Summary

The 1990 Clean Air Act amendments require major industrial sources of air pollutants to obtain federal operating permits. These permits, authorized in Title V of the act, are intended to enhance environmental compliance by detailing for each covered facility all of the emission control requirements to which it is subject. Title V also was intended to generate permit fees that would be used by state and local permitting authorities for administering the program. Implementation of these requirements affects nearly 17,000 industrial sources of air emissions, as well as state and local air pollution control agencies. Adding these provisions to the act was controversial, and implementation, too, has generated controversies.

The Environmental Protection Agency (EPA) issued Title V regulations in 1992. Aspects of those rules (particularly concerning procedures to modify permits) have been contentious since then. EPA has considered a number of regulatory revisions, but has not finalized any modifications. However, EPA has issued white papers and a number of formal and informal guidance documents that, together with the 1992 rules, comprise the agency’s current interpretation of statutory and regulatory requirements.

Because of regulatory and program approval delays, state and local agencies were slow to begin issuing Title V permits, falling far short of statutory deadlines and EPA’s goals. As of March 2000, for example, less than 45% of all required Title V permits had been issued. According to an EPA Inspector General report, key factors that delayed issuance of permits included insufficient state resources, complex EPA rules and limited guidance, and conflicting state priorities. As of January 2008, 99% of all required original permits had been issued, and permit reissuance (required after five years) and modification have replaced issuance of initial permits as the major ongoing task of permitting agencies.

Eighteen years after Congress enacted Title V, the program has reached some maturity, and most stakeholders agree that at least some of the benefits identified by Congress have been achieved, such as incorporation of applicable air pollution control requirements in a single document that is accessible to regulators, the public, and industrial sources. At the same time, there also is widespread dissatisfaction with the program’s complexity, costs, and confusing requirements. Many believe that a lack of EPA guidance has contributed greatly to implementation problems. Congressional examination of Title V has been limited since its enactment to several oversight hearings, the most recent of which was in 2000.
Clean Air Permitting: Status of Implementation and Issues

Introduction

A key element of the 1990 Clean Air Act (CAA) amendments (P.L. 101-549; 42 U.S.C. 7661-7661f) was the comprehensive permit program established in Title V of the act. It was added to the CAA to enhance compliance by detailing for each covered facility all the emission control requirements to which the facility is subject. Previously, an industrial source’s pollution control obligations — ranging from emission controls and monitoring requirements to recordkeeping and reporting requirements — were scattered throughout numerous, often hard-to-find provisions of state plans or various federal regulations. While approximately 35 states or localities had operating permit programs before 1990, they varied considerably, and few were as comprehensive as the new Title V program. Adding these provisions to the CAA was controversial, and implementation, too, has generated controversies.

Congress’ intent in creating the operating permits program was to “(1) better enforce the requirements of the law by applying them more clearly to individual sources and allowing better tracking of compliance, and (2) provide an expedited process for implementing new control requirements.” Benefits of the air permit program were expected to include clarification of pollution control requirements, simplification of procedures for modifying a source’s control obligations, augmenting state resources through permit fees, and enhancing states’ ability to administer other significant new CAA responsibilities, such as the air toxics and acid deposition programs.1

This report describes the statutory background of the Title V program and the status of implementation, in terms of federal approval of state and local permitting authorities and permit issuance. It also discusses broad policy issues identified by various stakeholders, including program complexity and costs, and inconsistencies due to a lack of sufficient federal guidance.

Major Features of the Operating Permits Program

Prior to the 1990 amendments, this law required individual federal permits only for construction of new or modified industrial sources of air pollutants. Existing sources did not have to obtain permits unless they were subsequently modified and increased their air emissions. Title V, which was modeled after a similar program in the Clean Water Act, expanded the number of sources requiring federal permits

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Nonattainment areas are regions that have failed to attain and maintain one or more National Ambient Air Quality Standard (NAAQS). EPA has promulgated NAAQS for six air pollutants: sulfur dioxide, particulate matter, nitrogen dioxide, carbon monoxide, ozone, and lead. For background information, see CRS Report RL30853, Clean Air Act: A Summary of the Act and Its Major Requirements, coordinated by James E. McCarthy.

New Source Performance Standards establish nationally uniform, technology-based maximum emission levels for categories of new major stationary sources, such as powerplants, steel mills, etc. The goal is to force the installation of new pollution control technology and thus prevent new pollution problems.
a single state agency. In other locations (for example, Tennessee, Arizona, Washington, and Idaho), local authorities implement the program in parts of a state, and the state regulatory agency has responsibility in the rest of the state.

Permitting agencies are required to collect permit fees sufficient to cover the cost of the permit program, and the fees may be used only for administering the program. The act requires that the fee schedule be set so as to collect from all sources, in the aggregate, not less than $25 per ton of each regulated pollutant to cover all reasonable (direct and indirect) costs of administering the program.\(^4\) Regulated pollutants include VOCs, National Ambient Air Quality Standard pollutants except carbon monoxide, and pollutants regulated under the hazardous air pollutant and NSPS provisions of the act.

**EPA Regulations**

EPA issued regulations to implement the permit program requirements in July 1992 (40 C.F.R. Part 70), seven months after the statutory deadline. The Part 70 rules cover the minimum elements of state permit programs. Rules promulgated in February 1999 (40 C.F.R. Part 71) cover federal permitting on Indian reservations and in any state that fails to adopt or implement an approvable Title V program.

While state and local agencies primarily implement the Title V program, the CAA provides for EPA oversight of permitting programs and gives EPA the right to review permit applications and object to proposed Title V permits. Defining the parameters of this oversight has been a source of tension among EPA, states, and industry. One over-arching issue has been the question of developing permits with sufficient flexibility to allow for the fact that industrial sources often change their operations (thus affecting air emissions) in response to marketplace signals, and they want to be able to do so quickly without needing a revised permit for every such change. The public also has an important role in the permitting process, because citizens may submit comments and request a hearing on draft permits. Further, under CAA Section 505(b), any person may petition EPA to object to issuance of a permit, and Section 502(b)(6) requires that there be an opportunity for judicial review in state court of final permit actions by the applicant, persons who participated in the public comment process, and any other person who could obtain judicial review of such actions under state laws.

The 1992 regulations were challenged by environmentalists, states, and industry, mostly over details concerning permit revisions. In response, in August 1994, EPA proposed modifications intended to address some of the biggest issues. Those proposed changes were not widely accepted by states and industry, however, and EPA took additional steps to streamline the permit programs. Since 1994, EPA has worked with states, industry, and environmentalists to reach consensus on key issues.

\(^4\) The fee amount considered sufficient to fund all permit program costs (sometimes called the “presumptive minimum”) has been adjusted for inflation by EPA over the years. The current presumptive minimum amount (in effect through August 31, 2008) is $41.96 per ton of regulated pollutant.
and has issued and re-drafted several regulatory proposals but has not finalized modifications to Part 70. Thus, the 1992 rules remain in effect.

The focus of efforts to revise the rules has been on how to streamline aspects of the regulations concerning permit modifications and revisions. According to EPA officials, the 1992 regulations give states ample flexibility to write permits that allow for minor operational changes by industry and to process permit modifications. Still, efforts to revise those rules have been driven by concerns of many permitting authorities and industrial sources that the current rules do not allow sufficient flexibility. One issue that has been particularly contentious concerns the procedures and amount of public review required for relatively minor modifications at emissions sources. At issue have been the definition and criteria for facility changes that are neither so minor that little or no review will be required, nor clearly so environmentally significant that full EPA review and public comment will be appropriate. EPA continued internal and external discussions on revising the Part 70 rules for some time, but by early 2005, agency officials apparently had ceased these activities. However, these efforts may be revived, as EPA considers and responds to recommendations for improvements to the permit program made in 2006 by a Title V Task Implementation Force (discussed below).

During the lengthy consideration of possible Part 70 rule changes, EPA issued guidance in the form of white papers to address some implementation issues that had been raised, such as permit revisions, EPA’s role in reviewing permits, administrative complexity, etc. The first was issued in July 1995 (concerning streamlining to reduce costs and paperwork), and the second in March 1996 (concerning overlapping federal and state requirements). A third white paper, concerning options for operational flexibility, was drafted in mid-2000, but was criticized by environmentalists and some state officials and was not issued. In addition, EPA has issued some formal guidance on specific implementation issues.

**Status of the Permit Program and Permit Issuance**

Under the CAA, all states and territories were to submit operating permit programs by November 15, 1993. Once a state or locality’s program was approved (EPA had one year to review the application), major industrial sources had 12 months to submit permit applications to the state or local authority, and permitting agencies had three years to issue permits to applicants.

As of June 1997, EPA had approved permit programs for all 114 submissions by states, local agencies, and territories. EPA gave full approval to some, but the majority (99 programs) were interim approvals, meaning that the program substantially, but not fully, met the requirements of the CAA and EPA regulations. The law allows EPA to grant interim approval for two years, during which time the permitting agency must correct deficiencies but can otherwise operate the program and issue permits. At the end of two years, the interim program must be replaced by a fully approved program; otherwise, EPA must implement a federal permitting program for the state or locality.

Despite the language of the statute, EPA administratively granted extensions of the interim program approvals on four occasions between 1995 and 2000 and did not
implement a federal program. During this time, the agency was considering changes to the Part 70 rules and argued that it would be most efficient to allow permitting authorities to combine program revisions with those required by whatever new Part 70 rules might be issued. Without extension, interim authority would expire, and EPA would be required to take over the program — a situation not viewed as desirable by EPA or states. In May 2000, EPA issued a final extension until December 1, 2001, for 86 operating permit programs that still lacked full approval, stating that no further extensions would be approved. But environmental groups, which had criticized the multiple extensions, challenged this action, seeking to strengthen permit programs and to force EPA to take over deficient state and local programs, as the CAA requires. To settle this lawsuit, EPA modified its regulations to clarify that a federal permitting program would apply in any area without a fully approved program as of December 1, 2001. When that deadline arrived, EPA gave final approval to all but a few of the 86 state and local programs that still had interim approval. In one case, Connecticut, outstanding issues were soon resolved, and EPA granted full approval in May 2002. In a second case, Maryland, further action by the legislature was required to resolve remaining problems. EPA gave final program approval there in January 2003. EPA took over these programs in December 2001, but it delegated permitting responsibility to the states and did not actually issue any permits in the interim, while federal approval was pending.

At the same time that it announced settlement of the lawsuit (December 2000), EPA also announced a 90-day period for public comment on program and/or implementation deficiencies of operating programs, regardless of approval status. Ultimately, after reviewing comments on a number of individual state and local programs, EPA issued notices of deficiency (NODs) to eight states, 34 local air permitting authorities in California, and the District of Columbia, directing them to correct regulatory program deficiencies within 18 months, as the CAA requires. Separately, EPA obtained commitment letters from nearly two dozen state and local permitting authorities that agreed to address certain actions relating to implementation issues identified by EPA (i.e., less significant than regulatory issues for programs that received NODs). According to EPA, the identified NOD issues have been resolved with all state and local agencies (in one case, involving Hawaii, the deficiency was corrected, but EPA has not yet published a Federal Register Notice to that effect). In May 2005, EPA issued a NOD to Maricopa County, AZ, for deficiencies related to permit fees and permit processing; this NOD has not yet been resolved. Environmentalists believe that EPA acted improperly in allowing programs to operate despite deficiencies, but they were unsuccessful in lawsuits challenging a number of the EPA program approvals.

In part because of the regulatory and program approval delays, state and local agencies were slow to begin issuing Title V permits. In early 1998, EPA surveyed states and EPA regions and found that only about 2,100 permits had been issued as of December 1997, compared with an estimated 11,000 that should have been issued. In March 1999, EPA proposed an ambitious goal of resolving the permit backlog by the end of 2000. Permit issuance increased, but it continued to fall far short of the statutory deadlines and EPA’s goals. As of March 2000, 42% of all required Title V permits had been issued; as of March 2001, 57% had been issued. While there were consequences for permitting authorities that did not get program approval by EPA (i.e., the possibility of federal takeover, as discussed above), there were no real
consequences or penalties for industrial sources that did not receive Title V permits due to state and local agencies’ delays. The principal consequence was a delay in attaining the policy objectives intended by Congress when it established the Title V program.

An EPA Inspector General (IG) report, issued in March 2002, criticized EPA and state and local agencies over the program’s continuing problems. The IG noted that, as of December 31, 2001, 30% of required permits had not been issued, and only four state and 17 local agencies had issued all of their Title V permits. Key factors delaying the issuance of permits included insufficient state resources, complex EPA regulations and limited guidance, and conflicting state priorities, the IG reported.\(^5\) A consequence of those delays is that the benefits that Congress intended the permit program to achieve have not been realized, according to the IG’s analysis. According to EPA, as of January 2008 — 12 years after the first program approvals — 99% of all original permits required for 16,726 Title V sources had been issued. After that initial process, the ongoing task of permit reissuance (required after five years) and modification has become the focus of most permitting authorities’ attention.

**Issues**

Eighteen years after Congress enacted Title V, the program has reached some maturity, and most stakeholders agree that at least some of the objectives and benefits identified by Congress have been achieved:

- Incorporating applicable requirements in one document that consolidates duplicative and redundant requirements is beneficial to regulatory agencies, the public, and regulated sources.
- Establishment of a funding mechanism provides resources to state and local permit programs.
- Source compliance assurance systems — driven by improved understanding of compliance requirements, obligations on corporate officials to certify compliance and report deviations, and a strengthened penalty/enforcement mechanism — have improved.
- Public participation has improved at various stages of the permitting process.

At the same time, there also is widespread dissatisfaction with the program as it exists today, due to program complexity; confusion and uncertainty about some of its requirements; and criticism of costs to regulated entities, permit agencies, and even the general public. While many believe that the permit program has clarified requirements and fostered consistency and fairness in regulatory treatment of sources, others argue otherwise, saying that permits suffer from excessive length and increased complexity. Benefits are more likely to be observed in states and localities that had no operating permit program prior to Title V and to be questioned more vigorously where such a program previously did exist. Likewise, views are mixed.

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Critiques of the Title V program are reflected in a March 2005 report of the EPA Inspector General6 and in a 2006 report by a Task Force on Title V Implementation Experience that was convened by EPA’s Clean Air Act Advisory Committee. The Task Force, consisting of state and local permitting agency, industry, and environmental advocacy group representatives, developed an extensive list of recommendations for improving the program which it believed could be implemented under current legislative and regulatory authority.7

**Complexity and Cost.** Prior to establishment of the Title V program, major sources of air pollution were not required to have federally enforceable operating permits. Regulatory requirements for these sources typically derive from multiple provisions of the CAA and were often scattered among multiple documents, thus complicating efforts to determine compliance and to provide effective enforcement of the law. Consolidating existing requirements (some dating from the 1970s) into a single, comprehensive document, while undoubtedly beneficial, also has resulted in permits that are lengthy and detailed, making it difficult to read them without precise knowledge of the individual source’s operations, according to some stakeholders.

Many issues have arisen, including what level of detail must be incorporated in a Title V permit (versus streamlining or simplifying the permit), how should small and insignificant emissions sources be treated, and how will newly issued CAA requirements such as hazardous air pollutant standards be incorporated. Another issue is the extent to which permitting agencies can adapt or update a source’s existing requirements (particularly those that were established many years earlier) so as to reflect its current operating conditions, without resulting in changes that exceed the scope of Title V, since the permit program was intended to consolidate but not substantively alter regulatory requirements. Title V was not intended to affect the stringency of requirements incorporated into a permit, but stakeholders disagree on whether actions such as the addition of new monitoring or new compliance methods affect stringency or are sometimes tantamount to creating new substantive requirements.

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From the beginning of the program, a key concern for EPA, states, regulated industries, and environmental advocacy groups has been the issue of operational flexibility in operating permits, the concept of allowing for operational change at a facility, while assuring compliance with applicable requirements and ensuring environmental protection. EPA addressed the issue in the 1992 Part 70 regulations and subsequent guidance (especially a 2000 draft White Paper). Also, beginning in 1993, EPA sponsored a flexible permitting pilot program with industrial facilities in 13 states in an effort to evaluate opportunities to design air permits to accommodate operational flexibility. EPA evaluated the economic and administrative benefits of flexible permits and documented several environmental performance benefits (including emissions reductions). Based on its assessment of the pilots, in September 2007, EPA proposed a rule to formalize certain permitting flexibility in the Title V rules. As of March 2008, a final rule had not been promulgated.

Industry groups generally believe that the regulatory burden and costs of the Title V program outweigh the benefits and far exceed EPA’s estimate at the time the Part 70 rules were adopted of $15,000 average cost per facility annually. In addition to permit applications, facilities incur recurring costs related to staffing, permit changes/corrections, report preparation, legal reviews, and management reviews of compliance. Also, some stakeholders (environmental advocates, for example) argue that program cost is not a significant issue when viewed in the context of cost as a percentage of a company’s operating cost, and that companies often benefit from the additional information gained through the program.

Costs are a continuing concern for state and local regulatory authorities with regard to increasing paperwork requirements and the sufficiency of current permit fees. Having adequate resources to administer federal environmental programs is always an issue for states and localities, especially in light of increasing program demands. The Title V permit fee requirement was intended to address that, by ensuring that sufficient resources would be provided. EPA has not conducted a comprehensive audit of permitting agency resources, but available information (such as the 2002 EPA Inspector General’s report) suggests that a number of states (perhaps many) are not collecting sufficient fees to cover their costs, which contributes to problems in hiring staff and processing permits.

In March 2007, an environmental advocacy group, the Environmental Integrity Project, released a report which concluded that more than half of the states have fee structures that do not meet federal minimum standards. The report focused on 18 states in which fees fell below the federal minimum, either because the states set lower emission fees or set a ceiling on the amount that could be collected from each polluter that was lower than the federal presumptive minimum on at least the first 4,000 tons of emissions of each pollutant covered by a Title V permit. It estimated that these 18 states are undercharging regulated sources by at least $53 million less than is required by the federal minimum standard. The report found that, if states were to raise fees to at least the minimum federal amount, they could provide a

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significant source of funding to support their air quality management programs, but that additional funding (for example, from EPA CAA grants) also is needed. It recommended that EPA undertake a comprehensive evaluation to ensure that low emission fees are not weakening the CAA permit program or its enforcement.9

One factor affecting fee revenues is the large number of sources that have lawfully opted out of the Title V program. EPA originally estimated that about 37,000 facilities nationwide would be subject to Title V. Today, the universe of Title V sources is nearly 17,000, and the others — often termed “synthetic minors” — have installed pollution control equipment or taken other steps to ensure that their emissions are below the Title V threshold of what is a major source. For permitting agencies, the resource issue is two-fold. First, most agencies initially calculated fee amounts and revenues based on a larger number of sources, but actual revenues have been less, since more than one-half of sources have lawfully avoided Title V coverage. Second, these sources still represent a regulatory workload, in terms of non-Title V permitting (separate state requirements) and tracking, which is unlikely to be covered fully by other fee revenues or available funding. Getting state legislatures to approve fee increases to address these concerns is politically difficult, in most cases.

Confusing Requirements and Limited EPA Guidance. Critiques of the Title V program, including the EPA Inspector General’s reports and the Title V Task Force report, identify insufficient EPA guidance as a major implementation issue. The IG’s 2005 report, based on a review of permits issued by several states, found that permit clarity varies widely from state to state. Permit requirements are often vaguely stated or identified by reference to other documents, without narrative description or precise citation. EPA regulations require that the permitting authority prepare a statement for each draft permit to set forth the legal and factual basis of the permit, but the IG found that such statements often are inadequate or totally missing.

From its review, the IG concluded that many of these problems stem from a lack of EPA guidance on key issues, which results in permitting inconsistencies and contributes to permitting delays that adversely affect sources, agencies, and the public. The IG strongly recommended that EPA issue nationwide guidance on a number of topics (including requirements for the statement of basis in permits, requirements for content of annual compliance certifications by corporate officials, and applicability of sanctions for unresolved program deficiencies) in order to achieve more national cohesion and consistency in Title V permits.

EPA has issued very limited formal guidance and rules on Title V in the past several years. In lieu of formal guidance, EPA has relied on responses to citizen petitions and letters to regions and permitting authorities to convey its position on key Title V issues, arguing that this strategy allows for flexibility that reflects differences in source complexity.10 Some stakeholders are concerned that, rather than resolving program issues through rulemaking or nationally applicable interpretive

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guidance, EPA is using the petition process and other mechanisms not just to apply law to facts, but to make law in the first instance. The change away from issuing national rules or guidance occurred following a federal court decision which vacated a 1998 EPA guidance document on periodic monitoring. In that case, the court ruled that the agency had exceeded its authority by utilizing non-binding guidance rather than national rulemaking to interpret regulatory requirements (Appalachian Power Co. v. EPA, 208 F.3d 1015 (D.C. Cir. 2000)). The IG noted that permitting authorities may be unwilling to follow or be unaware of guidance that isn’t national in scope.

One example of the issue of lack of EPA guidance relates to incorporation of monitoring requirements in permits, one of the most contentious issues in Title V implementation. The CAA mandates that permits include monitoring and reporting requirements to assure compliance with permit terms and conditions. In the 1992 Part 70 rules, EPA required that permits include all monitoring and test methods detailed in the applicable underlying requirements (e.g., in NSPS or hazardous air pollutant standards incorporated in the Title V permit). In addition, where an underlying applicable requirement does not require “periodic monitoring,” Part 70 requires that periodic monitoring be specified in the Title V permit.

The Title V monitoring rules have been subject to several EPA interpretations (the most recent is a December 2006 interpretive rule)\(^{11}\) and to litigation challenging those interpretations, in cases asking the court to determine the meaning of the periodic monitoring rule and related regulatory language and to determine the consistency of the rules (as interpreted by EPA) with the statutory requirements. According to the 2006 Title V Task Force report, stakeholders fundamentally disagree on the statutory and regulatory requirements and particularly on whether permitting authorities may or must (depending on one’s perspective) specify new or revised emissions monitoring requirements in permits.\(^{12}\) The 2005 EPA IG report found that specification of monitoring requirements was one of the most significant areas of inconsistency in permits and that a number of stakeholders and EPA regional officials contend that more EPA guidance on these issues is needed.

**Congressional Interest**

As the Task Force noted, much about Title V remains unsettled and subject to debate in both the legal and policy arenas, and it urged that steps be taken to “stem the tide of transaction costs and to bring an increased level of certainty and stability.

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11 U.S. Environmental Protection Agency, “Final Rule Interpreting the Scope of Certain Monitoring Requirements for State and Federal Operating Permits Programs,” 71 Federal Register no. 241, December 15, 2006, pp. 75422-75431 In addition to this rule, EPA has committed to take several actions to improve monitoring, including issuing periodic monitoring guidance, and issuing an advanced notice of proposed rulemaking (ANPR) seeking public comment on monitoring inadequacies in state implementation plans and federal regulations. This ANPR was published February 16, 2005; see 70 Federal Register 7905. New periodic monitoring guidance has not been issued.

to implementation of this program.” Responding to the Task Force report in September 2006, EPA officials identified a number of priorities and next steps. Over the next one to two years, the agency will work with states to identify best practices such as standards for granting a public hearing, providing written responses to public comments, and coordination of Title I and Title V process. Over the next one to three years, EPA will review existing guidance and issue new guidance as appropriate concerning clarification of the permit revision process and permit reopening, and clarification of certain statements required in draft permits. Finally, EPA will initiate rulemakings to address several concerns, such as clarifying when insignificant activities are exempt from permits, and allowing alternatives to newspapers for public notice requirements. Rulemakings could take three years or more, EPA said. Other priorities include improving online notice and access to documents, and improving the EPA petitions website.

In January 2008, EPA officials told an industry group that the agency is working on a proposed rule and guidance document, in partial response to the Task Force report. The streamlining proposal and guidance are expected to address a number of issues — but only a small percentage of the Task Force’s recommendations — including the type of emission units that must be included in a permit, the effectiveness of the public notice process, and the complexity and length of the permits. The proposed rule also is expected to remove insignificant emission units from the Title V permit process, allow the use of online public notices instead of newspaper notices, and clarify the use of administrative amendments and minor permit revisions. Agency officials said that the proposed rule is due to be announced in August 2008 and the guidance in the summer.

Congressional oversight of the Title V program has been limited to hearings by a House Energy and Commerce subcommittee and a Senate Environment and Public Works subcommittee in mid-1995, and a Senate Environment subcommittee field hearing in 2000 that addressed Title V and other CAA issues. So far, Congress has not considered statutory changes that would affect the Title V requirements. These issues could draw greater congressional scrutiny in the future.

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14 “EPA’s Response to the Title V Task Force Recommendations,” presentation to the Clean Air Act Advisory Committee, September 14, 2006. EPA’s database of petitions filed to object to the issuance of a Title V permit is available at [http://www.epa.gov/region07/programs/artd/air/title5/petitiondb/petitiondb.htm]