gleaned from environmental self-audits or grant immunity for self-auditing companies.

APPENDIX: DEFINITION OF SIGNIFICANT NON-COMPLIANCE

For the National Pollutant Discharge Elimination System (NPDES), significant Non-compliance is defined by the following occurrences:

- Violation of any monthly effluent limit at a given pipe by any amount for any 4 or more months during two consecutive quarter review periods.
- Violations of conditions in enforcement orders.
- Violations of compliance schedule milestones for starting construction, completing construction, and attaining final compliance by 90 days or more from the date of the milestone specified in an enforcement order or permit.
- Violations of permit effluent limits that exceed the Appendix A Criteria for Non-compliance Reporting in the NPDES permit.
- Failure to provide either Discharge Monitoring Reports, Publicly Owned Treatment Works (POTW) Pretreatment Performance Reports, or Compliance Schedule Final Report of Progress, or providing above reports 30 or more days later.
- Violation of a permit limit at a given discharge point for any two or more months during the two consecutive quarter review periods.
- An unauthorized bypass, an un-permitted discharge, or a pass-through of pollutants that causes, or has the potential to cause, a water quality problem or health problems.

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44 $7,000 equals the original $5,000 penalty level for significant non-compliers adjusted for inflation.

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