OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Evaluation Report

EPA Needs to Reinforce Its National Pretreatment Program

Report No. 2004-P-00030

Date: September 28, 2004

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Abbreviations

AMSA	Association of Metropolitan Sewerage Agencies
EPA	Environmental Protection Agency
GPRA	Government Performance and Results Act
OIG	Office of Inspector General
NPDES	National Pollutant Discharge Elimination System
PCS	Permit Compliance System
PER	Permitting for Environmental Results
POTW	Publicly Owned Treatment Works
TRI	Toxics Release Inventory

Cover Photo: Deer Island Wastewater Treatment Plant, Boston, Massachusetts
Photo provided by Massachusetts Water Resources Authority

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

OFFICE OF
INSPECTOR GENERAL

September 28, 2004

MEMORANDUM

SUBJECT: EPA Needs to Reinforce Its National Pretreatment Program
Report No. 2004-P-00030

FROM: Dan Engelberg /s/
Director, Water Issues
Office of Program Evaluation

TO: Benjamin Grumbles
Acting Assistant Administrator
Office of Water

This is our final report on the subject evaluation conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). This evaluation report contains findings that describe problems found by the OIG and corrective actions to address these problems recommended by the OIG. This evaluation report represents the opinion of the OIG and the findings contained in this report do not necessarily represent the final EPA position. Final determinations on matters in this evaluation report will be made by EPA managers in accordance with established audit resolution procedures.

Action Required

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 90 calendar days of the date of this report. You should include a corrective actions plan for agreed upon actions, including milestone dates. We have no objections to the further release of this report to the public. For your convenience, this report will be available at http://www.epa.gov/oig. In addition to providing a written copy of your response, please e-mail an electronic version to Fuller.Linda@epa.gov.

If you or your staff have any questions regarding this report, please contact me at (202) 566-0830 or Linda Fuller at (617) 918-1485.

Executive Summary

Purpose

Preventing industrial pollutants from interfering with wastewater treatment facility operations or passing through facilities untreated into water bodies are functions of EPA's pretreatment program. It is a core part of the Clean Water Act's National Pollutant Discharge Elimination System (NPDES) program. The Agency considers the pretreatment program successful in reducing discharges of harmful pollutants, and this has resulted in less resources and attention being directed toward this program in recent years. However, toxic pollutants are still being transferred to sewage treatment plants, and the impact to human health and the environment of some of these pollutants may still not be known.

Our objectives were to answer the following:

- How effectively have the pretreatment regulations controlled industrial user discharges?

- What are the differences in how publicly owned treatment works (POTWs) with and without approved pretreatment programs oversee their industrial users and do these differences affect protection of the plant and receiving waters?

- How well is EPA maintaining its program gains and addressing future needs and do EPA's pretreatment program measures show the program's progress?

Results in Brief

The reductions in industrial waste discharges to the nation's sewer systems that characterized the early years of the pretreatment program have not endured, according to EPA published data compiled from information provided by industrial facilities. Since the middle of the 1990s, there has been little change in the volume of a broad list of toxic pollutants transferred to POTWs or in the index of risk associated with these pollutants. As a result, the performance of EPA's pretreatment program, which is responsible for controlling these discharges, is threatened and progress toward achieving the Congress' Clean Water Act goal of eliminating toxic discharges that can harm water quality has stalled. The curtailing of the early gains may be explained in part by two factors: (1) dischargers that developed systems in response to EPA's initial program requirements have not enhanced their pretreatment systems in recent years, and (2) the rate at which EPA has been issuing effluent guidelines dramatically declined since 1990.

Our review of 22 POTWs suggests that the pretreatment program should be extended to at least some of the POTWs without approved programs because, they reported having encountered more operational problems and were more likely to be discharging to an impaired water than POTWs with approved programs. Specifically, the proportion of POTWs with approved pretreatment programs that experienced a pass through/interference event (17 percent) was less than half the proportion of POTWs without approved programs (40 percent). The difference between the proportion of POTWs with approved programs that discharged to an impaired water (25 percent) was even smaller compared to the proportion of POTWs without approved programs that discharged to an impaired water (60 percent). One possible explanation is that EPA Regions and State agencies that are supposed to act as control authorities for POTWs without approved programs do not have standards for overseeing industrial users discharging to these POTWs. Although EPA was working on necessary guidance for these Regions and States, the project was put on hold due to other priorities.

Without more visible leadership from Headquarters, improved programmatic information, and the adoption of results-based performance measures, EPA's pretreatment program is at risk of losing the gains it made in its early years. The leveling off of those early gains, coinciding with EPA's diminishing program emphasis, paints a picture of a program at risk. Headquarters has delayed finalizing guides and regulations intended to update the pretreatment program by not allocating sufficient resources or requesting budget increases for additional pretreatment resources. Additionally, results-based performance measures on pretreatment program activities have not been developed partially due to the lack of adequate, accessible data. As a result, POTWs' pretreatment programs may not be as effective in protecting environmental quality or worker health and safety as they could be, and EPA cannot assess the effectiveness of its pretreatment program.

Recommendations

We recommend that the Acting Assistant Administrator for Water take stock of the pretreatment program by determining a meaningful performance measure that entails continued improvement, establishing a mechanism to achieve that goal, and, lastly, acquiring additional resources to implement necessary programmatic improvements. Specifically, staff should be directed to finalize necessary guidance, set oversight standards for Regions and States designated as control authorities, encourage the incorporation of pretreatment oversight responsibilities in the NPDES permits of POTWs without approved programs as circumstances allow, and promote training opportunities. The Acting Assistant Administrator should direct staff to evaluate the resource needs of the pretreatment program to enable it to make further reductions in industrial waste transfers and risk. The additional funding should be requested in the next funding cycle.

Agency Comment and OIG Evaluation

In an August 30, 2004 response to our draft report, the Acting Assistant Administrator for Water acknowledged our findings that environmental benefits are derived from the POTWs' implementation of the pretreatment program. The Acting Assistant Administrator stated that the Office of Water was in the process of conducting the most comprehensive assessment of the NPDES Program in its 30-year history (Permitting for Environmental Results, or PER Strategy) and that one component of its resulting strategy would help to address several of our recommendations. We have summarized the Agency's response and our comments at the end of each chapter. The Acting Assistant Administrator's memorandum is attached as Appendix G. A clarification attachment provided by the Agency is on file at the Office of Inspector General. An exit conference was held on September 2, 2004.

The Office of Water's efforts to assess and improve its NPDES program as part of its PER Strategy are commendable. Since action for carrying out several of our recommendations is dependent on completion of this strategy, we are revising our recommendations to provide milestone dates for action and quarterly progress reports for actions not completed within 90 days of report issuance. We have also made other revisions as appropriate based on the Agency's clarification document.

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Chapter 1
Introduction

Purpose

The focus of the Environmental Protection Agency (EPA) clean water program is reducing pollutant loadings. There are hundreds of thousands of industrial users in the United States, and many may discharge toxic pollutants to wastewater facilities. Preventing industrial pollutants from interfering with wastewater treatment facility operations or passing through facilities untreated to water bodies are functions of EPA's National Pretreatment Program, a core part of the Clean Water Act's National Pollutant Discharge Elimination System (NPDES) program.

One of the 2003 Office of Water priorities is to "conserve the gains of the last 30 years." The Agency considers the pretreatment program successful in reducing discharges of harmful pollutants to wastewater facilities and their receiving waters. This success has resulted in less resources and attention directed toward this program in recent years, even though toxic pollutants are still being transferred to sewage treatment plants.

Our objectives were to answer the following:

- How effectively have the pretreatment regulations controlled industrial user discharges?

- What are the differences in how publicly owned treatment works (POTWs) with and without approved pretreatment programs oversee their industrial users and do these differences affect protection of the plant and receiving waters?

- How well is EPA maintaining its program gains and addressing future needs and do EPA's pretreatment program measures show the program's progress?

Background

Following scenes of dying fish and burning rivers in the 1950s and 1960s, Congress in 1972 passed the Clean Water Act to restore and maintain the integrity of the nation's waters. EPA established the NPDES program to achieve these goals. The program regulates facilities such as POTWs, which discharge directly to surface waters.

In addition to receiving wastewater from homes, POTWs may also receive industrial waste from manufacturing sources. Because industrial waste can disrupt a POTW's operations ("interference") or pollute the POTW's receiving water and cause an NPDES violation ("pass through"), the pretreatment program was established as a component of the NPDES program to control these discharges. The general pretreatment regulation promulgated on June 26, 1978, required certain POTWs to develop pretreatment programs to control the introduction of industrial wastes into POTWs. These program requirements are included in the POTW's NPDES permit. The National Pretreatment Program objectives are in Figure 1(A).

National Pretreatment Program Objectives

- *Prevent interference with POTW operations*
- *Prevent the pass through of pollutants*
- *Improve biosolids recycling and reuse opportunities*

Figure 1(A)

The pretreatment program is implemented through a partnership of EPA, State agencies, and POTWs. POTWs usually have the prime responsibility for implementing and enforcing the program, and are known as "control authorities." EPA Regions or a State agency authorized to administer pretreatment programs approve a POTW's pretreatment program are known as "approval authorities." Currently, there are approximately 1,500 approved pretreatment programs. EPA Regions or State agencies may also act as control authorities if POTWs are unauthorized or the agency deems it more efficient to administer the program. Regions and States include pretreatment program requirements as part of a POTW's NPDES permit; these permits are the mechanism used to regulate POTW discharges to surface waters.

Control authorities must implement their program in accordance with pretreatment regulations. An approved pretreatment program includes the following basic program elements:

- Legal authority.
- Procedures for maintaining and updating an inventory, issuing permits, and conducting inspections and sampling.
- Developing and updating local limits.
- Developing and implementing an Enforcement Response Plan.
- Submitting a list of significant industrial users (usually as part of the annual pretreatment report.

Control authorities should also ensure that their industrial users are following appropriate discharge standards, as noted in Table 1.1:

Table 1.1: Discharge Standards

Pretreatment Standard	*Applicable Industrial User*
Prohibited Discharge Standard: Prohibit the discharge of substances that could cause: • fire or explosions, • corrosive structural damage, • obstruction of flow, • toxic vapors, or • other harmful effects.	All industrial users subject or not to any other National, State, or local requirements.
Categorical Standards: National, uniform, technology-based standards.	Specific industrial groups.
Local Limits: Address specific needs and concerns of the POTW and its receiving water.	Typically, all industrial users discharging to the POTW.

Scope and Methodology

We reviewed data from EPA's Toxics Release Inventory and Permit Compliance Systems, as well as annual pretreatment reports prepared by POTWs, to determine trends in transfers of pollutants. We interviewed staff from EPA, State agencies, and POTWs to evaluate program oversight and measurement. Our field work was conducted from March 21, 2003, to February 27, 2004, in accordance with *Government Auditing Standards*, issued by the Comptroller General of the United States. Additional details on our scope and methodology can be found in Appendix A. No recent audit or evaluation reports have been issued on EPA's National Pretreatment Program.

Chapter 2
Pretreatment Program Gains Have Leveled Off

The reductions in industrial waste discharges to the nation's sewer systems that characterized the early years of the pretreatment program have not endured according to EPA published data compiled from information provided by industrial facilities. Changes in the amount of pollution that industrial users discharge into sewers is a good indication of how successful this program has been. Measured by volume as well as an index of risk associated with a broad list of toxic pollutants, there has been little change since the middle of the 1990s. As a result, the performance of EPA's pretreatment program, which is responsible for controlling these discharges, is threatened and progress toward achieving the Congress' Clean Water Act goal of eliminating toxic discharges that can harm water quality has stalled. The curtailing of the early gains may be explained in part by two factors: (1) dischargers that developed systems in response to EPA's initial program requirements have not enhanced their pretreatment systems in recent years, and (2) the rate at which EPA has been issuing effluent guidelines dramatically declined since 1990.

Trends in Industrial User Discharges

We determined the pretreatment program's progress in reducing industrial user discharges on a national basis using EPA's Toxic Chemical Release Inventory System [i.e., Toxics Release Inventory (TRI)]. This is a publicly available database that contains information on toxic chemical releases provided by certain industry groups. We also determined the trends in relative risk of these pollutants using EPA's Risk-Screening Environmental Indicators.

Following are charts detailing our various TRI analyses. However, it should also be noted that the TRI database is subject to error. OIG Report No. 2004-P-00004, *EPA Should Take Steps to Improve Industrial Reporting to the Toxics Release Inventory System*, February 2, 2004, identified TRI reporting errors by industries that significantly altered our initial conclusions. The charts presented include our corrections. Additionally, EPA's Office of Enforcement and Compliance Assurance issued *The National Nitrate Compliance Initiative* in April 2002 which noted that many facilities were not reporting the transfer of nitrates to TRI. According to EPA, the initiative improved reporting from 60 to 98 percent in recent years. This problem did not affect our final analysis since we subtracted nitrates.

Transfer of Pollutants

The transfer of pollutants to POTWs decreased by approximately 50 percent from 1987 to 1995, then climbed up again by approximately 100 percent from1995 to 2001. Figure 2(A) shows that the increase was the result of requirements for the reporting of additional pollutants starting in 1995. Pollutants reported consistently from 1987 to 2001 show a leveling off in transfers since 1995.

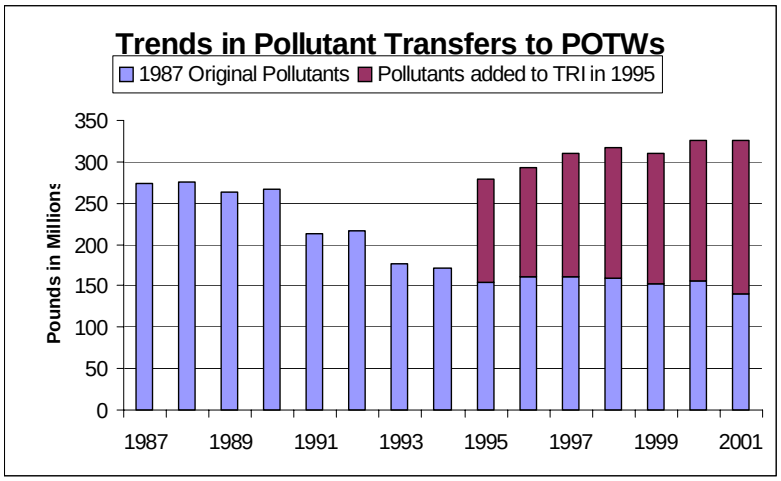

Figure 2(A): Transfer of pollutants to POTWs increased starting in 1995.

For pollutants added since 1995, we found another subset to explain the increase. Nitrate compounds – a pollutant that POTWs incidentally treat – were responsible for the significant increase in transfers since 1995. Figure 2(B) shows that when we removed nitrate compounds from the table, there is a leveling off of transfers. Figure 2(B) also shows that trends for transfers were mirrored by manufacturing activity, suggesting that the decreases and leveling off of transfers were not the result of decreased productivity. In fact, the 2001 Annual Survey of Manufacturers reports that manufacturing activity increased from 1987 to 2001.

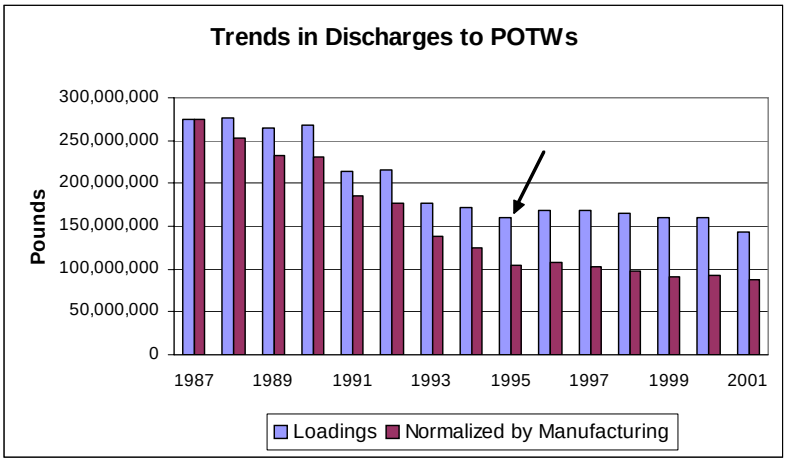

Figure 2(B): Transfers leveled off since 1995 without nitrates even when economy considered.

Risk

After a significant decrease from 1987 to1988, the risk associated with pollutants tracked in TRI since 1987 shows no apparent trend, while the risk associated with pollutants added since 1995 has been increasing. We used EPA's Risk-Screening Environmental Indicators to assess the potential impact related to oral ingestion toxicity of the industrial releases to POTWs. Our analysis considered the following information: the amount of chemical released, the toxicity of the chemical, its fate, and transport through the environment.

Figure 2(C) shows that the risk associated with the 1987 chemicals was reduced by 60 percent from 1987 to 1988. Risk showed a further decrease in 1995, with some increases in 1998, 1999, and 2001. This figure does not include individual discharges that could materially affect the results of our review (such as a single plant in Tennessee discharging thorium dioxide, which significantly increased the risk during 1995 and 1996; thorium dioxide is a radioactive substance that has the highest toxicity weight among the TRI pollutants).

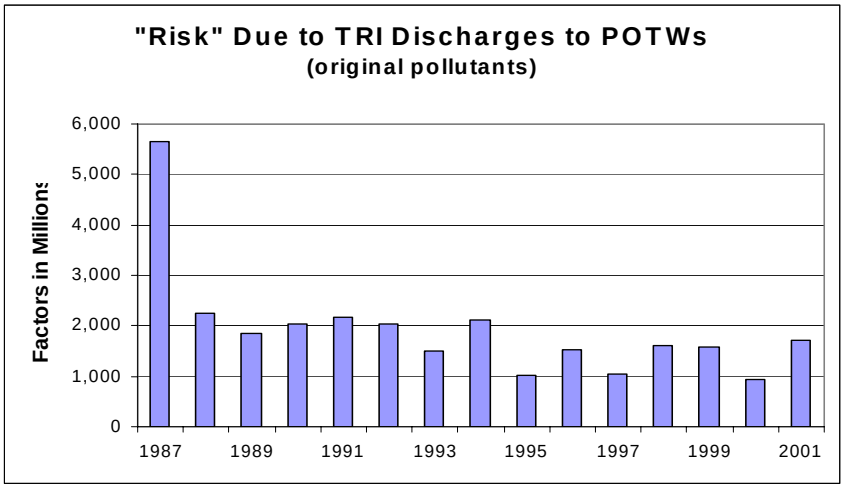

Figure 2(C): Risk reduced since 1987.

Our analysis of the 1995 pollutants showed the risk of these pollutants increasing even when we eliminated single facilities discharging highly toxic pollutants that caused significant increases in 2000 and 2001. See Figure 2(D).

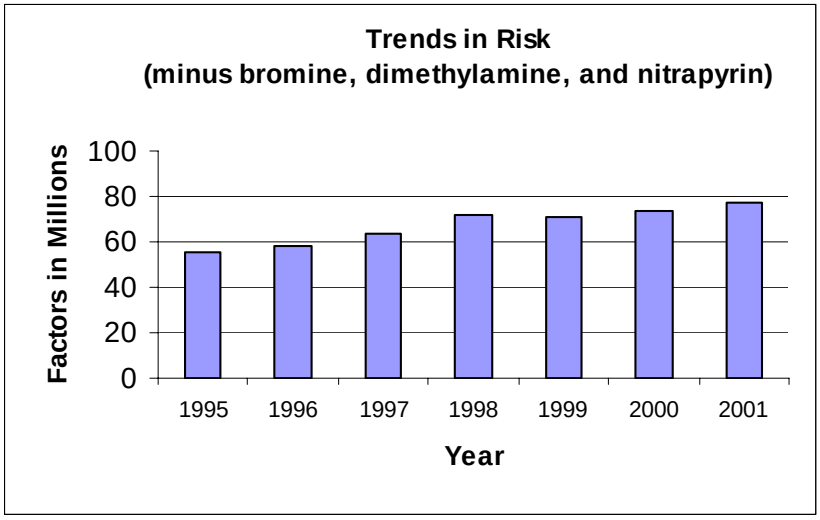

Figure 2(D): Risk associated with 1995 pollutants increased.

Enforcement of Regulations as Motivating Factor

The significant drop in the transfer of pollutants during the late 1980s may be explained in part because EPA issued most of it regulations during the 1970s and 1980s. Our sample of industrial users indicated that most were still using their original pretreatment systems from this period.

In 1997, EPA's Assistant Administrator for Water attributed the progress made in improving water quality as the result of technology-based effluent guidelines implemented through the NPDES program, and the Federally funded construction of sewage treatment plants. Effluent guidelines are industrial water pollution control regulations for facilities discharging directly to surface waters and indirectly to POTWs. "Categorical standards" are issued for indirect dischargers through the National Pretreatment Program. Prior to 1991, when there was the first drop in transfers, EPA had issued 49 effluent guidelines; since that time to 1999, only 7 new and revised effluent guidelines were issued. This may explain the initially significant drop in pollutant transfers and then a leveling off period.

Our interviews with representatives from 16 companies showed that companies installed pretreatment systems in response to regulations, and most maintain original systems going back to the 1980s. Of the 16 companies, 14 have a pretreatment process. Of those 14:

- One said their pretreatment system went back to the 1970s.
- Eight said their system went back to the 1980s.
- One said their system went back to 1991.
- Three said their system was approximately 10 or less years old.
- One did not know the age of the system.

Of the 10 companies which knew their system was 10 or more years old, one made a change in 2001 to meet new categorical regulations and another made a change to prevent a Safe Drinking Water Act violation. Due to the age of the industrial users' pretreatment systems and the length of service of the staff contacted, not everyone could explain why their companies installed pretreatment systems. However six did indicate that their pretreatment systems were required by their POTWs and one by the Clean Water Act.

Representatives indicated regulations certainly had an impact on actions taken. For example:

- A representative for a Minnesota firm indicated that regulations provided the impetus for companies to change operations because the financial staff would otherwise question the purchase of equipment not contributing to profit. The official noted the company still uses tin/lead solder because it is requested by their customers and will continue to use it unless it becomes illegal.

- A representative for an Indiana firm stated that what finally motivated the company to eliminate the use of chromium was to address a Safe Drinking Water Act violation caused by its discharge of fluoride to its local POTW. This company and others were allowed to discharge fluoride to the POTW in accordance with the local pretreatment program. However, the fluoride was discovered downstream to be in excess of drinking water standards. This Indiana firm was subsequently awarded the 2002 Indiana Governor's Awards for Environmental Excellence for eliminating the chromate conversion coating process that resulted in fluoride discharges. According to the local POTW superintendent, having a pretreatment program in place made it easier to identify the polluting companies, require monitoring, and work with the firm.

Conclusion

The reduction in transfers of toxic pollutants to POTWs has not been reduced since the mid 1990s. The reduction of risk for oral ingestion for some of these pollutants shows no apparent trend indicative of progress. Significant reductions in transfers were seen in prior years when EPA was active in establishing its pretreatment program and issuing numerous effluent guidelines. EPA needs to take stock of its pretreatment program to determine how it will eventually fully meet Congress' goal of the elimination of toxic discharges to the nation's waters. Otherwise, wastewater treatment facilities remain vulnerable to industrial waste discharges that can disrupt plant operations or pass through to receiving waters, resulting in poor water quality and potential harm to human health and the environment.

Agency Comment and OIG Evaluation

The Agency noted that many reportable pollutants are able to be treated by typical POTW biological processes and the receipt of large transfers of these pollutant may be somewhat misleading. They suggested that an analysis of incompatible pollutants (metals, cyanide, and organics) that are the focus of the pretreatment program would be a better assessment of the effectiveness of the pretreatment program. The Agency also believed that our conclusion did not adequately note the changes in TRI reporting requirements or link the risk for oral ingestion of indirectly discharged industrial process wastewater to the disruption of POTW operations.

Our review was broad in nature to give an overall picture of EPA's efforts to implement its pretreatment program. It was not our intent to provide detailed reviews of particular industries or pollutants. We believe that our review shows that when EPA applied resources to implementing its pretreatment program, reductions in transfers of toxic pollutants resulted. As the program received less attention and resources, those results leveled off. The Office of Water may want to conduct on its own the further analyses it suggested as part of its development of performance measures or to identify areas needing additional attention.

While our review did include transfers from new industrial sectors and lowered reporting thresholds for persistent, bioaccumulative chemicals, these differences did not significantly impact our figures. Our conclusion regarding the risk for oral ingestion does not make a link to the disruption of POTW operations. We are only stating that we do not see any indications of reduced pollutant toxicity.

Chapter 3
More POTWs Need to Adopt National Pretreatment Programs

Our review of 22 POTWs suggests that the pretreatment program should be extended to at least some of the POTWs without approved programs because, they reported having encountered more operational problems and were more likely to be discharging to an impaired waters than POTWs with approved programs. Specifically,

- The proportion of POTWs with approved pretreatment programs that experienced a pass through/interference event (17 percent) was less than half the proportion of POTWs without approved programs (40 percent).

- The difference between the proportion of POTWs with approved programs that discharged to an impaired water (25 percent) was even smaller compared to the proportion of POTWs without approved programs that discharged to an impaired water (60 percent).

One possible explanation is that EPA Regions and State agencies that are supposed to act as control authorities for POTWs without approved programs do not have standards for overseeing industrial users discharging to these POTWs. Although EPA was working on necessary guidance for these Regions and States, the project was put on hold due to other priorities. Some Regional staff also indicated that such POTWs receive less of a priority because they are small and their discharge probably will not have a significant impact on the receiving waters. However, our observation that a significant number of POTWs without pretreatment programs discharge into waterbodies that fail to meet water quality standards suggests that some of these systems would benefit from additional controls similar to those imposed on POTWs with pretreatment programs. Also, industries in such communities may be receiving an unfair advantage over their competitors that receive more monitoring.

POTWs with Pretreatment Programs More Likely to Meet Standards

With some exceptions, the 12 POTWs with approved pretreatment programs we contacted indicated that they administer their programs in accordance with EPA pretreatment regulations. Such consistency derives from these POTWs having standard guidance to follow and being subject to EPA and State audits that reinforce standards. For the 10 POTWs contacted that did not have pretreatment programs, 6 of the POTWs nonetheless carried out program elements comparably

to POTWs with approved programs. Those six POTWs had pretreatment program requirements included in their NPDES permits by State agencies.

Table 3.1 compares how well POTWs from both the approved and non-approved pretreatment groups met minimum pretreatment standards. Using EPA's 1999 guide, *Introduction to the National Pretreatment Program*, as a model, we identified six basic elements needed to administer an approved pretreatment program. Our use of the phrase "required program element" differs slightly from EPA's use of the phrase identified on page 2. Our review emphasized POTW's implementation of the program; we did not evaluate legal authority or funding. We obtained the respondents' information from questionnaires and site visits to the POTWs, Regions, and State agencies. For the POTWs visited, we also reviewed, if available, their annual pretreatment reports, Regional/State audit reports, and other related documents. The six elements are listed in Table 3.1. Further details on each of the six elements, including the importance of each and findings, are in Appendix B; a breakdown on actions taken for each location by element are in Appendix C.

Table 3.1: Comparison of POTWs in Meeting Minimum Pretreatment Standards

Required Program Element	*Criteria* (40 CFR Section)	Approved Programs (12 Respondents)	Non-approved Programs (10 Respondents)
Identify industrial users	§403.8(f)(2)(I)	100%	80%
Develop Local Limits	§403.8(f)(4) and 122.21(j)(4)	83.3% *	60%
Issue individual permits to significant industrial users	§403.8(f)(1)(iii)	100%	50%
Inspect and sample industrial users annually at a minimum - *Inspect* - *Sample*	§403.8(f)(2)(v)	 100% 100%	 70% 50%
Have approved Enforcement Response Plans	§403.8(f)(5)	91.7%	Not Applicable
Submit Annual Pretreatment Report	§403.12(I)	100%	70%

* The remaining two POTWs were developing local limits.

For four of the required program elements (issuing individual permits to significant industrial users, inspecting and sampling industrial users, having approved enforcement response plans, and submitting annual pretreatment reports), the probability that POTWs with approved program would meet these minimum standards if program approval made no difference is less than 0.05. For two of the seven required program elements (identifying industrial users and

developing local limits), the probability that POTWs with approved plans would have these minimum standards if program approval made no difference approaches statistical significance ($p \leq 0.083$). This means that for the 22 POTWs reviewed, having an approved plan is statistically, significantly more likely to result in POTWs meeting at least some of the minimum standards than if there were no approved program.

The applicability of this finding to the entire population of POTWs nationwide is limited. This is due, in part, to the small sample size and in part to the selection criteria used to choose POTWs for this study. While most of the POTWs were selected at random within specific Regions, one POTW with an approved program was selected because EPA officials described it as a "good" program. Another POTW without an approved program was selected because EPA indicated the POTW was having problems. Even when these two facilities are excluded from the analysis, however, five of the applicable criteria approach or achieve statistical significance ($p \leq 0.63$). With these two POTWs excluded from the analysis, the identification of industrial users is the only minimum standard likely to be met regardless of whether or not a facility has an approved program.

For our selected POTWs, we attempted to determine what benefits a POTW can derive from maintaining an approved pretreatment program by comparing the reported number of pass through/interference events between the approved/non-approved POTWs and identifying which POTWs discharged to an impaired water. Table 3.2 summarizes the results of our questionnaire responses and our review of EPA's WATERS data base reporting water bodies identified as being on the State 303(d) impaired water list. Information on the WATERS data base has limitations. States only report 303(d) impairments for assessed waterbodies, and most waterbodies are not assessed. Additionally, further analyses should be done before determining an actual causal relationship between the POTW source and the impaired waters. However, given the limitations in data availability, we believe our analysis can provide a general indication of results.

Table 3.2: Summary - Pass Through/Interference, Impaired Waters

	12 POTWs With Approved Programs		10 POTWs Without Approved Programs	
	No. of POTWs	Percentage of Total	No. of POTWs	Percentage of Total
Reported pass through/interference within past 2 years	2	17%	4	40%
Discharging to 303(d) impaired water	3	25%	6	60%

The probability that 17 percent or fewer of the POTWs with approved programs would experience a pass through/interference event in the past two years if having an approved program made no difference is 0.83. The probability that 25 percent or fewer of the POTWs with approved programs would discharge to an impaired water is 0.015. This indicates that for the 22 POTWs selected, having an approved program has an effect on whether or not a POTW will experience a pass through/interference event or discharge to an impaired water.

When the two POTWs described above are excluded from the analysis, having an approved program does not appear to affect whether a facility will experience a pass through/interference event ($p = 0.234$), but having an approved program is still significantly less likely to result in a POTW discharging to an impaired water ($p = 0.013$).

Waters on the 303(d) list may be impaired from sources other than POTWs passing industrial or non-industrial pollutants. Even when industrial pollutants are reported as the cause, the source of impairment is often not reported, so it is not easy to draw a direct correlation between an impaired water and a POTW's pretreatment program. For POTWs with approved programs, two of the three receiving waters were impaired due to metals and other pollutants; for POTWs without approved programs, three of the six waters were impaired due to metals and other pollutants. EPA's WATERS database provided the source of impairment for only one of the nine impaired receiving waters.

POTW Program Implementation Can Be Improved for Two Elements

While the results of our survey questionnaire indicated general consistency in implementation for POTWs with approved programs, our review of State audit reports and interviews with POTW staff indicated that the elements of identifying industrial users and enforcement could be improved especially for smaller sized POTWs. EPA can help these POTWs by expanding the training it already provides and ensuring that there are adequate resources available to conduct audits of POTW pretreatment programs.

Identifying Industrial Users

Small to medium-sized POTWs indicated that classifying industries was sometimes difficult because the regulations may be too complex to understand. For example, the Texas Natural Resource Conservation Commission reported in its audit of Brenham, Texas, a small-sized POTW, that it continued to experience difficulties in making categorical determinations. By not properly classifying industrial users, appropriate permits were not issued and enforcement taken. Other pretreatment coordinators at POTWs agreed that it can be difficult to stay

current with regulations and to apply them, particularly in determining whether an

industry is a categorical industrial user.

Enforcement

Review of annual pretreatment reports to determine whether POTWs were escalating enforcement actions (e.g., administrative orders, fines, etc.) disclosed that while the two selected large-sized POTWs reviewed showed evidence of escalating enforcement, the medium to small-sized POTWs varied in their efforts. POTWs without approved programs are not required to develop Enforcement Response Plans and may not have authority to take formal enforcement actions. All 10 POTWs contacted stated they notify industrial users of any violations and usually resolve any issues by phone, meeting, or mail, but few indicated they escalate action to a higher level. Only three indicated that formal actions such as Administrative Orders had been issued. Examples on enforcement issues are in Appendix D.

Training

In addition to guidance, training is a way to promote program consistency. EPA Headquarters provides basic and advanced pretreatment classes nationally. Some of the Regions also provide pretreatment training, as do most of our selected States. However, three of the six States, as well as some POTW officials, said EPA should provide more training, and one also recommended that EPA develop pro forma documents to assist POTWs in developing local limits. These responses indicate that EPA needs to more clearly communicate to POTWs what training is available. In addition, EPA may want to look into providing on-line training.

Audits

Regional and State audits of POTW-approved pretreatment programs ensure that these programs are maintaining standards and provide indirect scrutiny of industrial users. EPA's Government Performance and Results Act (GPRA) goal was for Regions and States to both audit 100 percent of programs over a 5-year period (20 percent is the Annual Performance Goal within GPRA measures). EPA's Office of Water could provide only limited data on attainment of this goal, which shows that not all the Regions/States were meeting the GPRA goal. For fiscal years 2000 and 2002, six Regions conducted audits of at least 20 percent of their approved programs. Regions 1, 5, 9, and 10 did not meet the goal for fiscal year 2000, while Regions 1, 3, 4, and 10 did not meet it for 2002. Since Regions 1 and 10 did not conduct 20 percent of the audits for either year, there is the possibility that they may not meet the 100-percent goal over a 5-year period. Region 1's pretreatment coordinator had written in a 1999 memorandum to Headquarters that he could not meet the 20 percent annual goal because resources had been reduced from six full-time equivalents in 1995 to one by 1999.

Regional and State Support and Oversight Can Be Improved for POTWs Without Approved Programs

Regions and State Agencies support POTWs that have approved programs by providing various training opportunities and overseeing their activities with audits, and this helps to promote greater national consistency. We found less consistency in support of POTWs without approved programs. Regions and States cannot always oversee industrial users discharging to POTWs without approved programs and such POTWs may or may not be required by their State or Region to oversee their industrial users. To ensure greater national consistency, EPA needs to finalize the guidance it has put on hold to address this area.

Regions and State Agencies as Control Authorities

Regions and State Agencies, as control authorities, are not required to implement their activities at the same frequency as imposed on municipalities who implement their approved programs. We found that few of those we reviewed inspected or sampled industrial users in accordance with standards required of POTWs. This is due to the large universe of industrial users spread throughout a State and the limited amount of State and Regional staff. If Regions or States are not adequately monitoring these industrial users, their operations and workers are vulnerable to toxic discharges causing disruptions and injury. Some States have recognized their limitations and have included oversight responsibilities in these POTWs' NPDES permits. EPA had been working on developing guidance for overseeing categorical and significant industrial users discharging to POTWs without approved programs, but has put it off due to other priorities.

Appendix E shows how selected EPA Regions and State Agencies oversee industrial users when they are designated as the control authority. Except for New Jersey and Ohio, Regions and States do not inspect and sample in accordance with pretreatment standards required for POTWs.

We found that States added pretreatment program requirements in the NPDES permits of POTWs without approved EPA pretreatment programs. This is one way to address the States' ability to adequately oversee the great number of significant industrial users discharging to POTWs without approved programs. EPA does not know how many significant industrial users discharge to POTWs without approved programs, but has determined that over 28,000 significant industrial users (of which approximately 13,000 are categorical industrial users) discharge to POTWs with approved programs. This figure gives an indication of how vast the universe is for monitoring industrial users.

As an example, the Texas Commission of Environmental Quality staff estimated that there are a potential 1,750 industrial users discharging to POTWs without

approved programs, of which only 24 (or 1.4 percent) are reporting to the State. State officials advised us that when Region 6 transferred pretreatment program delegation to the State in 1998, categorical industrial users discharging to POTWs without approved pretreatment programs were not adequately identified. The State has been in the process of identifying these industrial users since 1998.

States Require POTWs Without Approved Programs to Assume Oversight Responsibilities

Table 3.1 shows that POTWs with approved pretreatment programs are more likely to carry out minimum pretreatment programs. However, further analysis of our 10 POTWs without approved programs showed that six of these POTWs had pretreatment oversight responsibilities included in their NPDES permits by the State. Each of these six POTWs carried out the program elements with few exceptions (See Appendix C). All six stated they had developed local limits, which is better than the 10 of 12 selected POTWs with approved programs. Only one of the six (17 percent) experienced a pass through event, which is the same observed among approved program groups (also 17 percent). Two of the six (33 percent) discharge to an impaired water compared to three of the 12 (25 percent) for the approved group.

Of the remaining four POTWs that did not have any pretreatment program requirements, few carried out all the program elements. None of the four had developed local limits. Three of the four experienced a pass through/interference event and all four discharged to an impaired water (see Appendix C).

When appropriate, requiring POTWs to assume more oversight activities appears to be beneficial to both the Regions/States as well as the POTW. Nonetheless, the Regions and States will still need to provide oversight to ensure that appropriate formal enforcement is taken. Requiring these POTWs to submit an annual pretreatment report, including information on violators, could alert State and Regional officials of potential enforcement issues.

Conclusion

Based on our study of 22 POTWs, we conclude that POTWs do not develop pretreatment programs to control their industrial users unless required by EPA or a State Agency. Our study shows POTWs with approved pretreatment programs are more likely to meet most of the minimum program requirements than POTWs without approved programs. These POTWs are also less likely to experience pass through/interference events and to discharge to an impaired water compared to POTWs without approved programs. Although this study does not permit us to determine cause and effect, it is reasonable to believe that meeting the minimum program standards of an approved pretreatment program is likely to result in fewer pass through/interference events. We cannot link the cause of an impaired

water body to a POTW's implementation of a pretreatment program. However, our sampled POTWs without approved programs were more likely to discharge to an impaired water indicating a need for such POTWs to be concerned with the quality of their discharge. As a result, we believe POTWs without approved pretreatment programs should be encouraged to oversee their industrial users. Especially, since we found that EPA Regions and States acting as control authorities cannot always oversee to the same level as POTWs with approved pretreatment programs. EPA needs to complete its guide on overseeing industrial users discharging to POTWs without approved pretreatment programs. However, even when POTWs assume greater oversight responsibilities, EPA and States must still play a role in ensuring that POTWs understand regulations, which are sometimes complex, and that POTWs are taking appropriate enforcement actions.

Recommendations

We recommend that the Acting Assistant Administrator for Water direct staff to:

3.1 Finalize its guidance on regulating industrial users discharging to a POTW without an approved program and provide milestones for doing so to the OIG. This guidance should provide recommended frequency of various oversight activities such as inspections and sampling. If the Office of Water cannot finalize its guidance within 90 days of report issuance, it should provide quarterly progress reports to the OIG until this action is complete.

3.2 For Regions and States unable to follow EPA's guidance for basic oversight of industrial users discharging to POTWs without approved programs, encourage the Regions/States to have these POTWs assume oversight responsibilities as part of their NPDES permit requirements.

3.3 Encourage Regions/States to have POTWs without approved programs that are conducting oversight responsibilities to report on an annual basis violations and enforcement action taken to their control/approval authority.

3.4 Promote training opportunities to all POTWs by determining: a) the POTWs' ability to access information on EPA's website and b) the types of training POTWs need.

Agency Comment and OIG Evaluation

The Office of Water staff agreed that guidance on tracking, overseeing, and controlling significant industrial users is important to ensure achievement of the

pretreatment program's goals. As part of its comprehensive assessment of the NPDES program, the Office of Water will document Regional and State oversight capabilities and develop a "toolbox" based on how Regions and States are overseeing industrial users discharging to POTWs without approved pretreatment programs. The toolbox, along with the development of standardized accounting of these significant industrial users will assist in future oversight.

The Office of Water also stated that the pretreatment regulations do not impose minimum inspection or sampling frequencies on EPA Regions and States in either their roles as Approval or Control Authorities.

The Office of Water believed that reporting of significant industrial user problems in NPDES permit applications and categorical industrial user reporting of non-compliance is adequate for notifying Regional/State control agencies of violations. It was additionally pointed out that POTWs without approved pretreatment programs do not always have enforcement authority and that it is the responsibility of the permitting authority to increase reporting beyond the current regulations, determined on a case-by-case basis.

The Office of Water agreed that training is key to maintaining pretreatment program knowledge and has been discussing with Regions/States the need for improved publicity of available training.

Our finding indicated that pretreatment programs do benefit POTWs and their receiving waters. First, we believe that EPA should set standards for Regions/States acting as control authorities; they should set an example to POTWs. Second, in cases where the Regions/States cannot meet this standard, they should encourage the Regions/States to allow POTWs without approved programs to assume oversight responsibilities. We found State agencies have taken the initiative in expanding the benefits of the pretreatment program to POTWs that normally would not be candidates for approved program status. However, we believe EPA should lead the effort to expand this protection by issuing guidance documents encouraging permitting agencies to do so. EPA's lead should provide for more national consistency.

When POTWs without approved programs assume pretreatment oversight responsibilities, they should also be required to submit annual reports on violations and enforcement action for two reasons. 1) Because such POTWs may not have enforcement authority, the control agency needs to be aware of enforcement activity. 2) Current reporting mechanism do not ensure that the control authority receives timely and objective information to ensure that timely and appropriate enforcement has occurred. NPDES permit applications that identify problems with significant industrial users are reviewed at best every four and one-half years. With the current backlog, reviews are probably taking longer. Reporting by categorical industrial users is a self-reporting mechanism.

Chapter 4
Pretreatment Program Needs Improved Direction, Data, and Performance Measures

Without more visible leadership from Headquarters, improved programmatic information, and the adoption of results-based performance measures, EPA's pretreatment program is at risk of losing the gains it made in its early years. The leveling off of those early gains, along with EPA's diminished emphasis on the program, paints a picture of a program at risk. Headquarters has delayed finalizing guides and regulations intended to update the pretreatment program by not allocating sufficient resources to complete these projects because resources were assigned to newer, developing programs such as homeland security and storm water. However, EPA did not request additional funding to cover the needs of its pretreatment program. As a result, POTWs' pretreatment programs may not be as effective in protecting environmental quality and worker health and safety as they could be, and EPA cannot assess the effectiveness of its pretreatment program.

Developing a High Performance Organization Evaluated

In evaluating how well EPA is maintaining pretreatment program gains and addressing future needs, we used criteria from GPRA, the Malcolm Baldrige Award Program, and EPA. Specifically, based on what we were reviewing, we evaluated EPA's performance in three of the seven key areas based on the Baldrige program's criteria: leadership, information and analysis, and performance results.

EPA Can Improve Leadership

EPA can improve its leadership functions – such as modifying regulations, developing technical guidance, and overseeing program implementation – by ensuring national consistency. Responses from Regions, States, POTWs, and other stakeholders indicated that EPA Headquarters was not setting pretreatment program direction or providing sufficient technical guidance and training.

EPA devotes time and resources to developing its customer relationships, such as sponsoring national conferences, but it has not assigned the resources necessary to complete the tasks that could address some customer needs. According to EPA's February 1999 *Introduction to the National Pretreatment Program*, Headquarters responsibilities include overseeing program implementation at all levels, developing and modifying program regulations, developing policies to clarify and further define the program, and developing technical guidance for program

implementation. EPA began projects to further develop and modify its pretreatment program, but in recent years has not devoted sufficient resources to complete the projects, as shown by the following examples. For the period, 1995 to 2000, EPA did not request additional funding for its pretreatment program.

- In 1995, the Office of Water developed options and a basic plan in response to the Association of Metropolitan Sewerage Agencies' (AMSA's) concern of excessive administrative burdens. EPA issued its proposed streamlining rule in 1999 but had still not finalized it by 2004.

- EPA issued guidance in 1987 to assist POTWs to develop local limits. In 1997, the Agency started work to revise this guidance because the 1987 inhibition and removal efficiency data did not reflect the current diversity of POTW wastewater treatment utilized. The guide was finalized in July 2004.

- EPA formed a workgroup in 2000 to address industrial user discharging to POTWs without approved pretreatment programs. The group started to develop guidance 2001, but that work has been put on hold.

- Updating guidance on distinguishing industries subject to New Source versus Existing Source standards has also been put on hold. Industries that significantly change their process may be considered New Sources and need to meet stricter discharge limits.

The following table summarizes responses from 10 Regions and 6 States to an open-ended question on how EPA could improve its pretreatment program.

Table 4.1: Regional and State Recommendations for Improvement

Recommended Improvement	*Region*	*State*
More resources	9	2
Consistency in interpreting rules/regulations	4	
Need Headquarters leadership on categorical determinations	3	4
Finalize various guidance/regulations	3	3
Create database/Permit Compliance System modernization	3	
Provide more training opportunities		3
Review program for new/developing issues		2
Increase oversight and assistance on core requirements	2	
Develop pretreatment program measures	2	
Improve communication among Headquarters offices	2	
Develop a pleadings policy, higher administrative authority	1	
Focus on loading/local limits of non-conservative pollutants	1	
Identify criminal violations and support criminal investigations	1	

The 2004 Baldrige criteria provide a description of leadership as setting directions, values, and expectations while balancing the needs of all stakeholders. The Regional and State responses stressed a need for national consistency. National consistency was also identified as a priority goal by Regional and State pretreatment coordinators during the 2003 EPA National Pretreatment Conference.

Better Information and Analysis Needed

EPA does not have the information systems necessary to effectively measure, analyze, demonstrate, and improve program performance. EPA collects influent, effluent, and biosolids data, but it is not uniformly entered into EPA's Permit Compliance System (PCS). Also, because EPA has not established results-based measures for its pretreatment program (as noted in the next section), data collection and systems are not geared toward providing EPA with an analysis of program progress. Without sufficient data to show the gains made by its pretreatment program, EPA leaves this program vulnerable to future budget cuts.

Our efforts to utilize PCS and annual pretreatment reports prepared by POTWs to determine trends in discharges of metals to and from 10 POTWs were largely unsuccessful (see Appendix F). We found that PCS was not a good source of data for evaluating trends for industrial pollutants because: (1) only 3 of the 10 Regions input influent data into PCS; (2) NPDES permits did not always require the monitoring of industrial pollutant in effluent; and (3) sludge data in PCS is limited because EPA did not consider its entry as a high priority. (Some Regions indicated that sludge data is entered into EPA's biosolids database but even this was not consistent.)

While the pretreatment regulations do not specifically require POTWs to include sampling data in the annual pretreatment reports, the regulations do allow the approval authority to require other relevant data. We found that 9 of our 12 selected POTWs were including data in their annual reports. However, these data were not gathered or analyzed nationally. In our opinion, EPA is missing an opportunity to gather and analyze data to evaluate the environmental results of the pretreatment program. EPA could develop a statistical sampling plan and coordinate with State approving authorities to request the required information.

More POTWs have NPDES requirements to monitor metals now than in 1991, when EPA issued its Report to Congress on its assessment of the National Pretreatment Program, as shown in Figure 4(A). All nine individual metals we reviewed demonstrated significant increases between 1991 and the present. We found that of the 1,890 POTWs covered by an approved pretreatment program, 72.5 percent had from 1 to 12 metals included as a monitoring requirement in their NPDES permit. The reason for this increase can be due to a variety of factors, it does not necessarily mean that the levels of these pollutants increased at

the POTWs. In some cases, a new pollutant limit in a permit may be due to the development of a new Water Quality Standard. In other cases, a new limit may be due to development of or changes to the permitting authorities' procedures for imposing water quality based effluent limits.

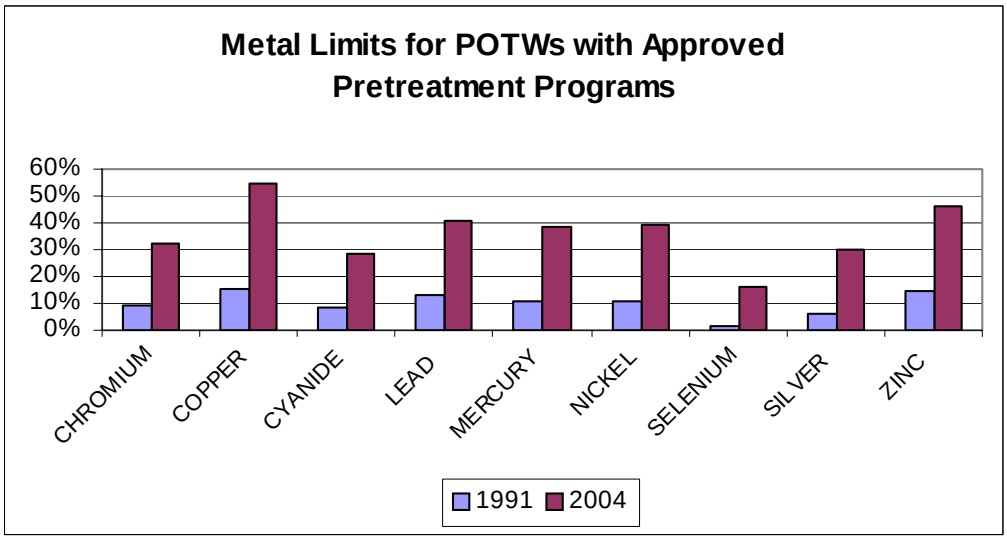

Figure 4(A): Comparison of Metal Limits in NPDES permits 1991 to 2004

In addition to the problems we encountered with the PCS data, Regional responses indicated that PCS is not meeting their needs. Four of the 10 Regions said they use another data system to track their pretreatment programs, while 3 others indicated they used other systems as well as PCS. This can result in duplication of information. EPA recently created a "modernized" version of PCS due to fundamental changes to the NPDES program. The modernized PCS will require the entry of more pretreatment data but it will be activity-based data. Additionally, full PCS modernization is in jeopardy due to funding shortages and implementation date slippage, according to OIG Report No. 2003-M-00014, *EPA Should Take Further Steps to Address Funding Shortfalls and Time Slippages in Permit Compliance System Modernization Effort,* May 20, 2003. A later report from October 2003 notes that EPA has delayed modernization of PCS to fiscal year 2006.

Performance Measures Need to Be Results-Based

Measuring the impact of a program is essential to documenting program performance to support continued funding and identify future needs. EPA's pretreatment measures have been activity-based to show compliance with program regulations or that compliance mechanisms are in place, rather than noting the impact of the program on the environment. EPA is aware of the limitations of its pretreatment program measures and has been evaluating other measures since

1994, but has found it difficult to develop results-based measures for the following reasons:

- Data are often limited or inconsistently collected or maintained.
- Factors such as production, plant openings/closings, change in process or material, etc., can affect industrial discharge.
- Pipe corrosion may be the source of copper rather than industry.
- Measures such as biosolids may not apply to all POTWs.
- Reduction of loadings may not exclusively be due to pretreatment activities.

GPRA and the President's Management Agenda state agencies need to be accountable and provide evidence on program results to ensure continued existence. Developing results-based measures may be complicated, as indicated above, but EPA needs to develop these measures to the best of its ability and disclose any limitations. EPA cannot hope to support the funding it needs for its pretreatment program without showing program results. Also, EPA cannot determine program direction without adequate measures.

EPA partly funded a workgroup of Agency, State, industry, POTW, and AMSA representatives to identify results-oriented measures of the performance of the national pretreatment program. AMSA issued a report on the workgroup's conclusions on July 11, 1994. According to AMSA, the "most important finding" is that adequate data does not exist in many locations to measure pretreatment program performance using indicators of the quality of the ambient environment. AMSA further stated that environmental measures appear useful in assessing the aggregate performance of all water quality programs, but very few true environmental measures can be linked unambiguously to elements of the pretreatment program alone.

EPA's Chief Financial Officer, Office of Policy, Analysis, and Accountability hired a contractor in 2001 to examine EPA's proposed pretreatment performance metrics, and evaluate how well they measured actual program performance and met GPRA objectives. In a May 19, 2002, memorandum, the contractor concluded that: (1) the proposed performance measurement metrics had many limitations, were not closely enough linked to environmental improvements, and would not facilitate accurate assessments of the value of pretreatment nor enable improved operational decisions; and (2) modernization of PCS appeared to address many of the weaknesses in the current PCS.

In its 2004 Congressional Justification for its budget, EPA wrote that it was developing a model to estimate pollutant reductions from POTWs, both with and without pretreatment programs. As of April 2004, the National Pretreatment Coordinator stated that a model was developed in 2003, but pretreatment data was not included. Additional funding to include pretreatment data in the model was not provided. The Coordinator also stated that there are so many factors to

consider in developing a pretreatment model that its accuracy would be uncertain. The Water Permits Division Director said that the pretreatment program's impact on the environment would be evaluated as part of EPA's watershed program. However, EPA will still have a challenge in showing results on a watershed basis because of a lack of quality and consistent data. Regardless, we believe that EPA also needs to evaluate the pretreatment program on its own as well as part of a watershed, since the watershed approach will not assist the Agency in identifying specific industrial problems and trends.

Conclusion

The pretreatment program is at risk of losing the gains it has made if EPA does not become more vigorous in setting national policy and developing program measures that can adequately document the program's progress. While EPA has made attempts to update its program, much of this work has not been finalized. Management is planning to finalize a portion of the streamlining rule and the local limits guide, but the development of results-based measures specifically for the pretreatment program has been discarded in favor of overall, watershed measures. However, this approach also will have a challenge documenting results because of limited data, and it will not enable EPA to measure progress or identify problems related to specific pollutants or industries. Lack of resources was given as the reason for not accomplishing all the tasks, yet EPA did not determine the level of resources it needed, then ask for additional funding for its pretreatment program.

Considering the fact that the pretreatment program has not made significant progress in the past 10 years, now is the time for EPA to take stock of its pretreatment program. It needs to develop goals on how to further reduce toxic transfers to POTWs and the risk associated with those pollutants so that it can fully realize Congress' goal - the elimination of toxic pollutants to the nation's waters. The appropriate level of resources needed to do this should be identified and requested.

Recommendations

We recommend that the Acting Assistant Administrator for Water direct staff to:

4.1 Develop a long-term strategy to identify the data it needs for developing pretreatment results-based measurements; determine the resources necessary to carry out the strategy; and gain the support of other Agency, State, and POTW staff to carry out the strategy. Provide milestones for the development of this strategy to the OIG, and if this strategy cannot be completed with 90 days of report issuance, provide quarterly progress reports to the OIG until results-based measures are developed.

4.2 Set milestones for finalizing the streamlining rule, local limits, and other applicable guidance. Provide milestone dates to the OIG, and if the products are not completed within 90 days of report issuance, provide quarterly progress reports to the OIG until the products are finalized.

4.3 Evaluate the resource needs of the pretreatment program to enable it to make further reductions in industrial waste transfers and risk. The additional funding should be requested in the next funding cycle.

Agency Comment and OIG Evaluation

Before it can develop pretreatment results-based measures, the Office of Water plans on obtaining further information on data and data systems. Using the PER Process, the Office of Water is compiling information regarding current data systems at the Regional/State level so it can identify inaccurate data and target data correction in PCS as part of the transition process to the new Integrated Compliance Information System. Once these activities are complete, the Office of Water will determine a long-term strategy based on data availability and resources, which should assist in developing pretreatment results-based measures.

The Office of Water stated that it was making progress in accordance with schedules to finalize the various, still outstanding documents reported in the finding. It is also currently developing its Strategic Plan for the coming triennium. The PER effort will help the office evaluate whether or not the resources allocated to implementing the pretreatment program are sufficient. Based on the information, appropriate action would be taken.

The Office of Water also noted that other EPA and Regional offices that participate in the pretreatment program and related activities plan their own strategic resource evaluations and may recognize their own priorities.

We commend the Office of Water for issuing the Local Limits Development Guidance, one of the documents which had been outstanding during our review. We revised our recommendations to request the milestones for completion of other actions and for quarterly progress reports to keep us apprised of actions not completed within 90 days of report issuance.

While Headquarters may not directly determine Regional resource levels, it does have powerful, indirect influence. Regional staff told us that their offices usually take the lead from Headquarters when determining the resources to allocate to a program. If Headquarters places less emphasis on a program, the Regions will follow.

Appendix A

Details on Scope and Methodology

National Results Based on TRI Data

The Toxic Chemical Release Inventory System (i.e., TRI) is a database that contains information on releases of toxic substances submitted by certain industry groups under Section 313 of the Emergency Planning Community Right-to-Know Act of 1986. Facilities that report to TRI must: (1) fit a specific standard industrial classification category; (2) have 10 or more full-time employee equivalents; and (3) manufacture or process designated pounds of listed chemicals during the calendar year except for certain persistent bioaccumulative toxic chemicals. The TRI list for 2001 included more than 600 chemicals and 30 chemical categories. We did not conduct an overall test of reliability of the TRI data system. Therefore, we do not express, an opinion on TRI data reliability in general.

In order to develop the national trends reported in Chapter 2, we obtained data from the Computer Specialist/Database Administrator of the TRI Division who provided us with two files based on TRI data contained within Envirofacts from industries identified by their 4-digit Standard Industrial Classification codes associated with the original industries reporting to TRI. The two sets of data included POTW transfer information from these industries, one for the reporting years of 1991 through 2001 and the other from 1987 to 2001. This information was initially used to identify general trends in industrial transfers of pollutants to POTWs. Using EPA's Risk Screening Environmental Indicators Model, we developed trends in the risk associated with the pollutants transferred to POTWs since 1987 and for pollutants added since 1995. Pollutants that had been delisted were not included in our calculations. Removal coefficients for POTW removal rates were identified and applied to each of the listed TRI chemicals. The oral ingestion toxicity weight was obtained and the related risk was calculated.

Case Study Review

To assess the impact of industrial user discharges to POTWs and the difference in how POTWs oversee their industrial users, we prepared case studies of 10 POTWs. Before selecting individual POTWs, we selected States and Regions with the highest transfers of pollutants to POTWs. Using TRI, we identified the top 10 industries in the nation transferring pollutants to POTWs. We identified the top five States in the nation in pounds of pollutants transferred to POTWs and number of industrial users.

Our 10 case study POTWs included 6 POTWs with approved pretreatment programs and

4 without. We selected POTWs with approved programs by size as we defined based on plant flow in millions of gallons per day.

Large:	Over 10 millions of gallons
Medium:	5 - 10 millions of gallons
Small:	Less than 5 millions of gallons

POTWs without approved programs would be small because regulations require those with a design flow of greater than 5 millions of gallons and that receive industrial waste to have an approved pretreatment program. We also selected some POTWs based on Regional recommendations. The following table identifies our selected POTWs.

Selected POTWs with Approved Pretreatment Programs			
POTWs	***POTW Size***	***State Authorization?***	***Region***
Brenham, Texas	Small	Yes	6
San Marcos, Texas	Medium	Yes	6
Passaic Valley Sewerage Commission - New Jersey	Large	Yes	2
Greensburg, Indiana	Small	No	5
Orangetown, New York	Medium	No	2
Indianapolis, Indiana	Large	No	5
Selected POTWs without Approved Pretreatment Programs			
POTW	***POTW Size***	***State Authorization?***	***Region***
Hutchinson Minnesota	Small	Yes	5
Northfield, Minnesota	Small	Yes	5
Delphi, Indiana	Small	No	5
Hobart, New York	Small	No	2

Differences in POTW Pretreatment Programs

To determine the differences in how POTWs with and without approved pretreatment programs oversee their industrial users, we used a combination of questionnaires and site visits. We mailed questionnaires to nine POTWs with and nine without approved pretreatment programs. Three POTWs from both categories were selected from Regions 2, 5, and 6. POTWs with approved programs were selected from EPA's PCS, which designates a POTW's pretreatment program status. POTWs without approved programs

were randomly selected from various documents prepared by State agencies that had

Categorical Industrial Users discharging into their systems.

We developed our questionnaire using EPA's 1999 *Introduction to the National Pretreatment Program*, Chapter 4, as a model for how an approved pretreatment program should be administered. Our model included the following elements of a pretreatment program:

- Industrial user identification,
- Local limits,
- Control mechanism used (permits, etc.),
- Inspection & sampling,
- Enforcement, and
- Reporting.

Six of the nine POTWs (66 percent) from both the approved programs as well as non-approved program categories responded to our questionnaire. We obtained information during our site-visits from interviews with plant officials. We reviewed NPDES permits of the 10 POTWs visited to determine pretreatment program requirements.

The following table identifies the POTWs (listed by size) that completed our questionnaire:

POTWs with Approved Pretreatment Programs			
POTW	***Size***	***State Authorization?***	***Region***
Chemung County, New York	Large	No	2
Racine, Wisconsin	Large	Yes	5
Jamestown, New York	Medium	No	2
Wooster, Ohio	Medium	Yes	5
Sulphur Springs, Texas	Medium	Yes	6
Sapulpa, Oklahoma	Small	Yes	6
POTWs without Approved Pretreatment Programs			
POTW	***Size***	***State Authorization?***	***Region***
Rouses Point, New York	Small	No	2
Herkimer, New York	Small	No	2
Maple Shade, New Jersey	Small	Yes	2
Shelby, Ohio	Small	Yes	5
Shiner, Texas	Small	Yes	6
Taylor, Texas	Small	Yes	6

To assess Regional/State oversight of pretreatment programs, we sent two-part

questionnaires to all 10 EPA Regions and 6 selected States: Indiana, Minnesota, New Jersey, New York, Ohio, and Texas. Part A of the questionnaire requested information on resources, priorities, data systems, training, and suggestions for program improvement, while Part B requested information on Regional/State oversight of towns that do not have approved pretreatment programs. We used Chapter 4 of EPA's 1999 *Introduction to the National Pretreatment Program* as a model of how a Control Authority should administer an approved pretreatment program. All 10 Regions and 6 States responded to Part A. For Part B, all the eight Regions that act as a Control Authorities responded. Regions 4 stated they do not have this responsibility. Region 7 stated that even though they are technically the Control Authority of Kansas, the State performs all the functions under a memorandum of understanding; therefore, a response from the Region to Part B was not provided. All the five States that act as Control Authorities responded; New York stated they do not do so.

Program Measures

To assess the Office of Water's efforts to develop program measures, we interviewed EPA Headquarters and Regional staff, reviewed current and past GPRA measures, and reviewed contractor reports evaluating established and proposed measures.

Program Maintenance and Future Needs

In evaluating how well EPA is maintaining pretreatment program gains and addressing future needs, we used criteria from GPRA, the 2002 President's Management Agenda, Malcolm Baldrige National Quality Award program, and EPA.

EPA's 1999 *Introduction to the National Pretreatment Program*, Chapter 2, provided a description of the roles and responsibilities of EPA, States, POTWs, and industrial users in implementing the pretreatment program.

To assess program maintenance, we sent questionnaires regarding resources, priorities, and program needs to all the Regions and six States, all of which responded. We also interviewed pretreatment staff at Regions 1, 2, 5, and 6, and selected State agencies and POTWs.

Appendix B

Basic Pretreatment Program Elements

Identifying Industrial Users

As part of program development and maintenance, POTWs are required to identify and locate all industrial users that might be subject to the pretreatment program. POTWs must know who is discharging and what is being discharged into the sewer systems so that adequate control procedures can be implemented. POTWs must classify their industrial users (e.g., significant or categorical industrial user) so that appropriate regulations are applied. TRI now reports specifically on transfers of metals to POTWs, which makes it useful to Agency, State, and POTW staff, and it is available on-line. Details on issues related to identify industrial users are in Chapter 3.

Local Limits

To protect its operations and ensure that its discharges comply with State and Federal requirements, a POTW will develop specific discharge limits for its local industrial or commercial facilities. Eighty-three percent of the POTWs with an approved program had developed approved local limits compared to 60 percent of the POTWs without approved programs. The 60 percent represents all the POTWs that had pretreatment program requirements included in their NPDES permits by State agencies.

Permits

Pretreatment regulations require that significant industrial users be controlled by an individual permit or other equivalent individual control mechanism, which will include specific discharge limits, and should be enforceable when not followed. Permits are transferable with restrictions. All our sampled 12 POTWs with approved programs issued individual permits to significant industrial users, while only 50 percent of the POTWs without approved programs issued permits. State Agencies issued individual permits or Section 308 enforcement letters for POTWs without approved programs. In some instances, such as in Minnesota, the State agency issued permits to categorical industrial users while the POTW issued permits to other significant industrial users. None of the POTWs without pretreatment programs that issued permits stated their permits were transferable, while 6 of the 12 POTWs with approved programs stated their permits were.

Inspection and Sampling

Inspections and sampling provide a means of verifying that the industrial user is following its permit conditions. Documentation to support enforcement actions can be obtained during inspections. Pretreatment regulations require POTWs with approved

pretreatment programs to inspect and sample significant industrial users annually at a minimum. There are no inspection and sampling requirements for POTWs without approved pretreatment programs. However, we asked the POTWs without approved programs how often they inspect and sample for comparison purposes. All the POTWs with approved programs said they sampled and inspected at least annually. All the POTWs without approved programs said they inspected their industrial users but only 70 percent described formal, annual inspection programs. Only 50 percent said they sampled on an annual schedule. Regional offices and State agencies will act as control authorities for POTWs without approved pretreatment programs, but not all the Regions and States were able to carry out inspection and sampling responsibilities due to the large universe of significant industrial users spread out over a State and limited staffing.

Enforcement

Enforcement Response Plans establish a framework for POTWs to investigate and respond to instances of industrial user noncompliance in a timely, fair, and consistent manner, and are required for POTWs with approved programs. Eleven of the 12 POTWs with approved pretreatment programs stated that they had approved Enforcement Response Plans, while the remaining one said its plan was under modification. We reviewed annual pretreatment reports to determine whether POTWs were escalating enforcement actions (e.g., administrative orders, fines, etc.). We found that the two large-sized POTWs (with approved programs) showed evidence of escalating enforcement but our medium to small-sized POTWs varied in their efforts. POTWs without approved programs are not required to develop Enforcement Response Plans and may not have authority to take formal enforcement actions. This issue is discussed in Chapter 3. Examples are in Appendix D.

Reporting

Annual pretreatment reports should include at a minimum: (1) a list of all the POTW's industrial users; (2) a summary status of industrial user compliance; (3) a summary of compliance and enforcement activities; (4) a summary of program changes; and (5) any other relevant information requested by the approval authority. All the POTWs with approved programs stated that they submit annual pretreatment reports. We were able to obtain most of the reports over a 10-year period for the six POTWs with approved programs visited and found the reports contained the minimum required information. Seven of the POTWs without approved programs stated they also submit annual pretreatment reports. We do not know what information was contained in all these reports. However, we did review annual pretreatment reports from two Minnesota POTWs without approved programs and found these reports as complete as those for POTWs with approved programs.

Appendix C

Oversight of Industrial Users by POTWs Without Approved EPA Pretreatment Programs

(With State Pretreatment Programs)

POTWs with State Programs	*Identify Industrial Users*	*Approved Local Limits*	*Control Mechanism*	*Inspect SIUs*	*Sample SIUs*	*PT Report*	*Receiving Water on 303(d) List*
Herkimer, New York *	Y	Y	Permit	Annual	Weekly	Y	Y
Rouses Point, New York	Y	Y	Permit	Semi-annual	Not at all	Y	Y
Hutchinson, Minnesota	Y	Y	Permit	Qtrly	Annual	Y	N
Northfield, Minnesota	Y	Y	Permit	Varies, more than annual	Varies, more than annual	Y	N
Shiner, Texas	Y	Y	Sewer Use Ordinance	Semi-annual	Semi-annual	Y	N
Taylor, Texas	Y	Y	Sewer Use Ordinance	Annual	Only if User fails self-sample	N	N

(No Alternative State Programs)

POTWs Without State Program	*Identify Industrial Users*	*Approved Local Limits*	*Control Mechanism*	*Inspect SIUs*	*Sample SIUs*	*PT Report*	*Receiving Water on 303(d) List*
Maple Shade, New Jersey *	Y	N	Permit	Semi-annual	Annual	Y	Y
Hobart, New York *	N	N	Developing Sewer Use Ordinance	No formal process	No sample	Y	Y
Delphi, Indiana *	N	N	Sewer Use Ordinance	“Not often enough”	“Not often enough”	N	Y
Shelby, Ohio	Y	N	Sewer Use Ordinance	No formal process - developing in 2004	No formal process - developing in 2004	N	Y

* Experienced pass through/interference within past 2 years of responding to questionnaire.

PT: Pretreatment
SIU: Significant Industrial User

Appendix D

Examples of Enforcement Efforts

Our review of enforcement efforts by our six selected POTWs with approved programs follows:

- Passaic Valley Sewerage Commission, New Jersey, and Indianapolis, Indiana, the two large-sized POTWs, issued a variety of enforcement actions from Notices of Violation to formal orders and fined violators.

- Orangetown, New York, a medium-sized POTW, issued at least one consent order and a penalty from 1996 to 2002.

- From 1994 to 2002, San Marcos, Texas, our other selected medium-sized POTW, issued only Notices of Violation, a first level response to violations of exceeding limits and reporting. No notices were issued during 1995, 1997, or 2000. The 2002 State audit cited deficiencies that prevented the POTW from identifying violations.

- From 1993 to 2002, Greensburg, Indiana, a small-sized POTW, issued only one Administrative Order but numerous Notices of Violation. Starting in 1996, the POTW imposed fines on violators. The Greensburg pretreatment coordinator said that fines made a difference in getting companies to comply.

- From 1993 to 2002, the only enforcement actions issued by Brenham, Texas, a small-sized POTW, were Notices of Violation during 1993, 1994, and 1998. The 2002 State audit cited deficiencies in the POTW's program, which prevented it from identifying and taking more formal enforcement actions.

Two Minnesota POTWs without approved programs submitted annual pretreatment reports that we reviewed to determine whether violations were identified and enforcement action taken.

- Northfield reported violations from 1994 to 2001 but never reported taking any enforcement action.

- Hutchinson did not identify any violations from 1993 to 2001. In 1998, Hutchinson did report that its biosolids had a "nickel problem," but the POTW did not identify the problem as a violation. The POTW did indicate that a letter was written to the industrial user responsible for the problem and the industrial user addressed the problem.

The EPA Region 5 pretreatment coordinator stated that Northfield should be addressing violations with enforcement actions. However, the POTW's role in taking enforcement actions is not clearly stated in its NPDES permit. Even though Minnesota has been delegated for

administering the pretreatment program since 1979, it lacks state pretreatment regulations that could require a non-approved POTW to take enforcement. Minnesota was working on these regulations during our visit in 2003.

Appendix E

Gaps in Industrial User Oversight

State/ Region	*Pretreatment Program Activity*			
	Identify Industrial User	***Permit or Enforceable Document Issued to SIUs***	***Annual Inspection of SIUs***	***Annual Sample***
Region 2	When information comes to their attention	Section 308 enforcement letter	Inspect CIUs once every 5 years. SIUs suspected of pass through/interference as resources allow	Sample 7-10 CIUs annually (includes approved)
New Jersey	Ongoing process	Individual industrial user permit	Annual inspections of SIUs	Annual samples of SIUs
New York	Not a control authority. Requires POTWs to develop "mini-pretreatment" program through NPDES permit. *Gap:* Those POTWs not under mini-pretreatment program. About 45-50 of universe of 70 have mini-pretreatment program.			
Region 5	Defer to States	Rely on States	Rely on States	No sampling
Minnesota	Rarely – only if information given to State	Individual permit, CIUs	CIUs once every 5 years; SIUs "rarely"	"Rarely"
Ohio	Last update early 1990s; every year, permit 10-15 new industrial users	Individual permit, all SIUs	Inspect SIUs every 2 years, some annually	Semiannually
Indiana	Last conducted in 1997	Individual permit	Inspections - not routinely	"0"
Region 6	"No current updates"	Section 308 enforcement letter and Administrative Order	"Rarely" – when pass through/interference suspected	
Texas	Updated as information becomes available	Section 308 enforcement letter	Inspect CIUs on criteria and compliance – inspect other industrial users as necessary	"As necessary"

CIU: Categorical Industrial User
SIU: Significant Industrial User

Appendix F

POTW Industrial Pollutant Trends

POTWs With Approved Pretreatment Programs			
POTW	***Influent***	***Effluent***	***Sludge***
Passaic Valley Sewerage Commission, New Jersey	Of 10 pollutants: 7 showed decreases 2 remained stable 1 showed no trend ***Source: POTW records***	Of 13 pollutants: 7 showed decreases 2 remained stable 4 showed no trend ***Source: POTW records***	Of 7 pollutants: 1 showed an increase 2 showed a decrease 1 remained stable 3 showed no trend ***Source: POTW records***
Orangetown, New York	1 pollutant remained stable ***Source: Annual Pretreatment Reports***	Of 14 pollutants: 5 remained stable 9 showed no trend ***Source: Annual Pretreatment Reports***	Of 10 pollutants: 1 showed an increase 1 showed a decrease 8 showed no trend ***Source: Annual Sludge Report***
Greensburg, Indiana	*State does not require POTW to submit data.*	Of 9 pollutants: 5 remained stable 4 showed no trend ***Source: PCS***	*PCS had insufficient data.*
Indianapolis, Indiana	Belmont Plant - Of 6 pollutants: 1 remained stable 5 showed no trend Southport Plant - Of 6 pollutants: 2 remained stable 4 showed no trend ***Source: Annual Pretreatment Report***	Belmont Plant - *No data* Southport Plant - Of 6 pollutants: 4 remained stable 2 showed no trend ***Source: Annual Pretreatment Report***	Belmont Plant - Of 3 pollutants: 2 showed decrease 1 showed no trend Southport Plant - *No data* *(POTW does not land apply sludge)* ***Source: Annual Pretreatment Report***
Brenham, Texas	Of 19 pollutants: 1 remained stable 5 remained stable, below detection levels 8 showed no trend 5 showed no trend, below detection levels ***Source: Annual Pretreatment Report***	*No PCS data for industrial pollutants*	*PCS had insufficient data*
San Marcos, Texas	Of 19 pollutants: 12 remained stable 6 showed no trend 1 showed no tend, below detection levels ***Source: Annual Pretreatment Report***	*No PCS data for industrial pollutants* 19 pollutants remained stable below detection levels ***Source: Annual Pretreatment Report***	*PCS had insufficient data*

POTWs Without Approved Pretreatment Programs			
POTW	***Influent***	***Effluent***	***Sludge***
Hobart, New York	Not required to submit data.	No PCS data for industrial pollutants.	Does not land apply sludge.
Delphi, Indiana	Not required to submit data.	No PCS data for industrial pollutants.	Does not land apply sludge.
Hutchinson, Minnesota	Not enough samples to determine a trend. ***Source: Annual Pretreatment Report***	No trend for 3 industrial pollutants. ***Source: PCS***	No trend for 4 industrial pollutants. ***Source: PCS***
Northfield, Minnesota	Not enough samples to determine a trend. ***Source: Annual Pretreatment Report***	No trend for 5 industrial pollutants. ***Source: PCS***	No trend for 4 industrial pollutants. ***Source: PCS***

Industrial pollutants include metals and other pollutants discharged from a POTW's industrial users.

Appendix G

Agency Response

MEMORANDUM

SUBJECT: Draft Evaluation Report:
"EPA Needs to Reinforce Its National Pretreatment Program"

FROM: Benjamin H. Grumbles
Acting Assistant Administrator

TO: Dan Engelberg
Water Issues Product Line Director
Office of Program Evaluation
Office of Inspector General

Thank you for your memorandum dated July 19, 2004, transmitting the draft report on the subject evaluation, No. 2002-0933. We appreciate your careful and thoughtful study of the National Pretreatment Program, and we appreciate the opportunity to provide you with the following comments. Your findings highlight that Publicly Owned Treatment Works (POTWs) which administer Pretreatment Programs enjoy increased National Pollutant Discharge Elimination System (NPDES) Permit compliance as well as environmental quality performance, as opposed to POTWs without approved Pretreatment Programs. For example, 17 percent of the surveyed POTWs with approved pretreatment programs experienced a pass through or interference event, while in contrast 40 percent of the surveyed POTWs without a pretreatment program experienced such an event. This could certainly serve as an indicator of the environmental benefits derived from the pretreatment program.

The Office of Water is in the process of conducting the most comprehensive assessment of the NPDES Program in its 30 year history, as part of the Permitting for Environmental Results (PER) Strategy. The Program Integrity component of the PER Strategy, led by the Water Permits Division, is designed to help address several of the recommendations in this draft report. The PER Strategy focuses on the development and implementation of tools to continually assess NPDES program performance, to obtain the necessary information for making adjustments to program activities, to correct weaknesses, and to ensure continued success. As part of this effort, EPA is compiling this information into EPA Regional and State Profiles which tell the NPDES story.

I am pleased to respond to the draft report's specific recommendations. In addition, an attachment to this memorandum provides some clarifications.

Recommendation 1 (Report Recommendation 3.1):

Finalize [its] guidance on regulating industrial users discharging to a POTW without an approved program.

We agree that guidance on tracking, overseeing, and controlling *Significant* industrial users (SIUs) is important to ensure achievement of the Pretreatment Program's goals. From the EPA Regional and State Profiles, we are gathering information on the diverse tools that States and EPA Regional offices currently use to oversee and control these SIUs, including reporting and tracking methods. We believe that the resulting toolbox, together with the development of standardized accounting (e.g., number, location, and industrial sectors) of these SIUs will assist future oversight in this area.

Recommendation 2 (Report Recommendation 3.2):
Identify Regions and States designated as control authorities that are not meeting minimum pretreatment requirements to identify, inspect, sample, and enforce against (when appropriate) all significant industrial users. If control authorities cannot meet the minimum standards, delegate the responsibilities to POTWs in the NPDES permit if the POTW can carry out these duties.

Via the PER Profiles, we are documenting information on the EPA Regions and States Pretreatment Program oversight capabilities, as well as information regarding efficiencies and innovations used to achieve workload efficiency and maintain a high level of productivity. EPA does not delegate its own responsibilities with respect to pretreatment to POTWs. Rather, EPA Regions (and, in some cases, States with authorized pretreatment programs) require POTWs to undertake certain activities as a specific condition of the POTW's NPDES permit. These requirements may include development of programs to control the contribution of industrial users to the POTW by requiring compliance with EPA-promulgated pretreatment standards. Such programs must include certain inspection and sampling requirements. In accordance with the NPDES and Pretreatment regulations (40 CFR 122 and 123, and 403, respectively), decisions on individual POTW NPDES permitting requirements are the responsibility of the permitting authority, determined on a case-by-case basis. The pretreatment regulations do not require EPA to inspect or sample SIUs.

Recommendation 3 (Report Recommendation 3.3):
Require POTWs without approved programs that are conducting oversight responsibilities to report violations and enforcement action taken to its control/approval authority.

NPDES regulations already address reporting of violations. 40 CFR 122.21(j)(6)(ii) currently requires all POTWs, in their NPDES Permit Application, to provide to the permitting authority a list of the SIUs and whether problems at the POTW have been attributed to an SIU in the past four and one-half years. Where the EPA Region or State is the Control Authority, 40 CFR 403.12(g) requires industrial users subject to categorical pretreatment standards to provide periodic reports on their compliance to the Control Authority and that the industrial user must notify the Control Authority within 24 hours when sampling indicates a violation of the applicable standards. In accordance with the NPDES and Pretreatment regulations (40 CFR 122 and 123, and 403, respectively), decisions on individual POTW NPDES permitting requirements,

particularly any increase in reporting beyond what is already imposed by the regulations, are the responsibility of the permitting authority, determined on a case-by-case basis. Finally, POTWs without approved programs would have regulatory authority to take enforcement action only if authorization is provided by the State Codes.

Recommendation 4 (Report Recommendation 3.4):
Promote training opportunities to all POTWs with industrial users discharging to their systems and offer on-line as well as classroom training.

We agree that training is key to maintaining Pretreatment Program knowledge. At our July 2004 EPA-States Pretreatment Coordinators meeting, we discussed the need for improved publicity of available training and venues, including improving our Water Permits Division website. We have historically partnered with the Water Environment Federation for training workshops, offered additional workshops through States offices, and also awarded a grant to the California State University at Sacramento to develop a wastewater training series (http://www.owp.csus.edu/wastewater.htm). Working with the Office of Compliance and the National Enforcement Training Institute, we launched an online (and CD-ROM) training course in July 2003 directed to inspectors, titled "CWA904: Clean Water Act/NPDES Computer-Based Inspector Training," which contains units specific to the Pretreatment program (http://www.netionline.com/).

Recommendation 5 (Report Recommendation 4.1):
Develop a long-term strategy to identify the data it needs for pretreatment result-based measurements; determine the resources necessary to carry out the strategy; and gain the support of other Agency, State, and POTW staff to carry out the strategy.

As your report notes, the Pretreatment Program has conducted several studies and sponsored workgroups over the past decade for identifying performance-based measures for the Pretreatment Program. Through the PER Process, we are compiling information regarding current data systems used to store pretreatment data at the EPA Regional and State level. We intend to use this information to identify inaccurate data and target data correction in PCS. Both of these activities are crucial to facilitate migration and retention of data as we transition to the Integrated Compliance Information System (ICIS). Once these efforts are complete, we believe that we will be able to determine a long-term strategy based on data availability and resources, which should ultimately assist us in developing pretreatment result-based measurements.

Recommendation 6 (Report Recommendation 4.2):
Develop measures on how industrial user operations have changed over the years.

As required by the Clean Water Act, the Office of Water annually reviews existing effluent guidelines and pollutant discharges from industrial facilities and investigates a variety of technological, economic, and environmental issues that ultimately will help determine the need for, or scope of, a revision for or development of an effluent guideline or a categorical pretreatment standard for a particular industrial category. To the extent that changes in industrial user operations drive our findings from these reviews, those changes would inform our planning

for the pretreatment program and the long-term strategy discussed in our response to Recommendation 5.

Recommendation 7 (Report Recommendation 4.3):
Set milestones for finalizing the streamlining rule, local limits, and other applicable guidance.

The Local Limits Development Guidance was finalized and made available on the EPA website in July 2004. As for the other efforts, we continue to make progress in accordance with schedules established by the Office of Water.

Recommendation 8 (Report Recommendation 4.4):
Evaluate the resource needs of the pretreatment program to enable it to make further reductions in industrial waste transfers and risk. The additional funding should be requested in the next funding cycle.

The Office of Water, Office of Wastewater Management, is currently developing its Strategic Plan for the coming triennium. As Strategic Goals and associated tasks are determined, some of which are identified in the discussion above, we will evaluate the resources necessary to complete those actions. In addition, the PER effort will help us evaluate whether or not the resources allocated to implementing the pretreatment program are sufficient. Based on the information, we would take appropriate action.

cc: Nikki Tinsley

Appendix H

Distribution

Acting Assistant Administrator, Office of Water (4101M)
Director, Office of Wastewater Management (4201M)
Director, Water Permits Division (4203M)
Associate Director, Water Permits Division (4203M)
Chief, Industrial Branch (4203M)
National Pretreatment Coordinator, Industrial Branch (4203M)
Agency Followup Official (the CFO) (2710A)
Agency Audit Followup Coordinator (2724A)
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