### Office of Inspector General Audit Report

### Region III's National Pollutant Discharge Elimination System Permit Program

**Report Number 2001-P-00012** 

June 25, 2001

**Inspector General Division Conducting the Audit:** Philadelphia, PA **Region Covered: Region III Program Offices Involved: Office of Watersheds** Office of Compliance and **Enforcement Audit Team: Michael Wall Anne Bavuso** 

**Mid-Atlantic Audit Division** 



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF INSPECTOR GENERAL MID-ATLANTIC DIVISION

1650 Arch Street Philadelphia, Pennsylvania 19103-2029 (215) 814-5800

June 25, 2001

#### **MEMORANDUM**

SUBJECT: Final Report of Audit on Region III's National Pollutant

Discharge Elimination System Permit Program

Report Number 2001-P-00012

FROM: Michael J. Wall

Team Leader

Mid-Atlantic Division (3AI00)

TO: Thomas C. Voltaggio

Acting Regional Administrator (3RA00)

Attached is our final report on Region III's National Pollutant Discharge Elimination System Permit Program. Our audit focused on specific permits and, accordingly, reports on issues we found with those permits.

Michael Leath

This audit report contains findings that describe issues the Office of Inspector General (OIG) has identified and corrective actions the OIG recommends. This audit report represents the opinion of the OIG and the findings contained in this audit report do not necessarily represent the final EPA position. Final determinations on matters in this audit report will be made by EPA managers in accordance with established audit resolution procedures.

#### **ACTION REQUIRED**

In accordance with EPA Order 2750, the action official is required to provide a written response to the report within 90 days. However, in responding to the draft report and during the exit conference, Region III officials provided proposed corrective actions. We ask that your final response provide us with the milestones of when these actions will be implemented.

We have no objections to the further release of this report to the public. Should your staff have any questions about this report, please have them contact Anne Bavuso or myself at (215) 814-5800.

#### **EXECUTIVE SUMMARY**

#### **Purpose**

The original purpose of our audit was to determine whether National Pollutant Discharge Elimination System (NDPES) permits in Region III were written to ensure water quality protection. However, at the request of the Regional Administrator, we abridged this effort in order to participate in a joint review with EPA's Office of Water of the Region's oversight of its NPDES program. Thus, our audit focused primarily on the more problematic permits. Accordingly, this audit does not report on the status of the Region's current NPDES program. Rather it reports on the specific problems with the permits we reviewed.

#### **Results in Brief**

Several States issued NPDES permits for facilities in Region III that were not written to ensure water quality protection as defined by the Clean Water Act. There were instances where the Region allowed the States to issue weak permits, thus hindering enforcement and enabling facilities to discharge pollutants with impunity. We found that some permits:

- Lacked specific discharge limits.
- Were inappropriately modified.
- Provided for studies rather than limits.
- Contained vague and complicated language.
- Did not contain all Federal regulations.

In addition, the inadequacy of these permits contributed to delays in issuing better permits. Such delays occurred because of prolonged negotiations among the facilities, the States, and EPA. Consequently, these permits did not sufficiently prohibit inappropriate discharges of pollutants, resulting in poor water quality and public health risks.

We believe these weak permits generally existed because Region III did not sufficiently contest them. We also believe that the Region's practice of accommodating rather than confronting the States on key permit issues contributed to this situation. The Office of Inspector General supports partnerships between EPA, State officials, and the facilities. However, such partnerships should not affect EPA's obligation to carry out its mission of safeguarding public health and the environment.

#### **Recommendations**

We recommend that the Regional Administrator ensure that Region III objects to permits that do not fulfill requirements of the Clean Water Act and Title 40 of the Code of Federal Regulations. We also recommend that Region III use its exclusive authority to issue permits when States do not satisfy Region III's objections.

In addition, we made other recommendations that would aid Region III in acting more forcefully against inadequate permits, such as: (a) discontinue the use of permit language that weakens permits; (b) utilize the expertise of the Office of Regional Counsel and Office of Compliance and Enforcement; and (c) require States to prepare Clean Water Act Section 106 work plans that target the issuance of specific permits and withhold funds when these permits are not renewed timely.

### **Agency Response** and **OIG Comment**

Region III generally agreed with our recommendations. However, it also submitted several arguments to support its oversight practices of State-issued NPDES permits. We evaluated these arguments and commented in Chapter 2.

### **Table of Contents**

EXECUTIVE SUMMARY	. i
Purpose	
Results in Brief	
Recommendations	
Agency Response and OIG Comment	
CHAPTER 1: INTRODUCTION	1
Purpose	1 1
Background	
Scope and Methodology	
Prior Audit Coverage	4
CHAPTER 2: SEVERAL PERMITS WERE INADEQUATE	5
Review Disclosed Weak Permits	6
Case Studies Demonstrated Permit Weaknesses	8
Other Issues Noted	18
Office of Water Evaluation	
Conclusion	
Recommendations	
Region III Response to the Draft Report	
OIG Evaluation	
CHAPTER 3: SUMMARY OF OFFICE OF WATER BRIEFING PAPER	25
Summary of Findings	
Office of water Recommendations	۲ (
EXHIBIT A	
National Pollutant Discharge Elimination System Permits	
Expired More than Three Years as of June 2000	31
EXHIBIT B	
Region III Response to Draft Report	33
•	_
EXHIBIT C	
Distribution	35

#### **CHAPTER 1**

#### INTRODUCTION

#### **Purpose**

The original purpose of our audit was to determine whether National Pollutant Discharge Elimination System (NPDES) permits in Region III were written to ensure water quality protection. However, at the request of the Regional Administrator, we abridged this effort in order to participate in a joint review with EPA's Office of Water of the Region's oversight of its NPDES program. Thus, our audit focused primarily on the more problematic permits. Accordingly, this audit does not report on the status of the Region's current NPDES program. Rather it reports on the specific problems with the permits we reviewed.

#### **Background**

The NPDES program controls direct discharges into navigable waters. The Clean Water Act and the Code of Federal Regulations prohibit industries from discharging pollutants into these waters without an NPDES permit. The purpose of such permits is to put limits on pollutants that can be discharged, and to contain requirements for monitoring and reporting. The permits are to be tailored to a particular industry and to the operations of each discharger. However, permits must ultimately include requirements that ensure permittees will meet State water quality standards and Federal regulations.

EPA may authorize individual States to implement the NPDES program. The environmental protection agencies of Delaware, Maryland, Pennsylvania, Virginia, and West Virginia write their permits subject to the review of Region III. District of Columbia permits are written by the Region itself. The Clean Water Act authorizes EPA and States to take enforcement actions against permit violators, but it is ultimately EPA's responsibility to assure that permits comply with the Act.

The Clean Water Act limits the length of permits to five years. The timely re-issuance of an expired permit is important to assure that the new permit will include: (a) any revisions to Federal regulations or State water quality standards; (b) Total Maximum Daily Loads [the amount of pollution a water body can absorb and still support Clean Water Act minimum goals]; and other changes at the facility. At the end of the five-year period, if the permit is not renewed, it can be administratively extended providing that the discharger applied for the renewal permit more than 180 days before expiration of the permit.

In Region III, regarding the permit renewal process, the State issues a draft permit for public comment and EPA review. In accordance with a Memorandum of Agreement between the States and the Region, EPA has 30 days to either "comment" on the draft permit, or to raise a "general objection." In the latter situation, the State has 30 additional days to satisfy the objection, at which time it can issue a permit. If the State does not satisfy the "general objection," the Region must provide a "specific objection" within the next 30 days. In most situations, Region III commented rather than objected to draft permits.

EPA waives its opportunity to object to the draft permit if it does not do so within 90 days following the receipt of the proposed permit. If the State does not satisfy the "specific objection," the Clean Water Act, as well as Title 40 of the Code of Federal Regulations, gives EPA the exclusive authority to issue the permit itself. Such an action by Region III has never occurred.

## Scope and Methodology

We performed this audit according to *Government Auditing Standards* (1994 Revision) issued by the Comptroller General of the United States as they apply to program audits. The audit included tests of program records and other auditing procedures we considered necessary.

We began our survey on February 28, 2000, and initiated an in-depth review on May 19, 2000. During this time period, we began to have concerns about the quality of some permits in Region III. On July 6, 2000, the Regional Administrator requested that the EPA Headquarters Office of Water conduct an assessment of the Region's oversight of its NPDES program, and that the Office of Inspector General

participate in that assessment. Accordingly, we suspended our audit work and accompanied Office of Water personnel on interviews of Region III and State NPDES staff. We also shared information we had already gathered through our ongoing work on the NPDES program. This effort was completed on September 7, 2000, when the Office of Water issued a briefing paper to the Regional Administrator. Additional details on the content of that briefing paper, including recommendations, are provided in Chapter 3 of this report. Following completion of the interviews, we resumed our audit work, and completed our audit fieldwork on October 27, 2000.

Documents we reviewed during the audit included Federal laws and policies applicable to the NPDES program, the Memorandums of Agreement between the States and Region III, the Clean Water Act Section 106 grant files, and the contents of permit files. We also reviewed data from EPA's Permit Compliance System; however, we did not review the internal controls associated with the input and processing of information into the database.

The Region's fiscal years 1998, 1999, and 2000 Assurance Letters, prepared under the Federal Managers' Financial Integrity Act, noted that the NPDES program was listed as a material weakness because of the high percent of permits that were "backlogged" (had not been reissued following expiration). Therefore, we reviewed a Region III listing of 19 permits that had been expired for at least three years. We focused on 5 of those permits, as well as 3 other permits that were not in that original sample of 19, that appeared to be particularly problematic.

We conducted our fieldwork in EPA Region III, at the Maryland Department of the Environment, at the Virginia Department of Environmental Quality, at the Delaware Department of Natural Resources and Environmental Control, and via phone conference with the West Virginia Division of Environmental Protection. We met with the EPA Region III Administrator and interviewed personnel from the Region's Office of Regional Counsel and the Water Protection Division Office of Watersheds and Office of Compliance and Enforcement. We also interviewed State officials affiliated

with permits within Maryland, Virginia, Delaware, and West Virginia.

We issued our draft report on February 13, 2001. We received a response from Region III on April 19, 2001, which generally agreed with our recommendations. The response is summarized in Chapter 2, and included in its entirety in Exhibit B. We held an exit conference with Region III on March 12, 2001.

#### Prior Audit Coverage

The EPA Office of Inspector General has not issued any prior reports on the NPDES program in Region III. It did issue reports of the NPDES program within Region X (Report Number E1HWF7-10-0012-8100076, of March 13, 1998) and on the NPDES program for the State of Kansas (Audit Report Number E1HWF7-07-0022-8100089, of March 31, 1998).

#### **CHAPTER 2**

### SEVERAL PERMITS WERE INADEQUATE

Several States issued NPDES permits for facilities in Region III that were not written to ensure water quality protection as defined by the Clean Water Act. There were instances where the Region allowed the States to issue weak permits, thus hindering enforcement and enabling facilities to discharge pollutants with impunity. We found that some permits:

- Lacked specific numerical discharge limits.
- Were inappropriately modified by State enforcement agreements.
- Provided for facilities to conduct studies prior to requiring the imposition of pollutant limits even when sufficient data existed to indicate limits were needed.
- Contained vague and complicated language that made them unenforceable.
- Did not contain all required Federal regulations.
- Circumvented compliance with pollutant limitations through the use of Part A/Part C permit formats.

In addition, the inadequacy of these permits often contributed to delays in issuing better permits because facilities resisted replacing weak expired permits with more stringent limits. We believe these weak permits generally existed because Region III did not contest them. Instead, the Region accommodated the States in their development of permits that would not trigger appeals by the facilities. The Office of Inspector General supports partnerships among EPA, State officials, and the facilities. However, such

partnerships should not supersede EPA's obligation to carry out its mission of safeguarding public health and the natural environment.

#### Review Disclosed Weak Permits

We found NPDES permits under Region III oversight that were not adequate. Region III personnel supplied us with a list of 19 permits that had been expired for between 3 and 11 years (see Exhibit A). We performed a detailed review of the circumstances involving 5 of these 19 permits, and reviewed 3 other permits that came to our attention during our audit. We found the following conditions in the permits reviewed:

Numerical limits were not included

Some permits lacked the specific numerical limits required by the Clean Water Act and NPDES regulations for pollutants contained in facility discharges. The Act requires limits be

included in permits where pollutants will cause, have reasonable potential to cause, or contribute to an exceeding of the State's water quality standards.

State agreements inappropriately modified permits

Permits were accompanied or directly modified by State-issued enforcement documents containing compliance schedules. State agreements extended time frames for compliance, relaxed effluent limits, and otherwise delayed imposing effective and protective

limits on the facility's discharge, sometimes for many years. Although States are not prohibited from entering into agreements with facilities to give them time to comply with permit limits, the Clean Water Act prohibits a permit from containing a compliance schedule that extends the Act's deadline or otherwise modifies or postpones Clean Water Act or NPDES requirements.

Studies caused delays

Permits provided for studies to be conducted that would delay imposition of limits even though available data had already existed to indicate specific limits were necessary. Furthermore, once the study was completed, permits did not require the modification of the permit to include the results of the study. State environmental officials were required by the permit to assess the study and make a decision to amend the permit based on study results, but States did not always complete this task, allowing the facility to meet a less stringent pollutant discharge limit.

Vague language prevented enforcement Permits contained vague or complicated language that made it difficult to track compliance or take enforcement actions. The permits set limits and monitoring requirements, but also contained footnotes and

special conditions that altered the stated terms and conditions. The referencing of State/facility agreements to the permit also confused permit language.

Federal regulations were not included Permits did not always align with or contain all required Federal regulations, which prevented EPA from taking enforcement action against facilities. Specifically, permits did not contain limitations for the protection of water even

where data indicated that there was a reasonable potential to exceed water quality standards. In addition, Regional staff disclosed that other permits did not include a requirement for secondary treatment as required in 40 Code of Federal Regulations Part 133.

Permit format circumvented compliance

Regional personnel allowed a State environmental agency to use a permit format known as Part A/Part C. This format allowed facilities to circumvent compliance with the 1987 amendments to the Clean Water Act by giving the

facilities compliance options for toxic pollutants. Thus, the Region fostered agreements that were vehicles for confusing language that diminished Regional oversight and prevented enforcement actions to occur.

#### Case Studies Demonstrated Permit Weaknesses

The following narratives discuss three of the eight case studies that we reviewed in detail.

Case Study A

As a result of a weak permit that expired in 1989, this Pennsylvania facility was given an extraordinary amount of time to correct significant discharges of pollutants. The permit

was weak because it incorporated a 1973 Consent Agreement between the State and the facility that allowed the facility to acquire time extensions for its discharges to meet State water quality standards. The facility argued that it was technologically impossible to achieve a certain water quality standard for color pollution. However, both the State and EPA repeatedly disputed this conclusion.

The State finally submitted a draft permit in 1997 after the permit had been expired for eight years. Negotiations then commenced between the parties involved and continued for a number of years. During this period Region III objected to several different versions of draft permits. However, the Region eventually withdrew its objections, stating it would refrain from overriding the State and issuing a permit on its own as long as negotiations continued.

In the meantime, the facility legally discharged its waste products for at least 30 years, the last 11 of which were under an expired permit. These waste products caused offensive odors and discolored a water body flowing through an area where over 46,000 people live and work; impairing the growth of aquatic plants; and jeopardizing the health of migratory birds and aquatic life.

The following chart illustrates the events that pertain to this situation.

1968

State modifications to the facility's discharge permit were challenged before the State's Environmental Hearing Board.

1973	The facility and the State Environmental Hearing Board entered into a Consent Agreement, which required the facility to achieve the water quality standard for color by June 1977. The agreement also allowed for time extensions if it could be demonstrated that the limit could not be achieved.
1975- 1984	Over this 9-year time period, the State granted the facility numerous time extensions to achieve the color standard.
1984	The State renewed the permit, modifying it to a 1973 Consent Agreement, thus enabling the facility to continue to request time extensions. EPA raised no objection.
1989	The 1984 permit expired. The State and the facility entered into an amended Consent Adjudication. Admitting that the existing instream color levels had a deleterious effect on some aquatic species, the Adjudication required the facility to report on progress towards achieving the water quality standard for color.
1989- 1998	Over this 10-year time period, the facility submitted various progress reports to the State as required by the 1989 Amended Consent Adjudication.
1996	The U.S. Fish and Wildlife Service alerted the State that dioxin levels found in fish downstream of the facility might be affecting bald eagles that eat the fish.
1997	In March, the State submitted a draft permit to EPA. In June, the Region objected to this permit because of concerns about dioxin and furan. In October and November, meetings took place between the State, the facility, and U.S. Fish and Wildlife Service to discuss the objection. In December, the State issued a second draft permit.
1998	Region III commented on the second draft permit which was not complete. The State submitted a third draft permit and EPA withdrew its objection.
	The State, through EPA, retained a team of consultants who asserted in a July 1999 memorandum that new advances in technology were available to further reduce the color in the facility's effluent. EPA promulgated new rules for this industry, but left it to each State to decide the quantitative color limit in each permit.

1998 cont.	EPA also established a voluntary Advanced Technology Incentives Program, with facilities having until April 15, 1999 to decide to participate. On April 15, 1999, the facility decided to participate.  The Region, the State, and the U.S. Fish and Wildlife Service participated in a study of dioxin concentrations in fish downstream of paper mills in Pennsylvania.
1999	In January, the State submitted a fourth draft permit. In April, the Region objected to this draft because it failed to comply with the State water quality standard for color. In July, the Region withdrew this objection, stating:
	EPA believes that its discussions with the State regarding the permit have been productive, and are likely to result in agreement about the terms of the state-issued permit in the future. That being the case, EPA intends to exercise its discretion in this case and refrain from issuing the permit while EPA and the State continue discussion.
	In October, the State submitted a fifth draft permit.
2000	In January, the State submitted a sixth draft permit. Although the Region found this permit acceptable, it objected to a separate document, a draft Consent Order and Agreement, whose language modified the permit.
	In April, the State, the facility, and citizens' groups met to discuss the issues. In August, EPA submitted a document to a Federal Court in support of a lawsuit brought by a citizens' group against the facility, and asserted its right to exercise veto authority over State-issued permits.
	By September, the State and the Region resolved the issues regarding the Consent Order and Agreement and the permit was issued. However, the facility now appealed the permit's limits. This appeal went before the State Environmental Hearing Board, which denied in part the facility's request to stay the limits of the new permit. The Board also decided that the facility would be unlikely to prevail on the argument that the 1989 Consent Adjudication provided it immunity in perpetuity, and that the color limit was technologically infeasible to achieve.

Case Study B

Prolonged negotiations between this Maryland facility and the State over many years delayed the issuance of a permit to help protect the Baltimore Harbor and Chesapeake Bay. Toxic

pollutant limits should have been incorporated into this facility's permit upon expiration in 1990. Instead, the State amended the permit in 1989, reinstating confusing language from the 1985 permit. This language prevented Region III and State officials from knowing the exact limitations for certain pollutants when the permit issues were being discussed. The permit was issued on February 27, 2001.

According to EPA documents, the facility discharged its wastes into the Baltimore Harbor, one of the three "Regions of Concern" in the Chesapeake Bay, and this facility is one of the largest dischargers of both nutrients and toxics in the Bay watershed. The facility discharged cadmium, copper, lead, mercury, oil, grease, and nickel into the Baltimore Harbor, which is classified as impaired for both aquatic life and human health. These substances are toxic to aquatic life, and some are acutely toxic to humans, causing cancer, contact dermatitis, respiratory problems, stomach and intestinal distress, liver and kidney damage, anemia, and other illnesses. Region III's Chesapeake Bay Program has spent hundreds of thousands of dollars to develop Regional Action Plans to clean up the Baltimore Harbor since the mid-1990s.

The following chart illustrates the events that pertain to this situation.

1980	The State issued a permit.
1984	Two environmental groups filed a complaint against the facility. A settlement required the facility to improve its flow monitoring procedures and pay \$1,000,000 to a trust fund and \$500,000 to the United States.

1985

The State issued a permit on October 10 to replace the 1980 permit. However, Region III personnel could not furnish us with the 1985 document for review. According to Region III staff, the 1985 permit contained footnotes that gave the facility an allowance for pollutants already contained in the water the facility used for its manufacturing processes. It also contained language that referenced the permit to a 1985 Consent Decree. Permits containing such language run the risk of inferring that the permit limits are modified, thus reducing the Region's ability to enforce the permit. Citizens' ability to take legal actions against the facility for violating the terms of its permit is also reduced.

On the same day the permit was issued, the State also entered into a Consent Decree that reportedly reinstated the limits of the 1980 permit. The terms of the Consent Decree allowed less stringent limits than the 1985 permit, and continued the allowance for pollutants in the facility's process waters until July 1, 1988. However, the document also allowed the facility to request a continuance of the allowance. Although the facility made the request, the State did not make a decision in 1988 or thereafter on the issue. As a result, the less stringent limits of the Consent Decree remained in effect.

1989

In March, the State amended the 1985 permit. The amended permit still contained footnotes that allowed the facility to take credits for pollutants in waters it used for its manufacturing process. Specifically, the pollutants discharged were ammonia, cyanide, oil, grease, lead, chromium, zinc, and phenol, all toxic to human health and the environment with exposure to high levels. In addition, the amended permit also referenced the 1985 Consent Decree, thereby incorporating its less stringent pollutant limits. The amended permit also allowed the Consent Decree to remain in effect until the State made a decision on the facility's request for an extension. However, the State never ruled on the request.

In December, the State submitted a draft permit to Region III. Although the Region had allowed an amended permit to be issued nine months earlier, the Region objected to a new draft permit, stating "the permit contains limits which purport to apply beyond the term of the permit." The Region also objected because "the modification results in unenforceable limitations."

1990	In May, the Region reminded the State that it had yet to satisfy the objections raised in December 1989. The Region acknowledged that the facility was appealing the draft permit. Nevertheless, the Region renewed its objection and reminded the State of EPA's authority to issue a permit for this facility under the Clean Water Act. However, the Region stated that it would refrain from exercising its exclusive authority until September 1, 1990. Although the State never satisfied the objection, EPA did not exercise its authority to issue a permit.  Also in 1990, the State revised its water quality standards for toxic
	pollutants, in response to 1987 amendments to the Clean Water Act. The amendment required States to submit to EPA lists of impaired waters, as well as lists of dischargers of toxic pollutants, and an individual control strategy for each of the listed dischargers. In response, this facility, as well as other entities, sued to stop the State from imposing the new standards. After the suit was settled in 1993, the State promulgated new water quality standards. The suit also reiterated the State's regulation that provided that criteria may be developed on a site-specific basis.
	Furthermore, the State and EPA listed the facility as one of several dischargers of toxic pollutants that impaired the water quality of the Baltimore Harbor. The facility disputed this decision. The State filed a complaint against the facility for oil spills and releases of hazardous materials, such as ammonia, and penalized the facility \$15,000.  In October, the 1985 permit expired.
1991	EPA filed a Consent Decree to address oil and hazardous substance spill violations by the facility. The facility was to achieve a higher standard of care in all aspects of the management and movement of hazardous substances and oil by implementing a Spill Management Program.
1993	Replacement of the permit that expired in 1990 was further postponed while revisions to State water quality standards were being discussed. In the meantime, the facility requested that no permit limits be imposed on it for copper and nickel, and applied for a site-specific variance.

1995	The State circulated a draft permit that included limits for copper and nickel, but delayed the effective date of the limits until 1998 to give the facility time to justify a site-specific variance. But when the facility objected to the copper limitations, the draft permit was never made public. Also, results of a study conducted by the facility were submitted to the State, which in turn concluded that the facility's request for a variance was justified. Citizens' groups opposed the variance and further negotiations ensued.
1997	In July, a study by the facility supported its contention concerning the copper limit, but it did not support its position on the nickel limit. Thus, the facility withdrew its request for a modified nickel criteria. The facility and the State entered into a consent order to resolve permit limit violations. In addition to paying a \$50,000 penalty, the facility submitted a corrective action plan to address violations.
1998	The facility began to operate a new mill without applying for a new source permit, even though a new permit was required.
1999	In July, the State asked Region III for feedback on not putting copper limits in the permit. The Region agreed to omit copper limits if the permit contained a condition requiring additional copper sampling to assure compliance with water quality standards. The Region also commented that the permit should contain a clause that would allow a copper limit "if the sampling showed water quality exceedances."  In December, the University of Maryland Law Center requested a
	meeting with Region III and State officials concerning this facility's permit.
2000	In January, the State sent Region III a draft permit for its review. This permit contained no limits for copper or nickel. In May, the State submitted another draft permit to the Region that still had no limits for copper or nickel. In June, the Region submitted comments to the State and others, including environmental groups. In October, the State submitted another draft permit to the Region and a letter responding to regional comments.

2000 cont. In November, the Region raised a general objection to the draft permit, with some of the main issues being: (a) the use of older data to calculate pollutant limits; (b) discharges from a new operation were not based on newer and more stringent performance standards; (c) the use of a compliance schedule that would have exceeded Clean Water Act deadlines which have already passed; and (d) the need for limitations for cyanide, copper, lead, nickel, zinc, ammonia, and phenol. In December, the Region specifically objected to the draft permit for the same reasons.

Although the corrective action plan for proper management and handling of oil and hazardous substance of 1997 was implemented, the facility continued to report data that showed violations of permit limits.

The University of Maryland Law Center initiated a suit against the facility for discharging pollutants and for operating a new source without obtaining a permit, and asked to review the facility's production records. This in turn started a dispute over whether such records are confidential business information.

2001

In January, Region III participated in a meeting of all the parties, including regulators, the facility, and concerned citizens. In addition, another draft permit was issued that contained limits for copper, nickel, and cyanide, to be effective in three years. In the meantime, interim limits would be in place, giving the facility time to come into compliance. The Region also sent a letter to the State lifting its November objection to the draft permit.

The State issued the permit on February 27, 2001.

Case Study C

This permit was not included on the backlog list provided to us by the Region. Rather, we noted it as a problem during the course of our field work. This is an example whereby a permit included a

limit but did not require compliance with the limit. This occurred because the Region made an agreement with the State environmental agency to issue permits for toxic pollutants that would be less likely to be challenged by the dischargers and end up on the backlog list. Specifically, Part A of the permit contained limits on toxic pollutants. However, Part C of the permit allowed the facility the option to perform a study instead of adhering to the limits in Part

A. The State was then to evaluate the study results and establish final limits. However, in this case, according to Region III, the State "did not act on the study results and the final limit did not go into effect." This set of circumstances contributed to a community's drinking water supply being contaminated with nitrate, a toxic pollutant, and the need for bottled water to be provided to pregnant women and infants.

Exposure to high concentrations of nitrates, which are discharged by this facility, reduces the capacity of blood to carry oxygen, thus turning skin blue and causing shortness of breath, which impairs other bodily functions. The Safe Drinking Water Act sets the maximum health-based standard, and indicates that pollution above this standard is unhealthy for all people, but is an especially serious health threat for infants, who can rapidly develop a life-threatening condition known as blue baby syndrome.

This Pennsylvania facility is located upstream from a creek used by a community as an alternative, or emergency, drinking supply in the summer months, when drought can diminish the primary source. Since the 1970s, the facility's discharge of nitrates steadily increased. On August 18, 1995, the State issued a permit. However, the Region allowed the State to structure this permit to inappropriately give facilities compliance options.

In essence, the permit only contained "preliminary" limits for nitrates, which would not go into effect until: (a) they were refined by a study done by the facility; (b) the State reviewed the study results; and (c) the State modified the permit to implement the limits. Moreover, the permit did not actually require the State to amend the permit should the study show a nitrate problem. We were led to understand that the Region agreed to let the State allow studies rather than stipulate limits for this facility, and others, in an effort to prevent appeals by dischargers. We also noted that this same permitting format was used with other Pennsylvania facilities discharging toxic pollutants.

At the time of the 1995 permit, the facility's discharge of nitrates per day exceeded the permit's "preliminary" nitrate limit by tenfold, and the facility has more than tripled its discharge per day since that time. When the facility reported

these levels to the State in 1997, instead of amending the permit, the State advised the community to relocate its emergency drinking source and to provide bottled water to pregnant women and infants.

Region III did not learn of the situation until contacted directly by a citizens group. The Region had not monitored the preliminary permit limits because the facility had opted to perform the study. Furthermore, the State had not reported the contaminated water body into EPA's Safe Drinking Water Information System because it does not report on the status of emergency water sources. In addition, according to the Region III Office of Regional Counsel, the flaws in the language of the permit rendered it unenforceable because it did not require the State to amend the permit after the performance of the study.

The 1995 permit expired on August 17, 2000. Upon receipt of a draft permit on September 25, 2000, to replace the expired permit, Region III requested 90 days for comment. In the meantime, EPA, the Department of Justice, and the facility planned to sign a Consent Order whereby the facility will reduce the nitrate discharge, provide an alternative water source, and study wells along the affected water body for nitrate pollution. In its response on November 21, 2000, the Region objected to the permit for various reasons. One reason was the inclusion of a compliance schedule for the facility to meet the nitrate limit. The facility had already been granted a compliance schedule and additional compliance time in the 1995 permit.

To conclude, the State knew of high levels of nitrate in the town's drinking water source in 1987 but only issued advisories to pregnant women and small children. Region III was unaware of the nitrate pollution situation, mainly because the permit was structured in a way that made its tracking of permit violations impossible. Although the Region took enforcement actions once it became aware of the problem, this situation should not have occurred.

**Other Issues Noted** During our review, we noted that recent efforts by Region III to reduce the number of permits on its backlog list have been considerable. As of February 2001, according to an EPA status report, it ranked third among the ten Regions in its efforts to work with States to meet Headquarters' goals to reduce the backlog.

> We also noted that Region III did not utilize the expertise of its Office of Compliance and Enforcement and Office of Regional Counsel. Specifically:

- The Region's Office of Watersheds, which was responsible for reviewing the draft permits, generally did not involve the Region's Office of Compliance and Enforcement with reviews of draft permits, even though this Office was responsible for enforcing the permits and its staff was knowledgeable on how a quality permit should be written. Region III personnel expressed concern regarding commingling, which is a situation whereby the integrity of the permit is jeopardized by its being reviewed and enforced by the same EPA personnel. For example, a legal challenge to Region III enforcement cases could prevail if Region III enforcement personnel working on a particular facility enforcement action also worked on the review of the same facility's draft permit. However, this situation was not present in the instances we reviewed.
- According to Office of Regional Counsel staff, they were not consulted on important permit issues, even though it was their responsibility to ensure that the Clean Water Act and EPA regulations were implemented.

In addition, Region III did not condition grants to require States to issue specific permits. Section 106 of the Clean Water Act authorizes EPA to provide Federal assistance to States to establish and implement ongoing water pollution control programs. The States are required to submit a yearly work plan agreeing to perform planned activities during the grant year. Grant funds can be withheld when States do not adhere to their work plans. We noted that the work plans

merely obligated the States to issue permits without specifying which facility permits should be issued.

#### Office of Water Evaluation

The Office of Inspector General generally endorses the recommendations of the separate Office of Water evaluation. We particularly agree with the recommendations for improvement of permit review processes. Details on the Office of Water Evaluation are in Chapter 3 of this report. Because our review concentrated on weak permits that were expired for a significant amount of time, we would like to stress the significance of the Office of Water's findings concerning the quality of permits in Region III. The Office of Water concluded that:

- Nearly all Region III State permits for Publicly Owned Treatment Works failed to include the requirement for 85 percent removal (secondary treatment), and failed to require influent monitoring to assess compliance with the percent removal requirements.
- Several permits omitted or modified standard conditions required by 40 Code of Federal Regulations Section 122.41, and several Publicly Owned Treatment Works permits did not include the condition required by 40 Code of Federal Regulations Section 122.42(b).
- Several permits appeared to indicate the need for water quality based effluent limits, but the State chose to delay the inclusion of limits pending further analysis.

#### Conclusion

EPA's responsibility is to carry out the mandate of the Clean Water Act. The Act prescribes the Agency's level of oversight for the NPDES Program. Weak permits represent a very real threat to the environment and human health. While we recognize that maintaining a good relationship with States is important, such relationships should not result in weak permits.

EPA has already identified expired permits as an Agency weakness that undermines its ability to carry out its statutory mandates. An expired permit will not contain terms and conditions based on the most recent standards and facility changes, in effect delaying prospective environmental improvements to the nation's waters. Thus, if the expired permit was flawed to begin with, the effects of these flaws will be prolonged.

In addition, weak permits directly contribute to facility resistance to replacement with more stringent permit conditions, and can prolong replacement of an expired permit. Facilities reap an economic benefit when they are not required to implement strong permits. Thus, the longer they can negotiate over a replacement permit, the greater the economic benefit for the facility.

In general, Region III's perspective that States are partners with EPA in carrying out environmental work is appropriate. We agree that partnerships between EPA, State officials, and local industries are useful. However, this does not supersede EPA's obligation to carry out its mission of safeguarding public health and the environment. Therefore, it is imperative for EPA to ensure that NPDES permits are of high quality and are enforceable.

**Recommendations** We recommend that the Regional Administrator ensure that Region III:

- 1-1 Objects to permits that do not fulfill requirements of the Clean Water Act and Title 40 of the Code of Federal Regulations.
- 1-2 Uses EPA's exclusive authority to issue permits when States do not satisfy Region III objections.
- 1-3 Stops the use of Part A/Part C permit formats that allow language to include special provisions that weaken the permit.
- 1-4 Utilizes the expertise of the Office of Compliance and Enforcement and the Office of Regional Counsel, as appropriate, when reviewing permits.

- 1-5 Requires States to submit Clean Water Act Section 106 work plans that target specific draft permits due for renewal in a given year and withhold funds when permits are not renewed in a timely manner.
- 1-6 Defines how the results of studies that are required in permits are tracked by Region III personnel.
- 1-7 Implements the recommendations in the Office of Water's briefing paper issued September 7, 2000, taking into account the additional recommendations made above.

#### Region III Response to the Draft Report

The Region agreed with our conclusion that weak permits are inappropriate because they provide a disincentive to new, more stringent permit requirements. Region III also generally agreed with our recommendations. Specifically, the Region commented that it:

- S Has and will continue to object to permits where they fail to meet State and Federal regulations.
- S Agrees that it is important for the States and dischargers to understand that EPA can and will take over an NPDES permit, if appropriate.
- S Agrees and will ensure that the use of "Part A/Part C" language is discontinued.
- Agrees that it is appropriate to use the expertise of the Office of Compliance and Enforcement and the Office of Regional Counsel, particularly in complex permits, such as the cases included in this report.
- **S** Will consider withholding funds for Fiscal Year 2002 where appropriate.
- S Is now emphasizing, where studies are required, that permits will contain a fixed compliance date, so that limits are not withheld pending State or permittee action on a study.

S Has begun to implement the recommendations of the Office of Water's evaluation, beginning with a process to engage the States in a commitment to certify that permits meet the Critical Elements of the NPDES program. Region III expects to continue working on implementing those recommendations in the next few months.

#### **OIG Evaluation**

Although Region III generally agreed with our recommendations, it also presented arguments disputing contents of the finding. Where we agreed with these arguments, we modified the finding. But there were still areas of disagreement.

For example, the Region stated that the OIG should not make "far reaching conclusions" based on a review of a small number of the most technical and complex permits in the Region. While our review focused on a limited number of problem permits, some of which were on the backlog list, we did not draw conclusions regarding the quality of *all* permits. Moreover, the Region's fiscal years 1998, 1999, and 2000 Federal Managers' Financial Integrity Act Assurance Letters noted the NPDES program as a material weakness because of the high percentage of backlogged permits. In addition, the Office of Water evaluation expressed similar concerns with the quality of some permits.

The Region asserted that we oversimplified the process whereby EPA could object and issue a permit, an event that has occurred less than a dozen times nationwide. If the State had not issued a draft permit, or had revoked an objectionable draft permit, EPA would not have the authority to issue a permit, as was the case in a few of the permits reviewed by the OIG. The Region also asserted that withdrawing a State's authority because of a single permit would be a "draconian" response.

We understand the process; EPA can only issue a permit if it specifically objects to a draft permit issued by the State. We also understand that the likelihood of such an objection could cause delays in the issuance of a permit. Our report

discusses permits that were expired for more than three years. As shown in Case A, the Region allowed the State to issue a weak permit in 1984, causing this permit not to be replaced with a stronger permit until 2000. With regard to withdrawing a State's authority to issue permits -- we never advocated such a "draconian" response.

Finally, the Region asserted that the Office of Watersheds did consult with the Office of Compliance and Enforcement and with the Office of Regional Counsel on important permit issues. In response, we can only offer that we were repeatedly told by personnel within these offices that the Office of Watersheds did not regularly consult with them when reviewing permits. Moreover, the Office of Water evaluation also noted that, "ORC and OCE are rarely involved in the routine review of permits, and are not made aware of significant comments raised on specific permits."

#### **CHAPTER 3**

#### SUMMARY OF OFFICE OF WATER BRIEFING PAPER

Note: The following represents excerpts from a 39-page briefing paper prepared by EPA's Office of Water, Water Permits Division, Office of Wastewater Management, on September 7, 2000.

## **Summary of Findings**

This briefing package provided a bulleted summary of the key findings of the evaluation:

- The Region oversees approximately 749 major and 7,918 minor facilities covered by individual NPDES permits. The Region's current practice is to review 100 percent of the permits for majors, and any minors affected by Total Maximum Daily Loads. Based on our interviews, approximately 4-5 full-time employees are devoted to permit review (across the 3 permits branches). Therefore, each full-time employee is responsible for about 30-40 majors and about one general permit per year, plus any minors that are submitted due to Total Maximum Daily Loads implementation.
- Both Region III and State NPDES staff indicate that they have a good, cooperative working relationship.
   The willingness of the staff to listen, communicate openly and honestly, and work with the States to resolve differences was considered a strength of the oversight program. The current Regional organization has helped to foster this cooperative working relationship.
- Despite the efforts of Regional staff and the good working relationship between the Region and the authorized States, some concerns were identified by this review regarding the consistency, timeliness, and enforceability of some permits issued by Region III States. Based on our interviews with the NPDES

staffs in Region III and the States, review of select State permits, and review of the Inspector General's preliminary findings regarding specific permits, the following concerns regarding the Region's oversight program have been identified:

- The review of Region III NPDES permits, conducted as part of the national permit quality review project, indicated several deficiencies in State permits. Most of these deficiencies, however, appeared to be isolated cases.
- Region III's oversight practices, including how reviews are conducted and documented, how comments are transmitted, and how issues are resolved, vary from State to State and have contributed to inconsistencies in State program implementation.
- The Region's expectations regarding permit content and quality are not explicitly communicated to the States. It appears this has contributed to inconsistent application of NPDES program requirements.
- The Region has not established criteria regarding which permit concerns should be raised as informal comments versus formal objections. This has led to States disregarding the Region's comments with no record of their response, or failing to respond adequately or in a timely manner to more significant issues that are not raised as objections by the Region during permit reviews.
- The permit review, comment, and objection process lacks formal procedures, including time frames for raising and resolving Regional comments and objections. This has contributed to States failing to adequately respond to comments and has led to protracted resolution of issues raised by the Region during permit reviews.
- Relatively little information is requested from or provided by States to allow the Region to anticipate

and plan its permit review workload. Additionally, the Region has only recently begun to use management tools to track the receipt, review, comment transmittal, comment response, or other aspects of its oversight activities across all States. The lack of a management system has contributed to the other concerns noted above.

- Staff level Regional permit reviewers often have little permit writing, site inspection, or other practical experience compared to their State counterparts. In addition, they often do not remain in their permit reviewer positions for even one permit term (5 years).
- Communication between the Region's permits and enforcement staff has been sporadic and lacking in structure. This has resulted in misunderstanding and mistrust with respect to expectations regarding permit content, quality, and enforceability.

#### Office of Water Recommendations

While the Region's permit program staff are trying to meet their responsibilities within the constraints of time and resources, the concerns noted above indicate that there are areas of the oversight program that should be strengthened. In particular, the Region should work to standardize its internal procedures for permit review, and should communicate permit quality objectives and expectations for resolving comments and objections more clearly to its authorized States. In addition, the Region should reassess its workload management practices to better anticipate the permits that will be submitted by the States and focus its efforts on permits that are of the most significant environmental concern. There are also opportunities to more fully integrate enforcement and Regional Counsel staff into NPDES permit oversight activities and foster improved communication and understanding of staff roles and responsibilities.

Based on this evaluation, the following specific recommendations are provided:

- 1. The Region should continue to encourage open communication and full participation of the authorized States in policy development, oversight planning, and permit review efforts. The current level of communication is clearly a program strength and should bolster the Region's efforts to improve and standardize its NPDES permit program oversight activities.
- 2. The Region should continue its ongoing efforts to standardize the NPDES permit review process across all of the State programs. The Region's cross-branch NPDES Permit Team is a good starting point for this effort and has begun to improve internal communications between permits staff in the Office of Watersheds and across other Regional offices. This effort, in conjunction with the recommendations that follow (regarding explicitly stating NPDES permit expectations and standardizing review documents) should help to resolve inconsistencies across State programs.
- 3. The Region should provide each of its authorized States (as well as all Regional staff with NPDES permitting responsibilities) an explicit statement of the minimal expectations for NPDES permit content and quality. This document should restate the central tenets of the NPDES regulations in a clear and unequivocal manner and should serve as notice that the Region will not accept or concur with permits or permit conditions that are inconsistent with these tenets.
- 4. The Region should standardize its review and response process to more clearly distinguish between informal comments and formal objections. Specifically, the Region should:
  - Develop and use a tool such as a checklist to ensure that all permit reviewers conduct reviews in the same manner and evaluate permits for the same core components.
  - Respond to the States using a standardized response format to ensure that issues that are recommendations and those that are required

- actions (i.e., objectionable deficiencies) are clearly indicated as such.
- Where there is a question of whether a finding should result in a recommendation or a requirement (i.e., objection), procedures should be in place to solicit Office of Regional Counsel at an early stage in the review process.
- 5. The Region should develop and clearly communicate to the authorized States a time line for review and response to comments and/or objections provided by the Region. The time line should encourage communication and cooperation in early resolution of issues, but should ensure that issues are resolved in a timely manner. Where objections are not resolved within a reasonable period of time, the Region should consider issuing the NPDES permit under the authority of 40 Code of Federal Regulations Section 123.44.
- 6. The Region should work with the authorized States to better plan permit review workload (i.e., to forecast the timing and number of permits that will be submitted by each State in the subsequent month or quarter). The Region should also consider targeting its NPDES permit review efforts to focus on those permits that present the most potential for environmental impact and/or public concern (rather than attempting to review permits for all major facilities). Additionally, the Region should occasionally select minor permits from each State (including permits for mining facilities) to evaluate permit content and quality.
- 7. The Region should investigate the possibility of interoffice training or temporary details to encourage better
  communication and understanding between offices
  involved in various aspects of the NPDES permits
  program. The Region should also evaluate approaches to
  encourage junior staff to remain in the permits program
  for longer periods. For example:
  - NPDES permits staff could accompany enforcement staff on facility inspections or in the development of

- an enforcement case (for a facility for which they have no permit writing responsibilities).
- Enforcement and Regional Counsel staff could attend an NPDES permit writer training course or could assist permits staff in the review of selected NPDES permits.
- The Region could develop a career path for junior NPDES permits staff that describes performance goals, incentives, and associated grade increases for remaining in the NPDES program for extended time periods.

**EXHIBIT A** 

#### National Pollutant Discharge Elimination System Permits Expired More than Three Years as of June 2000

	Exp. Date	Status as of Audit				
* 1	1989	EPA objected to State enforcement order language to modify draft permit (Case Study A)				
* 2	1990	Draft permit being reviewed by EPA after numerous rejections (Case Study B)				
3	1992	Permit last drafted in August 1995. Issue preventing re-issuance is dispute over combined sewer satellite systems				
4	1993	Permit issuance pending results of study				
5	1993	EPA objected to draft permit regarding NPDES and regulation issues				
6	1994	Permit drafted, main issue for delay involved PCB requirements				
7	1994	Permit issuance pending results of study				
8	1994	EPA objected in 1998 regarding State, NPDES, and regulation issues				
* 9	1995	Redraft to EPA color issue				
* 10	1995	Redraft to EPA color issue				
11	1996	Co-permitting strategy with other poultry permits				
12	1996	Co-permitting strategy with other poultry permits				
13	1996	Endangered species issue between State and U.S. Fish and Wildlife				
* 14	1996	EPA objected regarding production based effluent limits. Region investigating whether facility's discharge has impact on drinking water				
15	1996	EPA waiting on State determination of study results conducted by facility				
16	1996	Draft being revised following EPA objections				
17	1996	Permit issued June 2000				
18	1997	Delays regarding Total Maximum Daily Loads requirements				
19	1997	Total Maximum Daily Loads being incorporated into draft permit				

<sup>\*</sup> Five permits reviewed from the expired list of permits

#### **EXHIBIT B**

**Region III Response** 

to Draft Report

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

April 19, 2001

**SUBJECT:** Comments on Draft Report of Audit on Region III's

National Pollutant Discharge Elimination System Permit

Program

Report Number 2000-000833

FROM: Thomas C. Voltaggio

Acting Regional Administrator

TO: Carl A. Jannetti

Divisional Inspector General for Audit (3A100)

Thank you for the opportunity to meet with you to discuss the report findings. The meetings were very helpful to us in addressing the issues and preparing our response. The Region has reviewed the report findings and recommendations and believes the attached response addresses the specific report recommendations.

If you should have any questions on this matter, please contact Joseph Piotrowski at 4-5715.

Attachment

Customer Service Hotline: 1-800-438-2474

# EPA REGION III'S COMMENTS ON THE DRAFT REPORT OF AUDIT ON REGION III'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT PROGRAM DRAFT REPORT NUMBER 2000-000833

We appreciate the opportunity to respond to this Draft Inspector General's Report (the "Draft Report") regarding the National Pollution Discharge Elimination System (NPDES) Program. The NPDES Program has been an extremely important tool in achieving the significant improvements over that past 29 years. Our comments below follow the section headings in the Draft Report. We have attached more detail comments and supporting documentation in Appendices A through D.

#### **Comments on the Executive Summary of the Draft Report**

While we understand that the Inspector General may have originally intended to perform a general review of whether National Pollutant Discharge Elimination System (NPDES) permits in Region III were written to ensure water quality protection, we believe that the actual scope of the audit was quite different. Rather than review a broad sample of permits issued by the States or EPA as representative of permit quality, the Inspector General's review was confined to less than 20 of the oldest permits from the total universe of 761 major permits in Region III. In fact, the bulk of the audit findings rely on detailed review of only five permits, four of which were very old. One must be cautious, therefore, in drawing far-reaching conclusions about the entire program from this audit. However, conclusions can be drawn about the subset of old, complex permits that are useful.

The fact that the permits selected for detailed review were expired for an extended period of time is an indication that they were among the most technically and programmatically complex permits and not illustrative of the bulk of the program operation or quality. In most instances, the delay in issuance for these permits was based on the existence or likelihood of an EPA objection. While we do not contest that there were a few permits that could be considered "weak" in their current form, we object strongly to the notion that EPA Region III "supports weak permits, thus hindering enforcement and enabling facilities to discharge with impunity" and specifically request that this statement be deleted or substantially modified in the final report based on the attached written documentation. While many Regions review only a small percentage of State-issued permits, Region III has historically maintained oversight of 100 percent of State-issued major permits as a measure of our resource commitment and dedication to quality.

The Draft Report states that "the inadequacy of the permits contributed to delays in issuing better permits." In fact, the exact opposite is true. When issuance of a permit is delayed by EPA, it nearly always results in a <a href="stronger">stronger</a> permit. The notion that EPA will object to a permit if it is not consistent with Federal laws and regulations can cause the State to delay issuing a draft permit for EPA to review. Similarly, if the permits are considered excessively stringent and not well supported by scientifically defensible water quality standards and NPDES regulations (and not merely guidance), the States are not likely to issue draft permits for fear of appeals by the facility and permits which may be overturned.

It is critical that EPA maintain a working relationship with the States who have accepted NPDES program delegation, given the resource commitment that EPA and the States have made in successful State programs. However, the Region does <u>not</u> have a policy of "working with the States to develop permits acceptable to the facilities discharging the pollutants." EPA and the States must develop permits which are both environmentally protective and defensible on appeal by both the facilities and environmental interests. If permits are appealed, the end result is that no new permit is in place with resultant delays will in putting environmentally protective controls in place. Similarly, if States are to presume that EPA will object to all permits, the end result would likely be a tremendous backlog in reissued permits. EPA might then be faced with the burden of withdrawing NPDES program delegation, clearly not the best interests of the Agency.

#### **Comments on the Introduction of the Draft Report**

The Report generally describes the process whereby EPA reviews draft permits issued by the States. However, the Report implies that EPA's effective oversight to State-issued permits is limited to the permit objection process, that is through issuing objections and using exclusive authority to issue a permit where EPA has objected and a State has failed to satisfy EPA's concerns. In fact, EPA's strongest role has been in the review of many permits where EPA does not eventually object, but rather provides comments which cause the State to modify the draft permit or provides an acceptable rationale for the original submission. We have attached documentation to show that more than 95% of EPA's concerns are addressed through comments. To demonstrate this, the Region has been maintaining a database to track our comments and objections to permits and the net effect on the final permit decision. There is an impressive track record of EPA's influence on permit quality as can be seen in the Appendix A summary of how comments have translated into significant environmental benefit (See Appendix A - EPA Region III's General Oversight).

The Report oversimplifies the process whereby EPA could take over a permit. First, only where EPA had actually objected to a draft permit would this authority be

available to EPA. If the State had not issued a draft permit at all, or had revoked an objectionable draft, EPA would not have the authority to issue a particular permit. This has been the case in a few of the permits reviewed by the Inspector General under this audit. EPA's only authority where no draft permit has been issued would be to withdraw the State's delegation of the entire NPDES Program based on poor performance, a draconian response based upon a single permit. Second, it is a rare event for EPA Regions to take over a permit in a State delegated program; to our knowledge, this has occurred less than a dozen times nationwide.

Finally, the Introduction notes that the Inspector General's Office did not conduct field work or interviews in Pennsylvania, although two of the three case studies cited by the Inspector General's Office involve Pennsylvania permits. This fact should be noted in the Report.

#### **Comments on Chapter 1 of the Draft Report**

"Permits Inadequately Protect Water Quality" - The Title of this chapter is inflammatory and based on very limited data, certainly not a statistical review of permit quality. Likewise, the summary of conclusions on the first page also broadly implies that [all] permits lack specific discharge limits, etc., when in reality, the Inspector General reviewed less than one percent of major permits and primarily those which were problematic. Our comments above on the Executive Summary should be considered to apply to Chapter 1, page 7, as well. A more appropriate title would be: "Old, Long-expired Permits Inadequately Protect Water Quality."

"Review Discloses Weak Permits" - Page 8 of the draft report begins with this heading and seems to imply that EPA somehow found the list of long-expired permits acceptable as written. In fact, the contrary is true. Generally, the permits were weak because they had expired and in all likelihood, EPA and the State have been working on tougher permits for those facilities.

"Numerical limits were not included" - This paragraph does not include enough specific information for EPA to evaluate its validity nor does EPA agree that numerical limits are not or should not be included in permits. The Region has and will continue to require that where a discharger has demonstrated reasonable potential to violate water quality standards, a specific numeric limit should be included in that permit.

"State agreements inappropriately modified permits"- EPA concurs that permits should not be modified by agreements which extend the discharger's compliance deadline beyond that authorized by the permit. We have objected to a number of permits where inappropriate compliance schedules have been incorporated into permits or where the permit is otherwise modified by an enforcement agreement. In

fact, we objected to several draft permits on this same matter (including the P.H. Glatfelter permit). There are situations where the schedule leading to compliance is inherently expected to extend beyond one permit cycle, such as in the implementation of long-term control plans for Combined Sewer Overflows.

"Unneeded studies caused delays" - The definition of an "unneeded study" is not provided in the Report. Few studies are conducted which are "unnecessary," particularly where a permit appeal is likely if insufficient data exists to justify effluent limits data or where significant costs for compliance warrant extra assurances that controls are needed. We acknowledge that State and EPA resources and expertise for review of studies is often limited, and that permit writing resources are barely able to keep pace with the permit renewal process. EPA and the States need resources through staff expertise or contractor support for those difficult or complex issues where resources are lacking to adequately evaluate the discharger's information.

"Vague language prevented enforcement" - EPA does not condone the intentional use of vague language in permits which impedes the ability of EPA or the State enforcement agency to take appropriate action. However, we recognize that there have been instances where the permit language has acted as a "shield" and prevented enforcement actions which were later deemed appropriate from occurring. EPA believes that the best defense in this case is to insure that permits are based on reliable data and they are reissued in a timely manner, so that any unforeseen limitations are avoided.

"Federal regulations were not included" - EPA does not condone the intentional omission of Federal requirements from NPDES permits. However, it is important to understand that where a State has been authorized to issue NPDES permits, those permits must be consistent with the State regulations in effect to support the NPDES program. Generally, these regulations are adopted and submitted to EPA for review and approval when NPDES program delegation is sought and from time to time afterwards. The State regulations are reviewed to insure that they are consistent with Federal regulations, but they need not be identical. There have also been instances where State program authorities have not kept pace with changes in Federal regulations. In this case, EPA has worked with the States to upgrade their programs.

"Informal agreements circumvented compliance" - We believe that this paragraph refers to a practice initiated by the Pennsylvania Department of Environmental Protection (PADEP) known as "Part A/Part C" in the early 1990s after PADEP adopted many new water quality standards for toxic pollutants, as required by the Clean Water Act (CWA) Amendments of 1986. Formal language would be placed in each permit allowing the discharger time to conduct site-specific studies and collect

background data to support a less stringent effluent than that calculated using the assumptions built into the State's water quality model. The discharger was given a preliminary water quality based effluent limit. Once the discharger collected the appropriate data, the final water quality based effluent limit would not go into effect until PADEP acted on the discharger's submittal to confirm or deny the appropriateness of the effluent limit and agree to the next course of action. This agreement was formally incorporated into the NPDES permit. This process was not intended to be long-term and was only intended to apply to new water quality-based effluent limits which resulted from the new water quality standards. One of the case studies demonstrates that where the State failed to act on the discharger's information, the discharger could gain an exemption from an otherwise needed effluent limit. EPA agrees that this possibility is unacceptable and has objected to permits using the "Part A/Part C" process for the more recent permit renewals. At least one Region of PADEP reports that preliminary water quality based effluent limits have not been used in lieu of final water quality-based effluent limits for approximately five years, effectively discontinuing the "Part A/Part C" process.

**Case Studies** - See Appendix B for EPA's comments.

#### **Other Issues Noted**

The reference to the failure of the Office of Watersheds to consult with the Office of Compliance and Enforcement (OCE) and Office of Regional Counsel (ORC) on important permit issues is not true. EPA's Office of Watersheds routinely supplies information to OCE, including Section 106 work plan submittals, draft Strategies under review by EPA, and has requested assistance on numerous important permits. Resources necessary to take on the additional workload are limited for both Offices as well as for ORC. EPA routinely consults with ORC on issues of legal authority, statewide strategies, general permit renewals and on individual permit objections. The Agency's legal interpretation of a prohibition of "comingling" of permitting and enforcement functions has somewhat complicated communication over the past few years.

#### **Office of Water Evaluation**

EPA Region III has already taken steps to address the findings of the evaluation by the Office of Water. On January 19, 2001, the Regional Administrator wrote to each of the State Secretaries responsible for oversight of the NPDES Program to forward the Office of Water evaluation (copies attached in Appendix C). The letter identified Federal provisions that EPA considered to be Critical Elements of the NPDES Program and also proposed oversight tools in the form of checklists to be used by EPA in review of State-submitted major permits. The letter proposed that the States use the checklists as a tool to certify the quality of individual permits in order to

facilitate EPA review and change the nature of State oversight. EPA has been using the checklists for internal review of State permits and we have requested that the States test the checklists as a tool also, with opportunity for further discussion and refinement expected at the next annual NPDES States Meeting scheduled for May 2001. We are also planning a senior level meeting with the state water directors to discuss the Office of Water review and improvements that can be made to the NPDES permitting process.

#### **Conclusion**

EPA concurs with the conclusion that weak permits are inappropriate and should be avoided as they can provide a disincentive to new, more stringent permit requirements. EPA has already mounted a significant effort nationally to reduce the permit backlog. It should be noted that while this has been a significant problem nationally, Region III has been near the top of the list in terms of having the <u>lowest</u> permit backlog, i.e. the most modern and strongest permit base.

#### Recommendations

- 1-4 Objects to permits that do not fulfill requirements EPA has and will continue to object to permits submitted by the States under the terms of the MOU/MOA where they fail to meet the requirements of the State and Federal regulations. Our record over the last two years included in Attachment D of this Report is evidence of EPA's objections to State-issued permits. Evidence from very old permits is not representative of our last few years of program oversight.
- 1-5 Use EPA's exclusive authority to issue permits when States do not satisfy Region III objections While the Region has the authority to take over such permits, we believe that the Report underestimates the benefits of continuing to exert pressure and influence State-issued permits. The P.H. Glatfelter permit provides a good example of this effect. EPA worked with the State to develop a tough permit. While the process was long, the State retained ownership of the permit and used it as a model for the next pulp mill permit. The second permit was submitted to EPA and met or exceeded all Federal regulation, with no need to comment extensively or object. EPA had, in essence, helped to build the capacity to issue a good permit at the State level despite the fact that it was very technically challenging. EPA agrees, however, that it is important for the States and dischargers to understand that EPA can and will take over an NPDES permit, if appropriate.

- 1-6 Stop the use of any informal agreements that allow permit language to ...weaken the permit EPA agrees and will insure that the use of "Part A-Part C" language as described earlier is discontinued.
- 1-7 Utilize the expertise of OCE and ORC, as appropriate, when reviewing permits EPA agrees that it is appropriate to tap this expertise, particularly in process issues and in complex permits, such as the case studies included in this report. Water Protection Division will continue to take steps to insure that OCE and ORC are informed when permits are received for review, where appropriate.
- 1-8 Require States to submit Clean Water Act Section 106 work plans so that they target specific draft permits for renewal EPA has withheld 106 funding in the past for NPDES performance, including permit renewal and also for the Permit Compliance System data input. EPA's efforts over the coming year are targeted toward assuring that the States work to reducing the permit backlog to no greater than 10 percent for major permits by the end of 2001 and for all permits by the end of 2004. EPA will consider withholding of funds for Fiscal Year 2002 where appropriate.
- 1-9 Define how the results of studies that are required in permits are tracked by Region III personnel EPA's emphasis in this area has been to insure that where studies are done, the permit will contain a fixed compliance date, so that effluent limits are not withheld pending State or permittee action on a study. With the elimination of "Part A/Part C" language or other permit conditions which prevent a water quality-based limit from being effective, we expect that this should not be a problem. We believe that the primary responsibility for ongoing review of studies associated with State-issued permits rests with the State.
- 1-10 Implement the recommendations in the Office of Water's evaluation EPA has already begun implementing the recommendations of the Office of Water's evaluation, beginning with a process to engage the States in a commitment to certify that permits meet the Critical Elements of the NPDES Program. We expect to continue working on implementing those recommendations in the next few months.

## APPENDIX A REGION III'S GENERAL OVERSIGHT OF THE NPDES PROGRAM

The Inspector General's Report gives a generic description of EPA's review of state issued draft permits. As stated earlier, EPA believes that this does not give the entire picture of our oversight role. The list of permits reviewed for the audit represents a very small percentage of the number of permits covered by the program which have been especially difficult for the States to reissue and for EPA to accept. As part of program oversight, EPA spends a great deal of time and effort attempting to improve the quality of each State's program as a whole, providing guidance and technical assistance, hosting annual meetings for all EPA and State NPDES program managers and staff, and by providing training courses on new and developing requirements.

It is important to acknowledge that authority to issue NPDES permits has been delegated by EPA to all States within Region III with the exception of the District of Columbia, where EPA retains the authority to issue permits. Under delegation, the States have adopted legislation and regulations to support the NPDES Program which EPA approved as part of the delegation process. EPA's oversight is carried out consistent with Memoranda of Agreement/Understanding (MOA/MOU) which define the EPA/State relationship. In general, the MOU states EPA retains its authority to review major permits issued by each State. EPA has waived its authority to review minor permits, with certain exceptions. EPA has "revoked its waiver" of authority to review NPDES permits for confined animal feeding operations (CAFOs) and for Total Maximum Daily Load (TMDL) related permits. The State retains primary authority for the day-to-day activities of the program, while EPA's role is more focused on developing or problem areas.

Where EPA finds that a State's efforts have been inadequate, EPA can object to NPDES permits that do not comply with the State's water quality standards and NPDES regulations. EPA can, in theory, "take over" a permit to which EPA has objected following an administrative process outlined in EPA's NPDES regulations. Note that this has not happened in Region III nor does Region III believe that it is a panacea for permits which are not issued consistent with EPA's comments. First, the Federal permit must still meet the requirements of the State's regulations and the State must certify in accordance with Section 401 of the CWA that the permit is consistent with the State's water quality standards. The Federal permit could and most likely would be appealed as any State permit could be. If the State failed to promptly issue a permit upon expiration and did not issue a draft permit for EPA review, EPA's only recourse would be to withdraw delegation of the program. The resulting burden to EPA would likely be extreme, given the resources needed to issue the small number of permits that Region III does issue in the District of Columbia.

#### I. Maryland's NPDES Permitting Process and EPA's Oversight Role

It is important to understand the permit issuance process in Maryland is different from that of other states and EPA. In Maryland, the permit appeal process takes place before permit issuance [COMAR 26.08.04.01G(9)], and no permit can be issued until the appeal is resolved. Therefore, delays in permit issuance can occur until appeals are resolved.

Maryland has a defined permit development process, including a detailed Permits Manual (1996) and a Watershed Permitting strategy and procedure (1998). Maryland has committed to using a watershed-based permitting approach to managing its waters, in coordination with the TMDL effort. The MDE NPDES program is also preparing point-source Wasteload Allocations for TMDL-listed waters. MDE is incorporating the concepts, monitoring and sampling data developed during the TMDL process in order to issue its NPDES permits on a watershed by watershed basis. The state has been divided into five basins, with each year's NPDES program focusing on one basin. For any permit less than 2.5 years old when its watershed is being permitted, the permit will not be revoked and reissued "unless changing it is of special water quality significance." Permits which are older than 2.5 years will be revoked and reissued in their cycle year. Pending permits are handled on a case by case basis.

EPA receives draft permits for comment, usually before the public notice stage. EPA comments often result in changes to these draft permits, as evidenced by the attached record of permit reviews. Again, Case B does not show that EPA comments resulted in significant changes to the draft permit, and compliance with state water quality standards and federal regulations. Our objection letters of November 15, 2001 and December 15, 2000 required the permit to insure compliance with state water quality standards for cyanide, copper, lead, nickel, and zinc at various outfalls.

EPA Region III has conducted oversight of the Maryland NPDES program since 1974 in accordance with the Memorandum of Understanding (MOU). In 1998 and 1999, EPA provided the following comments on MDE draft NPDES permits, which resulted in changes to these permits. Of the 18 permits reviewed 1/99-10/99, 72% had major comments which resulted in changes.

Some of the major issues addressed and corrected in 1999 included: the use of Monthly averages not quarterly averages, inclusion of ammonia limits, inclusion of mass limits, toxic analysis for reasonable potential, correct classification of POTW and pretreatment industrial user, inclusion of Sanitary Sewer Overflow prohibition and reporting requirement, compliance schedule language clarified.

MD NPDES Permit Number	Facility Name	EPA's Comments	
MD0001252	Bayer	Compliance schedule language amended, monthly limits not quarterly average	
MD0052027	Northeast STP	Sanitary Sewer Overflow (SSO) prohibition and reporting requirement	
MD000060	Perdue	Nutrient Management Plan, monthly limits, mass limits	
MD0056545	Sod Run WWTP	Ammonia limits added	
MD0021491	Seneca WWTP	Toxics analysis, BOD analysis	
MD0003034	Ashburton WTP	Monthly averages added not quarterly average	
MD0003042	Montebello WTP	Monthly averages added not quarterly average	
MD0021512	Freedom WWTP	Ammonia limit added	
MD000094	Connective	Mass limits	
MD0055182	Mettiki Coal	Biomonitoring, toxics analysis included	

In 2000, EPA also provided comments on MDE draft NPDES permits which resulted in changes to these permits. Of the 29 permits reviewed 1/00-12/00, 90 % had major comments which resulted in changes.

Some of the major issues addressed and corrected included: inclusions of waste load allocations as determined by TMDLs, stormwater pollution prevention plans, testing for reasonable potential for possible hazardous substances in industrial sludge, reopener clauses for Confined Animal Feeding Operation (CAFO) regulations, new mixing zone studies for power generating stations, SSO prohibition, oil/grease and Total Suspended Solids (TSS) limitations for chemical metal cleaning wastewater, use of discretionary authority for not requiring mass limits, Best Practicable Technology (BPT), Best Available Technology (BAT), civil daily maximum penalty increased and criminal negligence penalty corrected, and Fact Sheet improvements to add 303(d) listing and TMDL preparation status.

Permit number	Name	Comment	
MD0021822	Ballenger WWTP	Civil daily maximum penalty increased. Fact Sheet to add 303d listing and TMDL preparation.	
MD0021121	Thurmont WWTP	Document that BOD limits will meet Dissolved Oxygen (DO) standards. Civil penalty amount.	
MD0068314	Baltimore Co. MS4	Criminal negligence penalties not changed. Define key terms.	
MD0002674	PEPCO-Morgantown	New Mixing Zone study required. Thermal discharge requirements. Document discretionary authority for not requiring mass limits (BPT, BAT). Add oil/grease and TSS limitations for chemical metal cleaning wastewater.	
MD0021741	Western Branch WWTP	SSO prohibition. Waste Load Allocation (WLA) for BOD complies with approved TMDL. Reduced monitoring allowed by EPA guidance.	
MD00208850	Naval Surf. W. Ctr. WWTP	TMDL Reopener clause. Total Phosphorus (Total-P) limit with P-removal facility completion. Special Condition for stormwater pollution prevention plan.	
MD0058611	Trans-Tech, Inc.	Design Flow Rates for Outfalls 001, 002. Add Condition to test for possible hazardous substances in industrial sludge.	

MD000060	Perdue Farms/Salisbury	Special Condition regarding discharge for maximum number of days per calendar year, in accord with TMDL. Reopener Clause for CAFO regulations. Monitoring threshold for stormwater events.	
MD0055174	Little Patuxent Water Reclamation.	Nitrogen mass loadings. Plan submittal requirements under 1987 Patuxent River Watershed legislation. Reopener Clause for Chesapeake Bay Program Nutrient Cap Strategy.	

In summary, the Report has focused on one extremely complex permit, while ignoring the majority of Maryland permits. The Report does not include EPA's specific objection letter for the Bethlehem Steel permit, and does not acknowledge the very successful permit issuance outcome. The Report also failed to recognize the unique permit procedures in Maryland regarding permit appeals before permit issuance which can delay permit issuance.

#### II. Pennsylvania Oversight and Comments on Draft Permits

Pennsylvania has the second largest number of "major" NPDES permits (393) in the nation (behind only Texas with 572). Region III has historically reviewed all major permits, all permits to Confined Animal Feeding Operations, and all permits which are written to implement TMDLs. Region III also reviews other documents which have a strong influence on permit quality in Pennsylvania, such as statewide strategies, guidance to permit writers, and changes in regulations. The picture of EPA's oversight role is somewhat diminished by the Report's focus on a small number of "significantly challenging permits" to determine the overall oversight of the program.

Since FY1997, EPA Region III has tracked comments made to draft permits written by the Commonwealth in order to identify problem areas and also to provide information to the State on where additional focus is needed. These records can be found attached to this Appendix. Between FY1997 and FY2000, 355 draft permit actions were received by EPA Region III for review. Significant comments were forwarded to Pennsylvania on 74% of the permits reviewed in FY1997, 63% in FY1998, 66% in FY1999, and 58% in FY2000. These comments included, but are not limited to:

- 1-11 Compliance with EPA's CSO Control Policy;
- 1-12 Limiting discharges to best available technology requirements;
- 1-13 Reasonable potential analysis for water quality based effluent limitations;
- 1-14 Effective compliance with effluent limits;
- 1-15 Controlling discharge toxicity with Whole Effluent Toxicity testing;
- 1-16 Best Management Practice implementation for Confined Animal Feeding Operations;

#### 1-17 Elimination of illegal bypassing.

It is important to note that the vast majority of permit issues are resolved at the "comment" stage, i.e. the State addresses EPA's concerns and changes are made in the draft permit, eliminating the need for EPA to object to the permit. These comments often have substantial environmental benefits. Also, as State policies are developed, recurring problems are eliminated. For example, one Regional Office in PADEP had a practice of placing language into draft permits which authorized sanitary sewer overflows (SSOs). EPA's Office of Watersheds commented to PADEP that this practice was inappropriate as SSO's were illegal discharges. The comment was intended primarily to satisfy concerns raised by the Office of Compliance Assistance and Enforcement regarding the impact of this language on the enforceability of the permits. Repeated objections by EPA to these types of permits led PADEP's Central Office to issue a central policy prohibiting SSO language in permits and the problem was resolved.

EPA also maintains a strong role in developing programs. EPA worked extensively with PADEP on the development of its strategy for Confined Animal Feeding Operations (CAFOs), development of a strategy for Combined Sewer Overflows (CSOs), issuance of General Permits for CAFOs and CSOs, and staff training. EPA is also in the process of completing a detailed evaluation of PADEP's stormwater permitting program.

## APPENDIX B EPA REGION III'S COMMENTS ON CASE STUDIES

#### **CASE STUDY A**

#### I. EPA's efforts in the last five years to reduce color impacts

EPA Region III agrees with the assertion that re-issuance of this permit was long overdue. In fact, EPA was heavily involved over the past five years in helping the Pennsylvania Department of Environmental Protection (PADEP) to craft a tough, environmentally protective permit. The report did not consider that this was an extremely complex situation, not only technically, but also from the standpoint of enforceability and also from the threat of litigation. There was substantial citizen group oversight of this matter and the existence of court challenges to the existing permit which EPA had to weigh from a technical standpoint so that the resulting permit would withstand appeal and litigation. Substantial citizen involvement in the permit was also accommodated by an extraordinary level of cooperation and communication between the state, federal agencies, and the company. EPA took a leading role in convening meetings with all parties.

It is important to understand that for this facility, issuance of a revised permit by PADEP in 1994 would not have immediately achieved the dramatic reductions in color needed to achieve the water quality standard. The IG's report correctly states that the consent adjudication allowed the company to have an extension of time if it could be demonstrated that the color limit could not be achieved. However, it does not describe that the company was also at the same time required to use "best demonstrated technology" and to research annually whether there were any developments in technology which would have allowed the company to achieve the instream water quality standards for color. The Company submitted these reports annually, continuing to evaluate color removal processes for application at the site. Copies of several reports are enclosed for your information. The reports conclude that while a number of processes were evaluated, the company was unable to identify technology which would enable it to achieve the level of control needed to achieve water quality standards. Based on review of the reports, EPA Region III and PADEP were unable to refute the company's claims that no better and appropriate technology existed which could be required at the Facility A's plant. It is likely that had the permit been issued in 1994, the company would have been considered to have implemented "best demonstrated technology" per PADEP's regulations.

The Report also does not recognize that the Company was making significant improvements to its processes despite the fact that a revised permit had not been issued. During the same period, the company conducted pilot studies to determine the feasibility of alternative technologies and completed a multimillion dollar pulp mill modernization project in 1994 which included installing oxygen delignification, increasing chlorine dioxide capacity, and installing a new recovery boiler for environmental reasons, including increasing color removal. With these process changes, the company was able to see a 30 percent reduction in effluent color. In fact, EPA's national experts on pulp and paper mills noted in their July 1999 report entitled Findings and Recommendations on Reducing Color Discharge, Facility A, Spring Grove, PA, (the Findings) that the "Current Color discharge is ...among the better mills in the US." Water quality standards were exceeded, in large part, because the plant discharge was to a small stream and the standards were very stringent. A copy of the Findings is enclosed for your information.

Nonetheless, the breakthrough in the search for alternative color technologies finally occurred when EPA Region III was able to obtain assistance from EPA's national experts on pulp and paper at PADEP's request in July 1998 to review the Company's color reduction progress reports and plans. EPA Headquarters had recently completed a similar evaluation of the Champion Paper facility in Region IV and had completed research and site visits in support of the development of revised effluent guidelines. The Findings, issued on 7/9/1999 noted that upon evaluation of the best technologies available worldwide, there was a range of technologies available, although no instance in which they had been combined and applied at a single location. The EPA experts recommended that Facility A try a specific combination of technologies, but that additional evaluation would be needed at each step. A meeting was held by EPA in Harrisburg on 6/10/99 to allow all stakeholders, including the Company and environmental groups, full access to EPA's experts to hear the results of the final report and to confirm what could and could not be done to improve the color of the plant's discharge.

The <u>Findings</u> recommended that the next permit issued to the Company include a specific combination of technologies, incorporate an interim milestone for construction not until the end of the fourth quarter of 2003, and attain the Tier 1 Best Available Technology (BAT) effluent limitations of the voluntary program (VATIP) under the Cluster Rule by no later than 4/15/2004. The Company was eligible for the 4/15/2004 schedule as a result of having enrolled in VATIP. There was no expectation that the facility could achieve instant compliance with the color standard. The schedule derived by the experts became the NPDES permit that was proposed by the State when the draft permit was issued in October 1999. We bring these activities to the attention to underline that EPA's intervention was not merely to "negotiate" the permit. A significant amount of complex research was necessary before a permit that was a significant improvement over the current condition could be issued.

The Region takes exception to the last paragraph in the introduction to Case Study A. First, the sentence: ..."the facility legally discharged its waste products for at least 30 years..." implies that somehow the discharge of waste products is not allowed nor is it legal. The authorized discharge of waste products forms the basis for the NPDES Program. All dischargers are legally authorized through NPDES permits to discharge waste products. Second, this paragraph implies that offensive odors associated with the facility are somehow the responsibility of the NPDES program as well, when in fact, odors are not regulated by the NPDES Program or by the Federal government. Third, this paragraph implies that the color of Codorus Creek impaired the growth of aquatic plants and jeopardized the health of migratory birds and aquatic life. Again, this is not true. The impact of color here is based on aesthetic concerns, i.e. visual appearance, and not on any other impact on aquatic life, wildlife, or human health. Only in extreme cases where color blocks light can it have an impact on plant growth. That was not the case with Facility A. There was also never any evidence that the facility impacted the health of migratory birds. If the final Report continues these statements, the Region wishes to have advanced review of the scientific evidence supporting this allegation.

#### II. Significant improvements in this permit beyond color reductions

While color may have been the most recent issue handled by EPA, we did not consider color to be the most significant concern from the perspective of risk to human health and aquatic life. EPA considered temperature and toxics to have much greater potential for concern. These concerns

were addressed and a number of provisions, including innovative requirements which went beyond regulatory requirements, were included in the final permit.

The Report correctly identifies that the U.S. Fish & Wildlife Service (FWS) alerted the State and EPA of concerns about the potential for bioaccumulation of dioxin in the plant's discharge and impacts on bald eagles downstream in the Susquehanna River. The Report fails to mention that, as a result, EPA organized a cooperative effort in 1997 involving FWS and PADEP to monitor fish tissue concentrations for dioxin at <u>all four</u> major paper mills in Pennsylvania to insure that dioxin contamination was not occurring. The study confirmed that there was little to no impact on aquatic life due to dioxin from the facility's discharge. The permit was still, however, written with a dioxin limit and internal monitoring at potential accumulation points within the plant.

The Inspector General's Report should also should note that the NPDES permit finally issued to the facility was the first permit issued in Region III to incorporate the new requirements of the Cluster Rule. EPA's development of the 40 CFR Part 430 "Cluster Rule" technology based effluent limitation guideline requirements took longer than expected to complete. Once a final draft was available, PADEP revisited what it had written for Facility A's permit to incorporate the Cluster Rule's requirements rather than allow the permit to be reissued earlier and escape the Cluster Rule's more stringent requirements. It should be noted in the Report that EPA's Cluster Rule did not provide guidance on how to handle the color issue, but rather placed the responsibility at the local level.

The Inspector General's Report should note that EPA's comprehensive involvement in Facility A's permit also enabled PADEP to use it as a model for another pulp & paper mill permit, even though it contained a number of requirements that were beyond regulatory requirements. EPA was able to approve that draft permit (Appleton Papers) immediately, without objections or comments to be resolved. This permit is now being used as the pulp and paper mill standard for Region III and possible for other Regions.

As mention earlier, there are a number of provisions in the permit for Facility A which go beyond minimum requirements. These requirements were made possible by the efforts of EPA and PADEP over the past five years and in all likelihood would not have been included in a permit issued in 1994 based on the information available at that time. They include:

- Stringent limits on the discharge of Total Suspended Solids and Biological Oxygen Demand (BOD). The draft renewal permit dated 3/04/97 included the same Total Suspended Solids limits as the previous permit with the requirement of conducting a solids study in the Codorus. Our 6/19/97 objection questioned the use of the existing mass limits since there is documented solids problems in the Creek below the discharge. As a result, the final permit reduced the average monthly mass limit almost in half and still required the solids study.
- Final water quality-based effluent limits for dioxin.
- Influent and effluent monitoring for Chemical Oxygen Demand (COD)
- A study of solids and odors produced by the facility.

- A permit requirement for the company to maintain stream flow in the Codorus Creek with releases from the Company-owned upstream lake. This is beneficial for maintaining the downstream recreational value of the stream during periods of low flow.
- Improvements in the "boilerplate" permit language, including
  - increased monitoring and reporting requirements
  - bypassing limitations
  - penalties and liability explanations.
  - biosolids handling
  - controlling chemical additive usage rates
- The permit was the first reissued in Region III to comply with the current 40 CFR Part 430 "Cluster Rule" technology based effluent limitation guideline requirements, including internal monitoring points on both the bleach plant effluents (softwood and hardwood process) with the proper effluent limits and required Best Management Practices. Facility A will be eliminating elemental chlorine bleaching by converting to 100% chlorine dioxide in order to comply with these requirements and to assist in reducing color in the wastewater discharge.
- Facility A will be required to complete a "mass and energy balance" study to identify other sources of color with the intent of further reducing color discharge in the wastewater.
- Whole Effluent Toxicity (WET) Testing is required as part of the Facility A permit and it has also been included in the draft permit for another facility. Note that WET testing is not required by State or Federal NPDES regulations for industrial facilities, however, it is being imposed here to insure that there are no hidden toxics problems which are undiscovered through chemical testing. Toxics identification and reduction will be required if the testing determines the effluent to fail these tests.
- 45 Stormwater outfalls will be included in the permit renewal with monitoring requirements.
- The permit renewal will require a new 316(a) temperature study to replace the 316(a) study completed in 1979. The new study will determine the current effect of the effluent temperature on the receiving stream. The results of the study will justify whether or not Facility A can continue to receive a water quality criteria variance for temperature as allowed by Section 316(a) of the Clean Water Act.
- Facility A has enrolled in Tier I of the Voluntary Advanced Technology Incentives Program established under 40 CFR 430.24(b) and will be required to meet an effluent limit for Absorbable Organic Halides (AOX) more stringent than the Best Available Technology established limit. The permit includes an implementation schedule for compliance with VATIP.

#### III. Factual discrepancies in the IG's report, Case Study A

The following describes specific errors that we would like to bring to the Inspector General's attention.

A. page 11, second block - This "1999" discussion is chronologically incorrect.

- 1) The second paragraph suggests that a proposed separate agreement would modify a draft permit submitted in 1999. A separate agreement was not publicly proposed until 2/26/2000. This agreement was then objected to on 5/12/2000 because it purported to modify the draft permit. However, the draft permit itself, also public noticed on 2/26/2000 was not objectionable since it contained immediate compliance with the water quality based effluent limit for color. The permit re-issuance was delayed in order to insure that concerns by EPA and environmental interests regarding enforceability were resolved.
- 2) The italic quote came from an EPA letter dated 7/2/1999. The first sentence of the last paragraph does not complete the picture because on 7/7/1999, PADEP withdrew its previous draft permit (12/28/1998) and promised to provide another draft on 10/5/1999. Withdrawing of the draft permit took away our objection to that draft and on 10/4/1999, PADEP submitted the revised draft.

The precise chronology for 1999 - 2000 is as follows:

- 1/04/99 EPA received PADEP's revised draft permit, dated 12/28/98.
- 2/03/99 EPA issued time extension letter on 12/28/98 draft.
- 2/09/99 Facility A issued formal comments to EPA HQ regarding the *Preliminary* color report.
- 2/16/99 EPA submitted comments to PADEP pertaining to the 12/28/98 draft.
- 4/05/99 EPA issued specific objection to the 12/28/98 draft.
- 6/10/99 EPA hosts a meeting in Harrisburg with EPA HQ, PADEP, environmental groups, and the facility for final discussions on *Preliminary* color report and to allow all interested parties free access to ask questions of EPA's national experts.
- 7/07/99 PADEP withdraws 12/28/98 draft and EPA withdraws its objection based on the commitment by the company to submit a revised draft by 10/5/99.
- 7/09/99 Final color report from EPA HQ.
- 10/12/99 EPA received PADEP's revised draft permit, dated 10/04/99.
- 11/12/99 EPA issued time extension letter on 10/04/99 draft.
- 01/10/00 EPA received PADEP's amendment to the 10/04/99 draft permit, dated 01/06/00.
- 1/10/00 EPA issued a letter stating the permit is acceptable as written and that EPA will not make a specific objection.
- 2/26/00 PA Bulletin notice of draft permit and draft consent order & agreement (the draft permit noticed was nearly identical to the draft permit dated 01/06/00).
- 3/17/00 EPA issued time extension/general objection to 02/26/00 noticed Consent Order and Agreement (CO&A).
- 4/09/00 Meeting in Harrisburg with PADEP, the facility, the environmental groups, and EPA co-chaired by EPA's Deputy Regional Administrator and the Director of PADEP's Southcentral Regional Office.
- 5/12/00 EPA issues specific objection to 02/26/00 noticed CO&A because it purports to modify the draft permit.
- 9/07/00 PADEP issues final permit after negotiation with Office of Regional Counsel and Office of Compliance and Enforcement regarding language for the CO&A. Again, note that the January 2000 draft permit contained color limits immediately effective upon permit issuance. The delay until the permit was finally issued in September was solely based on language being negotiated on an enforcement document, not the permit.

#### **COMMENTS ON CASE STUDY B**

#### I. Improvements gained as a result of EPA's involvement in this permit

The Case B description also does not consider the extremely complex technical and environmental issues surrounding this permit and the potential for court challenges and appeals which could have delayed issuance. Substantial citizen involvement in the permit was also addressed by an extraordinary level of cooperation and communication between the state, federal agencies, and the industry.

The Case B permit was issued by the Maryland Department of Environment (MDE) February 27, 2001 and effective on March 1, 2001, i.e. no appeals were registered. The permit requires the permittee to construct new treatment facilities to achieve significant discharge reductions, including an 87 percent reduction (17 million pounds annually) in the discharge of metals and other suspended solids. Oil and grease pollution will be reduced by 3.7 million pounds annually, representing an 85 percent reduction.

Additional provisions of the permit include stringent limits on concentrations of copper, lead, zinc, nickel, chromium, and cyanide. In keeping with the Chesapeake Bay Agreement commitment, permit limits are imposed at the ends of the discharge pipes and do not include the use of mixing zones (except for nickel, whose mixing zone will be eliminated). The permit also includes innovative requirements for pollution prevention and nutrient reduction in accordance with Chesapeake Bay goals.

#### II. Factual discrepancies in the IG's report, Case Study B

#### A. page 14- third block:

- 1) fourth sentence reads "The suit was settled in 1993 by allowing *new*, *weaker water quality standards* to be promulgated." The italicized words are incorrect, since the standards that were promulgated were acceptable to EPA and did provide protection for aquatic life and human health. From time to time, EPA revises and publishes a compilation of its national recommended water quality criteria for pollutants, developed pursuant to Section 304(a) of the Clean Water Act. These recommended criteria provide guidance for States and Tribes, in adopting water quality standards under section 303(c) of the Clean Water Act (CWA). These water quality criteria are not regulations, and do not impose legally binding requirements on EPA, States, Tribes or the public.
- 2) last sentence reads, "The settlement also allowed this facility to apply for site-specific variances." The settlement just restated MDE COMAR regulation 26.08.02.03-2C provides that "site specific numerical toxic substances criteria may be developed on a site specific basis, and Federal guidance on site-specific criteria as contained in *EPA's Water Quality Standards Handbook*.

<u>B. page 14-fourth block</u>, second sentence reads, "The Region agreed to omit copper limits if the permit contained a condition requiring additional copper sampling to assure compliance with water quality standards." This sentence is misleading since, our letter also required that a reopener

clause be included that would reopen the permit to include copper limits if the sampling showed water quality exceedances.

<u>C. page 15-fifth block</u>, does not include our specific objection letter of December 15, 2000, which stated: (1) that compliance schedules can not be granted for technology-based effluent limitations, (2) the need to use 5 year production values for permit limits, (3) the need for final water quality based limits for cyanide, copper, lead, nickel and zinc at various outfalls, (4) the need for ammonia and phenol limits based on effluent guidelines, and (5) the need for new source performance standards for the cold rolling mill.

#### COMMENTS ON CASE STUDY C

EPA agrees for this case study that the permit as written and as followed by PADEP was not adequate to protect water quality standards. PADEP should have acted upon information provided by the company as a condition of the 1995 permit to put a final nitrate limit in place to protect the downstream water supply. PADEP should also have acted to insure that the final limit for nitrate was in place and monitoring was being performed to insure that the downstream water supply would be protected based on the Company's notice that production had increased significantly since the time the last permit issued.

The Facility C permit was one of the first written after an agreement had been reached about 5 ½ years ago on incorporation of new toxics limits in permits. The State had adopted water quality standards for toxics in 1990, as many others did to comply with the requirements of the CWA Amendments of 1986. Because the resulting new limits were stringent and there were some questions regarding the toxicity of metals and how they should be handled, many permits issued by PADEP were being appealed, causing the new permits to be stayed. In an effort to eliminate the mounting backlog, EPA agreed that PADEP could under certain scenarios, allow a one-time schedule in the permit for the permittee to complete special studies before the limits became effective. Under this agreement, referred to as "Part A-Part C", a new water quality-based effluent limit would be placed in Part A of the permit where insufficient data existed to established a final limit. The permittee was then given the option to elect to conduct site-specific studies or collect stream or effluent data and to submit the results of the study to PADEP as Phase I of a Toxicity Reduction Evaluation. Once the studies were done and submitted to PADEP, it became PADEP's responsibility under this scenario to take the next step to insure that final water quality-based effluent limits were put in place where needed. Facility C took advantage of this process and performed the necessary studies, essentially putting a hold on a final limit for nitrate until PADEP acted on the study results. In this case, PADEP did not act on the study results and the final limit did not go into effect. EPA has not had a practice of following up on these studies and did not know that the final limit was not effective until the case came to EPA's attention because of local concerns about public water supply quality.

While we understand that there are other cases where this process has been followed by PADEP and worked well, we agree that it is inappropriate and have asked PADEP to suspend use of the "Part A- Part C" language or face objection by EPA. We understand that at least one Region of PADEP has not been giving PWQBELS for about five years, keeping in line with EPA's impression that this was to be a one-time application.

On Facility C, EPA has objected to the latest version of the draft permit, noted that the "Part A-Part C" language proposed for new toxic pollutants is unacceptable. Final water quality based limits must be effective for all parameters within the life of the permit.

#### APPENDIX C

#### **EPA Region III's Letters to the State Secretaries**

#### **Regarding NPDES Oversight**

The following letter was sent to each State within Region 3. The list of recipients is:

Honorable Michael C. Castle Director West Virginia Division of Environmental Protection 10 McJunkin Road Nitro, WV 25143	Honorable Nicholas DiPasquale Secretary Delaware Department of Natural Resources and Environmental Control 89 Kings Highway Dover, DE 19901		
Honorable James M. Seif Secretary Pennsylvania Department of Environmental Protection P. 0. Box 2065 Harrisburg, PA 17105-2065	Honorable Dennis Treacy Director Virginia Department of Environmental Quality 629 East Main Street Richmond, VA 23219		
Honorable Jane T. Nishida Secretary Maryland Department of the Environment 2500 Broening Highway Baltimore, MD 21224			



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street

Philadelphia, Pennsylvania 19103-2029

Exhibit B Page 25 of 29

January 19, 2001

Honorable Michael C. Castle, Director West Virginia Division of Environmental Protection 10 McJunkin Road Nitro, WV 25143

Dear Director Castle:

On January 9, 2001, 1 wrote to you concerning my intention to implement changes in the United States Environmental Protection Agency's (EPA) oversight of the National Pollutant Discharge Elimination System (NPDES) Program in order to respond to new challenges and also to better target the efforts of EPA and the states so that mutual benefits can be realized. In a conference call with your representatives on January 16, we discussed the concept further and initiated a process to further refine the tools to be used. I continue to believe that EPA plays an important role in insuring that a level playing field exists across state and regional boundaries and also to insure that NPDES permits are of high quality and reflect modem program requirements. At the same time, the states have considerable expertise and we need to fully recognize their leadership and experience so that efforts are not unnecessarily duplicated. During the call, it was agreed that EPA would continue discussing this proposal with the states, involving technical staff and also engaging state management.

EPA has an ongoing role in reviewing draft NPDES permits submitted by the states consistent with the Memoranda of Understanding/Agreement (MOU/MOA) established as part of program delegation. One of the major goals of EPA's review of NPDES permits is to insure that minimum Federal requirements are met. NPDES permits may also be subject to further discussion where interpretation of policy or guidance may differ and where the nature of the program may be new or evolving (such as with stormwater or concentrated animal feeding operations). As discussed in the conference call on January 16, EPA has identified "critical elements" which must be addressed by each NPDES permit in order to satisfy regulatory requirements.

To facilitate the review of draft permits for compliance with these regulatory requirements, EPA has developed a series of checklists. The checklists are designed to organize and highlight information in a way that EPA and the states can more easily identify where additional discussion is likely and also where the level of EPA's review could be reduced. The content of the checklists was discussed further at a meeting among our technical staffs on January 18 and some revisions were made. Enclosures include the following:

- ! Critical Elements of the NPDES Permits Program (revised to include regulatory citations)
- ! Municipal NPDES Permit Review Checklist

Customer Service Hotline: 1-800-438-2474

- ! Non-Municipal NPDES Permit Review Checklist
- ! Suggested Timeline for Regional and State NPDES Permit Review Process
- ! State Transmittal Checklist to Assist in EPA's Targeting of NPDES Permits for Review.

EPA intends these checklists to be used as an objective guide during the review of state-submitted NPDES permits. While we do not intend to require that the states use the checklists, we encourage their use as a tool that can expedite EPA's review process and ensure early consultation about those permits where additional discussion is needed. For states that opt to use these checklists as a self-certification tool, EPA will limit or eliminate its pen-nit-specific oversight role because regulatory requirements will be clearly identified as being met. We share the states' concerns that these tools do not independently establish policy or replace regulatory requirements.

Thank you for helping us to expedite this first step in modernizing Region III's oversight to better recognize the primacy of mature state programs. EPA is eager to continue discussing this concept at a policy level. Larry Tropea, of the Pennsylvania Department of Environmental Protection, has agreed to lead these management discussions and anticipates continuing them with you in February.

EPA and the states have a real opportunity, working together, to improve NPDES permit quality and consistency, and simplify our relationships on permits at the same time. The NPDES program has been, and should continue to be, one of the most significant protectors of clean water. Should you wish to discuss this matter further, please contact Rebecca Hanmer, Director of the Water Protection Division, at (215) 814-2300. 1 wish you well in your important endeavors.

Sincerely,

Bradley W. Campbell Regional Administrator

#### **Enclosures**

cc: Carl A. Jannetti, Office of the Inspector General Allyn Turner, Chief, Office of Water Resources Jerry Ray, Assistant Chief, Permits Section

#### APPENDIX D EPA Region III's NPDES Permit Objections 1999 - 2000

Permit Number	Facility	Draft Receipt	General Objection	Specific Objection	Issues
PA0217611	City of Pittsburgh	12/11/98	01/11/99	3/11/99	Compliance with Combined Sewer Overflow (CSO) requirements and coordination with ALCOSAN
PAG 12	CAFO General Permit	04/05/99	N/A	07/06/99	Eligibility, Discharge Definition, Best Management Practices (BMPs), Monitoring, Phosphorus, Land Application
PA0027014	Altoona Easterly	07/01/99	07/30/99	09/23/99	Compliance with CSO Nine Minimum Control Requirements (NMCs)
PA0027006	Tamaqua Borough	08/23/99	09/20/99	11/19/99	Compliance with CSO NMCs
PA0021571	Morrisville Borough	10/25/99	11/24/99	01/24/00	Compliance with CSO NMCs
PA0020346	Punxsutawney Borough	11/08/99	11/29/99	02/08/00	Compliance with CSO NMCs, reclassification of new CSO outfalls
PA0008869	PH Glatfelter	02/17/00	03/17/00	05/12/00	Consent Order & Agreement (CO&A) modification of permit for color compliance
PA0026921	Greater Hazelton	06/02/00	06/27/00	08/31/00	Compliance with CSO NMCs
PA0023248	Berwick M.A.	08/16/00	9/14/00	11/14/00	Compliance with CSO Policy Requirements for a Long-term Control Plan (LTCP)

Permit Number	Facility	Draft Receipt	General Objection	Specific Objection	Issues
PA0006343	AK Steel	09/25/00	10/17/00	11/21/00	Various issues include drinking water impact of nitrates and final compliance schedule
PA0070041	Mahanoy City	11/21/00		12/21/00	Compliance with CSO Policy Requirements for a Long-term Control Plan (LTCP)
PA0023043	North East Borough	01/05/01	02/05/01	04/06/01	Whole Effluent Toxicity (WET) testing and Compliance with Great Lakes Initiative (GLI) Certification
PA0025917	Chalfont-New Britain	01/17/01	02/15/01	Expected 04/17/01	Secondary treatment bypassing and blending
DE0051071	New Castle County MS4	05/18/99	06/14/99	08/13/99	Incomplete compliance schedule, inadequate detail on SW controls
DE0000736	Vlasic Foods Inc., Millsboro Plant	03/02/00	03/27/00	05/25/00	Compliance with Inland Bays TMDL.
DE0000086	Mountaire (Townsends)	10/04/00	11/02/00	12/22/00	Compliance with Inland Bays TMDL issue.
MD0001201	Bethlehem Steel Corporation - Sparrows Point Division	10/17/00	11/15/00	12/15/00	Application of and compliance with technology Effluent Guidelines, production rates, reasonable potential to exceed water quality instream criteria, Best Available Technology (BAT) needed for phenols and ammonia.

Exhibit B Page 29 of 29

Permit Number	Facility	Draft Receipt	General Objection	Specific Objection	Issues
MD0068209	Allen Family Foods, Inc./Hurlock	02/21/01	03/22/01	due 05/22/01	New discharger to water quality impaired waterbody (303d listed with TMDL).
WV0023213	Parkersburg Utility Board			03/10/99	Draft allowed discharges from Sanitary Sewer Overflows (SSOs)
WV0050610	Malden Public Service District			03/25/99	Draft allowed discharges from SSOs
WV0077020	Solutia, Inc.			04/03/00	Compliance with dioxin TMDL
WV0023108	Weirton			11/29/00	Secondary treatment variance on 85 % removal
VA0066630	Hopewell Regional STP	12/14/99		01/12/00	Draft allowed discharges from SSOs

#### **EXHIBIT C**

#### **Distribution**

#### **Office of Inspector General**

Inspector General (2410)
Assistant Inspector General for Audits (2421)
Assistant Inspector General for Planning, Analysis and Results (2450)
Assistant Inspector General for Program Evaluation (2460)
Congressional/Media Relations Liaison (2410)
Divisional Offices of Inspector General

#### **EPA Region III**

Regional Administrator (3RA00)
Director, Water Protection Division (3WP00)
Associate Director, Office of Watersheds (3WP10)
Associate Director, Office of Compliance and Enforcement (3WP30)
Audit Follow-up Coordinator (3PM70)
Region III Library (3PM50)

#### **EPA Headquarters**

Comptroller (2731A)
Agency Audit Follow-up Coordinator (2724A)
Agency Follow-up Official (2710A)
Agency Audit Liaison (2201A)
Associate Administrator for Congressional and Intergovernmental Relations (1301A)
Director, Office of Regional Operations (1108A)
Director, Office of Water
Associate Administrator for Communications, Education, and Media Relations (1101A)