Catalyst for Improving the Environment

#### **Evaluation Report**

# Substantial Changes Needed in Implementation and Oversight of Title V Permits If Program Goals Are To Be Fully Realized

Report No. 2005-P-00010

March 9, 2005



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#### **Abbreviations**

ACC Annual Compliance Certification

ANPR Advanced Notice of Proposed Rulemaking

CAA Clean Air Act

CAM Compliance Assurance Monitoring

CFR Code of Federal Regulations

CO Carbon Monoxide

EPA U. S. Environmental Protection Agency

FR Federal Register
FY Fiscal Year

GOP General Operating Permit
IBR Incorporation by Reference
IEU Insignificant Emissions Unit

MACT Maximum Achievable Control Technology

MOA Memorandum of Agreement

NAAQS National Ambient Air Quality Standards

NOD Notice of Deficiency NO<sub>x</sub> Nitrogen Oxide NSR New Source Review

OAQPS Office of Air Quality Planning and Standards

OAR Office of Air and Radiation

OECA Office of Enforcement and Compliance Assurance

OIG Office of Inspector General

PM Particulate Matter SB Statement of Basis

SIC Standard Industrial Classification

SIP State Implementation Plan

SO<sub>2</sub> Sulfur Dioxide

VOC Volatile Organic Compound

#### **Cover Photo:**

Cover and page 3 photo of EPA's Brochure on the Air Pollution Operating Permit Program Update, Key Features and Benefits, EPA/451/K-98/002, Feb. 1998 (photo by S.C. Delaney/EPA). According to EPA's photo caption, "The operating permit program covers most significant sources of air pollution in the United States. The more complex sources, such as large petroleum refineries and chemical production plants, can have hundreds or even thousands of emission points."

Source: http://www.epa.gov/air/oaqps/permitupdate/



# U.S. Environmental Protection Agency Office of Inspector General

# At a Glance

Catalyst for Improving the Environment

#### Why We Did This Review

We sought to determine whether (1) selected Title V permits contained adequate provisions consistent with key Clean Air Act (CAA) requirements, (2) EPA's oversight and guidance contributed to improvements in Title V implementation, and (3) Title V had achieved its goals of improving the implementation and enforcement of the CAA.

#### **Background**

In 1990 Congress enacted Federal clean air permitting requirements designed to reduce violations and improve enforcement of air pollution laws for the largest sources of air pollution. Known as Title V, this provision requires that all major stationary sources of air pollutants obtain a permit to operate. More than 17,000 sources are subject to Title V permit requirements.

For further information, contact our Office of Congressional and Public Liaison at (202) 566-2391.

To view the full report, click on the following link: www.epa.gov/oig/reports/2005/20050309-2005-P-00010.pdf

Substantial Changes Needed in Implementation and Oversight of Title V Permits If Program Goals Are To Be Fully Realized

#### What We Found

Our analysis identified concerns with five key aspects of Title V permits, including (1) permit clarity, (2) statements of basis, (3) monitoring provisions, (4) annual compliance certifications, and (5) practical enforceability. Collectively, these problems can hamper the ability of EPA, State and local regulators, and the public to understand what requirements sources are subject to, how they will be measured, and ultimately to hold sources accountable for meeting applicable air quality requirements. Factors such as extensive use of incorporation by reference, failure to fully cite applicable regulations, complex permit format, and lack of detail in source requirements for testing, monitoring, and reporting had a negative impact on permit clarity. Also, the practical enforceability of some permits was limited by vague permit language and insufficient monitoring provisions. Further EPA guidance is needed in each of these Title V permitting program elements.

EPA's oversight and guidance of Title V activities have resulted in some improvements in Title V programs; however, areas of further improvement remain. Many Title V programs have improved as a result of EPA's issuing formal notices of deficiency, and through EPA's efforts to obtain commitment letters from selected State and local permitting authorities. However, some EPA regions have been slow in issuing program evaluation reports for permitting authorities within their respective regions, and have not responded to public petitions against Title V permits in a timely manner. For example, of the 31 State and local agency Title V evaluations completed, EPA regions have only reported on 14 agencies. Several stakeholders expressed a need for increased EPA guidance and oversight.

Despite implementation problems, the Title V program has resulted in some significant benefits. The inclusion of all relevant CAA requirements in one document has enabled stakeholders to obtain the information needed to understand the applicable requirements for major emitting sources, and to express their concerns. Anecdotal evidence suggests that permitting authorities and industry sources have improved communications, that emissions inventories are better, that compliance has been achieved more quickly, and that emissions have been reduced due to the annual requirement for owners or operators to certify compliance with all applicable CAA requirements.

#### What We Recommend

We made several recommendations for EPA to, among other things, reduce the factors that negatively impact permit clarity, improve national Title V guidance, actively identify monitoring deficiencies in state implementation plans, and develop a comprehensive Title V oversight strategy. The Agency agreed with several of our recommendations regarding issuing draft rules and improving EPA oversight, but disagreed with several others related to issuing Title V guidance.



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF INSPECTOR GENERAL

March 9, 2005

#### **MEMORANDUM**

SUBJECT: Final Evaluation Report:

Substantial Changes Needed in Implementation and Oversight of Title V

Permits If Program Goals Are To Be Fully Realized

Report No. 2005-P-00010

FROM: Kwai-Cheung Chan /s/

Assistant Inspector General for Program Evaluation

TO: Jeffrey R. Holmstead

Assistant Administrator for Air and Radiation

Attached is our final report regarding implementation and oversight of the Clean Air Act's Title V Operating Permits Program. This report contains findings regarding EPA's need to issue national guidance related to Title V permitting activities and to improve oversight of State and local permitting programs. Also, the report contains corrective actions the Office of Inspector General (OIG) recommends. This report represents the opinion of the OIG, and the findings contained in this report do not necessarily represent the final EPA position. Final determination on matters in this report will be made by EPA managers in accordance with established procedures.

EPA's Office of Air and Radiation provided us with a response on February 7, 2005, that consolidated its comments to the draft report with those from the Office of Enforcement and Compliance Assurance and EPA's regional offices. We included EPA's consolidated response in its entirety as Appendix F.

#### **Action Required**

In accordance with EPA Manual 2750, as the action official, you are required to provide this office with a written response within 90 days of the final report date. Since this report deals primarily with the EPA Office of Air and Radiation's Title V Program, the Assistant Administrator for Air and Radiation was designated the primary action official. As such, he should take the lead in coordinating the Agency's response. The response should address all recommendations. For the corrective actions planned but not completed by the response date, please describe the actions that are ongoing and provide a timetable for completion. If you do not concur with a recommendation,

please provide alternative actions addressing the findings reported. We appreciate the efforts of EPA officials and staff, as well as external stakeholders, in working with us to develop this report. For your convenience, this report will be available at <a href="http://www.epa.gov/oig">http://www.epa.gov/oig</a>.

If you or your staff have any questions regarding this report, please contact me at (202) 566-0827, Rick Beusse, Director for Program Evaluation - Air Issues, at (919) 541-5747, or John Bishop, Assignment Manager, at (919) 541-1028.

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## **Table of Contents**

#### At a Glance

## Chapters

| 1 | Introduction 1   |
|---|--|
|   | Purpose  |
|   | Background 1   |
|   | Scope and Methodology  |
|   | Results in Brief   |
| 2 | Improvements Needed in Clarity and Completeness of Title V Permits if Goals Are To Be Realized |
|   | Improvements Needed in Permit Clarity  |
|   | Some Statements of Basis Missing Key Elements  |
|   | Monitoring Provisions in Permits Varied, Adequacy Questioned 18                                |
|   | Improvements Needed in Annual Compliance Certification Content 29                              |
|   | Practical Enforceability Concerns with Some Permits  |
|   | Conclusions  |
|   | Recommendations  |
|   | Agency Comments and OIG Evaluation   |
| 3 | EPA's Oversight and Guidance Have Improved   |
|   | State Title V Programs, But Gaps Remain 39   |
|   | Regional Reviews of Title V Permits Generally Met OAR Goals 39                                 |
|   | EPA Responsiveness to Public Petitions Needs to Improve 42                                     |
|   | Most NOD and Commitment Letter Issues Have Been Resolved 44                                    |
|   | Stakeholders Identified Needs for Title V Guidance   |
|   | Conclusions  |
|   | Recommendations  |
|   | Agency Comments and OIG Evaluation   |

| 4      | Improved Implementation of the Clean Air Act   | 53   |
|--------|--|--|
|        | EPA and Industry Views of Title V Differed   | 54<br>56<br>58<br>60<br>61<br>62<br>63<br>65<br>65 |
| Append | dices  |  |
| Α      | Definition of Major Stationary Source  | 66   |
| В      | Details on Scope and Methodology   | 68   |
| С      | Observations on Statements of Basis and Annual Compliance Certifications In Four States Reviewed | 74   |
| D      | EPA, State, and Local Agency Roles and Responsibilities in Implementing Title V                  | 78   |
| E      | Status of EPA Regional Evaluations and Notices of Deficiencies                                   | 80   |
| F      | Consolidated Agency Response to Draft Report and OIG Evaluation                                  | 81   |
| G      | Texas Response to Draft Report and OIG Evaluation  | 96   |
| Н      | Ohio Response to Draft Report and OIG Evaluation   | 102  |
| I      | Distribution   | 109  |

# Chapter 1 Introduction

#### **Purpose**

The Office of Inspector General (OIG) initiated this evaluation to assess the extent to which Clean Air Act (CAA) Title V operating permits have adequately incorporated key Title V requirements and met the congressionally-mandated goals of the program. Once authorized by the U. S. Environmental Protection Agency (EPA), State and local agencies issue Title V operating permits to major air pollution sources throughout the country, permitting these major sources to operate within applicable CAA requirements. Major sources, the largest emitters of air pollution, are generally sources with annual emissions potentials that meet or exceed levels specified in the CAA. (See Appendix A for a more detailed definition of major source.) A properly implemented Title V program can not only provide assurance of major source compliance, but also reduce air pollution emissions, increase regulatory certainty, and improve air quality.

Within the last several years, potentially significant problems related to the adequacy of CAA Title V operating permits have been identified as a result of lawsuits, public petitions, and other sources. Concerns have been raised regarding the overall clarity and completeness of Title V permits, and that selected permits were lacking relevant air quality protections; deficient in emissions monitoring requirements; had insufficient provisions for public participation, notification, and oversight; and contained inadequate enforcement provisions. At the same time, some industry representatives and others have questioned whether Title V is achieving its goals. As such, the objectives of our evaluation were to determine whether:

- selected Title V permits were clear and contained adequate provisions consistent with key Title V requirements.
- EPA's Title V oversight and guidance provided to State permitting authorities contributed to improving the implementation of Title V.
- the Title V program has achieved its congressionally-mandated goals of improving the implementation and enforcement of the CAA.

#### **Background**

#### Importance of Title V Permits

One of the primary purposes of Title V permits is to reduce violations of air pollution regulations and improve the enforcement of those regulations. Prior to passage of the CAA Amendments of 1990, major sources of air pollution were not

required to have federally enforceable operating permits. The requirements for these sources were often scattered among multiple documents, making it difficult to determine compliance and therefore difficult to provide effective enforcement of CAA regulations. Although some States did implement their own operating permit programs to regulate major sources, others did not. Even for those with permit programs, difficulties sometimes arose with Federal enforcement of State regulations.

The Title V operating permit requirement provides for a federally-enforceable document that contains all air quality requirements for an individual major source. Though Title V does not generally impose new air quality control requirements, it does require permits to contain monitoring, reporting, and record-keeping provisions to ensure source compliance with existing CAA regulations. Because these permits are federally enforceable, Title V permits provide Federal and State entities, as well as the general public, with a means of holding major sources accountable for all applicable air quality requirements.

#### Origin and Intent of the Title V Program

The CAA Amendments of 1990 established the statutory authority for the Title V operating permits program. Congress' main goal in establishing the Title V program was to achieve a broad-based tool to aid in implementing the CAA effectively and enhancing enforcement. Within this overarching goal, Congress intended the Title V program to realize nine more specific goals, as follows:

- 1. improving State air pollution programs through better emissions inventories,
- 2. providing resources through Title V fees,
- 3. providing a vehicle for implementing the air toxics and acid rain programs,
- 4. improving enforcement,
- 5. achieving faster compliance,
- 6. requiring compliance certifications from facility operators,
- 7. listing all the applicable regulatory requirements in one document,
- 8. providing regulatory certainty, and
- 9. improving public participation.

In July 1992, EPA published rules and regulations for implementing State air quality permitting systems, mandated by Title V, in Title 40 of the Code of Federal Regulations (CFR), Part 70 (Part 70). EPA stated, in the preamble to Part 70, that the Title V program would generally clarify which requirements apply to a major source by incorporating them into a single document. They further stated that the program would enable the source, States, EPA, and the public to identify the requirements to which the source was subject, and whether the source was meeting those requirements. (See Appendix D for EPA, State, and local agency roles and responsibilities in implementing Title V.) Although the 1990 CAA Amendments and the 1992 publication of Part 70 set the Title V program into motion, it took several years before State and local permitting authorities began to issue Title V permits.

#### Current Status of the Title V Program

According to the time line established by the CAA Amendments in 1990, all initial Title V permits should have been issued by 1997, and were to be renewed every 5 years. As of June 30, 2004, State and local permitting authorities had issued 91 percent (15,658 of 17,274) of the required Title V permits. While many State and local permitting authorities have initially issued all their Title V permits, other permitting authorities have issued as little as 57 percent of permits applied for. Generally, those major sources that are not yet permitted are the largest, most complex sources, and thus require more permitting authority resources to issue those Title V permits. Further complicating issuing these Title V permits is that many major sources throughout the country are approaching the 5-year renewal time for their existing permits, so that now some permitting authorities must juggle the task of initial issuances with that of permit renewals.

After EPA wrote the Part 70 rules governing implementing Title V, most States received interim program approval for two years which allowed them to begin issuing permits. For a number of States, EPA extended the interim approval periods twice. Because the CAA states that interim approvals can only be for two years and cannot be extended, the Sierra Club and the New York Public Interest Research Group sued EPA on this issue. The lawsuit resulted in a settlement in which EPA agreed to address issues in State rules related to Title V in order to approve or disapprove their plans. EPA agreed to issue a Federal Register (FR) notice requesting letters from citizens containing their comments about Title V.<sup>1</sup>

According to Office of Air Quality Planning and Standards (OAQPS) officials, after the FR notice was issued in December 2000, EPA received 34 letters from citizens that contained 350 Title V-related issues of concern affecting 20 States. In response, EPA divided the issues into regulatory and implementation categories. The regulatory category dealt with those issues regarding Federal and State regulations and rules affecting Title V; the implementation category dealt with issues related to administering and enforcing Title V.

As a result of the public comment period, EPA issued Notices of Deficiency (NODs) to certain permitting authorities to address the regulatory issues, and obtained commitment letters from a number of State and local permitting authorities to address the implementation issues. Ultimately, EPA issued NODs to 8 States, 34 local permitting authorities in California, and the District of Columbia, directing them to correct these regulatory issues. Many permitting authorities addressed multiple implementation issues by providing commitment letters to EPA. All 112 State and local permitting authorities' Title V programs have now received final approval from EPA.

<sup>&</sup>lt;sup>1</sup>See Sierra Club v. Envtl. Protection Agency, 322 F.3d 718 (D.C.Cir. 2003); Public Citizen v. Envtl. Protection Agency, 343 F.3d 449, 454 (5th Cir. 2003).

#### **Scope and Methodology**

To address questions regarding the adequacy of permit clarity and whether permits contained provisions that were consistent with key Title V requirements, we interviewed officials from OAQPS, environmental and industry groups, key air and enforcement officials in all 10 EPA Regions, and State permitting authorities. We conducted extensive Internet literature searches of Title V-related issues. We supplemented these searches by reviewing public petitions detailing citizen complaints against State Title V programs and individual permits, and lawsuits filed against State permitting authorities and EPA. We also analyzed EPA and State guidance on Title V permit writing and reviewing, including guides designed to aid the public in effectively participating in the Title V program. Our approach included a detailed review of selected permits in New York, North Carolina, Ohio, and Texas. We used a data collection instrument to review 40 permits (10 permits in each State), representing a range of industries, including all supporting documentation and compliance reports. Appendix B provides a more detailed discussion of our data collection instrument and the sampling methodology we used.

To assess the effectiveness of EPA oversight and guidance, we examined EPA regional efforts to review individual permits and conduct evaluations of their respective State and local agencies' Title V permit programs, according to their agreements with the Office of Air and Radiation (OAR). We also sought to determine if the issues raised in NODs and commitment letters had been addressed and resolved by the relevant permitting authorities. We accomplished this objective through reviewing selected permits and other documentation, interviewing OAQPS and EPA regional officials, and reviewing the status of EPA Title V guidance and rules with key stakeholders.

To determine whether Title V improved the implementation of the CAA, we interviewed representatives from all 10 EPA regions using a structured interview form. We also interviewed representatives from multiple additional stakeholder groups, including OAQPS, the Office of Enforcement and Compliance Assurance (OECA), permit writers and reviewers from selected State permitting authorities, environmental groups, and industry representatives. Using the data collection instrument discussed above, we also reviewed actual permits from a selected number of States and compared their content and requirements to pre-Title V State permits, where available. Because empirical data on benefits has not been maintained, the information we collected on Title V implementation was largely testimonial; however, we incorporated empirical evidence wherever possible. Appendix B provides more details on the structured interview form and methodology used.

We performed this evaluation in accordance with the *Government Auditing Standards*, issued by the Comptroller General of the United States. We conducted our fieldwork from September 2003 to October 2004.

**Prior Audit/Evaluation Coverage** - See Appendix B for a detailed list of prior OIG and Government Accountability Office (GAO) audits and evaluations related to Title V issues.

#### **Results in Brief**

#### Adequacy and Completeness of Title V Permits Needs Improvement

Substantial improvements are needed in the clarity and adequacy of Title V permits. According to our analysis, the clarity of Title V permits, the sufficiency of monitoring provisions incorporated into permits, and the adequacy of statements of basis (SBs) and annual compliance certifications (ACCs) varied significantly across permitting authorities. Factors such as extensive use of incorporation by reference, failure to fully cite applicable regulations, complex permit format, and lack of detail in source requirements for testing, monitoring, and reporting negatively affected permit clarity. The sufficiency of monitoring provisions in Title V permits was frequently a function of the underlying State and Federal regulations. Our review of 40 State-issued Title V permits found that 90 percent of those permits included some type of gap-filling provision(s) where the underlying regulations contained either no monitoring or insufficient monitoring requirements. This condition indicated a potential lack of sufficient monitoring requirements in State and Federal regulations. The ability of permitting authorities to improve monitoring provisions in Title V permits has been affected by court rulings on periodic monitoring and by EPA's recent umbrella monitoring rule.

The content of permit statements of basis varied substantially between permitting authorities and, in some cases, within permitting authorities. EPA responses to public petitions and EPA regional guidance provided a limited basis for the content of the statements of basis. However, EPA has made no successful attempt to provide consistency for statement of basis content. We noted a similar trend with respect to the criteria regarding ACCs under Title V. The adequacy of ACCs varied among permitting authorities. Our review also revealed evidence of problems related to the practical enforceability of permits. Overly general monitoring and testing requirements potentially affected the practical enforceability of some of the permits we reviewed.

#### EPA Oversight Could Be More Effective

EPA's oversight of Title V activities has resulted in some improvements in State Title V programs; however, more improvements are needed. Until Fiscal Year (FY) 2003, EPA's OAR emphasized, through Memorandums of Agreement, EPA regional office review of permits. The EPA regions largely met or exceeded this review initiative in FY 2002 and 2003 and frequently commented on permits reviewed. However, most EPA regions did not issue formal objections resulting

from these reviews, citing that, instead, they worked with permitting authorities early in the permitting process to avoid issuing objections to permits. In 2003, OAR shifted emphasis from EPA regional permit reviews to program evaluations of State Title V programs. Thirty-one such evaluations were completed in 2003 and 2004; however, only 14 final reports on these evaluations have been issued. In addition, EPA has not responded to public petitions filed against Title V permits in a timely manner. Although the CAA mandates that EPA respond to many of these petitions within 60 days, the average EPA response time to public petitions has been approximately 12 months. EPA region and OAQPS officials attributed the delays to a shortage in resources, and to the time required to coordinate efforts between multiple offices within EPA to formulate responses to the petition. One key official at OECA indicated that responding to public petitions has not been a high priority within EPA.

In 2001 and 2002, EPA issued 10 NODs to permitting authorities to address regulatory problems in their Title V programs. EPA also received 23 commitment letters from State and local permitting agencies during this period to address implementation problems in their Title V programs. States have resolved the majority of issues identified in NODs and commitment letters, with remaining issues unresolved in Ohio, Hawaii, and Texas. The resolution of the majority of NOD and commitment letter issues has resulted in improvements to various aspects of Title V programs and permits, including improved definitions of "prompt reporting of deviations" in regulatory language, improved statements of basis, and clearer citations to the origin of authority for permit terms and conditions. Although NOD issues are tracked and their status is noted in the FR, OAR does not track or monitor the resolution of commitment letter issues.

OAR has issued very limited formal guidance and rules on Title V in the past several years. In lieu of formal guidance, the Agency has relied on public petition responses and letters to regions and permitting authorities to convey its position on key Title V issues. Many of the key stakeholders we interviewed cited a need for greater national consistency in the Title V program and indicated a desire for guidance on periodic monitoring, as well as the minimum required content of statements of basis and ACCs.

#### Benefits of the Title V Program

Overall, Title V has improved implementing the CAA. Most stakeholders told us that Title V has been partially successful in meeting seven congressional Title V goals (better emissions inventories, consolidated regulations, facility operator certainty, public participation, faster implementation of control requirements, fee programs, and periodic compliance reporting). However, industry representatives held a different view of Title V, stating that it has not accomplished its intended goals and has, instead, imposed a substantial cost on facilities. Most key stakeholders also cited a number of additional benefits of Title V, including enhanced implementation of key CAA provisions, significant improvements in listing all requirements in one document, requirement for ACCs, and Federal

enforceability of permits. Our comparison of pre- and post-Title V permits for our sample of 40 permits in 4 States found that pre-Title V permits generally did not record all CAA requirements in one document, contain an ACC requirement, provide for public participation, or grant the public the right to object to permits.

#### Recommendations

We are making a number of recommendations to the Assistant Administrator for Air and Radiation, the Assistant Administrator for Enforcement and Compliance Assurance, and the EPA Regional Administrators to improve Title V implementation and enforcement and better ensure that program goals are realized. Specific recommendations are at the end of each chapter.

EPA's Office of Air and Radiation provided us with a response to our draft report that consolidated its comments with those of EPA regions and the Office of Enforcement and Compliance Assurance. The Agency generally disagreed with our findings, conclusions, and recommendations related to issuing nationwide guidance on the Title V program, but largely agreed with our findings that the Title V program could benefit from improvements in permit content and EPA oversight.

Our evaluation called for EPA to issue nationwide guidance on statement of basis (SB) and annual compliance certification (ACC) content to assure that permitting authorities are consistently incorporating key elements in both documents. EPA, however, stated that guidance for SB content could be found in public petitions responses and should be kept flexible to allow for differences in source complexity. They also stated that they have not seen widespread problems with either SB or ACC content. We maintain our position that national guidance is needed in each of these areas. Our findings indicated that permitting authorities may not have been aware, or may have been reluctant to follow, "guidance" that was not issued nationally (such as EPA statements issued in response to Title V permit petitions).

EPA agreed to follow through on various actions recommended in our report, including issuing the draft rule on intermittent versus continuous compliance monitoring, completing its commitment to develop periodic monitoring guidance, reviewing the adequacy of monitoring provisions in state implementation plans, and promulgating the order of sanctions rule. The Agency also agreed to develop five-year plans combining oversight with permit review and audits to ensure proper implementation of the Title V program, and to work to devise a procedure to reduce response times to public petitions.

We revised the report based on EPA's February 7, 2005, consolidated response and updated information, as appropriate. The Agency's consolidated response and our evaluation of that response are in Appendix F.

### **Chapter 2**

# Improvements Needed In Clarity and Completeness of Title V Permits If Goals Are To Be Realized

Various officials in EPA, and in environmental and industry groups, identified several problems concerning the clarity and content of key elements of Title V permits:

- the clarity of Title V permits,
- the content and adequacy of statements of basis (SBs),
- the adequacy of monitoring provisions,
- the content and adequacy of annual compliance certifications (ACCs), and
- the practical enforceability of permits.

We found similar problems in each of these areas while reviewing a sample of Title V permits in four States. Inadequate monitoring requirements in some State and Federal regulations and a lack of clear EPA guidance on certain key Title V elements contributed to permit problems. Collectively, these problems can hamper the ability of EPA, State and local regulators, and the public to understand what requirements sources are subject to, how they will be measured, and ultimately to hold them accountable for all applicable air quality requirements.

#### Improvements Needed in Permit Clarity

Officials in OAQPS, OECA, 9 of 10 EPA regional air offices, and environmental and industry group representatives told us they had concerns about various elements of permit clarity nationwide.<sup>2</sup> Comments from officials in these groups included the following: permits lack sufficient detail, do not clearly cite applicable requirements, and are difficult for the public to understand. In reviewing State permits, we also found many permit clarity-related problems, including:

<sup>&</sup>lt;sup>2</sup>Interpretation of permit clarity can vary depending on individual perspective. For the purposes of our evaluation and this report, we interpreted permit clarity as referring to the extent to which specific key permit elements, by their adequacy or lack thereof, affect the ability of outside reviewers to determine what requirements apply to a source and what is expected of the source in terms of meeting emissions limitations. Translating complex regulations into source-specific requirements such that the facility personnel, EPA and State regulators, and the public could clearly identify what is expected and how it would be measured, were among the original goals of having Title V permits.

- extensive incorporation by reference (IBR),<sup>3</sup>
- failure to fully cite underlying regulations,
- lack of specificity of source requirements for testing, monitoring, and reporting, and
- complex permit format.

Permit clarity was also affected by a lack of identifying, or explaining, streamlining in the permit's statement of basis (SB). Officials in some of the States we visited asserted that Title V permits are complex engineering documents, and are thus, by their nature, not easy documents to read and understand. We found that problems with these key elements in Title V permits can negatively affect the clarity and adequacy of already complex documents. These problems make it more difficult for EPA, State, and local regulators, industry and environmental groups, and the general public to readily discern which CAA requirements apply to a facility and what the facility must do to demonstrate compliance with emissions limitations.

#### Title V Stakeholders Identified Problems in Permit Clarity

Officials at OAQPS expressed concern about the effect of permit clarity problems on public participation and on permit reviews. According to one key OAQPS official, permits in some States can be "incomprehensible," making them difficult and confusing to review. He also noted that permits are more complex in States such as California, that have complex and extensive State-level environmental regulations. According to another key OAQPS official, in some States the extensive use of IBR is a significant problem. A key OAQPS official also asserted that the public regularly complains about the lack of permit clarity and complex permit format.

During FYs 2002 and 2003, most EPA regions reviewed samples of Title V permits issued by one or more of their respective permitting authorities pursuant to provisions in memorandums of agreement (MOAs) between OAR and EPA regions<sup>4</sup> and provided comments regarding the adequacy of permit content. Given their experience with Title V permits, we asked EPA regional officials what patterns, if any, appeared in their review comments. Officials from six EPA regions said that they had commented on one or more of the following permit clarity problems:

- permits lacked sufficient detail,
- use of streamlining needed to be explained more clearly,

<sup>&</sup>lt;sup>3</sup>Incorporation by reference (IBR): The process in which a permitting authority lists only a reference, or citation to, the underlying requirement that the source is subject to instead of providing both the citation and a narrative description of the requirement. To determine what the source must actually comply with, the reader must refer to the citation in the State or Federal regulations.

<sup>&</sup>lt;sup>4</sup>See page 39 for more information on permit review provisions in MOAs between OAR and EPA regions.

- permits included inappropriate permit shields,
- permits did not clearly cite State Implementation Plan (SIP) requirements, and
- permits were missing applicable requirements.

We also asked EPA regional officials to assess the strengths and weaknesses of various aspects of Title V permits, including permit clarity, for permitting authorities within their respective regions. While EPA regional officials told us that permit clarity is generally adequate among most permitting authorities, they also identified some problem areas. Some EPA regional officials cited permit clarity as a strength in certain permitting authorities, noting that their permits were well-written, formatted in a user-friendly manner, and easy to read. However, as shown in Table 2.1 below, EPA officials in nine regions noted some general permit clarity problems as well as some specific permit clarity problems among permitting authorities. These problems included extensive use of IBR, vague permit language, and complex permit format.

<sup>&</sup>lt;sup>5</sup>Many EPA regional officials indicated that they were hesitant to describe permit elements as weaknesses, focusing instead on areas that need improvement.

Table 2.1: Examples of Permit Clarity Problems Identified by EPA Regional Officials

| EPA<br>Region               | Permitting authority   | EPA regional officials' comments to OIG   |  |
|-----------------------------|--|---|--|
| 1                           | NA   | None  |  |
| 2                           | General  | - Permit clarity could be improved; however, it is difficult to develop<br>"user-friendly" documents because of the amount of information<br>required by Title V. |  |
| 3                           | General - States fail to provide adequate justifications for str |   |  |
|                             | District of<br>Columbia  | - Use of unknown, unexplained acronyms.   |  |
| 4                           | Louisville-<br>Jefferson Co.,<br>Kentucky                        | - Use of IBR makes permits confusing.   |  |
| 5                           | Illinois   | - Some general permit language makes it unclear whether requirements apply to a source; permit structure complicates review.                                      |  |
|                             | Indiana  | <ul> <li>Does not always clearly label combined Title V/construction permits.</li> </ul>  |  |
|                             | Ohio   | Origin and authority of terms left out - will be addressed upon permit renewal; some vague permit language.   |  |
| 6                           | Texas  | - Extensive use of IBR can make permits difficult to follow; frequently requires going back to the application for information.                                   |  |
| 7                           | lowa<br>Missouri   | - Sometimes fail to clearly cite SIP requirements.  |  |
| 8 North Dakota - Permits ne |  | - Permits need more detail in applicable requirements.  |  |
|                             | Utah   | - Permit language can be vague.   |  |
| 9                           | Arizona<br>California  | In some permitting authorities in Arizona and California, permit format can be complex and difficult to follow.   |  |
| 10                          | Washington:<br>Industrial<br>Section                             | - Permit format causes clarity issues.  |  |

Source: Comments provided by EPA regional air officials in their written and oral responses to OIG's structured interview questions.

Nine out of the 10 environmental groups we interviewed cited problems with the clarity of Title V permits. These problems included permits that are incomplete or lack sufficient detail, extensive use of IBR, confusing permit format, and issuing multiple Title V permits to a single source. Two environmental group representatives told us they found permits in some States to be incomprehensible. One representative told us that the permit format in one State was so complex that the permit information essentially had to be reorganized and re-written in order for the group to review the permit. Several of the environmental groups we contacted contend that the ability of the public to exercise their right to enforce a permit may be jeopardized if the permit is written in a way that cannot be understood by the public.

<sup>&</sup>lt;sup>6</sup>Including the format of general operating permits; these permits have a condensed application and permitting process. Sources with similar operations, emissions units, and requirements can apply for general operating permits in lieu of an individual permit. See page 13 for further discussion of general operating permits.

The industry representatives we interviewed also identified problems with the clarity of Title V permits. They stated that the Title V program is too complex and that permits are written in such excess detail that it is impossible to read them unless the reader has a very detailed knowledge of the individual source's operations. One industry representative also cited problems with clarity that arise from overlapping Federal and State rules and regulations. Representatives noted that streamlining can minimize the overlap and make permits less complex. However, they also stated that the process to streamline can be time-consuming and burdensome for the source. They also expressed the belief that too much detail exists on certain provisions, such as requirements for insignificant emissions units (IEUs), which adds to permit complexity.

#### Results of State Permit Review

We reviewed a sample of permits in four States to address the following clarity issues: using IBR, whether the permits correctly reflected underlying regulations, using permit shields and streamlining, and overall clarity. We found that these elements were incorporated into Title V permits to varying degrees, and that overall, permit clarity varied widely in most of the States we visited.

#### Using Incorporation By Reference

Almost all of the permits we reviewed incorporated applicable CAA requirements by reference to some degree. North Carolina, Ohio, and New York generally followed references or citations to a requirement with a narrative section paraphrasing the requirement. We found a few instances in each of these States where the reference to a requirement (usually in 40 CFR) was too general to determine which part specifically applied to the section. However, for the most part, the use of IBR in the North Carolina, Ohio, and New York permits we reviewed was reasonably discernable, provided the reader had access to the State regulations and/or 40 CFR. In Texas, citations for all requirements specific to emissions units at the source were listed in an applicable requirements summary table with minimal or no narrative description<sup>8</sup>. For the 10 Texas permits we reviewed, in order to determine what monitoring, testing, record keeping, and reporting the requirement entailed, the reader had to review each citation in the State regulations or 40 CFR. We found this to be a time-consuming process because of the State's reliance on IBR for all emissions unit-specific requirements. A reader or a reviewer is especially challenged when the citation

<sup>&</sup>lt;sup>7</sup>In most cases, we did not review requirements concerning each individual emissions unit in the Title V permits. Rather, we selected three to four emissions units at a source and reviewed the applicable requirements and corresponding monitoring provisions listed in the permit. In selecting units to review, we focused on capturing the major emissions units at a source, as well as a variety of units.

<sup>&</sup>lt;sup>8</sup>The Texas permits we reviewed included a description of the emissions limitation for each emissions unit; however, they did not do the same for monitoring, testing, record keeping, or reporting. These columns included only a citation to a State or Federal regulation.

is general and does not clearly reference a specific paragraph or subsection. In those cases, a reader may have to review lengthy State or Federal regulations to find the applicable paragraph.

Texas also extensively uses IBR in general operating permits. General operating permits are intended to provide a condensed application and permitting process for sites that are similar in terms of operations, emissions units, and applicable requirements. Instead of receiving an individual permit specifically identifying each emissions unit and its requirements, eligible sources fill out an application and then receive a letter granting them operating status under the general operating permit. General operating permits are not unique to Texas. However, they were used more frequently there than in the other States we visited. According to Texas officials, approximately 40 percent of Texas Title V permits were issued through general operating permits as of May 2004. The general operating permit we reviewed, which Texas officials stated was representative of the State's other general operating permits, did not specifically identify the actual emissions units at a given source.

To determine what requirements a general operating permit source is subject to, the reader must request access to the permit application to identify the source specific emissions units in the application, then locate the emissions units and operations listed in the general operating permit applicable requirements summary table, and locate the corresponding State or Federal regulation citation. For example, Texas general operating permits for oil and gas sources consist of 76 to 108 pages of applicable requirements tables – all with extensive IBR. Finally, the text of the State or Federal regulation must be located and the details of the requirement identified.

In 2002, several environmental groups filed a lawsuit challenging, among other things, Texas' use of IBR in incorporating minor New Source Review (NSR) permits into Title V permits. On August 15, 2003, the 5<sup>th</sup> Circuit Court of Appeals ruled against the petitioners on this issue and found that nothing in the CAA prohibits the incorporation of applicable requirements by reference. Using IBR in permits thus does not violate any Title V requirement. However, extensive use of IBR without narrative description, and particularly without a citation to a specific subsection, can negatively affect the clarity of the permit, especially for members of the public. Table 2.2 below shows the use of IBR in the four States reviewed.

<sup>&</sup>lt;sup>9</sup>Public Citizen, 343 F.3d at 454. The IBR decision was part of a more extensive ruling on a case brought by Public Citizen against EPA for approving the Title V program in Texas and for failing to issue notices of deficiency on several issues. EPA conceded to the court that it had previously provided guidance stating that requirements should first be restated on the face of the permit before IBR is used, however, EPA contended that such guidance was not binding and the Court agreed.

Table 2.2: Use of IBR in State Permits Reviewed

| able 2.2. Use of IDIX III State Fermits Neviewed |                                  |                                    |   |
|--|----------------------------------|------------------------------------|---|
| State  | Number of<br>permits<br>with IBR | Number<br>reasonably<br>discemable | OIG comments related to IBR   |
| New<br>York                                      | 10                               | 10                                 | Generally paraphrase requirements; however, in a<br>few cases it was necessary to reference 40 CFR.   |
| North<br>Carolina                                | 9                                | 7                                  | <ol> <li>Generally IBR was followed by paraphrasing;<br/>however, not always for 40 CFR citations.</li> <li>In two cases, cites to 40 CFR were not specific<br/>enough to determine which section was<br/>applicable.</li> </ol>  |
| Ohio   | 10                               | 9                                  | <ul> <li>4. Generally paraphrase requirements; however, in most permits it was necessary to reference 40 CFR or State regulations for at least one requirement.</li> <li>5. One instance where a citation was not specific enough to determine applicable section.</li> </ul>   |
| Texas  | 10                               | 6                                  | <ol> <li>Texas permits relied extensively on IBR.     Requirements can be reasonably discernable if readers can access State regulations and 40     CFR; however, citations were often not specific enough to identify the applicable section of the regulation.</li> <li>Difficult to discern which general operating permit requirements apply to a source without a list of emissions units at a specific site.</li> <li>In general, extensive IBR complicates permit reviews because the applicable requirements are not clearly stated on the face of the permit.</li> </ol> |
| Total  | 39 (98%)                         | 32 of 39<br>(82%)                  |   |

Source: OIG analysis of State Title V permit information. Note: See Appendix B for details of our permit review work in the above four States.

#### How Well Permits Reflected the Underlying Regulations

In North Carolina and New York, the permit text for the requirements we reviewed matched that of the underlying State or Federal regulation. In Texas, the permits had very little narrative, so only a limited amount of text was available to compare with the regulations. For those we were able to crosscheck, we did not discover such discrepancies.

We were not able to answer this question for several Ohio permits, though, because the permits did not include a citation to the underlying regulation—they provided a narrative description only. If the underlying regulation is not identified, it is difficult to determine whether the State is correctly incorporating the requirement. In a letter to EPA Region 5 officials in January 2002, Ohio committed to address this issue upon permit renewal and to incorporate the origin of authority for each permit term and condition. In all States, permit citations that were general, rather than specific, made it difficult to verify whether or not the content of the permit matched the underlying regulation.

#### Using Permit Shields and Streamlining

Of the 40 permits we reviewed, 7 included specific permit shield provisions beyond the language in the general terms and conditions<sup>10</sup>--2 in North Carolina and 5 in Texas. Based on our review of how well the SBs explained the shields, the two shields in North Carolina, and four of those in Texas, did not appear to be misapplied. One permit in Texas listed the rationale for the permit shield through a general IBR. The citation referred to in the Texas State regulations did not provide enough information to determine whether the shield was appropriately applied.<sup>11</sup>

Streamlining in Title V permits occurs when an emissions unit is subject to overlapping regulations and the permitting authority condenses the multiple requirements into one requirement in the permit, which should be the most stringent. We asked the States we visited general questions about streamlining and looked for evidence of streamlining in the permits. However, unless the permit or its SB explicitly discussed streamlining, it would have been difficult for us or the public to determine whether streamlining provisions applied. Ohio was the only State we reviewed that identified streamlining in its SBs. <sup>12</sup> The State did not, however provide a side-by-side comparison of requirements to justify which requirement was selected as the most stringent. Without clearly identifying streamlining and discussing the requirements, it is difficult for the public and other outside permit reviewers to determine whether the streamlining process is being used correctly.

#### Overall Permit Clarity

Generally, we noted inconsistencies in the clarity of the permits we reviewed in New York, Ohio, and Texas. To determine whether the permit provisions were clear, we reviewed the permit requirements for specific emissions units and attempted to identify what was expected of the source in terms of meeting emissions limitations. Besides taking into account the clarity elements discussed above, and the extent to which outside research was required to identify these requirements, if any, we also considered how these elements affected the monitoring, testing, and reporting requirements in permits. Most provisions and requirements in the permits from these States were clearly incorporated; however, some were not. Among the permits we reviewed, the specific factors that we determined affected overall clarity included:

<sup>&</sup>lt;sup>10</sup>Permits typically contain permit shield language in the general terms and conditions. Some also incorporate provisions shielding certain emissions units from specific requirements.

<sup>&</sup>lt;sup>11</sup>In its response to our draft report, Texas explained that since the permit in question was issued, the specific regulation cited had changed. The permit shield citation was not updated when the regulation changed, therefore the permit text was no longer consistent with the specific regulatory citation.

<sup>&</sup>lt;sup>12</sup>Ohio began identifying whether streamlining existed in permits in their SBs in 2002.

- Extensive use of IBR made permit provisions more difficult and time consuming to review (Texas), which could deter members of the public facing a limited comment period from reviewing permits.
- In New York, requirements for a specific emissions unit may be scattered throughout a permit, some of which are more than 100 pages in length. making it difficult to get a complete picture of a unit's requirements, <sup>13</sup>
- Using vague permit requirements, such as emissions testing is "upon request," or "if required," made it unclear what conditions would trigger a source to be tested unless additional information was provided (New York and Ohio).
- In States that frequently incorporated AP-42 emissions factors to determine compliance, or relied on surrogate monitoring, it was not always clear how these alternate methods would satisfy the underlying requirements (Ohio and North Carolina).<sup>14</sup>

As indicated above, problems involving a number of different permit elements impacted the clarity of permits, potentially affecting the ability of the public to clearly understand what is expected of a source. OAQPS addressed several clarity issues, including when it is appropriate to reference requirements in a permit and the proper use of streamlining, in guidance documents issued in 1995 and 1996 (White Papers Number 1 and 2). A series of "Title V Permit Writers' Tips" developed by EPA Region 3 also addressed clarity elements, such as streamlining and permit shields. As discussed on page 13, the 5<sup>th</sup> Circuit Court of Appeals found that nothing in the CAA prohibits incorporation of applicable requirements by reference. EPA regions have sometimes addressed other clarity issues through permit reviews and responses to public petitions. For example, in response to a public petition, Region 5 officials stated that they would work with Ohio to clarify vague permit language.

#### Some Statements of Basis (SBs) Missing Key Elements

Generally, EPA officials believe SBs in many States have problems. Officials in 8 of 10 EPA regions told us that inadequate or missing SBs were a problem in some of their State or local permitting authorities. Environmental groups also told us that SB inadequacy problems and missing SBs were an issue in a number of public petitions. Although our review of SBs in the States we visited indicated that SBs have improved, we identified incomplete SBs in all of the States we reviewed. Ohio questioned the need for detailed SBs since they asserted that much of the same information was found in their permits. Although EPA's Region 5 issued SB guidance to Ohio, OAQPS has not issued nationwide

<sup>&</sup>lt;sup>13</sup>New York's permits are generated automatically by a computer program created to process Title V permits. According to New York officials, changes to the computer generated permit system are difficult and would require a significant outlay of funds to the contractor. The State spent an estimated \$8-10 million to develop the system in 1992.

<sup>&</sup>lt;sup>14</sup>See page 18 for further discussion of monitoring requirements.

guidance on SB content. Officials in six EPA regions identified the lack of EPA guidance as a problem for SBs. We believe complete SBs not only provide a legal and factual basis for permits, but also improve permit clarity and allow for better public participation.

The regulatory basis for SBs is found in 40 CFR 70.7 (a)(5), which states that the permitting authority must prepare a statement for each draft permit to provide the legal and factual basis of the permit. The OAR has not issued any guidance on what should be included in an adequate SB. EPA's position is that permitting authorities could obtain information on the contents of acceptable SBs by reviewing prior court case decisions and EPA's responses to public petitions. (See Chapter 3 for a more complete discussion of this issue.) However, not all concerned officials in EPA Regions may be aware of applicable court decisions or public petitions. A memorandum from the Chief of EPA Region 5's Air Programs Branch to the Chief of Ohio's Division of Air Pollution Control, dated December 20, 2001, and an EPA Region 9 petition response in FY 2004, were the most complete and recent EPA documents we located that provided specific guidance on what information should be included in an adequate SB. The EPA Region 5 memorandum referred to above stated that the following information should be in the SB:

- discussion of the monitoring and operational requirements,
- discussion of the regulatory applicability determinations,
- explanations of any conditions from previously issued permits that are not being transferred to the Title V permit,
- · discussion of streamlining requirements, and
- other factual information including a listing of prior Title V permits issued to the same applicant at the plant, attainment status, construction, and permitting history of the plant and compliance history of the plant.

EPA Region 9 provided additional guidance on the contents of SBs in a recent response to a public petition. According to a key OAQPS official, issued EPA regional guidance and EPA responses to public petitions drafted by EPA regional offices, and issued by the Administrator, should be considered guidance for SB content. However, we believe a regulation explaining the content requirements of an adequate SB should be issued because not all EPA regions may be aware of guidance issued through petition responses or other EPA regional guidance. For example, during the course of our review, we noted one instance in which one EPA region was unaware that EPA's Region 9 had provided additional guidance on SB content.

EPA regional officials and environmental groups identified problems with SBs. EPA regional officials we interviewed identified 20 permitting authorities that

<sup>&</sup>lt;sup>15</sup>Additional EPA petition responses and court decisions have addressed the requirement that SBs be included with permits.

either did not prepare SBs or had inadequate SBs. For example, officials in Region 1 identified three States that did not prepare SBs because these States believed that their permits contained information on the legal and factual basis of permits sufficient to meet Title V's requirements. Officials in two EPA regional offices cited the lack of rationales for monitoring decisions in SBs as a recurring problem. Officials from three environmental groups we contacted believed that inadequate SBs were a problem. From these officials' perspectives, the main SB problem was the excessive disparity in SB content from State to State.

Our review of SBs (or equivalent documents) in the four States we visited indicated that each SB was missing at least one or more of the suggested key elements identified above in the EPA Region 5 memorandum. The key information in the SBs we reviewed was not consistently presented in each permit in each of the four States. SBs or equivalent documents prepared by these permitting authorities have evolved over time and the more recent SBs generally included more of the key elements suggested in regional guidance. However, none of the SBs contained all of the key elements suggested in the Region 5 memorandum mentioned above. For example, 2 of the 10 permits we reviewed in New York did not have a corresponding SB because New York did not prepare SBs for their early Title V permits. Texas originally prepared "Technical Summaries", but later began using SBs that were more complete. These improvements in SBs resulted from EPA NODs and commitment letters. (See Chapter 3 for a more detailed discussion of NODs and commitment letters.) However, further improvements in consistency could be made if nationwide guidance existed on the key elements necessary in SBs. Our observations on SBs, or equivalent documents, for the States we reviewed are discussed in Appendix C.

#### Monitoring Provisions In Permits Varied, Adequacy Questioned

Problems exist in the adequacy of monitoring provisions in Title V permits in many States. Officials at OAQPS, all 10 EPA regions, and a number of environmental groups identified problems with monitoring provisions in permits. Similar problems were identified in our review of a sample of Title V permits in four States. Title V regulations (40 CFR Part 70.6) contain two provisions requiring monitoring in permits. These provisions are intended to provide sufficient information to enable emitting sources, permitting authorities, EPA, and the public to determine whether or not facilities are meeting applicable requirements. The first provision referred to above, the periodic monitoring provision, requires, in the absence of other applicable requirements, "...periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit..." The second monitoring provision, sometimes referred to as the "sufficiency," or "umbrella" monitoring provision, requires that each permit contain "monitoring, reporting

<sup>&</sup>lt;sup>16</sup>40 CFR 70.6(a)(3)(i)(B)

and record keeping requirements sufficient to assure compliance with the terms of the permit." Some underlying air quality requirements in Federal regulations or approved SIPs explicitly require facilities to perform a specific type of monitoring; however, many do not. Prior to Title V, there was no Federal requirement to add monitoring to permits if the underlying regulations applicable to the source did not specify the type or frequency of monitoring. Both the periodic and umbrella monitoring provisions have been subject to numerous interpretations by EPA and the courts. We believe this has contributed to inconsistencies in the adequacy of monitoring nationwide and has affected the ability of stakeholders to determine source compliance with applicable regulations.

#### Stakeholders Identified Problems With Monitoring Provisions

Officials at OAQPS identified overall problems with the adequacy of monitoring requirements in Title V permits. One key OAQPS official told us that permits are sometimes issued without monitoring provisions. For example, Texas generally did not include periodic monitoring provisions in Title V permits until 2002. Another key OAQPS official noted that there is a substantial range in the adequacy of provisions which State permitting authorities insert in permits to fill monitoring gaps in the underlying requirements applicable to a source.<sup>18</sup> OAOPS officials stated that State permitting authorities vary significantly in the quality of the monitoring provisions they include in permits, and that substantial Title V monitoring problems exist in some cases. OAQPS officials also expressed concern that oversight in some EPA regions does not focus enough on ensuring the adequacy of monitoring provisions in permits. OECA officials told us that inadequate monitoring provisions in permits can hamper enforcement efforts. They stressed the importance of sufficient monitoring provisions in the effective enforcement of Title V permit requirements, noting that monitoring is the key to ensuring that sources comply with air quality rules and regulations.

Officials from all 10 EPA regions indicated that they provided permit review comments on the adequacy of monitoring provisions in Title V permits in one or more of their permitting authorities. Officials from several EPA regions stated that comments they provided related to monitoring provisions were frequent, and were among the most common problems observed in permits. Some officials noted that many of the comments provided were made early in the Title V program, and that improvements in monitoring provisions have been made over time. Some EPA regional officials also noted that most review comments are resolved in the draft phase of the permit, and few formal objections to proposed permits are issued.

<sup>&</sup>lt;sup>17</sup>40 CFR 70.6(c)(1)

<sup>&</sup>lt;sup>18</sup>While some Federal and State air quality regulations include specific monitoring requirements, others have "gaps" in monitoring requirements and do not specify the type or frequency of monitoring for certain emissions, or both.

EPA regional officials also assessed the strengths and weaknesses of monitoring elements in permits issued by permitting authorities in their respective regions. Most EPA regional officials indicated that the majority of permitting authorities include adequate monitoring provisions in their permits. However, as shown in Table 2.3 below, EPA officials in nine EPA regions identified permitting authorities in their area that have had problems with incorporating inadequate or minimally acceptable monitoring provisions in permits, particularly periodic monitoring provisions. Several regions noted that the subjective nature of air pollution monitoring, together with the lack of EPA guidance on appropriate monitoring, leads to inconsistencies in permit provisions and essentially requires a case-by-case determination of appropriate monitoring.

Table 2.3: Examples of Monitoring Problems In Title V Permits Identified By Regions

| EPA<br>Region | Permitting authority  | EPA Regional officials' comments to OIG  |  |
|---------------|---|--|--|
| 1             | Maine   | Inappropriately labeled monitoring as 'State-only' enforceable in some draft permits.  |  |
| 2             | General   | - Monitoring is progressing; work closely with States to determine adequate monitoring; lack of guidance leads to inconsistencies. |  |
| 3             | Maryland  | - State has difficulty with streamlining; sometimes leaves out requirements that are still applicable, which impacts monitoring.   |  |
|               | Pennsylvania  | - Monitoring in synthetic minors needs strengthening.  |  |
| 4             | Mississippi   | - Region provides training, working with State to improve permits.   |  |
|               | Louisville-<br>Jefferson Co.,<br>Kentucky                     | - Some problems with monitoring provisions.  |  |
|               | Shelby, Tenn.   | - Region is providing training to new staff.   |  |
| 5             | Indiana   | Lack of sufficient monitoring requirements in some permits; more monitoring detail needed in SBs.                                  |  |
|               | Illinois  | - Inadequate monitoring provisions; fail to specify frequency of testing ("upon request" is not sufficient).                       |  |
|               | Minnesota   | - Inadequate periodic monitoring in some permits.  |  |
|               | Ohio  | - Should include more detail regarding monitoring decisions in SBs.  |  |
| 6             | Texas   | - Monitoring provisions generally adequate, but IBR can make them unclear.   |  |
|               | Louisiana   | - Lack of sufficiency in opacity monitoring.   |  |
| 7             | Kansas  | Adequate, but require minimally acceptable level of testing and monitoring.  |  |
|               | lowa  | - Require the barest minimum level of testing and monitoring.  |  |
|               | Nebraska<br>(including<br>local<br>permitting<br>authorities) | - Adequate, but problems with PM and opacity monitoring.   |  |
| 8             | Colorado  | - Periodic monitoring issues; CAM deficiencies.  |  |
|               | Montana   | - CAM deficiencies in renewal permits.   |  |
|               | Utah  | - Inadequate/missing periodic monitoring; CAM deficiencies.  |  |
|               | Wyoming   | - Periodic monitoring issues; CAM deficiencies.  |  |
| 9             | Arizona   | - Sufficient monitoring is an issue, but improving recently due to EPA comments and objections.                                    |  |
|               | Bay Area Air<br>Quality<br>Management<br>District             | - Early problems with periodic monitoring were addressed, but some issues remain.  |  |
| 10            | ldaho,<br>Oregon<br>Washington                                | - Need to improve monitoring.  |  |

Source: Comments provided by EPA regional officials in their written and oral responses to OIG's structured interview questions.

Representatives from 8 of the 10 environmental groups we interviewed also expressed concerns regarding the incorporation of monitoring provisions into Title V permits. Several representatives stated that permits, in general, frequently lack the appropriate monitoring requirements. Representatives also expressed concern regarding the clarity of monitoring provisions from the general public's perspective. They noted that when monitoring provisions are included in permits, factors such as extensive IBR and listing several different monitoring options in the permit, instead of specifying one monitoring requirement, can limit permit clarity for the public.<sup>19</sup> According to one group, permitting authorities have particular trouble filling gaps in monitoring provisions in permits when monitoring requirements are not expressly prescribed by the SIP.

A number of environmental groups contributed to a June 2001 report on the Title V programs in Texas, Ohio, and Georgia.<sup>20</sup> The authors of this report contended that none of these State programs required sufficient monitoring provisions in permits, particularly with regard to opacity requirements. Additionally, a number of public petitions filed by environmental groups against proposed permits and/or State permitting programs cited inadequate monitoring provisions as a concern. Some of these petition issues were granted by EPA; others were denied because EPA did not find a basis for the specific complaint.<sup>21</sup> For example, EPA issued a NOD to Texas in response to public petition concerns that monitoring provisions were not adequately incorporated into the State's general operating permits. EPA disagreed with monitoring concerns raised in public petitions against the New York and Ohio permitting programs, stating that while they would watch for individual problems in permits, overall the programs included adequate monitoring and met the minimum requirements of 40 CFR Part 70.<sup>22</sup>

#### EPA Guidance on Monitoring in Title V Permits

Title V's monitoring requirements have been subject to multiple interpretations. OAR first issued guidance on periodic monitoring requirements (40 CFR section 70.6(a)(3)) in 1998. This guidance suggested that permitting authorities review each applicable underlying requirement to determine if the monitoring included in permits was sufficient to determine source compliance with the CAA. If

<sup>&</sup>lt;sup>19</sup>Environmental group representatives contended that some permits do not declare which type of monitoring a facility must use, but rather provide several different options. We found one example of this practice in an Ohio permit. The source was provided the option of either conducting continuous SO2 monitoring or coal sampling to determine compliance.

<sup>&</sup>lt;sup>20</sup>Baron, David; et al., National Environmental Trust, "Title V Operating Programs in Texas, Ohio and Georgia," June 11, 2001.

<sup>&</sup>lt;sup>21</sup>OAQPS and EPA regional officials stated that the majority of issues raised in public petitions are denied.

<sup>&</sup>lt;sup>22</sup>In its response to the draft report, EPA commented that it did not always disagree with monitoring issues raised in New York petitions against *individual* permits.

monitoring provisions were insufficient, then additional monitoring provisions could be added.

The validity of this guidance was challenged in court and in the 2000 *Appalachian Power* case, the D.C. Circuit Court of Appeals set the EPA guidance aside, ruling that the Agency had overextended its authority.<sup>23</sup> Under the Court's ruling, if the underlying State or Federal standard requires a source to perform a specific type of monitoring or testing more than one time, this satisfies the periodic monitoring language of Title V. Further, the ruling specifies that more frequent monitoring can only be added if the underlying standard requires no periodic testing, specifies no frequency, or requires only a one-time test. In its ruling, the court noted that Congress did not authorize EPA to require States, in issuing Title V permits, to revise monitoring requirements in existing Federal emissions standards. EPA has not issued any additional periodic monitoring guidance since 1998.

The Court's 2000 ruling did not address the "sufficiency monitoring" provision of Title V (40 CFR section 70.6(c)(1)). On September 17, 2002, EPA proposed rule on sufficiency monitoring. The proposed rule stated that where applicable State or Federal requirements already require periodic testing or monitoring, but that monitoring is not sufficient to assure compliance, the permit must meet the requirements for sufficiency monitoring. This proposed rule was also challenged in court.<sup>24</sup> As part of a subsequent legal settlement with industry plaintiffs, EPA revised its sufficiency monitoring rule and released a final rule, now referred to as "umbrella monitoring," on January 22, 2004. In this final rule, EPA determined that Title V does not establish a standard for requiring or authorizing reviewing and enhancing existing monitoring provisions. States may only add monitoring provisions in permits, or "gap-fill," where the underlying regulations are silent on either the type or frequency of monitoring required, or where monitoring is not periodic. A coalition of environmental and public health groups petitioned the Court to review this final rule on March 18, 2004. This latest case is pending in the D.C. Circuit Court of Appeals.<sup>25</sup>

Officials from six EPA regions told us that the lack of EPA guidance on Title V periodic monitoring requirements is a problem and indicated that such guidance is needed. Officials in two regions noted that the Court ruling in the 2000 *Appalachian Power* case negatively affected the ability of EPA to provide periodic monitoring guidance. Officials in another two regions stated that the lack of EPA guidance on monitoring requirements increased the burden on the regions to make case-by-case determinations of monitoring adequacy in permits. Officials in another region told us that the lack of EPA periodic monitoring

<sup>&</sup>lt;sup>23</sup>Appalachian Power Co.v Envtl. Protection Agency, 208 F.3d 1015, 1028 (D.C. Cir. 2000)

<sup>&</sup>lt;sup>24</sup>Utility Air Regulatory Group, Inc. v. Envtl. Protection Agency, 320 F.3d 272, 276 (D.C. Cir. 2002)

<sup>&</sup>lt;sup>25</sup>Environmental Integrity Project v. Envtl. Protection Agency No. 04-1083 (D.C. Cir. Filed Mar. 19, 2004).

guidance caused inconsistencies among States and delayed permit issuance. OAQPS officials indicated that they have plans to issue a rule clarifying what constitutes periodic monitoring. However, these officials were uncertain of the time frame for rule issuance and noted that previous efforts to address monitoring guidance needs have been subject to legal challenges and lengthy delays.<sup>26</sup>

Some EPA regional officials also commented on the possible effect of the new umbrella monitoring rule – that the new rule could limit the ability of State and local permitting authorities and EPA to require adequate monitoring in Title V permits. For example, prior to this rule, Region 4 officials worked extensively with Florida's Title V program officials to improve monitoring provisions in permits because they determined that certain requirements in the SIP did not contain monitoring sufficient to assure compliance. Region 4 officials noted that, at the time, EPA's interpretation was that States could supplement monitoring requirements with additional periodic monitoring when the existing requirements were found to be inadequate. As discussed above, EPA has a different interpretation in the new umbrella monitoring rule. OAQPS officials stated that they plan to release an advance notice of proposed rulemaking (ANPR) calling for public comment on potential monitoring inadequacies in SIPs and Federal regulations.

#### Monitoring Issues Identified In Reviewing State Permits

In reviewing State permits, we assessed the adequacy of the following elements of monitoring provisions:

- inclusion of periodic monitoring;
- inclusion of compliance assurance monitoring (CAM);
- gap-filling underlying State and Federal regulations;
- use of surrogate monitoring;<sup>27</sup> and
- the overall sufficiency of permit requirements to determine compliance.<sup>28</sup>

<sup>&</sup>lt;sup>26</sup>As part of the 2004 umbrella monitoring rule, EPA committed to three future rulemaking actions, including (1) improving source monitoring for opacity and particulates by providing monitoring guidance input to the upcoming implementation of the National Ambient Air Quality Standards (NAAQS) for fine particulate matter (PM) 2.5; (2) identifying and considering improving possibly inadequate monitoring in Federal rules and SIPs by issuing an advance notice of public rule-making (ANPR) calling for public comment; and (3) publishing a separate proposed rule to address what constitutes "periodic monitoring" under section 70.6(a)(3)(i)(B) and 71.6(a)(3)(i)(B).

<sup>&</sup>lt;sup>27</sup>For the purposes of our review, we considered surrogate monitoring to be using means other than direct emissions monitoring or testing to measure a source's compliance with an applicable State or Federal requirement. See Table 2.5 for examples of surrogate monitoring we noted during State permit reviews.

<sup>&</sup>lt;sup>28</sup>Our assessment of the sufficiency of monitoring provisions was based essentially on the inclusion and clarity of these key permit elements. We did not independently assess the appropriateness of the technical or engineering aspects of each monitoring provision.

While all of the permits we reviewed included monitoring on a periodic basis for at least some applicable requirements, we found that, in general, the permits did not consistently incorporate periodic monitoring for all requirements. The majority of the permits gap-filled at least one requirement by adding the frequency and/or type of monitoring where this was not specified in the underlying regulation. The majority of the permits we reviewed also included some type of surrogate monitoring for one or more requirements, the adequacy of which varied. Overall, we found that many of the permits we reviewed contained monitoring provisions sufficient for an outside observer to determine compliance with the underlying requirements. However, more than half of these permits contained both sufficient and insufficient monitoring requirements.

#### Provisions for Periodic Monitoring

All of the Title V permits we reviewed contained periodic monitoring provisions for at least some permit requirements.<sup>29</sup> Periodic monitoring was not, however, consistently incorporated into each requirement we reviewed in each State. To varying degrees, we found examples of a lack of periodic monitoring in permits in all of the States we reviewed. In some cases, State officials explained that periodic monitoring was not necessary because the type of material used by the source reduced the incidence of pollutant emissions to below regulated levels. In these cases, permits required the source to maintain records of the material makeup, but not to directly monitor the output of emissions from the unit. For example,

- North Carolina provided this type of rationale in permit statements of basis.
- Several Texas permits contained few periodic monitoring provisions because the State did not start including them for all applicable requirements until December 2002.
- In New York, monitoring for some pollutants from some emissions units was required only once during the permit term, or upon request by the permitting authority. New York statements of basis did not provide clear rationales for these monitoring decisions and the permit format made it difficult to track all of the requirements for an emissions unit.
- In Ohio, we found some cases where the frequency of monitoring was not specified or where State officials asserted that monitoring was not necessary because of the type of material used, however, explanations for these decisions were not always contained in the statements of basis.

#### Compliance Assurance Monitoring

In 1997, EPA promulgated new regulations to implement CAM for major stationary sources subject to Title V that rely on pollution control devices. CAM

<sup>&</sup>lt;sup>29</sup>For the purposes of our review, we defined periodic monitoring as monitoring of applicable regulated emissions required more than once during the term of the permit. The frequency of monitoring in the permits generally reflected either the underlying State or Federal regulation. In some cases, the monitoring frequency was added as gap-filling where the underlying regulation was silent.

requires owners or operators of sources to conduct monitoring that provides a reasonable assurance of compliance with applicable requirements. Sources with Title V applications completed before April 1998 were not required to incorporate CAM into their permits until renewal of their Title V permit application. All but one of the Title V permits we reviewed submitted their initial applications by April 1998 and thus were not required to address CAM.<sup>30</sup> CAM provisions are required to be added upon permit renewal. OAQPS officials anticipate that, once implemented, the new requirements in CAM will improve monitoring in a large number of Title V sources. Officials from several Regions noted that CAM inclusion is one of their criteria elements for permit review in order to ensure that these provisions are incorporated adequately.

#### Gap-filling Underlying State/Federal Regulations

We found examples of States adding monitoring provisions, or "gap-filling," where the underlying requirements were silent on either the type or frequency of monitoring in 90 percent of the permits we reviewed. As shown in Table 2.4 below, in these permits, the type/method or frequency of monitoring for at least one requirement we reviewed exceeded the provisions in either the underlying State or Federal regulation. Under EPA's current interpretation of periodic monitoring, as specified by the D.C. Circuit Court in the *Appalachian Power* case, a permitting authority may add monitoring requirements to the Title V permit if the underlying State or Federal standard requires no periodic testing, specifies no frequency of testing, or requires only a one-time test. In the permits we reviewed, specifying the frequency of monitoring when the underlying State regulation was silent was the most common type of gap-filling used by States.

Table 2.4: Permits That Added Monitoring Requirements to Fill Gaps in Underlying Regulations<sup>a</sup>

| State             | Number of permits that<br>added gap-filling<br>monitoring | Number that added<br>monitoring type | Number that added<br>monitoring<br>frequency |
|-------------------|---|--------------------------------------|--|
| New York          | 8   | 3                                    | 7  |
| North<br>Carolina | 9   | 5                                    | 9  |
| Ohio              | 9   | 7                                    | 7  |
| Texas             | 10  | 2                                    | 10   |
| Total             | 36 (90%)  | 17 of 36 (47%)                       | 33 of 36 (92%)                               |

Source: OIG analysis of State Title V permit information

<sup>&</sup>lt;sup>a</sup> Note: Some permits added both the type and frequency of monitoring. See Appendix B for details concerning our permit reviews in the above 4 States.

<sup>&</sup>lt;sup>30</sup>One permit we reviewed in Texas submitted its Title V application in 1999. However, the facility's emissions units were not reliant on emissions control devices and were therefore not subject to CAM.

#### Surrogate Monitoring

In 29 of the 40 permits we reviewed (73 percent), sources were permitted to use surrogate monitoring, rather than direct emissions monitoring or testing, to measure compliance with a State or Federal requirement. Some of the most frequently observed types of surrogate monitoring or surrogate methods to determine compliance included fuel certificates to verify the sulfur content of the fuel, AP-42 emissions factors, and using opacity monitoring to measure particulate matter. Surrogate monitoring was more commonly found in our sample of North Carolina, New York, and Ohio permits than in Texas permits.

The emissions factors used as surrogate measures in the permits we reviewed ranged in quality. Some were considered acceptable for use in estimating an individual facility's emissions, while other factors were less reliable. For example, AP-42 emissions factors were identified as surrogates for determining compliance with applicable requirements in six Ohio permits we reviewed, and in four North Carolina permits. An EPA Region 5 official noted that AP-42 factors are sometimes used to determine instances where periodic monitoring provisions are not necessary—for example, when the emissions factors indicate that the source's potential to emit is not big enough to ever exceed the applicable emissions limit.

In a November 2001 letter to Ohio EPA,<sup>31</sup> Region 5 officials commented that Ohio's Title V permits often rely on AP-42 factors as the compliance method. The Region stated that they do not believe that AP-42 factors are meant to be a basis for compliance.<sup>32</sup> However, they also stated that they believe Ohio EPA's use of these factors through a ranking system is appropriate. Ohio EPA ranks eight emissions factors from best to worst; AP-42 type factors are considered the least reliable on the list. In a June 2004 EPA report identifying where the emissions factors program needs to be improved, government, industry and environmental group stakeholders commented that EPA guidance is needed as to when it is appropriate to base or enforce permit and enforcement limits with emissions factors.<sup>33</sup> See Table 2.5 below for types of surrogate monitoring identified by State.

<sup>&</sup>lt;sup>31</sup>The name of the air pollution control program in Ohio is the Ohio Environmental Protection Agency.

<sup>&</sup>lt;sup>32</sup>The EPA AP-42 manual states that the Agency does not recommend the use of AP-42 factors as source-specific permit limits and/or as emission regulation compliance determinations.

<sup>&</sup>lt;sup>33</sup> "Summary of Emissions Factors Improvement Project Fact Finding Survey," prepared by EC/R Incorporated of Chapel Hill, NC for OAQPS, June 2004.

Table 2.5: Surrogate Monitoring Or Compliance Determination In Permits

| State             | Number of permits<br>that include<br>surrogates | Type of surrogate monitoring or compliance determination   |  |
|-------------------|---|--|--|
| New<br>York       | 10  | - Certification of SO2 content of fuel - Opacity testing to measure PM - Temp/pressure gauges for VOCs   |  |
| North<br>Carolina | 8   | - Certification of SO2 content of fuel - AP-42 emissions factors (4) - Record weights of raw materials   |  |
| Ohio              | 9   | - Fuel testing to determine S02 content - AP-42 emissions factors (6) - Measuring volume to estimate VOCs - Source specific non-AP-42 emissions factor - Computer software program (Tanks 4.0) - Measure H2S to estimate S02 emissions |  |
| Texas             | 2   | - Requirement to use a specific fuel - Source test performed on similar sources  |  |
| Total             | 29 of 40 (73%)                                  | 33 of 36 (92%)   |  |

Source: OIG analysis of State Title V permit information. Note: See Appendix B for details concerning our permit review results in the above 4 States.

# Many Monitoring and Reporting Requirements Sufficient To Determine Compliance

We considered whether the monitoring and reporting provisions included in the permits we examined appeared to be sufficient for Government officials and members of the general public to determine source compliance with permit requirements. Taking into account the monitoring elements and permit clarity factors discussed previously, we found that many requirements in the permits we reviewed contained sufficient provisions to enable an outside party – with ample time and effort – to determine the source's compliance with the applicable regulation. However, in over half of the permits, we noted that while provisions for one emissions unit/pollutant were sufficient, provisions for another requirement in the same permit appeared to lack clarity or key information. (See Table 2.6 below). For example, a permit may contain comprehensive monitoring provisions for visible emissions, yet not specify the monitoring frequency for another pollutant. In some cases, a clearer permit format or a discussion of the monitoring decision in the SB could address potential insufficiencies.

Overall, areas that we found potentially affected requirement sufficiencies included:

- The monitoring frequency was not specified or no periodic monitoring included.
- The IBR to general rules did not clearly specify monitoring and reporting requirements.
- General operating permits did not identify emissions units at a source.
- Monitoring and reporting were "upon request by the agency" with no specific conditions.

• Reliance was on less reliable AP-42 emissions factors instead of actual emissions.

Table 2.6: Overall Sufficiency Of Monitoring Requirements In Title V Permits

| State          | Number of permits where all requirements reviewed were sufficient to determine compliance | Number of permits where some requirements were potentially not sufficient to determine compliance |
|----------------|---|---|
| New York       | 5   | 5   |
| North Carolina | 6   | 4   |
| Ohio           | 3   | 7   |
| Texas          | 3   | 7   |
| Total          | 17 of 40 (43%)  | 23 of 40 (58%)  |

Source: OIG analysis of State Title V permit information. Note: See Appendix B for details concerning our permit review results in the above 4 States.

As indicated above, the overall sufficiency of monitoring provisions in Title V permits is impacted by a number of different factors. Our evidence suggests that, given the high rate of gap-filling in permits, there may be a significant lack of sufficient monitoring requirements in State and Federal regulations. State and local permitting authorities incorporated periodic monitoring in permits on a case-by-case basis, with inconsistent results. Region officials frequently commented on monitoring problems in their review of permits, however problems remain. Region efforts to review monitoring requirements in permits were impacted by the lack of national policy on key issues. OAR efforts to establish national guidance on monitoring met with limited success and were subject to court challenges. The January 2004 rule on umbrella monitoring may limit the ability of State and local permitting authorities to improve underlying monitoring provisions. However, it contains OAR commitments to issue periodic monitoring guidance and to address monitoring insufficiencies in State and Federal regulations.

#### Improvements Needed in Annual Compliance Certification Content

Title V requires that responsible officials at permitted sources sign ACCs. The ACC is an important compliance tool that provides a statement of the source's compliance status with respect to its permit terms over a 1-year reporting period. Congress included the ACC provisions in Title V to ensure that the responsible official certify that they have knowledge of the plants' CAA obligations and whether the plant met these obligations. Non-compliance with ACC provisions can result in penalties including fines and imprisonment.

The ACCs submitted by the Title V permit holders in the four States we visited differed substantially as to completeness from State to State and did not consistently address compliance for the same terms and conditions in the

permits. OAR has not issued guidance that explains the required terms and conditions that should be certified for compliance in an ACC. As a result, Title V sources have not been required to report their compliance status consistently throughout the country.

The requirements for ACCs are found in 40 CFR Part 70.6(c)(5)(i). Part 70 requires that ACCs be signed by a responsible official and submitted annually to both EPA and the permitting authority. In general, the ACCs should include each of the requirements listed in Table 2.7 below.

Table 2.7: Key Requirements Of Annual Compliance Certifications Under Title V

#### **Key Annual Compliance Certification Provisions and Requirements**

Must identify and list each term or condition of the permit that is the basis of the compliance certification.

Must identify the method(s) or other means used by the owner or operator to determine compliance status with each term and condition during the certification period.

Must identify the status of facility compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent

The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify, as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance occurred as defined under part 64 of 40 C.F.R.

Any other facts as the permitting authority may require to determine the compliance status of the source.

Many of the key stakeholders we interviewed cited problems with ACCs. EPA officials from four of the 10 regional offices cited the lack of EPA guidance for ACCs as an underlying cause for the problem. Also, four environmental group representatives believed that problems were associated with ACCs. The lack of completeness of ACCs was cited as the main problem because ACCs lacked adequate compliance reporting requirements. An industry representative we interviewed believed that ACCs required sources to certify compliance on too many parameters. As noted in Chapter 3, a key OAQPS official told us that OAR no longer issues nationwide guidance. Instead, guidance has been issued by some EPA regions, and there have been associated rulings in court cases and EPA responses to public petitions. A key OAQPS official told us that future OAQPS guidance will require a rulemaking.

# Certifications Received By the States Were Inconsistent

We reviewed, when possible, the most recent ACCs submitted for the permits in our samples in four States to determine whether the ACCs submitted by the sources met the requirements in 40 CFR Part 70.6. In some instances, a year had not passed since the permit had been issued and an ACC was, therefore, not due. In all, we reviewed 30 ACCs; 10 in New York, 7 in North Carolina, 7 in Ohio and 6 in Texas. In one instance, an ACC which was due had not been submitted to Texas for activities in the past year. As a result of this source's failure to submit an ACC, a State of Texas official said that an enforcement action will be taken against the source.

In general, we found problems with (1) consistency in ACC reporting requirements for the permits we examined in the four States we visited and (2) completeness of ACCs submitted by permitted sources in Texas and Ohio. We believe the problems were at least, in part, attributable to the lack of adequate EPA guidance on ACC content. The differences we found related to whether the facilities certified compliance in the ACC with each permit term and condition or whether the facilities simply certified compliance with the entire permit except for any identified deviations. In the October 22, 1997, preamble to Part 70 revisions - Compliance Certification Requirements (62 FR 54937), EPA allowed the certification to be a short, concise compliance statement that does not restate detailed information that had already been provided. However, two States we visited required their sources to certify compliance in ACCs with each permit term and condition. Since these two States have successfully required comprehensive ACCs from their sources for some time, we believe a similar nationwide requirement would not be unduly burdensome. The results of our review of ACCs in the four States are provided in Appendix C.

# Guidance and Rules on Compliance Certifications Not Issued

The OAR has not issued sufficient guidance or rules on ACC content. First, EPA has not issued drafted guidance that identifies what terms and conditions should be certified in ACCs. Second, EPA issued a rule in June 2003 to address a court decision related to defining terms in ACCs and inadvertently left out wording related to credible evidence. EPA has not issued the rule to correct the error, but it is OIG's understanding that a revised rule is going to be issued.

OAQPS officials we talked with recognized that the ACCs received by the States were inconsistent with respect to the content of the ACCs. However, EPA has not issued any guidance that would make ACC requirements uniform among the States. (See Chapter 3 for additional information on unissued guidance.)

On October 29, 1999, the United States Circuit Court of Appeals in *Natural Resources Defense Council* considered the Agency's ACC requirements for its final operating permits program and concluded that these requirements did not address whether the permittee had been in "continuous or intermittent" compliance.<sup>34</sup> In June 2003, EPA issued a final rule that removed the text that requires responsible officials to identify whether the compliance determination methods provide continuous or intermittent data. EPA replaced the text with a requirement to state whether compliance was continuous or intermittent during the period covered by the ACC.

EPA amended 40 CFR 70.6 (c)(5)(iii)(B) and 40 CFR 70.6 (c)(5) (iii)(C) to state that continuous or intermittent compliance referred to the compliance status during the year, and not the nature of the data obtained by the monitoring

<sup>&</sup>lt;sup>34</sup>Natural Resources Defense Council, Inc. v Envtl. Protection Agency, 194 F.3d 130 (D.C. Cir. 1999).

method. However, a mistake was apparently made in this rule by excluding a key clause on credible evidence. The following sentence related to credible evidence in ACCs was left out of the current regulations in 40 CFR 70.6(c)(5)(iii)(B),

"If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113 (c) (2) of the Act, which prohibits knowingly making a false certification or omitting material information."

According to a key OAQPS official, the omission was inadvertent and occurred due to an administrative error. The OAQPS official stated that this provision is strongly disliked by industry. OAQPS has attempted to place this language back into Part 70. This revision had not been completed at the time we finished our field work.

# **Practical Enforceability Concerns With Some Permits**

The enforcement of Title V permit provisions is affected by the manner in which the requirements are written into the permit. Monitoring, record keeping, and reporting provisions in permits should be written in sufficient detail to limit interpretation or ambiguity in meaning. Provisions that are imprecise or unclear can cause problems with enforcing permits. OECA and EPA regional officials identified potential practical enforceability problems in permits. Environmental groups provided similar comments in a number of public petitions.

A key OECA official noted that practical enforceability is a significant part of Title V permit enforcement.<sup>35</sup> According to the official, a permit is not practically enforceable if it does not contain adequate provisions for monitoring, record keeping, and reporting. An absence of these elements or the presence of vague permit language (for example, requirements to test emissions "as required" or "per manufacturer's specifications") makes a permit virtually unenforceable, or not practically enforceable. The official also noted that vague permit language or vague phrases are problematic because they force the reader to have to go to another source to identify applicable requirements. In addition to problems with vague language, the official noted that periodic monitoring requirements that may be technically legal under the *Appalachian Power* decision (see page 23), may present enforcement problems as a practical matter. For example, monitoring twice during the 5-year term of the permit meets the current interpretation of periodic monitoring; however, it may not be frequent enough to verify compliance.

<sup>&</sup>lt;sup>35</sup>To be enforceable as a practical matter, a permit condition should provide a clear explanation of how the limit or requirement applies to a facility and make it possible to determine whether the facility is complying with the condition.

The officials we interviewed from EPA regional air offices stated that most permitting authorities issued permits that were generally adequate in terms of practical enforceability. However, officials in 8 out of the 10 regions told us that problems in some permits potentially affect practical enforceability. They identified specific enforceability problems in a number of permitting authorities (see Table 2.8 below). Examples of practical enforceability problems cited by EPA regional officials included incorrect labeling of requirements as State-only enforceable, vague or unenforceable permit language, improper use of permit shields, and permit language preventing the use of credible evidence.<sup>36</sup> Officials in one region noted that certain provisions in underlying regulations may have practical enforceability problems that the region cannot address because the current Title V program limits their ability to add additional requirements to permits. (See discussion of the *Appalachian Power* decision and EPA's umbrella monitoring rule on page 23)

<sup>&</sup>lt;sup>36</sup>Title V permit conditions cannot limit the types of data or information (e.g., credible evidence) that may be used to prove a violation of any applicable requirement.

Table 2.8: Examples of Practical Enforceability Problems Identified by EPA Regions<sup>a</sup>

| EPA<br>Region | Permitting authority   | EPA regional officials' comments to OIG  |  |  |  |
|---------------|--|--|--|--|--|
| 1             | Maine  | <ul> <li>Inappropriately labeled monitoring requirements as State-only enforceable.</li> </ul>                                     |  |  |  |
| 2             | General  | - Significant number of conditions in each Title V permit, not all of which are adequate with respect to practical enforceability. |  |  |  |
| 3             | NA   | - Generally adequate in all permitting authorities.  |  |  |  |
| 4             | Louisville-<br>Jefferson<br>Co.,<br>Kentucky &<br>Shelby<br>Co., Tenn. | - Practical enforceability in permits needs improvement.   |  |  |  |
| 5             | Indiana  | - Needed anti-credible evidence "buster" language in permits. <sup>b</sup>   |  |  |  |
|               | Minnesota  | Need to use placeholders when a compliance schedule may be pending due to enforcement actions.                                     |  |  |  |
|               | Illinois   | - Included inappropriate permit shields for Federal regulations.   |  |  |  |
|               | Ohio   | - Vague permit language ("testing if required").   |  |  |  |
| 6             | Louisiana  | - Some problems with practical enforceability.   |  |  |  |
|               | Texas  | Some enforceability problems identified with monitoring, record keeping and reporting in applicable requirements.                  |  |  |  |
| 7             | NA   | - Adequate in all permitting authorities.  |  |  |  |
| 8             | Montana  | - Allowed State air Director's discretion on testing.  |  |  |  |
|               | Utah   | - Vague or unenforceable permit language.  |  |  |  |
| 9             | Arizona  | - Blanket permit shield language problematic; allowed State air Director's discretion on some issues.                              |  |  |  |
|               | San Joaquin<br>Valley  | - Not enough detail provided for enforceability of permit limits.  |  |  |  |
|               | South Coast  | - IBR led to some problems with enforceability.  |  |  |  |
| 10            | Washington:<br>Industrial<br>Section                                   | - Permit format causes clarity and enforceability problems.  |  |  |  |

Source: Comments were provided by EPA Region officials in their written and oral responses to OIG structured interview questions.

Environmental groups cited potential problems with practical enforceability in permits in a number of public petitions. The issues they expressed concern about included:

- having permits that contain provisions not enforceable as a practical manner;
- improperly limiting using credible evidence,
- improperly using permit shields, and
- having permit conditions that are too vague to be enforceable.

<sup>&</sup>lt;sup>a</sup> Region officials noted that some problems were identified earlier in the program and either have been resolved or are in the process of being resolved.

<sup>&</sup>lt;sup>b</sup> Anti-credible evidence buster language states that nothing in the permit shall be construed to limit the use of credible evidence. In its response to our draft report, EPA noted that this issue has been resolved and Indiana now includes an anti-credible evidence buster language condition in each permit.

EPA responded to several of these comments by soliciting commitment letters from the States, and in four cases, by addressing the issues in NODs.<sup>37</sup> For example, EPA agreed with public petition concerns that permits in Ohio contained conditions that were too vague to be enforceable as a practical matter and stated they would work with Ohio to improve enforceability of the permit language. In most other cases, EPA did not agree with the assertions in the petitions and denied those claims.<sup>38</sup> For example, EPA did not find a basis for practical enforceability concerns raised in a New York public petition and denied those issues in the petition.

#### Results of State Permit Review

As shown in Table 2.9 below, we identified potential practical enforceability problems in 22 of the 40 permits we reviewed in New York, North Carolina, Ohio, and Texas.

Table 2.9: Practical Enforceability Concerns In Permits Reviewed

| State             | Number                    | Number of Description of Concern(s)                     |  |  |  |  |
|-------------------|---------------------------|---|--|--|--|--|
|                   | of<br>permits<br>reviewed | permits with<br>practical<br>enforceability<br>concerns |  |  |  |  |
| New<br>York       | 10                        | 6   | <ol> <li>Some permits contained references to<br/>"manufacturer's specifications" without listing<br/>what, at a minimum, this should entail.</li> <li>Monitoring and/or reporting "upon request" by<br/>the Agency.</li> </ol>  |  |  |  |
| North<br>Carolina | 10                        | 2   | 3. IBR to 40 CFR in general not specific enough to reasonably determine applicable section.  |  |  |  |
| Ohio              | 10                        | 7   | <ul> <li>4. Testing frequency not specified.</li> <li>5. Some permits contained references to "manufacturer's specifications" without listing what, at a minimum, this should entail.</li> <li>6. One case where citation not specific enough to determine applicable section of regulations.</li> </ul> |  |  |  |
| Texas             | 10                        | 7   | <ol> <li>General operating permit did not list the actual emissions units at the specific source on the face of the permit.</li> <li>General IBR to lengthy regulations made it difficult to identify the section applicable to the source.</li> <li>Monitoring frequency not specified.</li> </ol>      |  |  |  |
| Total             | 40                        | 22 (55%)  |  |  |  |  |

Source: OIG analysis of State Title V permit information. Note: See Appendix B for details concerning our permit review results in the above 4 States.

We considered provisions with vague language, such as reporting "promptly" and inspecting and maintaining equipment "as suggested by manufacturer's

<sup>&</sup>lt;sup>37</sup>See Chapter 3 for additional information regarding NODs and commitment letters.

<sup>&</sup>lt;sup>38</sup>As noted in footnote 21, OAQPS and EPA regional officials told us that the majority of issues raised in public petitions are denied.

specifications" — where not followed up with more specific detail — to potentially limit the ability of enforcement staff to clearly hold sources accountable for compliance with permit conditions. We also noted possible problems with practical enforceability where requirements were incorporated by reference in an overly general manner, making it difficult to determine what requirements the source was actually subject to. For example, under reporting requirements, a permit may reference an entire 40 CFR subpart. Without a specific citation to the relevant paragraphs, the reviewer must examine the entire subpart to locate the requirement; in some cases this means examining more than 80 pages of requirements. In some cases, the lack of a specified monitoring frequency could make it difficult for officials to enforce such monitoring provisions and hold a source to specific emissions limitations.

## **Conclusions**

Our analysis of Title V permits indicated that the clarity of permits, the adequacy of monitoring provisions incorporated into permits, and the adequacy of the content of SBs and ACCs varied significantly among State permitting authorities.

- Permit clarity was negatively affected by a number of different factors, including extensive use of IBR; failure to fully cite underlying regulations; lack of specificity of source requirements for testing, monitoring, and reporting, and complex permit format.
- Evidence suggested that insufficient monitoring provisions in Title V permits is a problem in a number of different State and local permitting authorities. Monitoring is a critical aspect of Title V; however, State and Federal regulations often do not provide for sufficient monitoring, and EPA lacks guidance on periodic monitoring.
- The adequacy of SBs and ACCs content varied significantly in the State permits we reviewed; EPA regional officials indicated that SB and ACC content adequacy varied nationwide as well.

EPA has not clearly established what the minimum level of acceptable SB or ACC content should be. Without such nationwide guidance, significant inconsistencies have resulted. Evidence indicates that problems with vague permit language and insufficient monitoring provisions have posed potential practical enforceability problems for Federal and State enforcement officials.

Our review of 40 State-issued Title V permits found that 90 percent of these permits included some type of gap-filling where the underlying regulations contained either no monitoring, or insufficient monitoring provisions. These results suggest that a substantial lack of sufficient monitoring requirements may exist in State and Federal regulations. EPA's decision to re-write its draft sufficiency monitoring rule, and issue instead the more narrow January 2004

final umbrella monitoring rule, could limit the ability of State and local permitting authorities and EPA regions to use Title V permits to correct monitoring deficiencies. EPA did, however, recognize the need to address monitoring in underlying regulations in the umbrella rule. In this rule, EPA committed to taking several actions to improving monitoring, including issuing periodic monitoring guidance and issuing an advanced notice of public rulemaking, calling for public comment on monitoring inadequacies in SIPs and Federal regulations.

Collectively, the problems with permit clarity and the adequacy of permit content undermine a basic tenet of the 1990 CAA Amendments – that of transparency, openness, and full and effective public involvement. Problems with permit clarity make it more difficult for Title V stakeholders to identify what requirements sources are subject to. Without sufficient monitoring provisions, it is difficult to measure whether or not a source is complying with applicable requirements on a regular basis. When permitting authorities include only minimal information in SBs, they miss an opportunity to make permits that are essentially complicated engineering documents more understandable to stakeholders by including explanations for permit decisions. ACCs that contain insufficient information reduce the source's level of accountability to EPA, State and Federal regulators, and to the public.

### Recommendations

We recommend that the Assistant Administrator for Air and Radiation:

- 2-1. Develop and issue guidance or rulemaking on annual compliance certification content which requires responsible officials to certify compliance with all applicable terms and conditions of the permit, as appropriate.
- 2-2. Issue the draft rule regarding intermittent versus continuous monitoring as it relates to annual compliance certifications and including credible evidence.
- 2-3. Develop nationwide guidance or rulemaking, as appropriate, on the contents of statements of basis (SB) which includes discussions of monitoring, operational requirements, regulatory applicability determinations, explanations of any conditions from previously issued permits that are not being transferred to the Title V permit, discussions of streamlining requirements, and other factual information, where advisable, including a listing of prior Title V permits issued to the same applicant at the plant, attainment status, and construction, permitting, and compliance history of the plant.
- 2-4. Through its periodic discussions with EPA regions and State and local permitting authorities, emphasize improvements in Title V permit clarity by minimizing using incorporation by reference (IBR), clearly citing applicable underlying regulations, emphasizing conciseness in permit format, and using statements of basis to identify and explain permit decisions related to streamlining.

2-5. Expeditiously follow through on its commitment in the January 2004 umbrella monitoring rule to develop periodic monitoring guidance.

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

2-6. Develop and implement a training program and use their oversight authority to help EPA regional offices and State and local permitting authorities in preventing practical enforceability problems in Title V permits.

We recommend that the Assistant Administrator for Air and Radiation and the EPA Regional Administrators jointly:

2-7. Establish and implement a plan to review the adequacy of monitoring provisions in SIPs.

We recommend that the EPA Regional Administrators:

2-8. Ensure that State and local permitting authorities consistently apply periodic monitoring provisions to all applicable permit requirements, and ensure that permitting authorities use AP-42 emissions factors in permits only after other more reliable methods for determining compliance have been considered.

# **Agency Comments and OIG Evaluation**

EPA made several comments on the material presented in Chapter 2, and we made revisions to the Chapter where appropriate. The Agency did not fully agree with our findings that national guidance could provide further consistency and completeness in ACCs and SBs. Specifically, the Agency disagreed with recommendations 2-1 and 2-3 regarding these issues. However, we continue to believe that national guidance on ACCs and SBs would better ensure consistency among the States and regions. We found that States may be unwilling to follow (or be unaware of) guidance that is not national in scope, therefore diminishing EPA's claim of the adequacy of "guidance" issued in the form of public petition responses. Further, in response to EPA's disagreement with our draft recommendation to issue nationwide guidance to address problems with practical enforceability in Title V permits, we changed our recommendation to address potential practical enforceability weaknesses in permits through training and more effective oversight. The Agency's consolidated response and our evaluation of that response are in Appendix F.

# **Chapter 3**

# EPA's Oversight and Guidance Have Improved State Title V Programs, But Gaps Remain

Our review of OAR and EPA regional office efforts to provide Title V program oversight and guidance to State and local permitting authorities found the following:

- While most EPA regional offices met OAR program goals for permit reviews, they have generally not issued timely reports in evaluating permitting authorities' Title V programs.
- EPA generally does not respond to Title V public petitions in a timely manner.
- While the majority of issues identified in EPA's NODs and State and local commitment letters have been resolved, important issues remain unresolved in Texas, Hawaii, and Ohio.
- Many EPA regional offices and other key stakeholders wanted additional guidance from OAR regarding a number of key Title V elements. However, OAQPS has had limited success in recent attempts to issue Title V guidance.

# Regional Reviews of Title V Permits Generally Met OAR Goals

Expectations for regional oversight of Title V permits are documented in the annual memorandums of agreement (MOAs) between OAR and the EPA regional offices. In FYs 2001 and 2002, MOAs between OAR and the EPA regional offices indicated that

- five EPA regions committed to reviewing 10 percent or more of Title V permits drafted by permitting authorities in their respective regions,
- two EPA regions agreed to annually review at least 5 percent of permits.
- two EPA regions agreed to annually review a set number of permits (25 and 50, respectively), and
- one EPA region noted that because permit review was not identified as a high priority in OAR guidance, the region would conduct "a few spot checks" of permits and generally limit review activities to responding to citizen petitions.

Most EPA regional offices met OAR program goals for conducting permit reviews as outlined in the MOA's for FYs 2001 and 2002.

According to OAQPS officials, beginning in FY 2003, the Agency modified the MOA process such that the agreements primarily addressed the Assistant Administrator (AA) for Air and Radiation's priorities. The EPA regional offices needed to certify only that they would work to meet general annual performance measures, rather than providing a specific, point-by-point analysis of each provision. As a result, specific commitments to review individual permits were largely removed from the MOAs as OAR emphasis shifted to overall evaluations

of permitting authority Title V programs.  $^{39}$  The program evaluations were developed, in part, in response to recommendations in a March 2002 EPA OIG report.  $^{40}$ 

Based on data provided by EPA regional officials, regional permit review rates in FY 2002, and continuing into FY 2003, generally met, and in most cases exceeded, 10 percent. As shown in Table 3.1, regional permit review rates for 9 regions ranged from 9 percent to 90 percent. One EPA region reviewed only one permit during this time.

Table 3.1: Number and Percent of Title V Permits Reviewed by EPA Regions - FY02-03<sup>a</sup>

| Region | FY02 MOA<br>permit review<br>commitment | FY02-03 total<br>proposed<br>permits | Number reviewed<br>by region FY02-03 | Percent<br>reviewed by<br>region FY02-03 |  |
|--------|---|--------------------------------------|--------------------------------------|--|--|
| 1      | At least 10%                            | 157                                  | 110                                  | 70%                                      |  |
| 2      | At least 10%                            | 275                                  | 110                                  | 40%                                      |  |
| 3      | 50                                      | 253                                  | 130                                  | 51%                                      |  |
| 4      | 5 - 10%                                 | 486                                  | 80                                   | 17%                                      |  |
| 5      | At least 10%                            | 1035                                 | 148                                  | 14%                                      |  |
| 6      | At least 10%                            | 858                                  | 78                                   | 9%                                       |  |
| 7      | 25                                      | 244                                  | 35                                   | 14%                                      |  |
| 8      | 10%                                     | 298                                  | 268                                  | 90%                                      |  |
| 9      | Less than 5%                            | 458                                  | 97                                   | 21%                                      |  |
| 10     | Citizen petitions only                  | 181                                  | 1                                    | 0.5%                                     |  |

Source: MOAs between OAR and EPA regions. Permit review data provided by EPA region officials in their written and oral responses to OIG's structured interview questions

Regions generally provided informal comments to permitting authorities on the permits they reviewed; most reviews did not result in EPA issuing formal objections to permits. As shown in Chart 3.1, since the Title V program began, two EPA regions have each issued objections to at least 50 permits based on their reviews or on public comments filed against a permit. Four EPA regions issued objections to 3 or fewer permits; and four EPA regions have never formally objected to a Title V permit.

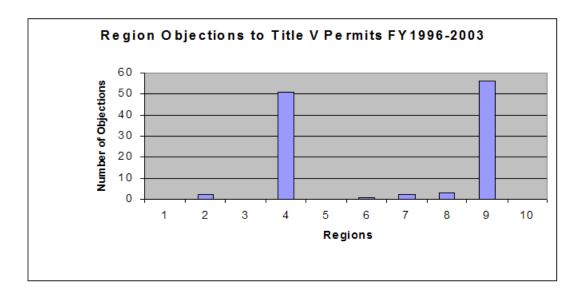
<sup>&</sup>lt;sup>a</sup> EPA regional permit review data was collected for the combined FY02-03 period; most EPA regional offices did not break review data down by individual year.

<sup>&</sup>lt;sup>39</sup>The FY2003 MOA for one region (Region 6) retained a permit review statement - the region committed to reviewing five percent of permits.

<sup>&</sup>lt;sup>40</sup>EPA and State Progress in Issuing Title V Permits, Report No. 2002-P-00008, March 29, 2002.

<sup>&</sup>lt;sup>41</sup>40 CFR 70.8(c) states that the Administrator will object to the issuance of any proposed permit that EPA determines is not in compliance with Title V.

Chart 3.1: Formal Objections to Title V Permits by EPA Regions



Officials from all 10 EPA regions, including those that objected to permits, stated that they typically prefer to avoid issuing formal objections to permits. Officials from most regions told us that they work to resolve issues early in the permitting process. Officials from two EPA regions stated that they have threatened to issue permit objections to State and local permitting authorities on several occasions, but instead were able to resolve the issues to the regions' satisfaction.

In FY2003, OAR shifted its focus from encouraging EPA regional offices to review individual permits to performing Title V program evaluations. According to OAQPS officials, EPA regional offices conducted Title V program evaluations, including on-site reviews, of 31 permitting authorities between October 2002 and December 2004. Most EPA regional offices indicated that they plan to complete all Title V program evaluations by the end of FY 2006. One EPA regional office, citing limited resources, stated that they would not have all of the evaluations completed until 2008. As shown in Appendix E, of the 31 program evaluations conducted, only 14 have resulted in final reports issued.<sup>42</sup> The remaining 17 reports are still in process.

According to OAQPS guidance on conducting and completing these evaluations, final reports on the reviews should have been issued not later than 90 days after completing each on-site visit. A key OAQPS official told us that some of the regions with outstanding reports have not met this 90-day completion target. The delays in issuing the reports prevents EPA and other government officials, as well as the general public, from becoming aware of problems with Title V programs as they are identified. OAQPS officials explained that they have requested that the regions complete and submit their assessments of the permitting authorities, but

<sup>&</sup>lt;sup>42</sup>As of December 2004. This number includes a program evaluation completed in Louisiana prior to the development of the OAQPS program evaluation questionnaire.

that some regions appear to be waiting until the problems are corrected before completing their final reports. OAQPS officials also told us that they do not have direct authority to require regions to complete the delayed reports. In responding to our draft report, EPA indicated that regions take a significant amount of time to prepare program evaluation reports and that the regions also provide time for State and local permitting authorities to comment on the draft reports.

# **EPA Responsiveness to Public Petitions Needs to Improve**

EPA review of Title V permits can also occur as a result of public petitions. According to section 505(b)(2) of the CAA, if EPA does not object to a permit, any person who submitted comments during the relevant public comment period may petition EPA to reconsider its decision. Public petitions must be filed within 60 days after the end of EPA's 45-day review period. If the petition is filed within these guidelines, EPA must grant or deny the petition within 60 days.

Our review found that EPA does respond to public petitions concerning Title V permits, but generally does not do so in a timely fashion. According to an online EPA database (updated in October 2004), EPA received 162 public petitions regarding Title V programs or permits between July 1996 and July 2004. Of those petitions received, EPA has responded to over two thirds (70 percent), averaging approximately 12 months to respond to each petition. As shown in Table 3.2, the range of response times to these petitions varies from 2 months up to nearly 4 years. EPA still has not responded to some petitions, dating back as far as May 1998. In recent years, EPA's petition response rate has been relatively low. Since January 2002, EPA has only responded to 35 percent of the petitions filed.

Table 3.2. Summary of EPA Responses to Title V Petitions - 1996 to 2004

| Year filed | Number<br>of<br>petitions | Number of petitions filed<br>that EPA eventually<br>responded to | Average time<br>from filing date<br>to EPA<br>response<br>(months) | Range of<br>EPA<br>response<br>times<br>(months) |  |
|------------|---------------------------|--|--|--|--|
| 2004       | 7                         | 2  | 4  | 2 - 6  |  |
| 2003       | 13                        | 1  | 9  | 9  |  |
| 2002       | 28                        | 14   | 11   | 7 - 25   |  |
| 2001       | 27                        | 23   | 14   | 5 - 31   |  |
| 2000       | 54                        | 48   | 13   | 3 - 37   |  |
| 1999       | 7                         | 6  | 19   | 4 - 47   |  |
| 1998       | 7                         | 4  | 16   | 5 - 29   |  |
| 1997       | 1                         | 1  | 4  | 4  |  |
| 1996       | 5                         | 5  | 7  | 2 - 10   |  |
| Total      | 149ª                      | 104<br>(70 % of total petitions filed)                           | 12   | 2 - 47   |  |

Source of data: EPA Region 7 Air Program, Title V Petition Database; http://www.epa.gov/region07/programs/artd/air/title5/petitiondb/petitiondb2004.htm

Although the Act required EPA to respond to at least 53 public petitions listed in the EPA database we reviewed within 60 days of the filed date, EPA did not respond to any within the required 60 days. EPA did respond to 45 of the 53 petitions; however, the average response time was almost 17 months. EPA had not responded to the other eight petitions at the time our fieldwork ended in October 2004. These eight petitions have been awaiting EPA response for an average of over 26 months. For 92 petitions in the database we could not find sufficient information to determine whether EPA was required to respond within the 60 day time frame. We found only four instances where EPA deemed petitions filed as untimely, therefore releasing EPA from a duty to respond within 60 days. EPA region and OAQPS officials attributed the delays to a shortage in resources, and to the time required to coordinate efforts between multiple offices within EPA that is necessary to formulate responses to the petitions. A key official at OECA indicated that responding to public petitions is not a high priority within EPA.

EPA's delay in responding to public petitions has prompted some environmental and citizen groups to file lawsuits against the Agency, occasionally forcing the Agency to act through a court ruling. The Georgia Chapter of the Sierra Club filed one such suit in September 2001 and as recently reported, a "coalition of environmental groups" sued EPA for their failure to respond to petitions against Title V permits for several Illinois based coal-fired power plants.<sup>43</sup>

<sup>&</sup>lt;sup>a</sup> In 2003 EPA dismissed 13 public petitions. Those petitions are not included in Table 3.2, as they do not reflect typical EPA responses to public petitions. In each of the petitions dismissed by EPA, the Agency had already initiated the process to reopen the permits for the facilities that the petitions were based on. Because of this, EPA dismissed these petitions as "unripe."

<sup>&</sup>lt;sup>43</sup>Sierra Club v. Whitman, 1:01-cv-01991 (D.C.Cir. Filed Sept. 19, 2001); and Suit Filed Against EPA Over Permits for Illinois Coal-Fired Power Plants, Daily Environment Rep. (BNA) No 179, at A-7 (Sept. 16, 2004), discussing, American Lung Ass'n of Metropolitan Chicago v. Leavitt, No.04 C 5966 (N.D. Ill. filed Sept. 13, 2004)

EPA's timely response to applicable public petitions is also important due to the Agency's lack of adequate Title V guidance over the past several years. <sup>44</sup> Agency officials told us that informal guidance provided through public petition responses has served as a means of providing EPA Title V guidance. EPA's responses to public petitions should not be a substitute for formally issued EPA guidance on Title V. Nonetheless, since these responses have served as informal Title V guidance, EPA's untimely responses may have exacerbated the problems that have arisen from the lack of formally issued guidance.

# Most NOD and Commitment Letter Issues Have Been Resolved

The OAR and EPA regional offices exercise oversight by issuing NODs for program deficiencies. State and local permitting authorities had resolved the majority of the issues identified in NODs issued by EPA. Most of the commitments made by the four State agencies we visited were adequately addressed by the States. In general, in these four States, we noted improvements in their Title V programs as a result of NOD and commitment letter resolutions. However, NOD deficiencies remain in Texas, Hawaii, and Wisconsin and commitment letter issues remain in Ohio and Texas. The deadline for resolving the NOD issue in Texas has passed. According to the NOD provisions, sanctions against the State were a possibility if the issues in the NOD were not resolved within 18 months. However, EPA had not yet published a rule on the Title V applicability of sanctions for unresolved program deficiencies. This "order of sanctions" rulemaking is a first step before EPA can take sanctions against a State. EPA drafted a proposed rule on the applicability of sanctions related to these unresolved NODs, but the proposed rule has not been issued for comment in the FR.

After EPA wrote the Part 70 rules governing implementing Title V, most States received interim program approval of their Title V programs from EPA for two years. This EPA interim approval allowed them to begin issuing permits. On May 22, 2000, EPA extended the interim approvals for 86 State and local operating permits programs a second time. Because the CAA states that interim approvals can only be for two years and cannot be extended, the Sierra Club and New York Public Interest Research Group Inc. (NYPIRG) sued EPA over the extended interim approvals in the Court of Appeals for the District of Columbia. The lawsuit resulted in a settlement in which EPA agreed to address issues in State rules raised by the Sierra Club and NYPIRG in considering whether to approve or disapprove their Title V programs. EPA agreed to issue a FR notice requesting citizens' comments concerning deficiencies in the States' Title V programs. <sup>45</sup>

According to key officials in OAQPS, after the above-mentioned FR notice requesting public comment was issued in December 2000, EPA received 34 letters

<sup>&</sup>lt;sup>44</sup>See discussion of the Agency's Title V guidance later in this chapter.

<sup>&</sup>lt;sup>45</sup>See, Sierra Club,, 322 F.3d at 718(D.C.Cir. 2003); Public Citizen, 343 F.3d at 449, 454.

from citizens that contained 350 issues affecting 20 State Title V programs. In response, EPA divided these issues into regulatory and implementation categories and issued NODs to permitting authorities that it deemed as having regulatory issues, and obtained commitment letters from States and local permitting authorities addressing the implementation issues. The regulatory issues required changes in the permitting authorities' regulations, while the implementation issues required changes in implementing the permit authorities' programs to resolve these issues. Ultimately, EPA issued NODs to 8 States, 34 districts in California, and the District of Columbia, directing them to correct these regulatory issues. At least 23 permitting authorities addressed multiple implementation issues in their commitment letters to EPA. As of October 2004, all State and local permitting programs have received final approval from EPA, although some NOD and commitment letter issues were still outstanding.

### Notices of Deficiency

According to provisions in the CAA, State and local permitting authorities that receive EPA NODs have 18 months to address their Title V program deficiencies. EPA must publish resolutions of these deficiencies in the FR. EPA issued NODs to 8 States, 34 local permitting authorities in California, and the District of Columbia, directing them to correct program deficiencies. NOD issues have been resolved with all States except for Texas, Hawaii, and Wisconsin. Appendix E provides details on the status of all NODs issued by EPA as of October 2004.

According to EPA, Texas has resolved all issues in its NOD except for final EPA approval of a SIP revision related to excess emissions resulting from facility malfunctions. This SIP revision was included in a Texas regulation amendment on January 2, 2004. EPA proposed approval of Texas' SIP revision on March 2, 2004, but has not yet granted final approval of the SIP revision. Consequently, because EPA has not officially approved the SIP revision, EPA has not issued a FR notice granting its final approval of Texas' action to correct its NOD. In the opinion of a key EPA Region 6 official, the SIP revision has not received final approval because EPA officials in OECA and OGC believe the Texas regulation allows too many excess emissions. Consequently, the statutory deadline for resolving NOD issues within 18 months had not been met since the NOD was issued in January 2002. A permitting authority may face sanctions if the deficiency is not resolved within 18 months. According to OAQPS officials, sanctions have not been proposed for Texas because EPA guidance on implementing sanctions has not been proposed. OAQPS officials stated that the unresolved NOD issue is SIP related and that Texas was required only to propose a SIP revision within the deadline in the NOD. OAQPS officials believe the deficiency was resolved since Texas has amended their regulations. However, the Texas regulation amendment will expire on June 30, 2005.

EPA issued an NOD to Hawaii in April 2002 because its SIP rules did not adequately address IEUs. According to an OAQPS official, Hawaii had revised its SIP rule related to this issue effective November 14, 2003. However, EPA has not issued a FR notice to propose approval of Hawaii's actions to resolve the NOD

issue. Officials in OAQPS and EPA Region 9 told us that the issue was resolved and that the FR notice would be issued shortly. According to a Region 9 official, the draft FR notice had not been issued because he had not been in the office during the period in question. The Region 9 official indicated that the Agency planned to issue the draft FR notice in December 2004.

EPA issued an NOD to Wisconsin on March 4, 2004. The issues cited against Wisconsin's Title V program in this NOD included (1) not collecting sufficient Title V fees, (2) improperly using Title V funds, (3) untimely issuing Title V permits, and (4) other issues, related to the supersession of terms and conditions from prior permits to Title V permits, issuing permits that did not contain all applicable requirements (such as IEUs), and including terms in their permits that were not federally enforceable and lacked origin of authority. Wisconsin's NOD deadline for correcting their program deficiencies is September 2005.

#### Commitment Letters

As discussed above, State and local permitting authorities sent letters to EPA committing to certain actions that they would take to resolve Title V program implementation issues identified by EPA. If the issues addressed in the commitment letters were not addressed in a timely manner, EPA could then issue NODs against permitting authorities. We reviewed actions taken by New York, Ohio, and Texas to determine the extent to which their commitments to EPA to resolve Title V implementation deficiencies were met. Except for the issues related to ACCs in Texas and the SB issues addressed in Chapter 2 of this report, the commitments appeared to be adequately resolved or the States were generally taking appropriate actions to implement the changes. In its commitment letter, Ohio committed to issuing SB guidance and we noted that limited guidance had been placed on the their SB form. However, Ohio SBs still do not contain key elements such as facility descriptions that include summaries of the operating processes; therefore, we believe Ohio SBs need further improvement. Ohio also committed to continue to work with EPA to improve the SBs. However, Ohio has not incorporated several key elements in its SBs recommended by Region 5 in its 2001 Memorandum<sup>46</sup> reasoning that "There is no national guidance, policy, or preamble documentation in either the Clean Air Act or proposed and final versions of Part 70 supporting the SB elements listed in the EPA [Region 5] memorandum." Texas reported in its commitment letter that the State had modified its ACCs to meet EPA Region 6's concerns. As explained in Chapter 2, we identified deficiencies in Ohio's SBs and Texas' ACCs which we believe still have not been adequately resolved.

For State and local permitting authorities with commitment letters which we did not visit, we did not verify whether the applicable commitments were completed. For example, one commitment by the State of Washington required the State to improve monitoring requirements in its permits. Although EPA Region 10

<sup>&</sup>lt;sup>46</sup>See page 17 of our report for a discussion of the Region 5 2001 memorandum to Ohio.

officials indicated that they believed improvements in the State's permit monitoring provisions were made, a key EPA Region 10 official could not verify the extent of these improvements with certainty because the Region had not yet evaluated Washington's Title V program. OAQPS could not verify whether the commitments were adequately addressed by the permitting authorities because OAQPS relied on the EPA regional offices to ensure that all the commitments were met and did not track resolution of the commitments. We were told by a key OAQPS official that OAQPS' early efforts to track resolution of commitment letter issues received little cooperation from EPA regional offices.

EPA has not issued a rule to address instances when permitting authorities have continuing unresolved deficiencies in their Title V programs. As part of the Agency's corrective action plan in response to our March 2002 OIG report, <sup>47</sup> EPA drafted a proposed rule to establish the order in which sanctions should apply for untimely resolution of NOD issues that are required under the mandatory sanctions provisions of Title V. Concerned that the Agency was not following through on its action plan to address this recommendation from the 2002 report, the OIG issued a memorandum to OAQPS in November 2003 and subsequently met with the Agency to discuss their progress. However, at the time we completed our field work in October 2004, this order of sanctions draft rule had not been proposed.

# State Title V Programs Improved as a Result of NODs and Commitment Letters

Resolving the issues raised in EPA NODs and commitment letters from State and local authorities have resulted in improving Title V permitting authority programs. As stated in Chapter 2, the States we visited have taken steps to significantly improve permit-related documents, due in part, to this resolution process. Though additional steps need to be taken, Texas has substantially improved its SBs. Texas also adopted a new section in its regulations requiring that the legal and factual basis of its permits be set forth in its SBs. New York began preparing Permit Review Reports for its permits. In addition, the States we visited have also improved their permits through this resolution process. For example, several States, including New York and Ohio, changed their regulations to improve their definition of prompt reporting of deviations due to excess emissions; also, both States subsequently included corresponding provisions in their permit terms and conditions. Ohio has been improving its permits by including provisions stating the origin of authority for each permit term and condition.

<sup>&</sup>lt;sup>47</sup>See footnote 40.

## Stakeholders Identified Needs for Title V Guidance<sup>48</sup>

Officials from most EPA regional offices, and other Title V stakeholders, wanted additional EPA guidance regarding key Title V permit elements including: monitoring, SB content and ACC content. Chart 3.2 below summarizes the views of EPA regional stakeholders we contacted on the adequacy of EPA's Title V guidance.

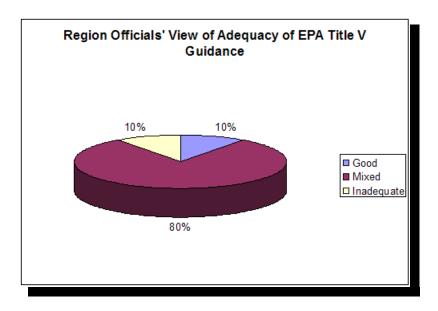


Chart 3.2: Regional View on Adequacy of Title V guidance

Source: EPA regional responses to OIG structured interviews

EPA regional officials discussed the adequacy of EPA guidance in terms of the range of Title V program issues addressed and the actual content.<sup>49</sup> Officials from five EPA regions indicated that the Title V guidance that EPA has issued is beneficial, however they also noted problems with timeliness and/or the lack of guidance in certain key areas. EPA regional officials listed areas where they believe Title V guidance is still needed. Officials from six EPA regions stated that guidance was needed on periodic monitoring, and would have been especially useful earlier in the Title V implementation process. However, officials from two EPA regions also pointed out that the *Appalachian Power* case decided in 2000 had a substantial negative impact on the ability of EPA to address monitoring issues.

<sup>&</sup>lt;sup>48</sup>The director of OAQPS typically signs official EPA Title V guidance. Guidance reflects EPA's policy position on a given issue; however, it is not legally binding. Guidance differs from rules, which must go through the formal rulemaking process in the Federal Register, since rules are subject to public notice and comment and must be adhered to once promulgated.

<sup>&</sup>lt;sup>49</sup>EPA regional officials provided us with responses from their perspectives, as well as related impressions received from their respective State and local permitting authorities.

Officials from six EPA regions stated that EPA guidance on the content of SBs would be beneficial; officials from four EPA regions expressed interest in guidance on the content requirements of ACCs. Officials in one EPA region noted that while they appreciated the Agency's hesitance to "micro-manage" requirements, the lack of content direction for ACCs and SBs meant that no minimum floor for such content was set. Officials in another region indicated that this has resulted in significant inconsistencies between States in what is included in ACCs and SBs. They expressed interest in EPA guidance on content requirements for ACCs and SBs. According to OAQPS officials, while OAR declined to act on issuing ACC guidance, enforcement officials in OECA were interested in issuing guidance. However, to their knowledge, and that of a key OECA official we interviewed, efforts to draft ACC content guidance in OECA did not progress. Another OECA official told us that inadequate EPA guidance has hampered the effectiveness of the Title V program.

Industry representatives we interviewed indicated that they would like to see more consistency in Title V permits and more focus on national cohesion from EPA. These representatives commented on the difficulties that policy variations between States and EPA regional offices pose for businesses. They also noted what they perceive as a lack of effort on the part of EPA to push for national consistency.

#### EPA Guidance Efforts Limited In Recent Years

OAR is responsible for developing national Title V regulations and guidance and for providing technical assistance on Title V program implementation. OAR guidance has been minimal since the DC Circuit Court of Appeals overturned EPA's periodic monitoring guidance in its 2000 ruling on the *Appalachian Power* case. A final rule on umbrella monitoring was promulgated in January 2004; however, three draft guidance documents and one draft rule have been awaiting approval at the OAQPS Division and/or AA for Air and Radiation level since 2002.<sup>50</sup> These draft documents are related to processing program revisions, permit renewal application forms, and ACCs. The draft rule addresses the order of sanctions that can be applied to permitting authorities if they fail to correct EPA-identified Title V program deficiencies. Table 3.3 below shows the status of OAR's issuance of draft rules and guidance since 2002.

<sup>&</sup>lt;sup>50</sup>An additional rule related to ACCs was approved, however OAR is working to correct a substantiative error in wording before promulgating. For more discussion of monitoring guidance/rules see page 21 of this report.

Table 3.3: Status of OAQPS Draft Rules and Guidance Since 2002

| Draft Document  | Date Submitted  | Status  |  |
|---|-----------------|---|--|
| Final rule on umbrella monitoring                           | Sept. 4, 2002   | Promulgated Jan. 22, 2004   |  |
| Proposed rule on order of sanctions                         | 2002            | Cleared OAQPS Division office; with AA for review                           |  |
| Final rule on 40 CFR Part 70 amendments to ACC requirements | June, 2003      | Approved by AA; however OAR staff is working to correct an error in wording |  |
| Guidance on processing program revisions                    | May 17, 2002    | Awaiting OAQPS Division office and AA review                                |  |
| Guidance on permit renewal application forms                | March 26, 2002  | Awaiting OAQPS Division office and AA review                                |  |
| Guidance on ACCs  | August 28, 2002 | Awaiting OAQPS Division office and AA review                                |  |

Source: OAQPS officials, information provided as of October 2004.

In the absence of formal guidance, EPA's Title V "policy" has, in recent years, been conveyed through letters to permitting authorities and responses to citizen petitions. This has resulted in two "guidance" databases: one official, and one unofficial. Official signed guidance and policy memoranda are found on EPA's Technology Transfer Network (TTN), while letters and other communications that may contain case-specific decisions are available in a database maintained by EPA Region 7. The Region 7 database includes letters from EPA regions and incorporates most, but not all, of the documents on the TTN list. According to OAQPS officials, the TTN database is the official source for Title V guidance; however, stakeholders are also referred to the Region 7 database because of the additional information it contains.

To identify all EPA written policy positions on a given Title V issue, one needs to review both the TTN and the EPA Region 7 databases for relevant information. OAQPS staff provided OIG with a copy of a document they prepared summarizing the Agency's position on a number of key Title V issues. This document identifies references where EPA positions and supporting information can be found. For example, the Agency's position on the content of SBs is extracted from responses to numerous citizen petitions, rather than one guidance document. As of September 2004, this document, or similar summary index, was not available on EPA's public Title V website.

OAQPS officials pointed out that even when guidance has been issued, OAR does not have the ability to enforce this guidance. Guidance may provide a structure and framework for EPA regional offices and State and local permitting authorities; however, it is not legally binding. OAQPS officials stressed that they to do not have the authority to force permitting authorities to follow EPA guidance. Thus, even if EPA issued additional guidance, OAQPS officials expressed concern that EPA regional offices and permitting authorities would continue to carry out Title V inconsistently.

### Challenges to Issuing Title V Guidance

OAR faces several obstacles to issuing Title V guidance besides that posed by the legal impact of the 2000 Appalachian Power ruling. OAQPS, EPA regional office, and State officials noted that reaching a level of consensus among all of the various Title V stakeholders can be challenging. For example, (1) North Carolina and New York officials noted examples of OAR and EPA regional offices disagreeing with each other on the correct course of action regarding permit questions; (2) New York officials also pointed out disagreements between the EPA regional office and OECA regarding the State's efforts to change certain permit provisions from a reporting to a notice requirement; and (3) environmental and industry groups have both sued the Agency because they disagreed with Title V guidance and rules. In addition, we were told that issuing guidance is subject to various political pressures surrounding the Agency. Further, OAR does not have the authority to enforce guidance that is successfully issued. Nonetheless, our work suggests that this lack of guidance has contributed to program deficiencies and implementation inconsistencies. Such guidance shortcomings make it more difficult for industry to develop Title V permit applications and for enforcement officials to determine compliance, potentially leading to inconsistent environmental protection.

#### **Conclusions**

Various problems and potential problems with specific elements of Title V permits were identified by officials in OAQPS, officials in all 10 EPA regional air offices, representatives from environmental and industry groups, and in our review of a sample of Title V permits. These problems, combined with the inclusion of CAM in permit renewals as well as the on-going incorporation of MACT requirements into permits, point to a pressing need for greater EPA regional office review of individual permits and action to correct permit deficiencies, as appropriate. Some potential areas of deficiencies, such as periodic monitoring and SB and ACC content, also illustrate a need for more EPA guidance on Title V. While EPA regional offices and permitting authorities are not legally required to adhere to EPA guidance, such guidance does provide the framework for improving adequacy and consistency, and reduces the need for individual EPA regions to develop their own policies on key Title V issues. EPA guidance would also provide EPA regional offices with more support for Title V permit review and enforcement efforts. Unless resolved, Title V program inconsistencies will likely continue to hamper industry and State and local agencies' efforts to meet Title V program goals as permits are renewed for another 5 years.

#### Recommendations

We recommend that the Assistant Administrator for Air and Radiation:

3-1. Promulgate the draft order of sanctions rule which provides notice to State and local agencies, as well as the public, regarding the actions that will be taken

when Notices of Deficiency are not timely resolved by State and local Title V permitting authorities.

- 3-2. Provide a document guide on the EPA public website which would assist the public in identifying and locating published EPA statements on key Title V program issues.
- 3-3. In conjunction with EPA Regional Administrators, jointly develop a strategy to ensure that EPA regional oversight and review of Title V permit adequacy continues beyond the scheduled program evaluations. EPA regional review of permits should include an analysis of clarity-related issues and appropriate inclusion of CAM and MACT provisions in any permit renewals.
- 3-4. In conjunction with EPA Regional Administrators, jointly coordinate and streamline the review and response process for Title V public petitions to meet the response requirements specified in the CAA.

# **Agency Comments and OIG Evaluation**

The Agency largely agreed with our findings, conclusions, and recommendations in Chapter 3 of the report. We made revisions to Chapter 3 where appropriate. EPA sought to clarify some information, specifically regarding program evaluations conducted by the regions, and public petition responses. EPA stated that the regions work closely with permitting authorities in conducting air program evaluations and also serve as a mediator between permitting authorities and petitioners during the public petition process. While there may be reasonable justifications for the more lengthy delays in EPA's issuance of written program evaluations and public petition responses, we remain concerned about the timeliness of the Agency's actions on these matters. EPA, as a whole, should streamline their issuance and response process with regard to both program evaluation reports and public petition responses. The Agency disagreed with parts of our recommendation to issue Title V program guidance and also our recommendation to provide a document guide to assist the public in identifying EPA statements on key Title V issues. We agree that it may not be necessary to issue all guidance now in draft, particularly guidance on permit renewal application forms and processing program revisions. However, we believe that guidance on ACC content is still needed to provide consistency among States and permitting authorities. We also believe that a brief guide summarizing EPA's position on key Title V issues would be beneficial to both permit writers and the general public. Such a guide will be important to the public as Title V facilities seek permit renewals. The Agency's consolidated response and our evaluation of that response are in Appendix F.

# **Chapter 4**

# Despite Some Problems, Title V Has Generally Improved Implementation of the Clean Air Act

Available evidence suggests that, in general, establishing Title V has improved implementing the CAA, and that the Title V program has been successful in partially meeting most of its congressionally-envisioned goals. Interviews with key officials from EPA's 10 regional offices, the four States we visited, stakeholders from environmental groups, as well as the results of five EPA evaluations<sup>51</sup> of State Title V programs, suggest that – despite implementation problems – Title V has improved the implementation of the CAA. Stakeholders from large companies with many Title V facilities, and industry representatives viewed Title V as a costly and burdensome program that had not achieved its intended goals. Although actual emissions reductions have not been tracked by EPA and insufficient evidence is available to determine whether Title V has resulted in cleaner air nationwide, most Title V stakeholders we contacted said that significant benefits have been achieved as a result of implementing the Title V permitting program. For example, while not an explicit goal of Title V, a number of stakeholders said that implementation of key Title V provisions, such as requiring facility owners/operators to annually certify compliance with applicable clean air requirements, has had the indirect benefit of reducing facility emissions.

Our comparison of State permits issued prior to Title V with federally-enforceable Title V permits showed that, in most cases, not only were requirements from pre-Title V permits incorporated into the Title V permits, but many new and significant requirements were incorporated into these permits. However, EPA has not conducted an in-depth study of Title V benefits, nor have data been maintained by EPA that would allow an empirical analysis of these benefits. Also, due to the data limitations and the inability to isolate the impact of Title V on enforcement as opposed to other Agency enforcement initiatives, we were unable to determine whether CAA enforcement and compliance was improved as a result of Title V's implementation, although anecdotal evidence suggests that many facilities had placed a greater emphasis on compliance as a result of Title V.

<sup>&</sup>lt;sup>51</sup>Six State Title V program evaluation reports were provided to us by the end of our fieldwork. However, only five of the reports addressed benefits resulting from Title V. See page 41 for additional information on program evaluations.

<sup>&</sup>lt;sup>52</sup>In this comparison, we assessed the extent that permits included compliance reporting requirements, enforceable terms, public participation provisions, and monitoring, testing, and recordkeeping requirements.

# **Expected Benefits of Title V**

During consideration of the 1990 CAA Amendments, U. S. Senate and House Committee reports dated October 26, 1990, and October 27, 1990, and the May 3, 1990, Clean Air Facts<sup>53</sup> identified benefits that Congress expected to be realized from the Title V program. Table 4.1 shows the nine expected benefits from Title V, as enumerated in the Congressional record.

Table 4.1: Nine Primary Benefits Expected From Implementing Title V

|   | Expected Benefit  |  |  |  |
|---|---|--|--|--|
| 1 | Improve States' air pollution programs due to better emissions inventories. |  |  |  |
| 2 | Provide resources through Title V fees.                                     |  |  |  |
| 3 | Provide a vehicle for implementing the air toxics and acid rain programs.   |  |  |  |
| 4 | Improve enforcement.  |  |  |  |
| 5 | Achieve faster compliance.  |  |  |  |
| 6 | Require compliance certifications from facility operators.                  |  |  |  |
| 7 | Include all the applicable regulatory requirements in one document.         |  |  |  |
| 8 | Provide regulatory certainty for sources.                                   |  |  |  |
| 9 | Improve public participation.   |  |  |  |

To analyze the impact of Title V relative to these Congressional goals, we categorized the nine benefits into results associated with (1) improving States' air pollution programs, (2) improving enforcement and achieving faster compliance, (3) consolidating all the applicable requirements listed in one document and providing regulatory certainty, and, (4) improving public participation. Although not an explicit goal of Title V cited in the Congressional record, we also sought to determine whether emissions reductions or cleaner air resulted from implementing the Title V program. This was a subsequent goal added by the CAA Advisory Committee, which was established to report on the state of Title V implementation.

## Most Stakeholders Cited Anecdotal Benefits of Title V

In general, benefits cited by stakeholders varied according to their different perspectives, with environmental groups, EPA headquarters and regional officials, and State permitting authorities citing multiple benefits from Title V. Industry representatives we contacted viewed Title V as a costly program that has not provided many benefits in its present configuration. Due to the lack of available evidence, we were unable to determine whether CAA enforcement and compliance

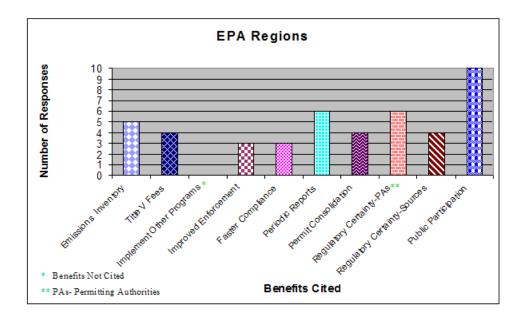
<sup>&</sup>lt;sup>53</sup>Clean Air Facts is a Congressional record document that provides background information on legislation.

was improved as a result of Title V's implementation, although anecdotal evidence existed that many facilities had placed a greater emphasis on compliance.

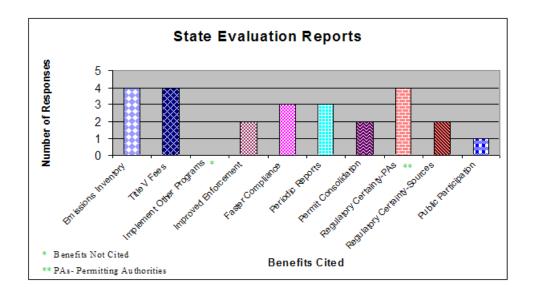
Also, the benefits of placing all applicable CAA requirements in one document and providing regulatory certainty to facility operators were not always recognized by stakeholders due, largely, to permit clarity issues (see Chapter 2 of this report). However, representatives from environmental groups indicated that Title V has significantly improved public participation. The results of interviewing key stakeholders and reviewing State Title V program evaluation reports are discussed in greater detail below.

The following charts summarize the responses received from EPA regional officials and the benefits identified in EPA's evaluation reports on State Title V programs.

Chart 4.1: Title V Benefits Cited by EPA Regional Officials



55



# **Improved Air Pollution Control Programs**

Three anticipated Title V benefits cited in the Congressional record were related to improved air pollution programs operated by permitting authorities, as follows:

- improved emissions inventories were expected to contribute to improved air pollution control strategies for meeting CAA standards.
- the collection of Title V fees were expected to provide a source of revenue to permitting authorities sufficient to support their efforts to issue permits, and
- Title V could be a vehicle for States to take over administration, subject to Federal oversight, of significant parts of the air toxics and acid rain programs. For example, MACT standards developed under the air toxics programs were to be included in Title V programs.

#### Improved Emissions Inventories

Permitting authorities identified improved emissions inventories as one of the most significant benefits that they received from the Title V program. State officials indicated that Title V permits have provided a more comprehensive inventory of controlled pollutant emissions. Officials from two of the four States we visited and four of the five State Title V evaluation reports identified improved emissions inventories as a benefit of Title V. Also, officials from 5 of the 10 EPA regions cited improved emissions inventories as a Title V benefit. Further, State officials reported that as a result of Title V, they identified non-permitted sources and were better able to quantify their emissions units.

#### Mixed Views of Fees

State officials identified establishing a Title V fee program as a benefit in four of the five State Title V program evaluation reports. For example, an EPA evaluation report on one State Title V program reported that fees collected through the State's Title V program provided a stable funding source and more resources for equipment and onsite travel. Another State also reported that Title V fees was a benefit of the Title V program, noting that

The increase in revenue as a result of Title V permit fees has allowed DNREC to significantly increase its permitting and enforcement staff levels, as well as, provided funds for other related expenses. Increased staff has allowed for more frequent inspections, greater timeliness in permitting, and greater ability to provide more compliance assistance.

Officials in 4 of the 10 EPA regions cited establishing a Title V fee program as a benefit. However, none of the State officials in the four States we visited identified the Title V fee program as a benefit to them. According to a key OAQPS official, "loose" guidance from EPA has impacted the fee provisions of Title V. Title V fee collections were supposed to fully cover the costs of each State's permitting program, including compliance assurance, monitoring, reporting, and record-keeping. Further, since the fees were based on amount of pollution emitted in a year, the fees provided an incentive to facilities to reduce their emissions.

There have been instances reported where the amount of fees collected by permitting authorities have not been adequate to sustain the corresponding Title V programs. For example, Wisconsin's NOD issued by EPA in March 2004 stated that Wisconsin, "... failed to demonstrate that its title V program of Part 70 sources requires owners or operators ... to pay fees that are sufficient to cover the costs of the State's title V program . . ." Similarly, in our prior Title V report on the EPA's and States' progress on issuing Title V permits, we noted that States sometimes chose to charge less than the recommended rate per ton of pollutant emitted. For example, although Congress set a presumptive minimum fee of \$25 per ton in 1990 when the Act was passed, in our 2002 report we noted that, for the 6 States reviewed, the fee per ton of emissions ranged from about \$18 per ton in Colorado to \$43 per ton in Pennsylvania. Additionally, EPA officials told us then that they believed that insufficient fee revenue had a negative impact on issuing Title V permits in a timely manner.

# Administration of Air Toxics and Acid Rain-Related Programs Not Cited

Although we saw Title V permits that contained air toxics and acid rain-related requirements, none of the stakeholders we talked with cited the use of Title V as beneficial in administering significant parts of these programs.

# **Improved Enforcement and Faster Compliance**

Three additional expected benefits cited in the Congressional record related to improved enforcement and faster compliance, as follows:

- By listing all the applicable requirements in one document, Title V permits would "... provide inspectors with specific information about regulated equipment, performance standards, emissions limits, and other operating parameters to facilitate their determination of the compliance status of ..." the facility.
- With greater agreement between industry and EPA, State, and local regulators on the equipment that should be in place, performance standards, emissions limits, and other operating parameters, this reduced uncertainty about what applies, where, and when would help Title V facilities achieve compliance more quickly.
- Submitting periodic compliance reports to EPA and the States, certifying that
  the facility complies with all applicable CAA requirements, or specifying those
  requirements that the facility did not comply with, under severe penalties. It
  was anticipated that Title V sources would be made more accountable for their
  emissions if the facility owners/operators were required to identify instances of
  non-compliance with any applicable requirements.

Title V benefits associated with better enforcement and faster compliance could not be definitively determined because of a lack of empirical data. However, some stakeholders stated that Title V permits assisted inspectors in the performance of their responsibilities and that the requirement to certify compliance resulted in companies being more concerned with their facility's compliance. A key State official and an official with a public interest group pointed out that it may be too early to assess Title V's results associated with enforcement as initial Title V permits are still being issued. Also complicating this assessment was that CAA enforcement data can be interpreted two ways. Increased enforcement actions may indicate that more violations are found because of Title V; conversely, reduced enforcement actions may indicate better compliance and fewer violations due to effective implementation of Title V.

#### Improved Enforcement Cited By Some Stakeholders

Improved CAA enforcement was cited as a benefit by officials in 3 of the 10 EPA regions and in 2 of the 5 State Title V program evaluation reports. Benefits cited included the ability of States to better target their enforcement and to provide their inspectors with more useful information. In one State Title V program evaluation report, the State indicated that, "Information from Title V operating permit program is used to target inspections and/or enforcement." The State also reported that their Title V permit program has improved the implementation of their program by, "...

identifying source categories or types of emission units with pervasive or persistent compliance problems, ..."

## Faster Compliance Cited By Some Stakeholders

Faster CAA compliance was cited as a Title V benefit by officials in 3 of the 10 EPA regions and in 3 of the 5 State Title V program evaluation reports. We also saw anecdotal evidence that, in some instances, faster compliance was achieved as a result of Title V. Table 4.2 below illustrates these benefits.

Table 4.2: Anecdotal Illustrations of Compliance Benefits From Implementing Title V

#### **Cited Compliance Benefits**

State evaluation reports cited instances where emissions units needing control devices were identified during the Title V permit issuance process.

State officials identified instances where facilities made operational changes to reduce emissions to avoid being subject to the Title V program.

One industry representative and one EPA regional official said that Title V helped pollution prevention efforts.

Another State indicated in a Title V program evaluation report that CAA compliance was improved and resulted in actual emissions reductions.

One State reported that a permit writer found a source without an approved Volatile Organic Compounds (VOC) Reasonable Available Control Technology (RACT) plan, which, when corrected, led to a decrease in the source's emissions.

In another State, a source decreased their emissions from approximately 250 tons per year to 65 tons per year to avoid Title V applicability.

Source: OIG Interviews of State officials and reviews of Title V program evaluation reports.

Some State officials indicated that Title V has resulted in facilities becoming more conscious of CAA compliance issues involving their facilities. In one State Title V program evaluation report, the State indicated that compliance behavior has improved as a result of the Title V program. The State reported:

The following changes in compliance behavior on the part of sources have been seen in response to the Title V operating permitting program: increased use of self-audits, increased use of environmental management systems, increased staff devoted to environmental management, increased resources devoted to environmental control systems (e.g., maintenance of control equipment or installation of improved control devices), increased resources devoted to compliance monitoring, and increased awareness of compliance obligations. Overall, industry is paying more attention to environmental issues. In some cases this awareness was pushed by the Title V compliance certifications and making sure the responsible offices know what they were signing.

Another State reported that their Title V program has assisted the State in identifying compliance issues. The report stated that:

The Title V program has also been a means to bring compliance issues to light. CDPHE [Colorado Department of Public Health & Environment] believes that

potential compliance problems were encountered during review of approximately 40%-60% of the total permits. The compliance problems were most often identified prior to issuance of the draft permit and after the final permit was issued. The majority of these problems are related to NSPS, SIP, and minor NSR requirements. Sources have responded to these compliance problems with increased self-audits, increased use of environmental management systems, increased staff devoted to environmental management, increased resources devoted to environmental control systems, increased resources devoted to compliance monitoring, and better awareness of compliance obligations.

## Annual Compliance Certifications Focus Attention On Compliance

Officials from 6 of 10 EPA regional offices identified the submission of signed ACCs as a benefit of Title V. Three of the five State evaluation reports indicated that Title V sources providing verification of compliance with permit terms was a Title V benefit. State officials reported that sources have spent more time and resources on compliance matters. One industry official believed that the ACC required too much reporting. Representatives from environmental groups believed that the requirement for ACCs was a benefit of Title V. Our work similarly suggests that these signed annual certifications have resulted in a greater emphasis on compliance.

# **Consolidation of Requirements and Regulatory Certainty**

Facilities that are large enough to be Title V sources are often subject to many different CAA control requirements, such as those under the hazardous air pollutant, nonattainment, and acid rain programs. Two benefits expected to be achieved through the inclusion of all applicable CAA requirements into each facility's Title V permit were:

- to allow the public and other stakeholders to identify all applicable requirements for the facility, and
- regulatory certainty for facility operators.

The results of our stakeholder interviews and reviews of State Title V program evaluation reports indicate that the benefits associated with having permit requirements in one document and providing regulatory certainty have been mixed. In general, industry representatives did not agree with most other stakeholders.

#### Benefits of Consolidating Requirements Cited By Many Stakeholders

Officials from 4 of the 10 EPA Regions indicated that placing all the requirements in one permit have been beneficial. This benefit was also cited in two of the five State Title V program evaluation reports. State officials also indicated that Title V has assisted their staffs in their understanding of applicable air pollution control requirements. In a State Title V program evaluation report, one State reported that their:

... Title V staff has a better understanding of NSPS requirements, the SIP stationary source requirements, the minor NSR program, the major NSR/PSD program, how to design monitoring terms to assure compliance, and how to write enforceable permit terms.

#### Another State similarly noted that:

Permit writers improved their skills in devising monitoring terms that assure compliance and writing enforceable permit terms, as well as their knowledge of applicability criteria for NSPS, NSR, and other Clean Air Act programs. IDEQ [ Idaho Department of Environmental Quality] believes these skills will carry over into its other air permitting programs.

Contrary to the views of other stakeholders, industry officials indicated that consolidating requirements in permits is an admirable goal, but that it has not been accomplished because the requirements for many emissions units at large facilities are subject to frequent changes, and that these changes are not easily incorporated into Title V permits.

# Regulatory Certainty Cited By Most Stakeholders

Though not identified as an expected benefit in the Congressional record, regulatory certainty for permitting authorities was often cited as an expected benefit. Regulatory certainty for facility operators was cited as a benefit by officials in 4 of 10 EPA Regions and 2 of the 5 State Title V program evaluation reports we reviewed. Officials from 6 of the 10 EPA Regions cited regulatory certainty for permitting authorities as a benefit. This benefit was also cited in 4 of the 5 State Title V program evaluation reports and by State officials in two of the four States we visited. Contrary to views of other stakeholders, industry representatives did not agree that regulatory certainty had been accomplished because regulations changed frequently and because of issues associated with permit clarity.

# **Benefits to Public Participation**

Improved public participation was also a key expected benefit from Title V. By requiring that both the permit and source compliance reports be made available to the public, it was anticipated that interested citizens would be able to review and help enforce a source's CAA obligations.

The extent of Title V benefit related to public participation cited in our interviews of key stakeholders and State evaluation reports depended on the stakeholder's perspective. Increased public participation was cited as a benefit by officials in all 10 of EPA's regions and by officials from public interest groups. One EPA Region wrote to us that:

Title V provides much-needed public access to the permitting process and transparency in CAA requirements that apply to industry. This has given the

public an opportunity to be involved in the process of attaining and maintaining clean air. This has also provided the public considerable knowledge about a facility's operation and its obligation to keep the environment clean.

### Officials from another region agreed by writing:

The public comment process has benefitted the public by enabling it to review proposed permits, request public hearings, and petition the administrator if its concerns are not addressed by the permitting authorities. These added provisions have spurred public participation in the permitting process and increased the public's awareness of federal, state, and local requirements. Through the comment process, the public has raised relevant issues that were overlooked by the permitting authorities and the Region.

Although EPA has generally not responded to public petitions in a timely manner, there appeared to be a significant amount of public interest in Title V programs and permits based on the number of petitions filed by public interest groups. Industry officials we interviewed told us that they believed that permits are written to a level of detail which makes it very difficult to understand them unless the reader has a detailed knowledge of the source's operations.

# **EPA and Industry Views of Title V Differed**

# Regional Officials Saw Substantial Improvements In Permits

All 10 EPA regional air offices noted that significant improvements have occurred in a number of key elements in State permitting programs since the implementation of Title V. The recording of all relevant CAA requirements in one document and the ACC requirement were the most significant improvements identified.

EPA regional staff were asked to rank how successful permitting authorities were with regard to six permit elements. These elements included: recording all relevant CAA requirements in one document; requiring regular reporting of monitoring results; requiring emissions monitoring, testing, and record-keeping; requiring ACCs; encouraging public participation; and making terms federally enforceable. Each element was ranked on a scale of 1 to 5, where 1 equaled "not at all" and 5 equaled "to a great extent," for a possible total cumulative rank of 30. Cumulative rankings by EPA regions for pre-Title V efforts overall ranged from a low of 9 to a high of 17, with an average of 14.2. Rankings by EPA regions for post-Title V efforts were significantly higher, ranging from 24.2 to 29.7, with an average of 27. Average ranking responses to individual program elements ranged from 1.1 to 3.4 before Title V and from 4.1 to 4.8 after Title V.

Several regional officials noted that the permit elements they ranked as improving the most, recording all relevant CAA requirements in one document and requiring ACCs, were elements that were not required in the NSR or PSD programs, or any other permitting program prior to Title V. They noted that some pre-Title V permits issued by permitting authorities may have included one or more of the six permit elements on an individual basis, but that there was no systematic requirement to address these elements prior to Title V. EPA regional officials also noted that a handful of permitting authorities with operating permit programs prior to Title V did do an adequate job implementing certain elements, such as including limited monitoring, reporting, and record keeping requirements in their permits.

# Industry Officials Viewed Title V as Costly and Burdensome

The industry representatives we interviewed represented large companies from various industrial sectors with facilities located throughout the United States. These individuals cited several potential benefits that could be achieved by the Title V program including (1) placing all requirements in one document, (2) increasing communications between source and permitting authority, and (3) streamlining of permit requirements. However, in general, these benefits were largely described as benefits only in theory. These representatives believed that the size and complexity of Title V permits and the changing nature of their applicable regulations made it impossible to achieve the goals of putting all the requirements in one document and achieving regulatory certainty. The representatives also said that streamlining requirements was difficult to achieve. Their statements were generally followed with a caveat stating that, in practice, the benefits are not seen because of other factors that make the Title V program a high cost, high burden program. They claimed high financial costs of the Title V permits and the administrative backlogs caused by permit modifications and renewals were detriments to the Title V program. In addition, industry officials expressed concern over the inconsistencies among EPA regions and State permitting authorities in their implementation of Title V programs and the permitting process.

# Results of OIG Review of Pre- and Post-Title V permits

Our review of a sample of Title V permits in four States included an analysis of pre-Title V permits issued to sources in our sample. All of the sources we reviewed were issued some type of permit prior to the beginning of the Title V program. Pre-Title V permits issued to these sources included State permits to construct or operate, NSR permits, and PSD permits. In the majority of cases, the pre-Title V permit was available for our review. As shown in Table 4.3, we found that the content of the pre-Title V permits varied; however none of the permits contained all the elements required in Title V permits.

Table 4.3: OIG Analysis of Pre-Title V Permits for Sources In Our Sample

| Table 4.3. Old Analysis of Fre-Title V Fermits for Sources in Our Sample                     |    |    |                |    |       |         |
|--|----|----|----------------|----|-------|---------|
|  | NC | TX | NY             | ОН | Total | Percent |
| Pre-Title V permit issued  | 10 | 10 | 10             | 10 | 40    | 100%    |
| Pre-Title V permit available for review  | 10 | 10 | 8 <sup>b</sup> | 10 | 38    | 95%     |
| Pre-Title V permit contained the following elements (of those permits available for review): |    |    |                |    |       |         |
| 1. All CAA requirements  | 1  | 0  | 0              | 1  | 2/38  | 5%      |
| 2. Monitoring, testing, record keeping   | 10 | 9  | 4              | 9  | 32/38 | 84%     |
| 3. Periodic monitoring   | 9  | 7  | 3              | 8  | 27/38 | 71%     |
| 4. Annual compliance certifications  | 0  | 0  | 1              | 0  | 1/38  | 3%      |
| 5. Public participation & objections   | 0  | 0  | 3              | 0  | 3/38  | 8%      |
| 6. Terms federally enforceable <sup>a</sup>  | 4  | 0  | 3              | 0  | 7/38  | 18%     |
| 7. Regular reporting   | 6  | 2  | 2              | 7  | 17/38 | 45%     |

Source: OIG analysis of Title V permit information

Generally, the pre-Title V permits we reviewed did not record all CAA requirements in one document. They also did not require ACCs or provide for public participation and public right to object to permits. The terms of the pre-Title V permits were not explicitly federally enforceable in most cases. Most permits contained provisions for at least some monitoring, testing, and record keeping; however, they did not always require periodic monitoring or regular reporting. In addition, the application of monitoring, testing, and record-keeping provisions were not consistent for all requirements in pre-Title V permits. In general, non-Title V permits issued after the Title V program was in place (but before the source received their Title V permit) were more complete than earlier permits.

We also reviewed the extent to which the limited requirements found in pre-Title V permits were incorporated into the Title V permits. In the majority of cases, the Title V permits contained all of the requirements found in the prior permits. In some cases, however, it was difficult to track requirements from the prior permit to the Title V permit. For example, in Texas a facility may have one NSR permit and two or more Title V permits. It was not possible to determine if all the NSR requirements were incorporated without reviewing all of the Title V permits for a source. Our methodology, however, limited us to reviewing one permit per facility. In addition, in Ohio, changes between the pre-Title V permit and the Title V permit sometimes made it challenging to compare requirements. Ohio State officials provided explanations for these discrepancies upon request.

<sup>&</sup>lt;sup>a</sup> In some cases, the pre-Title V permits provided were NSR permits. Rules governing NSR permitting are federally enforceable when approved into a SIP. The information in the table above reflects only whether or not the permits stated that they were federally enforceable on the face of the permit.

<sup>&</sup>lt;sup>b</sup> Prior permits were not provided for two New York permits. In one case, the files could not be located; in the other case, the old permit files had been purged.

#### Conclusions

Despite implementation and oversight problems with Title V permits, legal setbacks, and some industry resistance, the Title V program has generally resulted in significant benefits. Benefits have been recognized by State pollution agencies in significantly improving their knowledge of air pollution sources which they believe has improved their efforts to reduce air pollution levels in their States. Although the adequacy of compliance certifications is inconsistent among the States, the States have improved enforcement tools as a result of the requirement that source compliance be certified periodically by a responsible official and submitted to the State agency and EPA. Responsible officials generally have a better knowledge of their plants' operations and are placing more emphasis on compliance with the applicable regulations, according to officials in State enforcement offices.

In addition to identifying the specific benefits of Title V, officials in all 10 EPA regions cited significant improvements overall in State and local permitting since the implementation of Title V. We found similar results as a result of our review of pre-Title V permits issued to sources in our State samples. The most significant improvements identified by EPA regional officials were recording all relevant CAA requirements in one document and the requirement for ACCs. These requirements are key factors in providing all stakeholders with the information needed to understand the air pollution requirements which major emitting sources are subject to, as well as how well they are meeting those requirements.

#### Recommendations

We recommend that the AA for Air and Radiation:

4-1. Consider forming a stakeholder advisory group, possibly in conjunction with the CAA Advisory Committee, to solicit input on needed Title V guidance and rules from selected State and local agencies, and industries or industry associations, environmental groups and other interested stakeholders.

# **Agency Comments and OIG Evaluation**

EPA agreed with recommendation 4-1 but disagreed with our recommendation 4-2. Upon further consideration, we decided to remove recommendation 4-2 from the final report. EPA Headquarters and regions agreement to continue long-term oversight of Title V implementation, including permit reviews and comprehensive Title V program reviews, should provide sufficient information to identify Title V areas still in need of improvement. The Agency's consolidated response and our evaluation of that response are in Appendix F.

# **Definition of Major Stationary Sources**

Passage of the CAA Amendments of 1990 also brought new definitions of major stationary sources that varied depending on the type of pollutant, the attainment status of the area where the pollutant is emitted, the synergistic effects of multiple airborne pollutants, the ability of some pollutants to travel long distances, and other factors. As a result, simple definitions of what sources are and are not major sources of air pollution are difficult to find. Generally, a major source is any source with annual emissions that meet or exceed levels specified in the Act.<sup>54</sup>

Table A.1 shows the annual emission levels, in tons of pollution, that define a major source of any of the National Ambient Air Quality Standard pollutants under the Act:

Table A.1: Categorization of Major Sources

| Attainment<br>Status<br>of Area<br>Where<br>Source Is<br>Located | Potential to Emit (Tons/Year) |               |   |                                      |                                  |   |  |
|--|-------------------------------|---------------|---|--------------------------------------|----------------------------------|---|--|
|  | Carbon<br>Monoxide<br>(CO)    | Lead<br>(Pb)ª | Nitrogen<br>Dioxide<br>(NO2) <sup>a</sup> | Nitrogen<br>Oxides<br>(NOx)          | Particulate<br>Matter<br>(PM-10) | Sulfur<br>Dioxide<br>(SO2) <sup>a</sup> | Volatile<br>Organic<br>Compounds<br>(VOCs) |
| Attainment<br>Areas  | 100                           | 100           | 100                                       | 100                                  | 100                              | 100                                     | 100  |
| Nonattainment  | Areas                         | •             | •   | •                                    |                                  |   |  |
| Marginal <sup>b</sup>  |                               |               |   | 100                                  |                                  |   | 100  |
| Moderate   | 100                           |               |   | 100                                  | 100                              |   | 100  |
| Serious  | 50                            |               |   | 50                                   | 70                               |   | 50   |
| Severe <sup>b</sup>  |                               |               |   | 25                                   |                                  |   | 25   |
| Extreme  |                               |               |   | 10                                   |                                  |   | 10   |
| Northeast<br>Ozone<br>Transport<br>Region                        |                               |               |   | 50 -<br>marginal<br>100-<br>moderate |                                  |   | 50 -<br>marginal<br>100-<br>moderate       |

<sup>&</sup>lt;sup>a</sup> The Act did not establish additional major source classifications for these pollutants based on an area's attainment status.

The 1990 Act also added new definitions for major sources of hazardous air pollutants, generally

<sup>&</sup>lt;sup>b</sup> Nonattainment areas for carbon monoxide (CO) and particulate matter (PM–10) are classified as either moderate or serious.

<sup>&</sup>lt;sup>54</sup>A major source is defined in 40 CFR Part 70 as any stationary source belonging to a single major industrial grouping that meets any of the following criteria: 1) emits, or has the potential to emit, 10 tons per year (tpy) or more of any hazardous air pollutant (as defined in section 112(b) of the CAA), 25 tpy of any combination of hazardous air pollutants, or 100 tpy of any air pollutant; 2) is located in an ozone nonattainment area with the potential to emit 100 tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as "marginal" or "moderate," 50 tpy or more in areas classified as "serious," 25 tpy or more in areas classified as "serious," or 10 tpy or more in areas classified as "extreme;" 3) is located in ozone transport regions with the potential to emit 50 tpy or more of volatile organic compounds; 4) is located in a nonattainment area classified as "serious" with the potential to emit 50 tpy or more of carbon monoxide; or 5) is located in a nonattainment area classified as "serious" and has the potential to emit 70 tpy or more of PM-10.

referred to as air toxics. The act listed 188 such air toxics, including the airborne emissions of such things as arsenic, asbestos, benzene, dioxin, formaldehyde, mercury, and perchloroethylene. By definition, any source is a major source if it emits 10 or more tons annually of any one of these 188 air toxics, or 25 or more tons of any combination of these 188 air toxics. Facilities emitting these 188 air toxics are regulated under the National Emission Standards for Hazardous Air Pollutants.

Additionally, engaging in or undertaking certain activities can cause a source to become a major source. These generally involve sources that are subject to one or more of the following:

- EPA's New Source Performance Standards limitations for new sources of pollution.
- Prevention of Significant Deterioration provisions or the nonattainment area New Source Review provisions for expanding or changing sources.
- Selected sources with potential to contribute to acid rain problems.
- Solid waste incinerators.

According to EPA, over 35,000 sources in the United States have the potential to emit pollutants in sufficient amounts to be a major source, and thus be required to obtain a Title V permit. However, about 17,000 sources have chosen to limit their hours of operation, install pollution control equipment, or take other actions to avoid being subject to the Title V requirements.

# **Details on Scope and Methodology**

#### **Objective 1**

To assess the adequacy of Title V operating permits, we conducted interviews with officials in OAQPS and OECA, representatives from 10 environmental groups and 5 industrial concerns, and key officials in all 10 EPA regional offices. The EPA regional officials we interviewed included air office directors or managers, Title V program managers, State coordinators, permit reviewers, enforcement staff, and regional counsel. We also interviewed Title V program managers, permit writers, permit reviewers, and enforcement staff in four selected States we visited: New York, North Carolina, Ohio, and Texas. In addition, we reviewed 40 Title V permits; 10 in each of the 4 States we visited. We created a structured interview form and a data collection instrument to document the data collected and facilitate in analysis. Information on these follows.

#### Structured Interview Form

Based on issues identified in our preliminary interviews of key stakeholders, a structured interview form was created for use in interviews of EPA regional officials. This form was sent to region air program officials in preparation for interviews via video or telephone conference. The structured interview form contained questions regarding Title V implementation and oversight, regional assessment of permit adequacy, regional assessment of permitting authority progress, the impact of Title V, and the resources available for the Title V program. In addition to responding to the questions orally, all 10 regions supplemented their interviews with written responses to the questions outlined on the structured interview form. EPA regional interviews were conducted from December 2003 to March 2004.

#### Data Collection Instrument

In addition to the structured interview form, a data collection instrument was created to aid in the State permit review aspect of our field work. Questions were developed for the data collection instrument by researching Title V guidance and policy documents, and Title V issues identified in preliminary interviews and in publicly available literature on Title V issues. Documents used to generate review areas and questions included EPA white papers, guides to aid the public in reviewing Title V permits available on EPA's website, the EPA Region 3 Title V permit writer's guide, and various permit training and issue-related documents.

#### Sample Selection

Due to the large number of permits needed to create a sample statistically representative of the universe of Title V permits nationwide, and limitations on OIG resources, we decided to judgmentally select four States and randomly select 10 permits to review from within each State.<sup>55</sup> The four States selected for permit review included: New York, North Carolina, Ohio, and Texas. Three States (New York, Ohio, and Texas) were identified by OAQPS, EPA regions, and

<sup>&</sup>lt;sup>55</sup>Selection of State permits was random within the context of certain parameters.

environmental groups as States with varying degrees of problems associated with their Title V permits. Ohio and Texas had received NODs as a result of Title V program problems; Ohio, Texas, and New York wrote commitment letters to EPA pledging to address problems with Title V permit implementation issues.

Permits in these States have received a number of public complaints. North Carolina was recommended by OAQPS and EPA regional officials as a State that had not received such NODs and few complaints. Another selection criteria we considered was the relative significance of major source emissions on air quality. With the exception of North Carolina and Ohio emissions of PM10, the States rank in the top 15 of emitting States for selected criteria pollutants.<sup>56</sup>

We stratified our sample within each of the four States selected by reviewing industries in each State. The top five industries were ranked by Standard Industrial Classification (SIC code) according to annual tonnage of emitted pollutants (see Table B.1).

Table B.1: Top Five Emitting Industries (of Criteria Pollutants) In Each State

| New York  | North Carolina   | Ohio   | Texas  |
|---|--|--|--|
| Electric Services     Photo Equip &     Supplies     Cement     Hydraulic     Elec & Other     Services     Combined     Blast Furnaces     and Steel Mills | Electric Services     Paper Mills     Wood Furniture     Industrial Organic Chemicals     Pulp Mills | 1. Electric Services 2. Elec & Other Services Combined 3. Blast Furnaces & Steel Mills 4. Inorganic Pigments 5. Primary Aluminum | Electric Services     Petroleum Refining     Industrial Organic     Chemicals     Natural Gas     Liquids     Carbon Black |

Source: OIG analysis of data from EPA NET Facility SIC Report. See www.epa.gov/air/data/geosel.html

The following steps were then taken to select industries for permit review: (1) all industries that appeared in at least two of the States' top five lists were included; and (2) the next two largest polluting industries for each State were included. Step 1 resulted in selecting three industries – electric services, blast furnaces, and industrial organic chemicals. Step 2 added another eight industry types for a total of eleven selected industries. Table B.2 lists all 11 selected industries.

<sup>&</sup>lt;sup>56</sup>Based on 1998 State-level emissions and rank for CO, NOX, VOC, SO2 and PM10 (EPA Report "National Air Pollutant Emission Trends, 1900 -1998" (EPA-454/R-00-002), page 36).

Table B.2: Industries Selected For Permit Review

| Sel | ected Industries for Review<br>(SIC- Industry Type) | New York | North<br>Carolina  | Ohio  | Texas |
|-----|---|----------|--------------------|-------|-------|
| 1.  | 4911 - Electric Services                            | Х        | Х                  | Х     | Х     |
| 2.  | 3312 - Blast Furnaces and Steel Mills               | Х        | X (1) <sup>a</sup> | Х     | Х     |
| 3.  | 2869 - Industrial Organic Chemicals, nec            | Х        | Х                  | Х     | Х     |
| 4.  | 2621 - Paper Mills Exc Building<br>Paper            | x        | X (3)              | Х     | X (3) |
| 5.  | 2511 - Wood Household Furniture                     | Х        | Х                  | X (1) |       |
| 6.  | 2911 - Petroleum Refining                           | X (1)    |                    | X (2) | Х     |
| 7.  | 1321 - Natural Gas Liquids                          |          |                    |       | Х     |
| 8.  | 2816 - Inorganic Pigments                           | X (1)    | X (1)              | X (1) |       |
| 9.  | 3334 - Primary Aluminum                             | Х        | X (1)              | X (2) |       |
| 10. | 3861 - Photograph Equipment & Supples               | Х        | X (2)              | X (1) |       |
| 11. | 3241 - Cement Hydraulic                             | Х        | X (3)              | X (2) | Х     |

Source: State info on Title V permits by SIC code received from NC, TX, OH, and NY officials.

To select the sample of Title V permits from among the selected industries, we obtained a list of Title V permits issued in each of the 11 SIC codes, identified in Table B.2, for New York, North Carolina, Ohio, and Texas. The lists included permit number, source name, and date of permit issuance. After assigning a chronological number to each permit, the team used a random number generator to select one permit from each SIC code in each State.<sup>57</sup> A total of 40 permits were selected, 10 from each State. The permits had to meet the following criteria in order to be included in the sample: (1) permit must be a valid Title V permit; (2) permit must be issued on or after January 1, 1999;<sup>58</sup> and (3) permit must not be a source on the same property as other permits in the sample.

Although the sample size was not large enough to be statistically projected nationwide, a broad range of industries and Title V permits were reviewed. Our selection methodology allowed for some cross-State comparison of Title V permit content and adequacy among specific industries, and it also allowed us to review Title V sources in the largest emitting industries in each State. For each source selected, the final Title V permit, SB, ACC, related enforcement documentation, and the most recent pre-Title V permit were reviewed, if available. Data were collected in each State, using our data collection instrument, from April to June 2004.

<sup>&</sup>lt;sup>a</sup> Numbers in () represent the number of facilities in a specific SIC if three or fewer.

<sup>&</sup>lt;sup>57</sup>In States that did not have 10 of the 11 industries selected, we randomly sampled additional permits from the lists provided by the States until we had selected 10 permits in each State.

<sup>&</sup>lt;sup>58</sup>All but seven Title V permitting authorities received at least interim program operating approval by 1997 (see EPA OIG Report No. 2002-P-00008 p.51 and www.epa.gov/air/oaqps/permits/approval). We started our sample two years (January 1999) after all programs were approved to ensure that the permitting authorities had time to get their programs operational and work through early implementation problems.

#### Limitations

Information received as a result of EPA regional officials interviews were based largely on regional officials' opinions and experiences with Title V, and generally not on in-depth program analysis. Because of the many possible technical approaches or methods to controlling and monitoring emissions, certain aspects of Title V permits can be challenging to assess. Many of these approaches and methods are subject to differing interpretations. Because of the complexity and uniqueness of permits, we were not able to develop extensive comparisons by industry.

#### **Objective 2**

To assess the effectiveness of EPA oversight and guidance, we examined EPA region efforts to review individual permits and conduct program evaluations according to OAR guidance. Copies of FY2001, FY2002, and FY2003 memorandums of agreement between the regions and OAR, and program evaluation reports completed by the regions were obtained and reviewed. Testimonial evidence regarding region permit review activity was obtained during interviews with EPA regions. Responses were compared to the actual memorandums of agreement to see if they were meeting the agreements with OAR.

To evaluate EPA responses to public petitions, the Title V petition database on EPA Region 7's website was reviewed. The data, last updated in October 2004 and representing Title V public petitions filed from July 1996 to October 2004, were analyzed to determine if EPA was obligated to respond to these petitions within 60 days, under §505(b)(2) of the CAA. Also, using these data, an EPA response rate to public petitions was calculated as well as an average time of response to the petitions.

We also sought to determine if the issues raised in NODs and commitment letters had been addressed and resolved by the relevant permitting authorities. NODs and commitment letters were reviewed and the issues identified in each were followed up in three States we visited (North Carolina did not receive an NOD or issue a commitment letter). We tracked the resolution of the NODs through the FR and contacted OAQPS and EPA regional officials when there was not a FR notice available. For commitment letters, we were not able to verify completion of all the commitments for the States that we did not visit since the commitments were program implementation issues and not State regulatory issues resolved through trackable rule changes. We assessed the steps taken towards completing the commitment letters in the States we visited.

To assess the adequacy of guidance provided by OAR to regions and permitting authorities, two separate EPA guidance databases were reviewed. The Technology Transfer Network, which contains formal, signed guidance and policy memoranda, was accessed via the EPA Title V Permits website. This database contained 70 documents. The other guidance database that was reviewed was the searchable database found on the EPA Region 7 Air Program website, which contains letters and responses to petitions. The Region 7 database contained more documents than the Technology Transfer Network, with 220 guidance documents stored in the database. These databases were reviewed to identify the body of Title V guidance available. Questions were included in the structured interview form, and asked during interviews with EPA regions, to determine if there was a need for further EPA guidance on specific Title V related issues.

#### Limitations

EPA issuance of guidance, regarding the Title V program, has been impacted by various court decisions, making it difficult for the Agency to issue formal guidance on many issues. Informal guidance, in the form of NODs, commitment letters, and responses to public petitions, is more difficult to track than formally issued EPA guidance. OIG staff did not have resources to conduct a comprehensive followup on all oversight and guidance issues, such as all permitting authorities' resolution of all commitment letter issues.

#### **Objective 3**

To determine whether Title V improved implementation of the CAA, we interviewed representatives from all 10 EPA regions using the structured interview form. Specifically, we asked regions to rate how well certain elements of the CAA were met both before and after the Title V program was implemented. We also asked regions to provide specific examples of any benefits experienced as a result of the Title V program. In addition, we interviewed representatives from key stakeholder groups including OAQPS, OECA, permit writers/reviewers from selected State permitting authorities, environmental groups, and industry representatives. Using the data collection instrument, we also reviewed actual permits from a selected number of States and compared their contents and requirements to pre-Title V State permits, where available.

#### Limitations

No empirical evidence was available from EPA relating to this objective. Because of this, we relied on anecdotal evidence to answer this objective. OMB had not evaluated EPA's Title V program under its Program Assessment Rating Tool as of the end of our fieldwork.

We conducted our fieldwork from September 2003 to October 2004. All work was done in accordance with the *Government Auditing Standards*, issued by the Comptroller General of the United States.

#### **Prior Audit Coverage**

#### Government Accountability Office

- Air Pollution: EPA Data Gathering Efforts Would Have Imposed a Burden on States GAO/AIMD-95-160, August 1995
- Air Pollution: Status of Implementation and Issues of the Clean Air Act Amendments of 1990 - GAO/RCED-00-72, April 2000
- Air Pollution: Emission Sources Regulated by Multiple Clean Air Act Provisions GAO/RCED-00-155, May 2000
- Air Pollution: Implementation of the Clean Air Act Amendments of 1990 (Testimony) GAO/RCED-00-183, May 17, 2000
- Air Pollution: EPA Should Improve Oversight of Emissions Reporting by Large Facilities GAO-01-46, April 2001

## **EPA Office of Inspector General**

- EPA and State Progress in Issuing Title V Permits (2002-P-00008), March 2002
- Public Participation in Louisiana's Air Permitting Program and EPA Oversight (01351-2002-P-00011), August 2002
- EPA Region 6 Needs to Improve Oversight of Louisiana's Environmental Programs (2003-P-00005), February 2003

# Observations on Statements of Basis and Annual Compliance Certifications In Four States Reviewed

#### Statements of Basis

#### New York

Up until December 2001, New York did not prepare SBs or equivalent documents for their permits. In response to a public petition, New York issued a commitment letter to EPA dated November 16, 2001, in which it agreed to prepare a document called the Permit Review Report for each Title V permit. Permit Review Reports are New York's version of SBs, and were prepared for 8 of the 10 New York Title V permits we reviewed. With two exceptions, these Permit Review Reports included (1) a description of the facility and the manufacturing process, (2) a summary of emissions, emissions units, and control devices, (3) an explanation of why the source is subject to Title V, (4) the attainment status of the area where the facility is located, (5) a summary of applicable requirements, and (6) an explanation for applicability determinations. One of the Permit Review Reports did not provide a description of the facility and the manufacturing process. One other Permit Review Report did not explain regulatory applicability determinations. Six of the eight Permit Review Reports provided the basis for periodic monitoring decisions. The other two Permit Review Reports simply indicated that regulations were the basis for periodic monitoring decisions without providing any specific explanation.

#### North Carolina

North Carolina prepared Initial Title V Air Permit Application Reviews (Application Reviews) for the 10 permits we reviewed, which were considered to be SBs by the State. All of the Application Reviews included a description of the facility and the manufacturing process, and a summary of emissions, emissions units, and control devices. Only two of the Application Reviews provided an explanation as to why the facility needed a Title V permit. However, the most recent Application Review completed in February 2004 identified the pollutants and the amount of emissions that exceeded the major source thresholds. The Application Reviews did not indicate the attainment status of the areas where the facilities were located, though we were told by State officials that North Carolina did not have any areas of non-attainment at the time the permits were issued. All 10 of the Application Reviews provided a summary of applicable requirements. For eight of the permits, the corresponding Application Reviews explained the regulatory applicability determinations. Except for one instance, the Application Reviews provided the basis for periodic monitoring decisions.

#### Ohio

Following the issuance of the December 20, 2001, memorandum from EPA Region 5 to Ohio on SB content, Region 5 informed a public interest group in a petition response that Ohio had committed to working with the Region to improve their SBs. However, the SBs completed for the

Ohio permits we reviewed did not include several key elements identified in EPA Region 5's 2001 memorandum. State of Ohio officials told us they do not believe that a substantial amount of resources should be devoted to preparing SBs. These officials believed that their resources should be used instead to complete their unfinished permits and that much of the same information EPA Region 5 believes that should be in a SB is already in Ohio permits. The 10 Ohio SBs we reviewed included (1) a summary of emissions, emissions units, and control devices, (2) an explanation of why the source is subject to Title V by identifying the major pollutants, and (3) a summary of applicable requirements. Nine of the SBs included an explanation for the regulatory applicability determinations. Two of the nine SBs prepared for the permits with monitoring requirements provided the basis for periodic monitoring decisions. However, none of the SBs provided an adequate description of the facility, the manufacturing process and the attainment status of the area where the facility is located.

#### Texas

Texas amended their regulations to require SBs for their Title V permits in response to an EPA NOD issued on January 7, 2002. Texas prepared Technical Summaries for the six permits we reviewed that were issued prior to 2003 and SBs for the four 2003 permits. We reviewed the SBs and Technical Summaries for 10 permits. The Technical Summaries provided a description of the facility and the manufacturing process and also provided summaries of emissions, emissions units, and control devices. The Technical Summaries generally provided an explanation of why the sources were subject to Title V and sometimes indicated the attainment status of the areas where the facilities were located. The Technical Summaries did not provide a summary of applicable requirements or an explanation for regulatory applicability determinations. Further, the Technical Summaries did not provide a basis for periodic monitoring decisions. However, Texas' SBs were an improvement over Technical Summaries. These SBs provided (1) descriptions of the facilities and manufacturing processes, (2) summaries of emissions, emissions units, and control devices, (3) explanations of why the sources are subject to Title V including charts of the emissions thresholds for defining major sources, (4) the attainment status of the areas where the facilities are located, (5) summaries of applicable requirements, and (6) explanations for applicability determinations. Two of the four SBs provided the basis for periodic monitoring decisions.

#### **Annual Compliance Certifications**

#### New York

All of the New York ACCs we reviewed met the 40 CFR Part 70 requirements. All 10 of the compliance certifications addressed the general terms and conditions in the permits to varying degrees. The individual terms and conditions for the emissions sources were identified in the ACCs. However, generally, we believed the ACCs we examined in New York were more complete than those we examined in the other three States.

#### North Carolina

The seven North Carolina ACCs we reviewed met the applicable requirements of 40 CFR Part 70. ACCs were not yet due from three Title V permitted facilities since their permits had been issued

within the prior year. We noted that not all of the ACCs included a certification of compliance with each of the permit general terms and conditions. Prior to FY 2004, the State required the facilities to report only on compliance with the monitoring, reporting, and record keeping requirements in the permits. The facilities were not required to report on compliance with the general terms and conditions listed in the permit. According to officials in North Carolina, EPA Region 4 officials requested that all States in the Region require their facilities to address compliance with the general terms and conditions in ACCs. In FY 2004, three of the seven ACCs addressed compliance with all of the permit requirements, including the general terms and conditions. According to North Carolina officials, some confusion still remained among their permitees regarding their new requirements.

#### Ohio

All of the Ohio ACCs we reviewed met the 40 CFR Part 70 requirements. Ohio does not require identifying the individual general terms and conditions when permittees certify annual compliance. Rather, the Ohio ACC form requested only that the facility identify any deviations from the general terms and conditions. All of the Ohio sources required to have submitted an ACC submitted their ACC in a timely manner. We noted one instance when the certifying official for the source did not understand the meaning of continuous and intermittent compliance. A note attached to the ACC stated, "The facility submitted the report. This is the first year that the facility is reporting. Although there are many 'I' for intermittent - the facility did not have any deviations in the permit..." As explained in our report, there was confusion as to how the terms "intermittent and continuous compliance" should be interpreted. The State official we interviewed said that it appeared that the official did not understand the form and that the State would work with them.

#### Texas

In early 2002, Texas sent a commitment letter to EPA Region 6 officials promising to modify their ACCs to clarify how material information other than the required monitoring should be reported. The Texas ACCs we reviewed did address the issue of reporting other material information, but the forms submitted by facilities in Texas were not as complete as those received by the other States we visited. The ACCs submitted by facilities in Texas consisted of a cover form that addressed the overall compliance with the terms and conditions of the permits and included 6-month deviations reports. The individual permit terms and conditions are not identified in the ACC cover form or in the deviations report. The cover forms only state that the facility is in compliance or identifies any deviations that occurred in the past year. The deviation reports are required to be submitted semiannually in accordance with the provisions found in the general terms and conditions section of the Title V permits. The deviation reports are used to identify monitoring, reporting and recordkeeping deviations along with site-wide deviations associated with the general terms and conditions. The ACCs do not identify whether there was continuous or intermittent compliance with each individual permit term or condition. The method for determining compliance is also not identified in Texas' ACCs. In Public Citizen, the Court ruled that EPA had the discretion to approve the ACCs received by Texas.<sup>59</sup>

Table C.1 shows the differences between the four States discussed above as to how permit terms

<sup>&</sup>lt;sup>59</sup>Public Citizen, 343F.3d at 449.

and conditions are addressed in compliance certifications. As noted in the chart, the content of the annual certifications differed substantially by State.

Table C.1: Permit Terms and Conditions From Permits Reviewed in Four States

| State          | State Individual general terms and conditions identified in ACCs?                               |   |
|----------------|---|---|
| New York       | Yes, in all certifications  | Yes   |
| North Carolina | Beginning in 2004; 4 of the 7 certifications identified at least one general term and condition | Yes   |
| Ohio           | Reported deviations only  | Yes   |
| Texas          | Facilities report deviations in the attached deviation reports per Texas officials              | Reported deviations only in attached deviation report |

<sup>&</sup>lt;sup>a</sup> The terms and conditions were monitoring, reporting, and record keeping requirements.

# EPA, State, and Local Agency Roles and Responsibilities in Implementing Title V

#### **EPA Promulgates Rules, Provides Guidance, Oversees Authorized Programs**

EPA is responsible for promulgating regulations; establishing the minimum elements of a Title V permit program; reviewing, approving, and overseeing permit programs; reviewing permits issued by the State and local agencies; and providing guidance and technical assistance to State and local agencies, industry, and others to facilitate achievement of program goals. EPA is also responsible for implementing permit programs for any State and local agencies that do not implement their own programs.

While State and local agencies primarily implement the Title V program, EPA has an important oversight role. EPA reviews and approves each State and local agency's operating permits program; oversees implementation of the program; reviews proposed permits; and, if necessary, objects to improper permits proposed. In addition to approving State or local agency programs, EPA is responsible for ensuring that State and local agencies administer and enforce the programs. If EPA finds a State or local agency is not adequately administering and enforcing a part of the Title V program, EPA is to notify the State or local agency of its finding. If the deficiencies are not corrected, EPA can apply sanctions, withdraw the program, or administer a federal program in that State.

Within EPA's OAR, OAQPS is responsible for developing national regulations and guidance for Title V and providing technical assistance to EPA regions and the States. Regions are responsible for reviewing proposed permits, conducting Title V program evaluations, assisting State and local agencies in getting initial permits issued, and monitoring permit renewal requirements. Every two years, OAR and the regions negotiate a Memorandum of Agreement (MOA) identifying, among other things, the Title V oversight activities that EPA regions are to perform.

#### States, Local Agencies Authorized to Implement Title V

Once approved by EPA, State and local agencies are responsible for establishing and implementing their permit programs, issuing permits to major sources of air pollution located within their geographical jurisdictions, collecting fees to cover the cost of the programs – including the initial costs of issuing permits to sources – and ensuring that sources comply with their permit limits. Under the CAA, State and local agencies that do not adequately implement the Title V permit program may lose their authorization to continue administering the program.

There are 112 State and local agencies in the United States approved by EPA to administer the Title V permitting program. In some States, local agencies are responsible for implementing air pollution control programs, such as Title V. To have an approvable program, State and local agencies must be able, through fees, to recoup all reasonable costs of developing and administering the program, including the reasonable costs of emission and ambient monitoring, modeling, and reviewing and acting on permit applications. The objective of the fee is to ensure the State or local agency has all necessary resources to administer the permit program with a minimum of delay. Other key provisions that must be part of a Title V program before EPA will approve it include:

- Monitoring and reporting requirements.
- Authority to terminate, modify, or revoke and reissue permits for cause.
- Authority to enforce permits, permit fee provisions, and the requirement to obtain a permit.
- Public notification and opportunity for comment for every new permit and when permits are renewed or significantly revised.
- The requirement that sources provide emission reports to their permitting authorities at least semi-annually and certify compliance status annually.

Also, Title V permits are to contain all air pollution control requirements that a source must meet under the CAA. This includes requirements established by EPA, State, and local agencies as part of a federally approved program, as well as State and local agencies that are not required by the Act and are not federally enforceable.

# Status of EPA Regional Evaluations and **Notices of Deficiencies**

Table E.1: Status of EPA Regional Evaluations of Title V Programs

| Region | Number of<br>permitting<br>authorities to be<br>evaluated through<br>Sept. 30, 2006 | Number<br>evaluated<br>through<br>December 31,<br>2004 | Number<br>with reports<br>issued | Number of<br>completed<br>evaluations<br>without written<br>report as of<br>December 2004 |
|--------|---|--|----------------------------------|---|
| 1      | 6   | 3  | 1                                | 2   |
| 2      | 4   | 2  | 1                                | 1   |
| 3      | 7   | 3  | 2                                | 1   |
| 4      | 17  | 4  | 3                                | 1   |
| 5      | 6   | 4  | 1                                | 3   |
| 6      | 5   | 2  | 2                                | 0   |
| 7      | 5   | 4  | 0                                | 4   |
| 8      | 6   | 4  | 2                                | 2   |
| 9      | 6   | 2  | 1                                | 1   |
| 10     | 10  | 3  | 1                                | 2   |
| Total  | 72  | 31   | 14                               | 17  |

Source: Data provided by EPA OAQPS and region officials

Table E.2: Status of Title V Notices of Deficiency - October 2004a

| Permitting authority               | NOD issue date | Date of proposed approval <sup>b</sup> | Date of final approval <sup>b</sup> |  |
|------------------------------------|----------------|--|-------------------------------------|--|
| Indiana                            | 12/11/01       | 5/16/02                                | 5/16/02                             |  |
| Michigan                           | 12/11/01       | 6/23/03                                | 11/10/03                            |  |
| District of Columbia               | 12/11/01       | 4/16/03                                | 4/16/03                             |  |
| Washington                         | 1/2/02         | 6/28/02                                | 12/2/02                             |  |
| Texas                              | 1/7/02         | 3/2/04                                 | Not Issued                          |  |
| Missouri                           | 3/25/02        | 9/17/03                                | 9/17/03                             |  |
| Hawaii                             | 4/1/02         | Not Issued                             | Not Issued                          |  |
| Ohio                               | 4/18/02        | 9/30/03                                | 11/20/03                            |  |
| 34 Local Agencies in<br>California | 5/22/02        | 10/8/03                                | 11/21/03                            |  |
| Wisconsin                          | 3/4/04         | Resolution Pending                     | Resolution Pending                  |  |

Source: Data provided by EPA OAQPS and region officials \*Listed in chronological order from NOD issue date.

<sup>&</sup>lt;sup>b</sup>The proposed and final approval dates are the dates EPA proposed or issued final approval of the action taken by the permitting authority to correct the last deficiency in the NOD.

# Consolidated Agency Response to Draft Report and OIG Evaluation

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



OFFICE OF AIR AND RADIATION

#### **MEMORANDUM**

SUBJECT: Response to Draft Report No. 2003-000339 "Substantial Changes Needed in

Implementation and Oversight of Title V Permits If Program Goals Are To Be

Fully Realized"

FROM: Jeffrey R. Holmstead

**Assistant Administrator** 

TO: J. Rick Beusse, Director for Program Evaluation, Air Issues

Office of the Inspector General

I am responding on behalf of my office, the Regional Offices, and the Office of Enforcement and Compliance Assurance (OECA) to the Office of the Inspector General's (OIG) draft report of findings and recommendations concerning State Title V permit adequacy and EPA's oversight. We appreciate the insights the report provides in addressing the question: "Are Title V permits clearly written and complete, and is the permitting program as a whole achieving its mandated goals?" and agree with your findings that the program could benefit from improvements to permit content in some areas. While the Agency has been - and continues- reviewing permit content and program adequacy, we agree with the OIG's findings that we can do more. Along these lines, we are proposing to expand the use of our stakeholder workgroup as a means of identifying what is working (and what is not working), to streamline the petition response process where feasible, and to develop operating plans that combine oversight with permit reviews and evaluations. In general, we disagree that guidance documents offer solutions to Title V program implementation issues, especially now that a decade has passed since program approvals and because almost all permits have been issued. We believe it is better to work with our Regional Offices on improving the implementation of the Title V program when specific issues arises with a given permitting authority.

Attached is our coordinated response, which includes a page-by-page editorial comment section and a section with the OIG draft recommendations and our responses. If you have any questions about this response, please contact Ray Vogel at 919-541-3153.

### Attachments

cc: Beth Craig Steve Page

Bill Harnett

Bill Wehrum

Scott Mathias

Rick Beusse

Jan Cortelyou Lee Kay Holt

Laurie Trinca

Scott Voorhees

Ray Vogel

# Substantial Changes Needed in Implementation and Oversight of Title V Permits If Program Goals Are To Be Fully Realized

#### **Comments on Report Content**

#### Report Pages 6, 39 and 79:

<u>EPA Comment:</u> The numbers on pages 6 (Chapter 1), 39 (Chapter 3) and 79 (Appendix E) are now out of date. The updated numbers through the end of 2004 are:

Table E-1: Status of EPA Regional Evaluations of Title V Programs

| Region | Number of Permitting<br>Authorities to be<br>Evaluated Through<br>Sept. 30, 2006 | Number<br>Evaluated<br>through Dec.<br>31, 2004 | Number with<br>Reports<br>Issued | Number of<br>Completed<br>Evaluations<br>Without Written<br>Report as of<br>December 2004 |
|--------|--|---|----------------------------------|---|
| 1      | 6  | 3   | 1                                | 2   |
| 2      | 4  | 2   | 1                                | 1   |
| 3      | 7  | 3   | 2                                | 1   |
| 4      | 17   | 4   | 3                                | 1   |
| 5      | 6  | 4   | 1                                | 3   |
| 6      | 5  | 2   | 2                                | 0   |
| 7      | 5  | 4   | 0                                | 4   |
| 8      | 6  | 4   | 2                                | 2   |
| 9      | 6  | 2   | 1                                | 1   |
| 10     | 10   | 3   | 1                                | 2   |
| Total  | 72   | 31  | 14                               | 19  |

Note: After the Agency provided its response to our draft report, an OAQPS official notified us that there was an addition error in the above Table. The corrected information is reflected above.

#### OIG Response:

Table E-1 and relevant references to the table have been changed in the report based on information provided by OAQPS.

#### Report Page 15:

<u>EPA Comment:</u> Regarding incorporation by reference (IBR), while Region 6 agrees IBR can lack clarity and make the review of permit conditions time consuming, EPA believes IBR can be a very effective tool when used properly.

<u>Report Pages 15-17:</u> The report states that EPA officials in 6 out of the 10 regions perceive the lack of nationwide guidance result in inadequate statement of basis (SB). Environmental groups also reported problems with SB in citizen petitions.

<u>EPA Comment:</u> The report does not explain that EPA investigated the problems, although in the following sentence the report correctly states that SBs have improved.

#### OIG Response:

In Chapter 3 of the report, we noted that SBs in Texas improved and that New York started

preparing Permit Review Reports as a result of NOD and commitment letter resolutions between EPA and the permitting authorities.

<u>Report Pages 15-17:</u> The report states that EPA's position is that permitting authorities could obtain information on the contents of acceptable SBs by reviewing prior court case decisions and EPA's response to public petitions. However, not all . . . officials in EPA Regions may be aware of applicable court decisions.

<u>EPA Comment:</u> Because EPA responses are public documents, noticed in the FR and available on EPA's web page, it seems an unnecessary effort to rewrite them in additional guidance documents. In fact, citizen groups such as NYPIRG make use of our SB-related policy statements in their lawsuits. The same objective could be accomplished more efficiently by promoting the reading of pertinent documents, and by providing opportunities during conference calls to describe and discuss these decisions, which the Agency currently does. This is explained in our recommendation responses.

#### OIG Response:

We disagree with EPA over the reliance on petition responses for guidance. We believe the use of petition responses in lieu of guidance is inefficient and results in duplicative work being performed by permitting officials. As shown in our report, the current situation has resulted in inconsistencies among the four States we visited. We also noted that in one case, an EPA official was unaware that a petition addressing SBs had been issued.

Also, States are reluctant to follow guidance that is not issued nationwide or through a rule. Thus, in addition to the inefficiency noted above, lack of guidance may allow ineffective actions on key permit provisions. In their response to our draft report regarding their SBs and the applicability of the Region 5 guidance on SBs, Ohio EPA responded to us that the Region 5 memorandum dated December 20, 2001 only included a list of desired elements and not required elements. They also wrote "There is no national guidance, policy, or preamble documentation in either the Clean Air Act or proposed and final versions of Part 70 supporting the SB elements listed in the EPA memorandum." We continue to believe that one document that provides these elements would prevent these types of disagreements and better ensure consistency among the States and regions.

<u>Report Pages 15-17:</u> The report states that a memorandum from Region 5 to Ohio and a Region 9 petition response were the only EPA documents that provided specific guidance as to what constitutes an adequate SB.

<u>EPA Comment:</u> This sentence is misleading, first, by referring to two documents as the only EPA guidance documents, and second, by minimizing the importance of guidelines on the contents of SBs, found in a number of EPA petition responses.

#### OIG Response:

The wording in the report was modified.

Report Pages 15-17: The report recommends issuing guidance (or a rule revision?), citing concerns that the lack of nationwide guidance on the contents of SB results in SBs that differ from state to state, and suggests that SB lacking EPA suggested elements are incomplete.

EPA Comment: As noted in EPA's responses to citizen petitions, EPA expects that "[e]lements included in these reports may differ, depending on the type and complexity of the facility." EPA

interprets that, in general, SB ought to contain, among other information, a list of anything that deviates from a simple recitation of requirements, and in general should draw attention to items that would be the highest priority for EPA and persons reviewing the permit, such as new conditions. In its responses to petitions, EPA has also explained that there are circumstances when information is not required, for example: when the simplicity of the source does not call for additional detail to understand the legal and factual basis for the draft permit conditions, such as national gas-fired turbines, where the norm is not to include additional monitoring for compliance with the opacity standard. Also, in a response to a petition on the Seminole Road Municipal Solid Waste Landfill, EPA stated that the regulation does not require that the SB contain the facility's compliance history.

#### OIG Response:

We noted more inconsistencies in the elements of the SBs between the four States we reviewed rather than differences among the types of facilities located within the States. In general, each of the four States had their own formats for their SBs.

Report Page 21: The report states, in part, "EPA disagreed with monitoring concerns raised in public petitions against the New York and Ohio permitting programs, stating that while they would watch for individual problems in permits, overall the programs included adequate monitoring and met the minimum requirements of 40 CFR part 70."

<u>EPA Comment:</u> The Region (and ultimately, the Administrator) did not always disagree with monitoring issues raised in New York petitions against individual permits and, in fact, granted such petitions in some cases.

#### OIG Response:

The sentence referenced above discusses petitions specific to overall Title V programs, not to individual permits. However, the report was modified with a footnote to acknowledge that EPA did not disagree with all monitoring issues raised in New York petitions against individual permits.

#### Report Page 28:

<u>EPA Comment:</u> Please explain your concern about lack of completeness in Annual Compliance certification, and please include a reference to the October 22, 1997 preamble to Part 70 revisions - Compliance Certification Requirements (62 FR 54936) which allows the facility owner to cross-reference the permit or previous reports to identify the various information elements required in a certification. Also, the preamble states "This provision allows the actual certification to be a short, concise compliance statement that is not a burden by restating detailed information that has already been provided." Therefore, it has been determined that a short and concise compliance statement meets minimum legal requirements.

#### OIG Response:

In the report, we noted that the short and concise compliance statements meet legal requirements and made reference to the preamble to Part 70. However, we also note that not all permit terms and conditions, such as the general terms and conditions, are specifically addressed in all ACCs throughout the country. In addition, some States require that the facilities in their State address each monitoring, record keeping, and reporting requirement in their ACC. We believe that the guidance would be useful in avoiding inconsistencies that are now occurring nationwide.

Report Page 37: OIG states that Ohio committed to issuing SB guidance, but the OIG saw no evidence that this was accomplished.

<u>EPA Comment:</u> Ohio's SB guidance is part of the SB form which was revised as a result of the commitment letter.

#### OIG Response:

Wording was changed on page 46 to indicate that this issue was not completely resolved because there is still an issue with SB guidance.

#### Report Pages 39,40:

EPA Comment: In the discussion on program evaluations, the OIG made no distinction about the style, content or format of written reports between different Regions or how that may play into timelines for completion. At least one Region has taken a position that it will create a report that accurately reflects not only the Regional view of their State and Local air programs but also reflects the State and Local opinion of their program. To that end, the Region provides the State or Local agency the opportunity to comment on the draft Regional report, just as the OIG provides EPA the opportunity to comment on its draft reports. Regions spend a significant amount of time preparing the reports in the belief that a well-conducted evaluation will serve as an appropriate baseline and serve as a blueprint between EPA and the State/Local agencies with respect to targeting areas on which to focus the Agency's attention. The Regions have received very positive feedback to date from the states evaluated and have committed to develop an on-going evaluation process that will continue after the initial evaluations. Region 4 requests that the report acknowledge this.

#### OIG Response:

We remain concerned about the slow completion rate of program evaluation reports. However, the report was revised to include some of the information provided in the comment above as reasons why the reports may take longer to complete than originally anticipated.

#### Report Pages 40-42:

<u>EPA Comment</u>: This report should recognize that EPA does take steps to address a citizen's petition well before the Agency issues a final determination. In many cases, Regional Offices work as a mediator between the state permitting authority and the concerned citizen or citizens' group. Sometimes, as a result of a Region's efforts, a State is willing to revise a permit before receiving an official EPA determination. Although our information is anecdotal, it appears that open communication between involved parties has helped facilitate resolution in some cases. Very few citizens' groups have actually followed through and filed lawsuits involving untimely responses to petitions.

#### OIG Response:

While some regional offices may have facilitated informal communications between permitting authorities and petitioners, the delay, or absence, of official EPA responses to petitions has also continued. Further, although relatively few lawsuits have been "actually followed through and filed" against EPA for untimely petition responses, we believe that the fact that such lawsuits have been filed at all serves as an indication that the response process needs improvement.

<u>Report Page 41:</u> The report states that "Additionally, a key official at OECA indicated that responding to public petitions is not a high priority within EPA."

<u>EPA Comment:</u> Responding to public petitions is a <u>high</u> priority within some Regions, as evidenced by the number of staff committed to the effort. For example, there are 5 regional staff attorneys who spend at least part of their time reviewing title V petitions and there is one GS-15 attorney supervising this effort who spends approximately 75 percent of her time overseeing the legal review of the title V petitions submitted to the Region.

#### OIG Response:

While responding to public petitions may be a high priority within some EPA regions, the overall response rates, as well as interviews with EPA officials, indicate that petition response is not a high priority within EPA as a whole.

#### Report Page 42:

<u>EPA Comment:</u> The EPA has prepared a draft Federal Register notice which identifies resolutions to the remaining Notice of Deficiency issues in Texas. Region 6 expects the proposal to be published in the spring of 2005.

<u>Report Pages 42, 43:</u> The report states on page 42 "However, NOD deficiencies remain in Texas, Hawaii, and Wisconsin..." and on page 43 "NOD issues have been resolved with all States except for Texas, Hawaii, and Wisconsin...".

EPA Comment: Please update the report to reflect that State of Hawaii has corrected all of the deficiencies identified in the NOD. Under the procedures outlined in 40 CFR 70.10(b), the State had 18 months to correct the deficiencies identified in the NOD. Working closely with the EPA, Hawaii adopted regulations that addressed all of the identified deficiencies. The adopted regulations were signed by the Governor of Hawaii on November 4, 2003 and became effective on November 14, 2003. All of the deficiencies have been corrected by the State and all that remains to be done is for Region 9 to issue a FR notice proposing to approve Hawaii's actions. Since the State's program has been revised to correct all of the deficiencies in accordance with 40 CFR 70.10(b), Region 9 believes that the references to the State of Hawaii should be removed from the two sentences listed above.

#### OIG Response:

This information has been noted in the report. However, we do not consider the NOD to be resolved until a final FR Notice has been issued. Also, as noted in the Agency's response, EPA Region 9 has not yet issued its proposal to approve the State's actions and allowed an opportunity for public comment on the proposal. A modification to the report was made to change the effective date of the regulation to November 14, 2003.

<u>Tables 2-1, 2-3 and 2-8:</u> These tables show permitting authorities identified by the Regions as having problems with clarity, monitoring and practical enforceability

<u>EPA Comment:</u>. The tables should be clarified either in the title or in the footnotes as examples offered by the Regions and not necessarily an exhaustive list of programs or issues. These three tables group individual permitting authority issues by EPA Region. It is difficult to discern whether certain issues apply to only one permitting authority, or whether they apply to all permitting authorities listed in that Region. It would be clearer if the table included distinct

rows for each permitting authority.

#### OIG Response:

We revised the table titles to clarify that the permit clarity, monitoring, and practical enforceability problems identified by the regions are examples.

<u>Table 2-3:</u> Monitoring problems in Title V permits identified by regions.

<u>EPA Comment:</u> Indiana is noted as having a lack of sufficient periodic monitoring requirements. This should be removed as an issue for Indiana. Although Region 5 noted to the OIG that it had found some monitoring issues in permit reviews, the Region did not identify any periodic monitoring concerns, and noted to OIG that monitoring for most units is adequate.

Minnesota is noted as having inadequate periodic monitoring. This is an overly broad conclusion and should be removed. Region 5 noted to the OIG that, in the past, some Minnesota permits have contained inadequate periodic monitoring. However, this was not considered a significant problem in their Title V program. Currently, the Region has not found this to be a prevalent issue in Minnesota Title V permits.

#### OIG Response:

The paragraph leading into Table 2-3 acknowledges that regions believe the majority of permitting authorities include adequate monitoring provisions in their permits. However, we believe it is important to identify the types of problems that have been found through region permit reviews and oversight. To address Region 5's concerns, we deleted the reference to "periodic" for Indiana, and revised the table to include the phrase "in some permits." We also revised the table to include the phrase "in some permits" for Minnesota. We believe this should clarify to the reader that the problems are not widespread within these States.

Table 2-8: Practical enforceability problems identified by EPA regions.

<u>EPA Comment:</u> Indiana is identified as needing anti-credible evidence (ACE) buster language in permits. This issue has been resolved and should be removed from the table. Indiana now includes an ACE buster language condition in each permit.

Michigan is identified as lacking Federal enforceability. Although Region 5 did note this in its talking points to the OIG, there was no basis for this statement and it should be removed. Region 5's talking points to the OIG note that, in general, Michigan's permits are practically enforceable.

#### OIG Response:

We revised Table 2-8 to include the updated information on Indiana. A footnote clarifies that this was a prior problem that has been resolved, according to the Region. Because EPA Region 5 indicated that their description of Michigan permits as lacking Federal enforceability was an error, we removed Michigan from the table.

#### **OIG Recommendations and EPA Responses**

Recommendation 2-1. Develop and issue guidance on annual compliance certification content which requires responsible officials to certify compliance with all applicable terms and conditions of the permit.

**Response**: Three Regions agree with the recommendation to prepare guidance and a fourth would also agree if the resulting guidance were properly focused and specific in nature. A fifth Region noted that some States cannot go beyond EPA rules and therefore, if anything is needed, it must be done by rulemaking. They did not express an opinion on the appropriateness of rulemaking on this issue.

OAR disagrees with the recommendation that rulemaking guidance is needed to clarify that responsible officials must certify compliance with all applicable terms and conditions of the permit because the rules already contain an equivalent provision that requires the identification of each permit deviation – sources experiencing deviations from their permit terms must certify intermittent compliance. 40 CFR § 70.6 (c)(5) directly requires information as follows: permit terms (which encompass the Clean Air Act requirements and their required methods), other means (for example, compliance determination methods used voluntarily), the compliance status (including identification of permit deviations) and other facts required by the permitting authority. OAR agrees that, should States develop forms, these must be consistent with the rules; however, variations in format from State to State are expected due to the flexibility given in the rules – which allows the required information to be cross referenced from the permit or previous reports. Issuing new guidance at this late date may undercut existing State programs, especially those that are stricter than requirements in guidance. There is little or no evidence of a fundamental problem with annual compliance certifications. Please elaborate on the widespread problem that would be corrected with national guidance.

#### OIG Response:

Based on our discussions with and information obtained from EPA regional offices and many outside stakeholders, and our examination of ACCs in four states, we continue to believe that EPA national guidance or a rule on ACC content should be issued to maximize the effectiveness of the Title V program. Region and State officials indicated that as a result of Title V, they have seen greater compliance awareness by permittees which may be due, in large part, to compliance certification requirements. As reported in Chapter 4, two States reported an increased use of self-audits, increased use of environmental systems, increased resources devoted to environmental control systems, increased resources devoted to compliance monitoring, and increased awareness of compliance obligations — all as a result of ACCs. Consequently, we continue to believe that ACCs, when used properly, are an effective tool for improved compliance and that permittees should be required to certify to each obligation created by a permit term or condition.

EPA regions indicated that there is a disparity in ACC content across the Nation. We noted that one State we visited significantly improved their ACC completeness when asked to do so by EPA regional officials, while another State we visited required that their permittees certify only to overall compliance with the permit and to identify any deviations. The differences in State requirements on ACC content may also place increased pressure on those States that have more comprehensive ACCs to reduce their reporting requirements. For example, we were told by one Region that one of their States is being pressured by industry to change their ACC form to one

which would require less content. We believe the effectiveness of ACCs would be reduced if ACC comprehensiveness were lessened due to pressures from industry on a nationwide basis.

Recommendation 2-2. Issue the draft rule regarding intermittent versus continuous monitoring as it relates to annual compliance certifications.

**Response**: EPA agrees with this recommendation.

Recommendation 2-3. Develop nationwide guidance on the contents of statements of basis (SB) which includes discussions of monitoring, operational requirements, regulatory applicability determinations, explanations of any conditions from previously issued permits that are not being transferred to the Title V permit, discussions of streamlining requirements, and other factual information, including a listing of prior Title V permits issued to the same applicant at the plant, attainment status, and construction, permitting, and compliance history of the plant.

**Response**: One Region agrees with the recommendation and two others would agree if the resulting guidance were properly focused and specific in nature. A fourth Region would prefer to point to model SBs instead of guidance.

OAR disagrees with the recommendation that additional guidance is needed to improve the adequacy of SBs. OAR believes that its position, as stated in EPA's responses to citizen petitions on state programs or permits<sup>60</sup>, provides reasonable guidelines as to the types of information that should be in SBs while retaining the flexibility needed for state permitting authorities to prepare these documents without imposing an unnecessary paperwork burden. Furthermore, part 71 permits as written by our Regional offices provide examples of well documented and thorough SBs (for example SBs for Devon SFS Operating, Inc. and Red Cedar Gathering Company). The ongoing title V program reviews include elements for assessing states' general practices regarding preparation of SBs, including whether the permitting authority provides guidance to its permit writers and how the permitting authority ensures that guidelines are followed when preparing SBs. To the extent that the Regions make a determination that prevalent inadequacies in SBs result in permits not in compliance with the approved program rules, EPA will consider issuing NOD's in accordance with section 502(i) of the CAA and 40 CFR section 70.10(b). Please elaborate on the widespread problem that would be corrected with national guidance.

OAR recognizes that as EPA officials deal with operating permits implementation issues - including the adequacy of SBs - they must be familiar with EPA's position on these issues. Although petition responses are public documents, are widely available, and are commonly used by citizen groups, OAR recognizes that additional efforts are needed to bring awareness of the issues addressed in these documents within EPA. The EPA has started promoting these documents internally by compiling lists of all the issues addressed in EPA

<sup>&</sup>lt;sup>60</sup> EPA has described the necessary and suggested components of a statement of basis in numerous previously issued title V orders responding to citizens' veto petitions. See, e.g., In the Matter of Consolidated Edison Co. Of NY, Inc. Ravenswood Steam Plant, Petition No. II-2001-08, at pages 39-45 (Sept. 30, 2003); In the Matter of Port Hudson Operation Georgia Pacific, Petition No. 6-03-01, at pages 37-40 (May 9, 2003); In the Matter of Doe Run Company Buick Mill and Mine, Petition Number VII-1999-001, at pages 24-26 (July 31, 2002); In the Matter of Los Medanos Energy Center, at pages 9-13 (May 24, 2004).

responses together with the references to the particular document(s) where the issue is discussed. The EPA headquarters will consult with the regions on additional efforts needed to disseminate this information and will prepare and implement a plan for this purpose.

#### OIG response:

We believe that complete SBs are an effective document to aid the regulatory community, other key stakeholders, and the general public in the review and understanding of Title V permits. As noted in their response to the draft report, OAR believes that the petition responses and regional guidance have provided sufficient guidance. However, as noted in the report, 8 of the 10 EPA regions told us that inadequate or missing SBs were a problem in some of their State or local permitting authorities. Also, we noted significant disparities in SBs among the four States we visited. Further, we were informed that the regions have previously requested national guidance from EPA on SBs. We do not believe regional guidance is sufficient because one region may be required to use guidance for which they did not have an opportunity to provide input. While we recognize that petition responses can be used in lieu of guidance, we also believe that petition responses are an inefficient and ineffective method for disseminating guidance. For example, we noted one instance in which a key regional office official was unaware of another region's petition response that provided some guidance on SBs. The use of petition responses as a primary source of guidance requires each permitting official to independently research and interpret petition responses to seek answers to SB issues. Further, some permitting authorities are precluded from relying on EPA guidance and can only rely on Federal rules. We believe it would be more efficient for the regions to correct SB inadequacies through national guidance or a Federal rule on SB content.

Recommendation 2-4. Through its periodic grant discussions with EPA regions and State and local permitting authorities, emphasize improvements in Title V permit clarity by minimizing using incorporation by reference (IBR), clearly citing applicable underlying regulations, emphasizing conciseness in permit format, and using statements of basis to identify and explain permit decisions related to streamlining.

**Response**: EPA Headquarters and the Regions disagree with the recommendation. Funding for title V programs comes from permit fees and section 105 grant monies cannot be applied. It is inappropriate to raise issues related to improving title V permit clarity in the context of grant funding.

#### OIG Response:

We removed the reference to "grant" discussions from the recommendation, but we continue to believe that EPA should emphasize such improvements through its periodic Title V discussions with State and local agencies. Additionally, we believe EPA regions could emphasize such improvements during their evaluations of permitting authorities' Title V programs.

Recommendation 2-5. Expeditiously follow through on its commitment in the January 2004 umbrella monitoring rule to develop periodic monitoring guidance.

**Response**: EPA agrees with the recommendation. Consistent with the umbrella monitoring rule, we are developing a notice and comment rulemaking to provide guidance on periodic monitoring

required under the provisions of 40 CFR §§70.3 (a)(3)(i)(B) and 71.3 (a)(3)(i)(B). This rule will address when the requirements for periodic monitoring in title V rules are triggered to improve monitoring in underlying emission standards and rules, and when it is triggered, how to create periodic monitoring in the permit. We hope to propose this rule in early 2005.

Recommendation 2-6. Develop nationwide guidance designed to help EPA regional offices and State and local permitting authorities in preventing practical enforceability problems in Title V permits.

Response: The EPA agrees that national guidance is an effective way to provide instruction to EPA regional offices and State and local permitting authorities, and over the years EPA has generated numerous guidance documents addressing practical enforceability. However, it is EPA's view that practical enforceability problems arise in individual permits and are not so ubiquitous across States to require the development of additional national guidance. Nonetheless, EPA believes that the issues identified by the OIG can, and should, be addressed through both training and more effective oversight. Four Regions disagree with the recommendation, feeling that concerns about practical enforceability are best addressed in the New Source Review program, or that national guidance already exists and training is a more effective improvement. One Region agrees with the recommendation if the guidance appears in the form of a rulemaking on Potential to Emit.

#### OIG Response:

We agree that the goal of preventing practical enforceability problems could be addressed through effective, periodic training and more effective oversight as opposed to guidance. We revised the recommendation to reflect this approach.

Recommendation 2-7. Establish and implement a plan to review the adequacy of monitoring provisions in SIPs.

**Response**: EPA agrees with the recommendation. Consistent with the umbrella monitoring rule, we are developing an advance notice of proposed rulemaking to ask for comment to identify inadequate monitoring in certain underlying emission standards and rules, including SIP rules, and to ask for input on the best methods to correct such monitoring, such as through rulemaking or other similar mechanisms. As part of this notice, we hope to provide a list of example patterns of inadequate monitoring that may be found in such standards and rules. Although we have not made up our mind as to next steps, it is likely that if the outcome of this process demonstrates a need, we would initiate one or more future notice and comment rulemakings to correct any inadequate monitoring we may determine to exist in such rules. We hope to issue the notice in early 2005.

Recommendation 2-8. Ensure that State and local permitting authorities consistently apply periodic monitoring provisions to all applicable permit requirements, and ensure that permitting authorities use AP-42 emissions factors in permits only after other more reliable methods for determining compliance have been considered.

**Response:** EPA Headquarters and the Regions disagree with the recommendation. It is important that the best information be used by States in specifying compliance determination

methods. Sometimes AP-42 emission factors are the best that is available. Two Regions cautioned that limits must be in place to avoid excessive oversight of all permits by EPA. This issue should be addressed through training.

#### OIG Response:

Our recommendation states that AP-42 emissions factors should be used "only after other more reliable methods for determining compliance have been considered." We do not recommend that AP-42 factors never be used. We agree that the objectives of our recommendation could be accomplished through effective, periodic training.

Recommendation 3-1. Promulgate the draft order of sanctions rule which provides notice to State and local agencies, as well as the public, regarding the actions that will be taken when Notices of Deficiencies are not timely resolved by State and local Title V permitting authorities.

Response: EPA agrees with the recommendation. As noted in the OIG report, in calendar years 2001 and 2002, EPA issued 10 NODs to permitting authorities to address regulatory problems in their title V programs. EPA also received 23 commitment letters from State and local permitting agencies during this period to address implementation problems in their title V programs. States have resolved the majority of issues identified in NODs and commitment letters, with remaining commitment letter issues unresolved in Ohio. Hawaii adopted regulations that addressed all of the identified deficiencies. All that remains to be done is for Region 9 to issue a Federal Register notice proposing to approve Hawaii's actions. Region 6 has prepared a draft Federal Register notice which identifies resolutions to the remaining NOD issues in Texas, and the Region expects the proposal to be published in the spring of 2005. While we agree that promulgating the Order of Sanctions rule is our goal, it is currently not a priority for the agency.

#### OIG Response:

In light of the fact that OAQPS identified the need for the rule in 2002 in connection with our report titled, "EPA and State Progress in Issuing Title V Permits, Report No. 2002-P-00008," issued on March 29, 2002, we believe this rule should be issued expeditiously.

Recommendation 3-2. Issue the four draft Title V program guidance and rules developed by OAQPS and submitted for approval in 2002.

**Response**: With the exception of the Order of Sanctions rule, EPA disagrees with these recommendations. Sufficient time has passed for the issues to reach resolution through other means or are no longer of interest to State and local agencies. Two Regions agree with the recommendation (although one considers these issues outdated). A third Region noted that some States cannot go beyond EPA rules and therefore, if anything is needed, it must be done by rulemaking. They did not express an opinion on the appropriateness of rulemaking on this issue. Order of Sanctions Rule - See previous response to Recommendation 3-1 regarding the Order of Sanctions rule.

<u>Permit Renewal Application Forms Guidance</u> - This guidance is no longer needed because Region 4 has approved a rule in Kentucky that allows for streamlining of renewal applications. This provides guidance that can be applied nationally.

<u>Annual Compliance Certifications Guidance</u> - The original draft guidance as prepared over two years ago is now out of date and was not reviewed by EPA management due to competing priorities with New Source Review. Were such guidance to be prepared now, it would need to come in the form of a notice-and-comment rulemaking. There are no plans at present to undertake a rulemaking on this issue.

<u>Processing Program Revisions Guidance</u> - The lack of any recent requests for guidance on processing program revisions suggests that this guidance is not needed at this time.

#### OIG Response:

We agree with the Agency that the Order of Sanctions rule should be issued. We disagree with the Agency on ACC content issues in that there is a continuing need for ACC consistency and completeness on a nationwide basis and that this need could be significantly addressed by issuing national guidance or a Federal rule, as appropriate. We agree that the guidance for permit renewal application forms and processing program revisions may no longer be needed and have substantially revised and consolidated our recommendation to reflect these considerations.

Recommendation 3-3. Provide a document guide on the EPA public website which would assist the public in identifying and locating published EPA statements on key Title V program issues.

**Response**: EPA disagrees with the recommendation. The designated repository for OAR policy and guidance (where key title V program issue documents are stored) is the OAQPS Technology Transfer Network (TTN). The TTN is intentionally limited to documents originating from and signed by OAR officials, and cannot include Regional materials. Regional materials are easily accessible, however, by linking to Region 7's database. One Region agrees with the recommendation and one Region feels this link already exists and a new one is not needed.

#### OIG Response:

As indicated in EPA's response above, Title V guidance can be found on both the OAQPS TTN and Region 7's website. We are not suggesting that the databases be merged or that a new database be created. Rather, we are suggesting a more user-friendly tool to aid permitting officials and the public alike in locating EPA positions on key Title V issues. Currently, in order to identify all EPA written policy positions on an issue, one must use the search function to review both databases. As discussed in Chapter 3 of this report, OAQPS staff provided OIG with a copy of a document they prepared summarizing the Agency's position on a number of key issues and identifying references where the specific positions and supporting information can be found. At a minimum, we believe this document should be made available to region and State and local permitting staff. We also believe it would be beneficial to make the document publically available on EPA's website, possibly on the public input page of the Operating Permits website, or elsewhere, as determined appropriate.

Recommendation 3-4. In conjunction with EPA Regional Administrators, jointly develop a strategy to ensure that EPA regional oversight and review of Title V permit adequacy continues beyond the scheduled program evaluations. EPA regional review of permits should include an analysis of clarity-related issues and appropriate inclusion of CAM and MACT provisions in any permit renewals.

**Response**: EPA Headquarters and the Regions agree that long-term oversight of title V implementation is needed. Using the current four-year analysis of title V programs as a baseline, OAR and the Regions will develop five-year plans that combine oversight with permit review and audits to ensure continued proper implementation. This would include a written strategy and annual reports to OAQPS.

Recommendation 3-5. In conjunction with EPA Regional Administrators, jointly coordinate and streamline the review and response process for Title V public petitions to meet the response requirements specified in the CAA.

**Response**: There are many case-specific reasons why permit responses can exceed 60 days. EPA Headquarters and the Regions will work internally to devise a procedure that will reduce response times, will implement that procedure, and then will track the impact on shortening the process. Permits are often moving targets, which can delay the response process.

Recommendation 4-1. Consider forming a stakeholder advisory group, possibly in conjunction with the CAA Advisory Committee, to solicit input on needed Title V guidance and rules from selected State and local agencies, and industries or industry associations, environmental groups and other interested stakeholders.

**Response**: EPA agrees with the recommendation. A stakeholder group has been formed. The stated purpose of the Task Force on Title V Implementation Experience is to "report to the [Clean Air Act Advisory] committee on the experiences of stakeholders who have been working in the title V permitting arena. The report should reflect the perspectives of all the stakeholder groups, and should reflect an effort to answer two questions: (1) How well is the title V program performing and (2) What elements of the program are working well/poorly?" The Task Force may also make recommendations to EPA based on its findings.

Recommendation 4-2. Establish and implement an EPA-wide database to track improvements made in Title V permits by permitting authorities.

**Response:** EPA Headquarters and the Regions disagree with this recommendation. The purpose of a permit-improvement database is not clear from the OIG report. Ninety-four percent of the title V sources nationally already have received their permits. Most improvements have already happened, due to comments and corrections from permittees, the public and EPA. We agree that there is room for program improvement, but an EPA-wide database for tracking permit improvements will not accomplish this. Future program audits, permit reviews, and the Title V Task Force will help EPA identify areas that still need improvement.

#### OIG Response:

After further consideration, we removed this recommendation from the report. EPA Headquarters and Regions agreement to continue long-term oversight of Title V implementation, including permit reviews and comprehensive Title V program reviews, should provide sufficient information to identify Title V areas still in need of improvement.

# Texas Response to Draft Report and OIG Evaluation

#### <u>Using Incorporation by Reference (IBR):</u>

TCEQ Response:

OIG's concerns with the use of IBR rest with the extent to which specific applicable requirements may be identified from the citations. In 6 of the 10 Texas permits reviewed, however, the applicable requirements were found to be "reasonably discernible" (i.e., the regulatory citations were specific enough to provide identification of the specifically applicable requirements). In general, for Texas' SOP Title V permits (both audit sample and permit population at large), the exact citation of the applicable regulation is provided. In atypical cases where the specific citation is not provided, permit holders are required to provide this level of detail with their submittals of compliance certification or deviation reports.

The form, content and mechanism of GOP authorizations are approved elements of the Texas Title V program. The use of IBR in GOP is consistent with this approval. Sources authorized by GOP typically have few emission units, and reviewing their requirements does not require navigation of multiple (i.e., '76 to 108') pages of applicable requirements tables. The review of these tables is also facilitated by an index numbering system included in the design of the GOP. Although the issued GOP authorization itself does not list actual emission units, all emission units to be covered by the GOP must be listed in the application.

The suggested use of the narrative text alternative apparently does not consider the implications of this approach. Narrative text requirement summaries would increase the volume of all permits in which it was applied. For most of our SOP permits, the desired benefit of direct access to applicable requirements would be negated by unmanageable permit size that would result from using narrative text summaries.

As OIG's own findings about IBR indicate, this practice has been litigated and upheld by the August 15, 2003 ruling from the United States 5th Circuit Court of Appeals. The Court found that nothing in the Federal Clean Air Act prohibits this practice; APD agrees with OIG's observation that IBR does not therefore violate any Title V requirement. Additionally, EPA's White Paper No.2 supports IBR. The white paper specifically describes the practice of citing and cross-referencing information in permits if the information is readily available to the permitting agency and the public.

#### OIG Response:

We agree that general operating permits are approved elements of the Texas Title V program. However, we found reviewing these permits to be challenging from an outside observer standpoint. The Texas general operating permits for oil and gas sources we reviewed consisted of between 76 and 108 pages of applicable requirements tables - all with extensive IBR. Even if sources authorized by general operating permit have few emissions units, and can be identified through an indexing system, a reviewer must engage in several extra steps in order to determine what requirements a source is subject to.

We acknowledge that incorporating narrative text in place of IBR would increase the volume of the permits. However, in most cases, we do not believe that including narrative text results in unmanageable permit size. The three other States we reviewed used narrative text to a significant extent. In most cases, the use of narrative text helped provide context and increased understanding of the source. We did not find that it hampered direct access to the applicable requirements.

EPA's White Paper No. 2 states that in general, information may be cited or cross-referenced if the information is readily available to the permitting agency and the public. It also states that the citations and references must be clear and unambiguous and enforceable from a practical standpoint. As noted in our report, we do not dispute the legality of the practice of IBR. However, we do believe that the extensive use of IBR with little or no narrative description negatively affects the clarity of the permit, particularly for the public.

#### **How Well Permits Reflected the Underlying Regulations:**

TCEQ Response:

Comparison of text summaries to underlying regulations is a reasonable indicator of a permit's fidelity to its regulatory basis, but only for those permitting programs that use this approach. While we generally agree with OIG's observation (i.e., available narrative showed no discrepancies from underlying regulations), we maintain that the direct regulatory citations provided by IBR result in greater overall fidelity between permits and their underlyling requirements (i.e., much closer 'matching', with minimized possibility of restatement errors).

#### <u>Using Permit Shields and Streamlining:</u>

TCEQ Response:

APD believes the use of its permit shield mechanism is sound, as supported by OIG's overall findings in this area. The exception that a permit shield IBR citation did not provide sufficient information to conclude whether the shield was appropriately applied, however, is attributable to an administrative matter. At the time the subject permit was issued, the permit shield citation and its keyword reference to the subject emission unit (i.e., process heater) were consistent with the applicable definition in the pertinent regulation (Ch. 117). Since the permit was issued, however, Ch. 117 has changed. The permit shield citation and keyword reference were not updated when the regulation changed, and the location of the applicable definition in the regulation

text is no longer consistent with the specific citation in the shield. When checking the regulatory text to which the citation refers, OIG staff apparently consulted the current version of Ch. 117. In this version, the same-numbered citation now holds the definition of another concept, unrelated to process heaters. OIG concluded from these observations that it was unable to determine whether the permit shield was correctly applied to the subject emission unit.

APD believes there is sufficient information provided by the permit shield's keyword reference and regulatory citation, and in the initial and current definitions of "process heater", with which to determine that the permit shield is appropriately applied to the subject emission unit. For consistency of practice and format with more recently issued permits, and to eliminate the potential for the regulatory tracking difficulties described above, APD will likely strike altogether the specific permit shield regulatory citation when the permit is renewed (in newer permits, only brief keyword references to the subject emission unit and applicable requirements are provided in the 'basis of determination' column of the permit shield summary).

#### OIG Response:

We revised the report and added a footnote to reflect the explanation provided above.

#### **Overall Permit Clarity:**

TCEQ Response: As previously indicated (see response to "Use of IBR" findings), APD

has considered this concern relative to those resulting from the use of narrative text summaries (i.e., permit volume). APD believes the IBR approach offers a better solution to our obligation to maximize

access and fidelity to underlying regulatory requirements.

#### Statements of Basis:

TCEQ Response: APD is in general agreement with this assessment (i.e., that SB's are

improved replacements for technical summaries. More specific comments on OIG's SB observations in Section 5 are provided in that

portion of the document).

#### **Provisions for Periodic Monitoring:**

TCEQ Response: APD is in general agreement with this assessment.

# **Compliance Assurance Monitoring:**

TCEQ Response: APD is in general agreement with this assessment.

#### **Gap-filling Underlying State/Federal Regulations:**

TCEQ Response: APD is in general agreement with this assessment.

#### **Surrogate Monitoring:**

TCEQ Response: APD is in general agreement with this assessment.

#### **Monitoring and Reporting Requirements:**

TCEQ Response: We infer from the data in Table 2-6 that the sufficiency issues in the 7

indicated permits are those described in the foregoing text (i.e., monitoring, IBR, GOP). In rule changes effective December 2002, APD committed to include periodic monitoring in permits issued after this date, for those whose underlying state and federal requirements

did not otherwise require monitoring or specify monitoring

frequencies. Of the 4 audited permits that were issued after this date, 2

contain PM provisions and the other 2 specify monitoring requirements as included in their applicable state and/or federal regulations. 6 of the 10 audited permits were issued prior to the commitment date for inclusion of PM. The required updates will be evaluated and implemented when the permits are renewed (SOP), or

when the overall GOP is revised (GOP).

The use of IBR identifies requirements as monitoring or reporting in the applicable requirements summary. The use of GOP, as well as the form and content of this mechanism, are approved elements of our Title V program; the use of IBR in both SOP and GOP is consistent

with this approval.

### **Annual Compliance Certifications:**

TCEQ Response: OIG observes that "...differences...were related to... whether the

facilities certified each permit term and condition or just reported deviations." This language might suggest that Texas requires only reporting of deviations. While the Texas program does not require "line-by-line certification" of terms and conditions, nor has it made commitments to this effect, it clearly references the permit in question. Also, the responsible official clearly states the applicants are certifying to all terms and conditions of the permit with the exception of the deviations reported. We suggest re-wording the referenced sentence to

avoid misunderstanding and/or mis-statement.

#### OIG Response:

We modified the wording on page 31 in the report to "The differences we found related to whether the facilities certified compliance in the ACC with each permit term and condition or whether the facilities simply certified compliance with the entire permit except for any identified deviations."

#### Practical Enforceability:

TCEQ Response:

In rule changes effective December 2002, APD committed to include periodic monitoring in permits issued after this date, for those whose underlying state and federal requirements did not otherwise require Of the 4 audited permits that were issued after this date, 2 contain PM provisions and the other 2 specify the monitoring requirements of their applicable state and/or federal regulations. monitoring or specify monitoring frequencies. 6 of the 10 audited permits were issued prior to the commitment date for inclusion of PM; required updates will be evaluated and implemented when the permits are renewed (SOP), or when the overall GOP is revised (GOP).

GOP form and content are approved elements of the Texas program; the use of IBR in both SOP and GOP is consistent with this approval. Although the issued GOP authorization itself does not list actual emission units, the enforceable application for this authorization must include all emission units to be covered by the GOP.

#### **Notices of Deficiency:**

TCEQ Response:

In December 2003, TCEQ amended three of the newly numbered sections of its emissions events rules to address concerns raised by EPA in the NOD. These three sections have an expiration date of June 30, 2005. These rule changes were submitted to EPA as revisions to the Texas SIP. EPA has given verbal indications it will grant limited approval for all of these rule changes, and approval is expected in January 2005.

#### **Commitment Letters:**

TCEQ Response:

The substance of our response to the ACC issues referenced in this section is provided in the responses to OIG's ACC findings of Sections 2 and 5, and is not re-stated here. Regarding SB issues, however, OIG's reference to "Chapter 2" is vague and potentially confusing, especially when considering that "Chapter 2" was not provided for review. Follow-up discussions with OIG staff indicated the nature of these SB issues is related to consistency of SB content across states and EPA regions, and the extent to which the SB contained what OIG considers key elements. These issues are not exclusively pertinent to Texas. It would be helpful for these references to be clarified with specific identification and discussion of these issues in this section, and for Texas to have the opportunity to review and comment on this discussion.

#### Review of Pre- and Post-Title V Permits:

TCEQ Response: Since rules governing NSR permitting are part of the Texas SIP, NSR

permit terms and conditions are fully enforceable. Further, APD believes its NSR permit conditions contain adequate provisions for periodic monitoring. In addition to technical summaries, and as supported by OIG's Table 4-3 indicating availability of pre-Title V authorizations for all audited Title V permits, APD provided all available emission rate tables and special conditions of the current

NSR authorizations associated with the audited permits.

#### OIG Response:

We revised the report and added a footnote to Table 4-3 explaining that some pre-Title V permits reviewed were NSR permits, and thus were federally enforceable. The numbers in the Table columns still only reflect whether or not federal enforceability was explicitly stated on the face of the permit. We deleted a footnote stating that Texas only provided technical summaries for the pre-Title V permits to reflect that emissions rate tables and special conditions were also provided.

#### Observations on Statements of Basis:

TECQ Response: APD is in general agreement with this assessment. As described in

previous responses (Section 2 - Monitoring and Reporting; Practical Enforceability), 2 of the 4 audited permits issued after December 2002 did not require addition of PM provisions. OIG's indirect observation in this section (that 2 of the 4 SB's reviewed <u>did not provide</u> the basis of the PM decision) refers to the same 2 permits. The SB for these permits did not include an explanation of the PM decision precisely for

the reason that PM was not required in these permits.

#### **Observations on Annual Compliance Certifications:**

TCEQ Response: OIG observes that Texas has addressed the "material information"

issue as committed, but also immediately comments on the substance of the ACC (completeness of the certification, as indicated with line-by-line certification vs. certification by exception). The organization of these comments suggests that Texas also committed to change its method of certification and has yet to comply with this commitment. Texas has in fact made no such commitment. The language of these observations should clarify that the subject commitment was to resolution of the 'material information' matter, separate from how

certification is handled.

#### OIG Response:

No changes were made in our report as we do not believe the report indicated that Texas agreed to change their ACCs to require facilities to complete their ACCs with a line by line certification.

# Ohio Response to Draft Report and OIG Evaluation

January 26, 2005

**CERTIFIED MAIL** 

U.S. EPA

Attn: J Rick Beusse, Director for Program Evaluation, Air Quality Issues Office of Inspector General, N283-01 Research Triangle Park, NC 27711

RE: Response to Excerpts from Draft Evaluation Report on Title V, Assignment No. 2003-

000339

Dear Mr. Beusse:

Thank you for the opportunity to review and comment on the Ohio portions of the draft evaluation report on Title V. Ohio EPA believes that a thorough review of the federal Title V permit program will lead to improvements in implementing a complex program and will provide increased national consistency. We look forward to participating in any effort to make the Title V program more efficient and effective. We also appreciated meeting with your review team and believe they gained valuable information concerning the experience that Ohio brings to issues associated with implementing 40 CFR Part 70 requirements. Following is a summary of our comments based on our limited knowledge of the full program evaluation conclusions. These comments are based on our review of the redacted draft report you supplied for comment.

#### **Using Incorporation By Reference**

Ohio EPA has no comments.

#### **How Well Permits Reflected the Underlying Regulations**

As with any large, complex program, the initial permits may not have contained the amount of information that appeared in later permits. Ohio EPA appreciates recognition that implementation issues can be worked out in a cooperative fashion with the U.S. EPA regional staff. Ohio is following through with the commitment to cite underlying regulations as part of any permit modification or renewal.

#### **Using Permit Shields and Streamlining**

Ohio EPA is not aware of any Part 70 provision requiring side-by-side comparisons of requirements to justify which requirement is selected as the most stringent in cases where streamlining is employed. SIP approved, rule-based requirements and SIP approved state best available technology requirements are good examples of where "streamlining" is used in Ohio Title V permits. Ohio EPA does not believe there is a need to provide detailed side-by-side comparisons of the requirements in the Statement of Basis (SB) because both requirements are part of the federally approved SIP for Ohio. Thus, the basis for each requirement has already undergone federal and public review, and needs no further justification regarding the selection of the more stringent requirement. Further, there is no national guidance concerning the level or

length of detail required in the SB; Ohio EPA provides additional comment on this related issue below. Nevertheless, Ohio EPA does identify each requirement in the Title V permit that is more stringent than the corresponding PTI term or SIP rule limit. This is indicated in the permit by language such as "...The minimum overall control efficiency specified by this rule is less stringent than the minimum overall control efficiency established pursuant to OAC rule 3745-31-05(A)(3)." This is generally referred to as "subsuming" rather than "streamlining" in Ohio.

#### OIG Response:

We agree that there is no Part 70 provision requiring side-by-side comparisons to justify streamlining. However, this useful practice is recommended in EPA's White Paper #2 and in Region 3's Title V Permit Writers Tips.

#### **Overall Permit Clarity**

Ohio respectfully disagrees with the conclusion that Ohio permits lack clarity or that the use of the phrase "upon request" or "if required" makes it unclear what conditions would trigger a source to be tested. To state every condition which could trigger the requirement for a source to undergo emission testing in an operating permit is unreasonable. As U.S. EPA is aware, most determinations for these source test requirements are made on a site-specific basis. U.S. EPA has not provided clear guidance or rule-based requirements concerning on-going testing frequency. For example, most, if not all NSPS and NESHAPS categories only specify an initial compliance determination. If it is U.S. EPA's desire to have certain types of operations tested on specified frequencies, U.S. EPA should promulgate regulations to ensure that goal is achieved. Otherwise, deference needs to be given to the permitting authority to determine when and if emission testing should be required on a site and source-specific basis.

#### OIG Response:

We understand Ohio's position that stating every condition which could trigger emissions testing may be unreasonable. We also acknowledge that, in the absence of clear guidelines on testing frequency from EPA, State and local permitting authorities are left to make individual decisions. However, from the perspective of an outside reviewer, particularly members of the public, such language can appear vague and leave the reviewer unclear as to what would trigger source testing.

#### **Statement of Basis (SBs)**

As stated in the draft report, Ohio EPA does question the overall efficacy of SBs, but we continue to work with U.S. EPA on issues associated with the level of content and detail needed in a SB. Ohio EPA believes that every Title V permit issued by the Agency, and every associated SB, meets the requirements of the Part 70 rules. The Clean Air Act (including the preamble to the Act) provides no details regarding what constitutes an adequate accounting of the legal and factual basis for Title V permit terms and conditions. Further, the Part 70 SB program element provides virtually no indication of the required focus, elements, or structure of the SB.

The focus of this section of the draft report is a letter from U.S. EPA Region 5 that describes what they believe should be in a SB. However, the list produced by the Region does not have a regulatory basis, and contains the information that Region V would like to see. Although Ohio EPA recognizes that more information can be helpful, there needs to be a recognition that

permitting authorities have limited resources and the focus of the effort needs to be in the issuance of quality permits.

#### OIG Response:

We noted in the report that EPA has not issued a nationwide guidance document or a rule that explains what constitutes an adequate SB. We have made a recommendation that EPA issue guidance or a rule that specifies the elements of an adequate SB.

Monitoring Issues Identified In Reviewing State Permits (periodic monitoring; gap-filling; surrogate monitoring; and clarity of many monitoring and reporting requirements to determine compliance)

#### **Provisions for Periodic Monitoring**

Ohio EPA does not believe that commonly understood or well established permitting practices need to be explained or detailed in either the permit or SB. For example, not requiring monitoring for PM for inherently clean fuel burning operations should not have to be explained in the permit or in the SB because the minor emissions associated with such operations are widely and commonly understood by industry and the regulatory community. One could question whether the public could readily ascertain why monitoring is not required in such an instance, and conclude that explanation should be provided. However, nothing in Part 70 or the Act requires permitting authorities to detail the minutia of every decision the permitting authority makes in developing permit requirements, especially those decisions that are consistent, and widely understood and accepted in the environmental field. Further discussion of this issue is detailed below in the OIG review SB discussion.

#### Gap-filling

Ohio EPA has no comments regarding gap-filling.

#### Surrogate Monitoring

Concerning surrogate monitoring, Ohio EPA does not have a ranking system for surrogate monitoring. Ohio EPA is concerned that the list of types of surrogate monitoring in Table 2-5 in conjunction with the preceding paragraph would lead a reader to believe that the list is the ranking mentioned in the lead-in.

#### OIG Response:

Chapter 2 of our report cites a November 2001 Region 5 memorandum to Ohio EPA. We include Region 5's statement that Ohio EPA ranks emissions factors, not surrogate monitoring. We discuss the use of emissions factors as one type of surrogate monitoring or compliance determination. Table 2-5 lists types of surrogate monitoring or compliance determination we identified in the permits we reviewed in four States. We do not believe the table would lead a reader to believe that the examples under Ohio comprise a ranking system.

# Many Monitoring and Reporting Requirements To Determine Compliance

Ohio EPA has no comments regarding reporting requirements.

#### **Annual Compliance Certification**

Ohio EPA has no comments regarding Annual Compliance Certifications.

#### **Practical Enforceability**

Ohio EPA is concerned about the assertion that Ohio Title V permit terms are not practically enforceable, particularly in light of the lack of U.S. EPA follow-through in providing regulatory enforceability for certain types of on-going compliance demonstration tools. Especially disappointing is the continued failure of reviewers to recognize how certified continuous opacity monitoring systems can be used to help ensure ongoing compliance with visible particulate emission limitations. There continues to be a push for traditional Method 9 observations at some set frequency even though the data from a certified continuous opacity monitoring system does not indicate a compliance problem and, therefore, the need for additional Method 9 observations. U.S. EPA should step back and consider the rationale for and benefits of the continuous opacity monitoring systems required by 40 CFR Part 51, Appendix P, 40 CFR Part 75, and the NSPS provisions if they are going to continue to require the states to conduct Method 9 observations for demonstrating compliance with most visible particulate emission limitations. In other instances cited in Table 2-9, Ohio EPA uses manufacturers' specifications that are not developed or provided by the manufacturer on a site-specific basis. To require the permitting authority to determine a precise minimum frequency would be resource prohibitive. Compliance source testing in conjunction with deviation reporting review by the permitting authority should provide reasonable assurance of the practical enforceability of "manufacturers' specifications."

#### OIG Response:

We do not intend to assert in our report that Ohio Title V permit terms are not practically enforceable. Our discussion of practical enforceability in Chapter 2 cites potential problems and concerns that we believe could arise from the standpoint of an outside reviewer. As noted in our report, officials in 8 out of 10 EPA regions told us that problems in some permits potentially affect practical enforceability, and they identified problems in a number of permitting authorities, including Ohio's use of vague permit language (see Table 2-8).

#### **NOD** and Commitment Letter Issues

Ohio EPA was the first state in Region 5 to complete the initial round of Title V permits. This significant achievement was attained in spite of federal audits of the air program, challenges by environmental organizations of the Title V program implementation in Ohio on the federal level, and many appeals of the individual permits by industry at the state level.

Regarding SB guidance. Ohio EPA has a standing committee of Ohio EPA Central Office, District Office, and local air agency permit and enforcement representatives that meet on a bimonthly basis (the P&E Committee). The required elements of the SB have been discussed in P&E meetings. Additionally, the Ohio version of the SB was revised in 2003 to include detailed instructions regarding the elements to be completed in the SB, including considerations that must be taken into account by permit writers when developing the SB for a given permit. The SB instructions were discussed during P&E meetings. Ohio considers these activities to meet the commitment by the Director to train permit writers on SB. Ohio EPA does not agree with the conclusion that these activities does not constitute "guidance" as "guidance" can take many forms. Please see below for responses and/or comments regarding the OIG review "identified deficiencies" in Ohio's SBs.

#### OIG Response:

As stated in our report, we believe that Ohio SBs could be further improved by including certain key elements considered advisable in the December 20, 2001, Region 5 memorandum. We recognize that the Region 5 memorandum is not nationwide guidance or a rule. As noted above, we have recommended that EPA provide nationwide guidance or a rule which specifies what EPA considers to be sufficient SB content.

#### Results of OIG Review of Pre and Post Title V Permits

Ohio EPA is concerned that the message conveyed by a zero in item 5 of table 4-3 in this section of the OIG report would lead a reader to conclude that the Ohio EPA does not adequately address public participation. The fact that there have not been any objections by the public to an Ohio permit does not have a negative reflection on public participation. Ohio EPA provides public participation and information regarding appeal provisions for every permit in the cover letter accompanying the permit. If a given permit was issued draft, a public notice is sent to the newspaper of general circulation in the county where the facility is located. This notice provides all instructions and contacts associated with public participation in the permitting process. Additionally, the Ohio EPA produces a publication titled the 'Weekly Review' that identifies all Agency actions taken each week. This publication also provides instructions regarding public participation.

#### OIG Response:

Table 4-3 reflects whether or not specific elements, such as provisions for public participation, were explicitly included in pre-Title V permits. It is intended, in part, to illustrate the improvements that Title V has brought about over the old operating permits. This table is not a comment on current public participation practices in the States. The zero in item 5 which Ohio refers to is not related to current Title V permits or public participation efforts.

#### **Observations on Statement of Basis and Annual Compliance Certifications**

Ohio EPA is concerned that the draft OIG report would lead a reader to believe that the December 20, 2001 EPA memorandum includes a list of required elements for each SB. The memorandum is a enumeration of desired elements from one regional office of U.S. EPA. There is no national guidance, policy, or preamble documentation in either the Clean Air Act or proposed and final versions of Part 70 supporting the SB elements listed in the EPA memorandum. Indicating in the OIG review that Ohio EPA did not include "...several key elements identified as necessary in U.S. EPA Region 5's 2001 memorandum." provides no constructive advancement regarding the SB issue. Further, indicating that "none of the SBs [reviewed for Ohio] provided an adequate description of the facility, the manufacturing process and the attainment status of the area where the facility is located." has no constructive value. Inclusion of such statements in the OIG review, absent federal rules on minimum elements of the SB, will only serve to fuel a mis-perception that Ohio SBs do not meet the minimum Part 70 and Clean Air Act requirement of providing the legal and factual basis for each permit term to the EPA and the public.

The requirement for permitting Agencies to provide a SB is a product of EPA requiring permitting authorities to identify the legal and factual basis for each permit term (see 40 CFR 70.7(a)(5). There is virtually no discussion or explanation of the required contents of an

"adequate" SB in either the draft or final preambles to Part 70. Ohio EPA respectfully requests that all language in the OIG report that would lead a reader to conclude that Ohio EPA SBs do not meet the minimum requirements of Part 70 be removed. Notwithstanding, Ohio EPA appreciates that the OIG report does recognize that Ohio EPA has made changes to the SB in response to input for U.S. EPA Region 5.

Additionally, Ohio EPA is not aware of ANY instance where a citizen has relied upon the SB to understand, let alone, comment on any Ohio Title V permit. The vast majority of comments received in the first round of Title V permits processed by Ohio EPA were made by U.S. EPA staff or environmental organizations; both of which have a reasonable knowledge of issues associated with air pollution control permitting. Further, *if* a citizen were to review Ohio EPA permits and the associated SBs, and they were to still have confusion or questions regarding either document, Ohio EPA or local air agency staff are available to further explain the documents, the source, or any other issue related to a given permit or facility. Taking permitting authority staff time out to address specific instances of citizen confusion or questions is a much more resource effective approach than developing voluminous SBs for an extremely limited audience; particularly in light of the lack of federal rules, guidance, or policy with respect to SBs.

The content of Ohio EPA's SBs meet the legal requirements of Part 70. The format and content of our SBs have been approved by U.S. EPA Region 5 and there has been no further national guidance from U.S. EPA on this issue. Furthermore, it should be noted that the SBs are <u>not</u> necessary to prepare a Title V permit. The SB is an informational tool only that is prepared for U.S. EPA and the general public. In processing close to 700 Title V permits, we received less than 10 comments from citizens concerning SBs. To ask an agency to spend more time to expand the content of the SB, would force valuable resources to be redirected from <u>permit preparation</u> to SB preparation. We fail to see any positive benefit from such a reallocation of resources.

#### OIG Response:

Please note our responses on SBs provided above. We agree that an EPA nationwide guidance document or rule has not been issued that would provide minimum SB requirements and we have, therefore, recommended that EPA provide such guidance or rule. In our report, we identified missing elements in Ohio SBs that were recommended in Region 5's guidance document. We also identified missing SB elements for three other States and noted that there are inconsistencies among the SBs prepared by each State. We believe that key content of SBs should be consistent nationwide. We disagree with Ohio EPA on the value of Sbs, i. e., we believe that they are very useful, necessary tools which aid in the understanding of Title V permits. In our review of permits among three of the four States, the accompanying SBs were very effective aids in our understanding and review of the permits. On page 75 of the report we noted Ohio EPA's disagreement over SBs relative to the issue concerning the assertion of reallocation of resources. We believe adequate SBs are necessary and that the resources necessary to construct these SBs are justified. Further, the other three states' permit programs we reviewed with more comprehensive SBs did not provide any indication of any significant resource reallocation experiences, nor did we receive information that any other permitting authority had such concerns.

In summary, Ohio EPA appreciates the opportunity to submit comments on the draft OIG Title V evaluation report. We hope that the report is used by U.S. EPA and permitting authorities to refine and enhance implementation of the Title V permit program, and assists the public in

understanding the complex issues associated with implementing this very important federal program.

Sincerely,

Bob Hodanbosi, Chief Division of Air Pollution Control

cc: Mike Hopkins, DAPC/Permitting
Jim Orlemann, DAPC/Enforcement
Mike Ahern, DAPC/PIDM
Jeanne Mallett, OEPA Legal
Sam Portanova, U.S. EPA/Region 5
Genevieve Damico, U.S. EPA/Region 5

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