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LEGISLATIVE NOTE

THE CLEAN AIR ACT AMENDMENTS OF 1990: PERMITS AND ENFORCEMENT — THE GUTS OF THE NEW LAW¹

I. INTRODUCTION

On November 15, 1990, President George Bush signed the 1990 Clean Air Act Amendments.² The Amendments represent a major revision of prior clean air legislation. The purpose of the Amendments is to provide clean air for every American.³ The estimated cost of this clean air ranges from \$25 billion per year⁴ to as high as \$91 billion per year.⁵ The cost is also great in terms of lost jobs.⁶

The Amendments contain sweeping provisions which are designed to increase the likelihood of achieving the goal of clean air. These new provisions will require some sources of pollution to be regulated for the first time.⁷ New or stricter standards are provided for national air quality standards,⁸ mobile sources,⁹ hazardous air pollutants,¹⁰ acid rain,¹¹

1. See 136 CONG. REC. S3175 (daily ed. Mar. 26, 1990) (statement of Sen. Chafee).

2. Pub. L. No. 101-549, 104 Stat. 2399 (1990)(codified at 42 U.S.C. § 7401 (Supp. 1991)) [hereinafter cited as CAA].

3. See President's statement on signing S. 1630, 1991 U.S.C.C.A.N. (6 Stat.) 3887-1 (1991).

4. 21 Env't Rep. (BNA) 2127 (most EPA, congressional, and administration officials estimate cost at \$25 billion).

5. See N.Y. TIMES, Sept. 13, 1990, at A26.

6. See REUTERS BUSINESS REP., Feb. 27, 1990 (suggesting that as many as 2.4 million jobs may be lost as a result of the new law).

7. The CAA list of air toxins in section 112 is responsible for much of this result. CAA § 112(b)(1) (codified at 42 U.S.C. § 7412 (1983 & Supp. 1991)). Examples of new sources of substances to be regulated are dry cleaners, printers, and refrigeration manufacturers and repair business. 56 Fed. Reg. 28,548 (1991) (listing potential source categories) (codified at 40 C.F.R. § 60 (1991) (CAA section 111 requirements for new sources)).

8. Title I of the CAA contains provisions for attainment and maintenance of National Ambient Air Quality Standards (NAAQS). CAA § 109 (codified at 42 U.S.C. § 7409 (1983 & Supp. 1991)). These provisions address the problem of continuing nonattainment of NAAQS. In many areas, nonattainment persists for ozone, carbon monoxide, and particulate matter. JOHN QUARLES & WILLIAM LEWIS, THE NEW CLEAN AIR ACT 89 (1990) (ninety-seven cities are in nonattainment for ozone, forty-one are listed as nonattainment for carbon monoxide, and seventy are listed as nonattainment for particulate matter). Nonattainment areas are classified according to the se-

verity of their respective nonattainment problems. CAA § 181. The classification an area receives determines the amount of time the area has to comply with the applicable NAAQS. *Id.* Cities with the most severe problems will receive the most time to comply. *Id.* The nonattainment classifications and times allowed for compliance are as follows: Marginal - 3 years; Moderate - 6 years; Serious - 9 years; Severe - 15 years; Extreme - 20 years. *Id.*

State Implementation Plans (SIPs) remain an important part of Title I. *See infra* text accompanying notes 62-69. SIPs must demonstrate the ability to reach attainment of each NAAQS by the required date. SIPs must also include progressively stricter emission controls on sources based on the area's classification as attainment or nonattainment. CAA § 110. Past clean air legislation employed statutory deadlines for attaining NAAQS with little success. This is particularly the case with respect to ozone. The 1990 Amendments address this problem by lowering the amount of emissions per year necessary for a source to be treated as a "major source." The minimum amount varies depending on an area's classification. *See* H.R. CONF. REP. NO. 952, 101st Cong., 2d Sess. 336 (1990) [hereinafter H.R. CONF. REP. NO. 952]. Thus, sources emitting smaller amounts of pollution are now subject to the EPA's regulation.

Despite the new standards and attainment dates, attainment of the NAAQS is not a realistic goal. "Areas with significant nonattainment problems could not achieve attainment even if all industry ceased to operate." QUARLES & LEWIS, *supra*, at 21. Continually tightening the controls on industry is ineffective in achieving NAAQS because industry emissions only represent fifteen to twenty percent of total emissions. *Id.* The effect of the EPA's regulation of smaller sources may go further to hurt an already struggling economy than to achieving the NAAQS. *See* Mark Sagoff, *The Principles of Federal Pollution Control Law*, 71 MINN. L. REV. 19, 87 (1986). *But see* 22 Env't Rep. (BNA) 2179, January 24, 1992; 21 Env't Rep. (BNA) 2127, March 29, 1991 (an EPA assistant administrator believes that the 1990 Amendments will generate business opportunities).

9. Title II of the Amendments contains provisions relating to mobile sources. 42 U.S.C. § 7520 (1983 & Supp. 1991). This title is important in light of the minimal impact that industry emissions have on ozone nonattainment. *See supra* note 8 (discussion of the minimal impact of industrial emissions on attainment). For nonattainment areas to reach attainment, motor vehicle emissions must be reduced. Title II addresses this problem in several ways.

First, clean fuels are mandated. The nine worst cities in the country must phase in the use of reformulated gasoline by January 1, 1995. The cities are Baltimore, Chicago, Houston, Milwaukee, Muskegon, New York, Philadelphia, San Diego, and Los Angeles. CRAIG A. MOYER & MICHAEL A. FRANCIS, CLEAN AIR ACT HANDBOOK 2-9 (1991). Reformulated gasoline must have an oxygen content of at least two percent, must contain less than one percent benzene and no heavy metals such as lead, and must produce fifteen percent less emissions of volatile organic compounds by 1995. *Id.*; *see* George H. Unzelman, *Oxygenate/Hydrocarbon Shift Will Rewrite Gasoline Recipes*, OIL & GAS J., April 29, 1991, at 62 (analyzing reformulated gasoline content and alternatives). The reformulated gasoline is expected to cost four to five cents per gallon more than ordinary gasoline. Michael Weisskopf, *Rare Pact Reached to Fight Smog; Environmentalists, Oil Firms Agree on Gasoline Standards*, WASH. POST, Aug. 16, 1991, at A1.

Second, stricter tailpipe and evaporative emissions standards are required. Beginning in 1994, auto manufacturers must reduce emissions of hydrogen dioxide by thirty-five percent and nitrogen oxide by sixty percent. CAA § 202. Evaporative emissions from fuel vapors will be controlled by on-board vapor recovery systems by the mid 1990's. *Id.*; *see* QUARLES & LEWIS, *supra* note 8, at 28; 56 Fed. Reg. 48,272 (1991) (to be codified at 40 C.F.R. § 86) (requiring on-board diagnostics systems per CAA § 207(a)); *see also* National Resources Defense Council v. Reilly, 788 F. Supp. 268 (E.D. Va. 1992).

Third, fleet vehicles will be required to be substantially cleaner than ordinary vehicles. Fleet vehicles are groups of centrally fueled and serviced vehicles. CAA § 229. Covered fleet means 10 or more motor vehicles owned and operated by a single person that are either fueled or capable of being fueled at a central location. CAA §§ 241(5)-(6). These vehicles must comply with California emissions standards in serious, severe, and extreme nonattainment areas by 1998. H.R. CONF. REP. NO. 952, *supra* note 8, at 337. California's emissions standards are the most stringent of any

state's emissions standards in terms of requirements for new vehicles, fuels, and fleet vehicles. *See generally* CAL. [HEALTH & SAFETY] CODE §§ 27157.5, 43000.5 - 44017.3 (Deering 1991).

Both the auto industry and the petroleum industry will be affected by these provisions. The cost of converting the petroleum industry to produce reformulated gasoline is estimated at \$30 billion. 21 Env't Rep. (BNA) 473, 480. Regulations governing the content of reformulated gasoline may force some smaller refiners out of business. *Way Clear for Reformulated Gasoline Rule*, OIL & GAS J., Aug. 26, 1991, at 37; *see* 56 Fed. Reg. 52,316 (1991) (to be codified at 40 C.F.R. § 80)(regulations for gasoline and alcohol blends).

10. Title III of the Amendments contains provisions relating to Hazardous Air Pollutants. 42 U.S.C. § 7601 (1983 & Supp. 1991). Section 112 of the Clean Air Act of 1970 gave the EPA the authority to set national emissions standards for hazardous air pollutants. The statute required that standards be set for substances that pose health risks. This health-based standard, coupled with scientific uncertainty as to what constituted an acceptable health risk, resulted in only seven substances being regulated under section 112 as of 1990. *See* 40 C.F.R. Part 61 (1991). The regulated substances are arsenic, asbestos, benzene, beryllium, mercury, radionuclides, and vinyl chloride. *Id.*

Title III contains several provisions intended to remedy this problem. First, rather than leaving the determination of what substances are to be regulated to the EPA, Congress lists 189 substances for regulation. CAA § 112(b)(1). Second, section 112 standards are imposed in two phases. In the first phase, the health risk-based standard is exchanged for a technology-based standard. Rather than regulating sources to remove risks to health, sources must apply "maximum achievable control technology" (MACT). CAA § 112(d). The EPA will promulgate MACT standards for various sources. The EPA will consider costs, energy requirements, health effects, and environmental effects when determining the MACT standards. *Id.* In addition to mandating certain control technology MACT standards, the EPA may require a source to change processes or materials, enclose systems, or collect pollutants at their emission point. *Id.*

All "major sources" must apply MACT. CAA § 112(a). A source is a "major source" if it emits ten tons per year of any single hazardous air pollutant or twenty-five tons per year of any combination of hazardous air pollutants. *Id.*; *see* 56 Fed. Reg. 28,548, 28,552 (1991) (listing source categories to be regulated under section 112). The shift from the health-based standard to the technology-based standard allows the EPA to regulate a substance even when risk of harm to health is unclear.

In the second phase, regulation under section 112 returns to the health risk-based standard. This switch back will take place at a later time to be determined by the EPA. *See generally* Leslie F. Chard III, Note, *The 1990 Clean Air Act Amendments: Section 112 Comes of Age*, 59 U. CIN. L. REV. 1253 (1991) (analyzing CAA section 112 and the new technology-based standard).

11. Title IV of the CAA addresses the problem of acid rain. Title IV mandates reduction of power plant emissions, which in turn will reduce the adverse effects of acid rain. Sulfur dioxide emissions are to be reduced by ten million tons per year from 1980 levels. Nitrogen oxide emissions are to be reduced by two million tons per year from 1980 levels. CAA § 401(b).

Emissions reductions will be achieved through the regulation of fossil fuel burning electric utilities. Utilities that use coal to produce their power are primary targets for regulation. Congress lists 111 power plants to be regulated. CAA § 403(e)(3) table A (fifteen of the regulated plants are located in Ohio).

The strategy for achieving these emissions reductions is the use of marketable emission allowances. An emission allowance provides a plant with permission to emit a specified amount of pollutant. Each plant is allocated a number of emission allowances that can be used or sold. Plants may receive additional allowances by early reduction of emissions and installation of clean air technology. *See* 56 Fed. Reg. 55,062 (1991)(clarifying which facilities are eligible to participate in the allowance trading system). The allowance market provides an economic incentive for plants to reduce emissions. It also provides flexibility to sources with compliance problems. Sources with emissions that exceed allotted allowances must purchase additional ones on the market. If a source's emissions are in excess of the allowances it holds, then the source is required to pay a

operating permits,¹² ozone protection,¹³ and enforcement.¹⁴ The Amendments also mandate clean air research¹⁵ and provide relief for businesses and workers adversely affected by the Amendments.¹⁶ The

penalty. CAA § 411(a). The penalty is calculated by multiplying the number of tons of emissions in excess of allowances by \$2,000. *Id.*

The primary way for plants to reduce emissions of sulfur dioxide and nitrogen oxide is to reduce their use of high sulfur coal. Thus, Title IV has a severe adverse impact on the coal industry in Ohio, Kentucky, West Virginia, and Pennsylvania. *But see* CAA Title XI, *infra* note 16 (discussion of provisions to provide relief to displaced workers). Ohio responded to the potential harmful effects on its coal industry with a law that gives tax credits to power plants that continue to use Ohio's high-sulfur coal. *See* COMM. REP. NO. S6-11, 119th Leg. (1991), (S. Bill 143); *see also* 22 Env't Rep. (BNA) 667 (the law gives a one dollar tax credit for each ton of Ohio coal burned).

12. *See infra* notes 73-208 and accompanying text (discussion of the CAA permit program).

13. Title VI regulates and eventually eliminates substances that deplete the earth's stratospheric ozone layer. This title will directly affect every American. Title VI's regulation of refrigerants used in home appliances, auto air conditioner servicing, and recycling requirements for these refrigerants and nonessential products will impact products that most people use everyday. *See* 56 Fed. Reg. 43,842 (1991) (to be codified at 40 C.F.R. § 82) (establishing standards for servicing auto air conditioners and restricting the sale of small containers of refrigerants). The impact will result from either increased costs or elimination of the product. Manufacturers face the task of finding substitutes for banned chemicals by the deadlines in the act. QUARLES & LEWIS, *supra* note 8, at 45-46.

Congress divides ozone depleting chemicals into two classes. Class I includes chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform. CAA § 602(a). The Amendments required class I chemicals to be phased out beginning in 1992 and production to be terminated by 2000. The phase-out now must be completed by December 1995. *Bush Speeds Schedule for Phasing Out CFCs; No Movement on Global Warming Position*, 22 Env't Rep. (BNA) 2408, Feb. 21, 1992. The exception is methyl chloroform which will be banned in 2002. CAA §§ 604(a), (b). Class II chemicals include hydrochlorofluorocarbons. CAA § 602(b). Regulation of Class II chemicals begins in 2015. Production of Class II chemicals will be banned in 2030. CAA §§ 605(a)-(c); *see* 56 Fed. Reg. 49,548 (1991) (to be codified at 40 C.F.R. § 82) (conforming regulations designed to implement the Montreal Protocol to the requirements of Title VI). *See generally A Clean Air Act Primer: Part III, Stratospheric Ozone Protection*, 22 Env'tl. Rep. (Env'tl. L. Inst.) 10,316 (1992).

14. *See infra* notes 209-67 and accompanying text (discussion of new enforcement provisions).

15. Title VIII "Miscellaneous" and Title IX "Clean Air Research" both mandate new studies of air pollution. Under Title VIII, the EPA is required to conduct research and make reports to Congress on visibility standards, secondary NAAQS, the Clean Air Act's impact on small communities, and the Clean Air Act's economic impact on public health, the economy, and the environment. CAA §§ 810, 812, 816, 817.

Title IX requires the EPA to establish a research program to report on the effects of the Clean Air Act, including effects on health and welfare. CAA § 901(a)(1). Further, the EPA must establish a national network to monitor trends in pollution. CAA § 901(c)(2). The EPA must also continue the acid rain research program established by the Acid Rain Precipitation Act of 1980. CAA § 901(j). The Acid Rain Precipitation Act of 1980 mandates research to identify causes and sources of acid precipitation and to evaluate its effects. 42 U.S.C. §§ 8901-8912 (1983 & Supp. 1991). The Act also mandates action to eliminate or limit emissions consistent with existing laws. *Id.*

16. Title X "Disadvantaged Business Concerns" and Title XI "Clean Air Employment Transition Assistance" provide relief for businesses and individuals facing economic hardship as a

two provisions that most increase the probability of achieving the goal of clean air are Title V permits¹⁷ and Title VII enforcement.¹⁸ While neither Title V nor Title VII substantively affect the emission of air pollutants, both titles provide the means through which the substantive provisions of the Amendments will be implemented and enforced.

This Note briefly begins by surveying prior clean air legislation and some of the problems that led to the 1990 Clean Air Act Amendments. Next, this Note examines the Title V permit program. Finally, this Note examines the enforcement provisions of Title VII.

II. CLEAN AIR LEGISLATION PRIOR TO 1990

A. History

Congress' first attempt at clean air legislation was the Air Pollution Control Act of 1955.¹⁹ This law focused primarily on researching the growing air pollution problem.²⁰ The 1955 Act authorized the Department of Health, Education, and Welfare (HEW) to study air pollution problems.²¹ Development and enforcement of substantive air pollution laws remained the responsibility of the individual states. Few states, however, had air pollution control laws at that time.²²

In 1963, Congress passed the first Clean Air Act.²³ The Clean Air Act gave more authority to HEW. The focus of the law shifted from funding research to funding state air pollution control programs. The 1963 act signalled a gradual departure from local and state control toward more centralized federal control.²⁴

The Air Quality Act of 1967²⁵ further shifted control from state and local governments to the federal government.²⁶ The 1967 Air Quality Act was the first law to authorize a full scale federal air quality

result of the Amendments. A disadvantaged business concern is defined as a business fifty-one percent of which is minority owned. CAA § 1001(b). Title X requires that ten percent of the funding available for research be made available to disadvantaged business concerns. CAA § 1001(a).

Title XI amends the Job Training Partnership Act, 29 U.S.C. § 1501, by providing financial assistance to workers displaced as a result of the Amendments. CAA § 1101. As much as \$250 million will be available to eligible individuals by 1995. This title provides grants for job searches, relocation, and training or education. CAA §§ 1101(a), (b), (e).

17. 42 U.S.C. § 7661 (1983 & Supp. 1991).

18. *Id.* § 7413.

19. Pub. L. No. 84-145, 69 Stat. 322 (1955).

20. 1 FRANK P. GRAD, TREATISE ON ENVIRONMENTAL LAW 2.03[1] (1991).

21. *Id.*

22. *Id.*

23. Pub. L. No. 88-206, 77 Stat. 392 (1963).

24. GRAD, *supra* note 20, § 2.03[1].

25. Pub. L. No. 90-148, 81 Stat. 485 (1967).

26. 3 MARK SQUILLACE, ENVIRONMENTAL LAW: AIR POLLUTION 41 (1988).

regulatory program.²⁷ The federal program, however, did not aggressively pursue enforcement.²⁸ Rather, the federal program primarily took a supervisory approach.²⁹

Lack of enforcement power was a major weakness of the Air Quality Act of 1967.³⁰ Despite the shift in regulatory control, most enforcement responsibility remained with the states because there were very few federal enforcement officials.³¹ Thus, the 1967 law attempted to address enforcement problems without much success.

The Clean Air Act of 1970³² was a response to the lack of enforcement power in the Air Quality Act of 1967.³³ The 1970 Act attempted to correct the enforcement problem by granting authority to the newly created Environmental Protection Agency (EPA).³⁴ The 1970 Act gave the EPA the authority to develop and administer air quality standards and to enforce those standards independently of the states.³⁵

Although the 1970 Act provided the EPA with specific enforcement capabilities,³⁶ no effective remedies were available to force compliance.³⁷ The 1970 Act took the scientific data compiled from earlier research and established national air quality standards.³⁸ The EPA's enforcement procedure was to work backwards from these standards and to establish controls.³⁹ This approach resulted in complexity, inconsistency, and error due to the debate over how to interpret this data.⁴⁰ As a result, it was sometimes less costly for polluters to resist compliance than to make the changes necessary to comply with the law.⁴¹ The EPA lacked adequate remedies to change this situation. Thus, it could not effectively enforce compliance. Although the standards set in 1970 were supposed to attain the prescribed air quality by 1975, little pro-

27. *Id.*

28. David McN. Olds, et al., *Thoughts on the Role of Penalties in the Enforcement of the Clean Air and Clean Water Acts*, 17 DUQ. L. REV. 1, 2 (1978).

29. *Id.*

30. See GRAD, *supra* note 20, at 2-69 through 2-70.

31. *Id.*

32. Pub. L. No. 91-604, 84 Stat. 1676 (1970).

33. Abigail English, Comment, *State Implementation Plans and Air Quality Enforcement*, 4 ECOLOGY L.Q. 595 (1975).

34. The EPA was created by the executive order of President Nixon in 1970.

35. SQUILLACE, *supra* note 26, at 41.

36. J. PHILIP BROMBERG, CLEAN AIR ACT HANDBOOK 93 (1983).

37. Richard Ayres, *Enforcement of Air Pollution Controls on Stationary Sources Under the Clean Air Act Amendments of 1970*, 4 ECOLOGY L.Q. 441, 472 (1975).

38. Samuel Hayes, *Clean Air: From the 1970 Act to the 1977 Amendments*, 17 DUQ. L. REV. 33, 39 (1975). These standards are called national ambient air quality standards or NAAQS. *Id.*

39. *Id.* at 39, 42.

40. *Id.*

41. *Id.*

gress was achieved.⁴² Still, the Clean Air Act of 1970 provided the primary framework for current clean air legislation.⁴³

Dissatisfaction with the progress made in achieving the air quality standards set in 1970 resulted in the Clean Air Act Amendments of 1977.⁴⁴ The 1977 amendments provided the EPA with a means of recovering any economic advantage a source may have gained through noncompliance.⁴⁵ These amendments further increased both the EPA's enforcement power and its discretion.⁴⁶ The 1977 amendments also required individual states to develop plans to implement the standards the law prescribed.⁴⁷ The states were forced to take into account the competing interests of industrial growth and attainment of the air quality mandated by the Act.⁴⁸ These competing interests further inhibited compliance and attainment because the resulting state plans failed to provide adequate guidance or the standards necessary for efficient compliance and enforcement.⁴⁹

Moreover, prior to 1977, the EPA lacked a uniform enforcement strategy⁵⁰ and failed to aggressively use the available enforcement options.⁵¹ The 1977 amendments addressed these problems with increased penalties and additional enforcement options.⁵² Neither the penalties nor the enforcement options, however, were adequate to provide efficient enforcement and attainment of the air quality standards.⁵³ These shortcomings in the 1977 law resulted in a minimal improvement in air quality and failed to achieve attainment by the prescribed 1983 deadline.⁵⁴ Although the 1977 amendments failed to solve the Clean Air Act's enforcement problems, they did solidify further federal control of air pollution. Moreover, the changes made by the 1977 amendments maintained the framework created by the 1970 Act. This framework

42. BROMBERG, *supra* note 36, at 100.

43. GRAD, *supra* note 20, at 2.03[1].

44. Pub. L. No. 95-95, 91 Stat. 685 (1977).

45. BROMBERG, *supra* note 36, at 113. The new authority was the ability to issue noncompliance penalties equal to the amount of economic benefit the polluter gained from noncompliance. See *Duquesne Light Co. v. EPA*, 698 F.2d 456 (D.C. Cir. 1983) (affirming the validity of the noncompliance penalty).

46. Olds, *supra* note 28, at 7.

47. BROMBERG, *supra* note 36, at 101; see *infra* text accompanying notes 62-72 (discussion of state implementation plans (SIPs)).

48. Hayes, *supra* note 38, at 65.

49. *Id.*

50. Olds, *supra* note 28, at 25.

51. *Id.* at 26.

52. *Id.*

53. Roger Strelow, *Reviewing the Clean Air Act*, 4 *ECOLOGY L.Q.* 583, 585 (1975).

54. *Id.*; see CAA § 172(a)(1) in 91 Stat. 685 (1977) (attainment deadline was December 31, 1983).

provides the context in which the Clean Air Act Amendments of 1990 were created.

B. Framework of Clean Air Legislation

1. National Ambient Air Quality Standards

The primary strategy for obtaining clean air since 1970 has been based on the National Ambient Air Quality Standards (NAAQS).⁵⁵ NAAQS are standards that reflect the minimum allowable air quality⁵⁶ and are applied uniformly throughout the country. The EPA sets these standards based on public health and welfare.⁵⁷ Most other provisions in the present Clean Air Act and its predecessors are for the purpose of attaining these standards.⁵⁸

Standards for minimum allowable air quality are based on "threshold levels" of pollutants. The term "threshold level" refers to the amount of a particular pollutant that can be present in the air without adversely affecting humans or the environment.⁵⁹ Acceptable threshold levels are only set for "criteria pollutants." Criteria pollutants are those pollutants which, based on the latest scientific knowledge, the EPA has determined adversely affect public health and welfare and which result from numerous and diverse sources.⁶⁰ The EPA has established NAAQS for only six criteria pollutants: (1) ozone; (2) carbon monoxide; (3) particulate matter; (4) sulfur dioxide; (5) nitrogen dioxide; and (6) lead.⁶¹

Under the Clean Air Act framework, NAAQS represent the substance of clean air legislation. Attainment of the NAAQS provides clean air by reducing to acceptable levels the amount of criteria pollutants present in the air. Theoretically, NAAQS are a sound method of achieving the congressionally mandated air quality. Practically, how-

55. CAA § 109.

56. See English, *supra* note 33, at 597. The national ambient air quality standards establish the maximum permissible concentrations in the atmosphere of each pollutant identified as dangerous to public health or welfare. CAA § 109.

57. See GRAD, *supra* note 20, at 2.03[4][c]. The CAA distinguishes primary and secondary NAAQS. Primary standards are based on public health while secondary standards are based on public welfare. The distinction between the words "health" and "welfare" is unclear. Thus, it is difficult to determine when a primary or secondary standard will be developed or applied. It is clear, however, that primary standards are to be attained as soon as possible, while secondary standards may be attained at a later time. *Id.*

58. See *supra* note 10 (listing regulated substances in 40 C.F.R. § 60). The exceptions are Title III provisions relating to hazardous air pollutants. There are no NAAQS set for these substances. CAA § 181.

59. See QUARLES & LEWIS, *supra* note 8, at 9.

60. SQUILLACE, *supra* note 26, at 42.

61. 40 C.F.R. § 50 (1991).

ever, implementing and enforcing the requirements necessary to achieve attainment of the NAAQS presents problems.

2. State Implementation Plans

The primary means of achieving the NAAQS was the state implementation plan (SIP).⁶² The SIP was intended to be an all encompassing document containing every procedure and requirement a state intended to adopt in order to achieve attainment of the NAAQS.⁶³ The original SIPs were supposed to achieve attainment of the NAAQS within certain time limits. Areas with nonattainment problems seldom met these deadlines and, subsequently, the deadlines for attainment were extended.⁶⁴

The EPA divided the states into air quality control regions according to geographic zones for the purpose of determining where NAAQS were and were not met.⁶⁵ Each area was then designated as an attainment or nonattainment area for purposes of each standard, and a SIP was developed for the area.⁶⁶ Because of the comprehensive function of the SIP, the plans became voluminous and complex. As a result, few SIPs were ever finished as complete documents.⁶⁷ The complex and incomplete nature of the SIPs made it difficult for sources of pollution to understand what their obligations were under the Act.

In addition to their inability to communicate obligations to sources, the use of SIPs as the primary means of implementing the law presented other problems as well. Constantly changing scientific data required changes in both the air quality standards and in the methods used to achieve the standards. For example, the scientific technology used to develop emissions control equipment might change. This change in technology would cause changes in the source's obligation to install the equipment necessary to control emissions. Further, if the data on which the NAAQS were based changed, new NAAQS would be necessary. Both of these changes would require the state to change its SIP. The Clean Air Act, however, contained no provision to facili-

62. FREDRICK R. ANDERSON ET AL., ENVIRONMENTAL PROTECTION: LAW AND POLICY 139 (1984).

63. *Id.*

64. *Id.* Under the 1970 Clean Air Act, the SIPs were to achieve NAAQS by 1975. The 1977 Act provided that the SIPs achieve attainment by 1983. *Id.*

65. CAA § 107.

66. CAA § 110. A SIP for a nonattainment area was required to show how attainment was to be achieved. A SIP for an attainment area was required to show how the area would prevent significant deterioration of air quality. *Id.*

67. ANDERSON, *supra* note 62, at 139.

tate such changes in the SIPs.⁶⁸ Complexity, uncertainty, and inflexibility made implementation and enforcement through SIPs difficult for the EPA, the states, and the sources of pollution.⁶⁹

Congress responded to these problems with the 1990 Clean Air Act Amendments.⁷⁰ The Amendments modify every section of the Clean Air Act.⁷¹ The Amendments also create many new provisions. The most notable of the new provisions are Title V's permit program, which replaces the SIP as the primary means of implementing the law,⁷² and Title VII's increased enforcement power, which promotes compliance with the Act.

III. TITLE V PERMITS

While most of the 1990 Clean Air Act Amendments build on or modify the 1977 version of the Clean Air Act, Title V's permit program is completely new.⁷³ Prior to the enactment of the 1990 Amend-

68. See William F. Pedersen, Jr., *Why the Clean Air Act Works Badly*, 129 U. PA. L. REV. 1059 (1981)(suggesting the use of a permit system that is similar to the one adopted by Congress in 1990).

69. *Id.*; see Hayes, *supra* note 38, at 39.

70. Pub. L. No. 101-549, 104 Stat. 2399 (1990). The NAAQS attainment deadline in the 1977 amendments was December 31, 1982. CAA § 172(a)(1). Congress, however, did not pass the legislation necessary to address the problems until 1990. Despite the failure to attain the NAAQS for seven years past the deadline, Congress still had considerable difficulty enacting the legislation. See Stephen E. Roedy, *Permitting and Enforcement Under the Clean Air Act Amendments of 1990*, 21 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 10,178 (1991) (describing the process and legislative history involved in passing the amendments).

71. See *supra* notes 8-16 (discussion of each title).

72. Much of what was in a SIP has been transferred to the permits. The SIP will become more general. Thus, it will not need to be revised every time the technology on which source controls are based or the science on which the SIP is based change. See David P. Novello, *EPA's Proposed Air Permit Regulations: Implementing the 1990 Clean Air Act Amendments*, 21 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 10,511 (1991). Rather, the permit will contain the specifics and provide the ability to change. *Id.*

73. Title V is a completely new addition to the Clean Air Act. Permits, however, have had a place in the Clean Air Act in the past. The use of permits under the old Act was for New Source Review (NSR). See CAA §§ 110(a)(2), 165, 172, 173. NSR requires facilities that are sources of air pollution to obtain a construction permit before installing new or modifying old equipment. CAA § 110(a)(2). NSR requires that adequate emissions controls will be employed so that the new or modified source will not adversely affect the area's compliance with relevant NAAQS. *Id.* NSR is still in place in the 1990 amendments and is even more stringent in its requirements. 56 *Fed. Reg.* 21,746 n.6 (1991); see 40 C.F.R. part 51; THE CLEAN AIR ACT AMENDMENTS OF 1990: BNA'S COMPREHENSIVE ANALYSIS OF THE NEW LAW 223 n.4 (1991) [hereinafter BNA'S ANALYSIS]. The final version of the permit program allows state NSR programs that satisfy the substantive requirements of the permit program to qualify for the administrative amendment procedure provided under the operational flexibility provisions of the final rule. 57 *Fed. Reg.* 32,289 (1992).

Nor is the use of permits as a means of implementing the Act new to most states. Approximately thirty-five states, including Ohio, utilize some form of operating permit program to control air pollution. S. REP. NO. 228, 101st Cong., 2d Sess. 346-47 (1990); see OHIO REV. CODE ANN. § 3704 (Anderson 1991); 56 *Fed. Reg.* 21,713 (1991). No state program in its present form will meet the requirements of Title V; many programs, however, match its intent. 56 *Fed. Reg.* 21,714

ments, the primary mechanism for implementing the requirements of the Act was the state implementation plan (SIP).⁷⁴ The volume and complexity of SIPs made it difficult for sources of pollution to understand their obligations and also prevented pollution control officials from effectively enforcing the Act.⁷⁵ The persistence of nonattainment in many areas, despite congressionally mandated compliance deadlines, indicated that the SIP was inadequate as the primary implementation and enforcement mechanism. A more effective mechanism was needed to achieve the goals of the law.⁷⁶ The Title V permit program provides that mechanism. "The permit program is not only the most important procedural reform in the new Clean Air Act, but in many ways [it is] the key to effective enforcement and implementation of the law."⁷⁷

The use of permits as the primary implementation mechanism is an improvement over the SIP because a permit will include all of a source's obligations under the Clean Air Act. These obligations include the amount of pollutants that a source may emit, emission control devices and technologies that must be in place, and monitoring and reporting requirements. Thus, both sources of pollution and enforcement officials will have access to a complete statement of the source's obligations.⁷⁸

A. Which Sources Must Obtain Permits?

The 1990 Amendments' more stringent emissions standards require many businesses to undergo EPA regulation for the first time. The first contact these businesses will have with the EPA will come through the permit program. Fear that compliance will be impossible may cause some businesses to doubt their continued viability.⁷⁹ Busi-

(1991). Therefore, the EPA provides the states with flexibility to maintain and build on old programs where possible. *Id.*

74. See *supra* notes 62-72 and accompanying text (discussion of state implementation plans).

75. *Id.*

76. See Pederson, *supra* note 68, at 1059 (suggesting the need for a change in the method of implementing the Clean Air Act and that the use of a permit program would facilitate both compliance and enforcement).

77. *EPA Proposes Permit Rules to Increase Industry Accountability Under New Clean Air Act*, EPA ENVIRONMENTAL NEWS, April 24, 1991 [hereinafter EPA NEWS] (statement of William K. Reilly, Administrator of the EPA); see 57 Fed. Reg. 32,251 (1992). "Increased source accountability and better enforcement should result" from the permit program. *Id.*

78. 57 Fed. Reg. 32,251 (1992).

79. 21 Env't Rep. (BNA) 2127. A representative of the National Association of Manufacturers estimated that approximately 362,000 businesses may be required to obtain permits based on statistics from the U.S. Census Bureau. *Id.*; see Lisa M. Keefe, *Clean Air Bill Hits Small Biz Hardest; On the Hook: Printers, Metal Shops, Cleaners*, CRAIN'S CHICAGO BUSINESS, Dec. 10, 1990, at 17 (reporting that small businesses like printers, metal shops, and cleaners will be hit hard by the 1990 Amendments).

nesses may also be confused as to what the law requires of them, both in terms of emissions reductions and the regulatory processes surrounding receipt of a permit. The Title V permit program attempts to address these concerns in several ways. The permit provides businesses with a document they can rely on with respect to their substantive obligations under the Act.⁸⁰ The permit program also provides guidance with respect to who must participate in the permit program.

"Sources" of pollution must participate in the permit program. The term "source," as used in the Amendments, is a term of art describing which businesses will be subject to particular requirements of the Act.⁸¹ The Title V permit program requires several different sources to obtain permits.

First, all "major sources"⁸² must obtain permits.⁸³ There are several criteria for determining if a source is a "major source." Satisfaction of any one of these criteria makes the source a "major source." Any source of a hazardous air pollutant with the potential⁸⁴ to emit ten tons per year of any single section 112 pollutant, or twenty-five tons per year of any combination of section 112 pollutants, is a "major source" and must obtain a permit.⁸⁵ Additionally, any source that emits or has the potential to emit one hundred tons per year of any air pollutant is a "major source" and must obtain a permit.⁸⁶ Finally, a smaller source of pollution may be defined as a "major source" if it is located in a nonattainment area.⁸⁷

Second, some nonmajor sources must also participate in the permit program. Any source that is not a "major source" in terms of the amount emitted criteria, but which is subject to regulation under sec-

80. 57 Fed. Reg. 32,251, 32,265-66 (1992); see *infra* notes 200-04 and accompanying text (discussion of permit shields).

81. CAA § 501(2).

82. *Id.*; 57 Fed. Reg. 32,296 (1992) (to be codified at 40 C.F.R. § 70.1).

83. CAA § 502(a).

84. Potential to emit refers to the maximum amount of pollution a source can emit, taking into account federally enforceable limitations on capacity to emit and control equipment. 56 Fed. Reg. 21,725 (1991); see 45 Fed. Reg. 52,688 (1980); 54 Fed. Reg. 27,274 (1989) (guidelines on how to limit the potential to emit under NSR rules). See generally Bradley Raffle, *Operating Permits*, in BNA'S ANALYSIS, *supra* note 73, at 186.

85. CAA § 112(a)(1).

86. CAA § 302(j).

87. CAA § 182(c)-(f). The more severe the nonattainment zone is, the lower the number of tons per year a source may emit before being classified as a "major source" and thus being required to obtain an operating permit. For example, a source emitting twenty-five tons per year in a "serious" nonattainment area is not classified as a major source. However, the same source emitting the same amount of pollutant but located in a "severe" nonattainment area is classified a "major source."

tions 111, 112, or New Source Review (NSR),⁸⁸ must also obtain a permit.⁸⁹

Third, any "affected source" under the acid rain title must obtain a permit.⁹⁰ Affected sources include the one-hundred and eleven power plants listed in Title IV. Affected sources also include any other power plant that chooses to participate in the program.⁹¹ Title V provides that all sources, except mobile sources,⁹² fall within the scope of Title V and must obtain permits.⁹³ It is important to distinguish between various types of "sources" because of the discretion the EPA has with regard to the regulation of nonmajor sources.⁹⁴ Although Congress set forth rules in Title V for classifying sources which are required to obtain permits, the impact that the permit program has on businesses will largely be determined by the rules that the EPA promulgates.⁹⁵

B. EPA's Operating Permit Program

The EPA's operating permit program has created some controversy.⁹⁶ While industry considers the program too restrictive, environmentalists consider it too permissive. The EPA formulated the permit program as a result of the roundtable procedure it instituted in an effort to alleviate some of the controversy.⁹⁷ The "roundtable" discussions included representatives from industry, environmental groups, and

88. See *supra* note 73 (discussion of new source review).

89. CAA § 502(a).

90. *Id.*

91. See *supra* note 11 (discussion of Title IV).

92. See *supra* note 9 (discussion of Title II).

93. The term "source" has also created some controversy over what type of source is to receive the permit. A source can be either the individual piece of equipment emitting the pollutant or the whole facility containing the equipment. The EPA has proposed to require permits for both the individual pieces of equipment and whole facilities. 56 Fed. Reg. 21,727 (1991). This means that a facility must include all emissions, including those not regulated by the CAA, in its permit. Requiring permits for whole facilities, in addition to individual pieces of equipment, imposes an added burden on both the EPA and the permitted facilities. BNA's ANALYSIS, *supra* note 73, at 183-86.

94. See *infra* notes 108-40 and accompanying text. The EPA's discretion is limited to nonmajor sources. Major sources and affected sources must receive permits. 57 Fed. Reg. 32,252 (1992).

95. See BNA's ANALYSIS, *supra* note 73, at app. D (timetable for EPA regulations).

96. Compare the final rule, 57 Fed. Reg. 32,250 (1992) (to be codified at 40 C.F.R. § 70), with the rule proposed in 56 Fed. Reg. 21,712 (1991). The proposed rule generated approximately five hundred public comments. 57 Fed. Reg. 32,251 (1992). As a result of the controversy surrounding the permit program, the EPA was over seven months late in promulgating the final rule. Further, several environmental groups have filed a lawsuit challenging the rule as violative of the Act. NRDC, *Sierra Club, EDF Sue Agency, Call New Air Permitting Rule Illegal*, 23 Env't Rep. (BNA) 1188.

97. See Novello, *supra* note 72, at 10,511.

state and federal pollution control agencies.⁹⁸ The goal of involving all groups in the development of the program was to avoid future litigation.⁹⁹ The permit program is based on the Clean Water Act's¹⁰⁰ (CWA) National Pollutant Discharge Elimination System (NPDES) permit program.¹⁰¹ Title V's permit program brings the Clean Air Act

98. EPA Office of Air and Radiation, *Summary of EPA Proposed Operating Permit Rule Under the Clean Air Act*, April 24, 1991, at 4.

99. *Id.*

100. 33 U.S.C. § 1251 (1983 & Supp. 1991); see CWA §§ 318, 402, 405; 40 C.F.R. § 122 (1990).

101. 56 Fed. Reg. 21,713 (1991). Since the Title V program is modeled on the CWA's program, the EPA proposed to look to NPDES precedent to resolve similar issues under Title V of the CAA. *Id.* This is a logical approach for setting the parameters of potential litigation under the Title V program. Several problems, however, exist. While the permit programs of the CWA and the CAA are similar, the types of pollutants and the types of resources being protected are fundamentally different. The control of effluent emissions of water pollutants is completely different from the control of ambient air pollutants. These differences require different approaches to similar problems. See S. REP. NO. 228, 101st Cong., 2d Sess. 487 (statement of Sen. Symms). Thus, the use of NPDES precedent would create more litigation than it would settle. The EPA recognized these differences and decided that although NPDES precedent will be used for guidance, it will not be presumed to be binding. 57 Fed. Reg. 32,260 (1992).

Some NPDES decisions directly conflict with the 1990 Amendments. The last major NPDES case decided was expressly overruled in the Amendments. In *Chesapeake Bay Found. Inc. v. Gwaltney of Smithfield, Ltd.*, the court held that citizens could not recover civil penalties for past violations. 791 F.2d 304 (4th Cir. 1986), *vacated and remanded on other grounds*, 484 U.S. 49 (1987). Congress overruled the application of *Gwaltney's* doctrine to the CAA in section 113(e). Further, in *Sierra Club v. Train*, the court did not require the EPA to issue a compliance order as a mandatory duty. 557 F.2d 485, 490 (5th Cir. 1977). This is contrary to CAA section 113. Also, in *Hercules, Inc. v. EPA*, the court found that a source must comply with newly promulgated standards before its permit is revised to include them. 598 F.2d 91 (D.C. Cir. 1978). This is contrary to the CAA permit program. See 56 Fed. Reg. 21,741 (1991). Therefore, at least some NPDES precedent will be inapplicable. The process of determining which decisions are and are not applicable will generate litigation.

The most common NPDES precedents concern issues regarding public hearing and judicial review. Both of these subjects are dealt with specifically in the CAA. See CAA § 502(b)(6); 56 Fed. Reg. 21,759, 21,778 (1991); see, e.g., *Costle v. Pacific Legal Foundation*, 445 U.S. 198 (1980) (public hearing is required only if there is significant public interest in the permit); *Crown Simpson Pulp Co. v. Costle*, 445 U.S. 193 (1980) (the EPA veto of a state issued permit is directly reviewable in the Court of Appeals); *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519 (1978) (the EPA has broad discretion in procedural implementation of the statute); *NRDC v. EPA*, 673 F.2d 400 (D.C. Cir.) (challenges to consolidated permit regulations for effluent limitations may be brought in courts of appeals rather than in district courts), *cert. denied*, *Chemical Mfrs. Ass'n v. EPA*, 459 U.S. 879 (1982); *Virginia Electric and Power Co. v. EPA*, 655 F.2d 534 (4th Cir. 1981) (the court of appeals is the proper forum for review of the EPA's administrative actions); *District of Columbia v. Schramm*, 631 F.2d 854 (D.C. Cir. 1980) (the EPA decision not to veto a permit is not reviewable); *Citizens for a Better Env't v. EPA*, 596 F.2d 720 (7th Cir. 1979) (opportunity for a public hearing is required before the EPA rules on a permit application); *Pacific Legal Found. v. Costle*, 586 F.2d 650 (9th Cir. 1978) (the court of appeals has jurisdiction to review a permit issued jointly by the state and the EPA), *rev'd*, 445 U.S. 198 (1980); *United States v. Frezzo Bros., Inc.*, 602 F.2d 1123 (3d Cir. 1979) (allowing the jury to infer a willful violation of a permit), *cert. denied*, 444 U.S. 1074 (1980); *Republic Steel Corp. v. Costle*, 581 F.2d 1228 (6th Cir. 1978) (the EPA can object to state issuance of a permit extending an attainment deadline unless the state has authority to extend the deadline), *cert. denied*, 440

up to date with the Clean Water Act and the Resource Conservation and Recovery Act.¹⁰²

The permit program has several benefits over the SIP as a means of implementing the Act. First, the permit program clarifies the source's obligations under the Act.¹⁰³ This clarity enhances the EPA's, the state's, the public's, and the source's understanding of how the source is required to comply with the law. Enhanced understanding of these requirements will improve compliance¹⁰⁴ and will facilitate enforcement actions. Second, the permit program provides a vehicle for states to administer the new air toxins¹⁰⁵ and acid rain provisions.¹⁰⁶ Third, the permit program is self-sustaining because fees charged for the permits will provide the resources necessary to administer the program.¹⁰⁷

1. Protections for Small Businesses

In addition to the permit framework provided in the Amendments, the EPA used several implementation principles as guides in formulating the operating permit program.¹⁰⁸ These principles are policy deci-

U.S. 909 (1979); *Shell Oil Co. v. Train*, 585 F.2d 408 (9th Cir. 1978) (the court of appeals does not have jurisdiction to review denial of a variance); *Ford Motor Co. v. EPA*, 567 F.2d 661 (6th Cir. 1977) (the court of appeals has jurisdiction to review the denial of a modification to a permit); *Marathon Oil Co. v. EPA*, 564 F.2d 1253 (9th Cir. 1977) (permit issuance proceedings must include application of the Administrative Procedure Act and, thus, permit issuance requires a public hearing); *Bethlehem Steel Corp. v. Train*, 544 F.2d 657 (3d Cir. 1976) (Congress intended deadlines to be strictly enforced), *cert. denied*, 430 U.S. 975 (1979); *United States v. Cutter Labs., Inc.*, 413 F. Supp. 1295 (E.D. Tenn. 1976) (it is an offense to violate a permit even if it includes no guidelines for the discharge). See generally, GRAD, *supra* note 20, § 3.01[6][a].

102. Compare the Clean Air Act permit program, 42 U.S.C. § 7661 (1983 & Supp. 1991) and 57 Fed. Reg. 32,250 (1992) (to be codified at 40 C.F.R. part 70) with the Clean Water Act permit program, 33 U.S.C. § 1342 (1983 & Supp. 1991), 40 C.F.R. §§ 122, 123, 125, 403 and the Resource Conservation and Recovery Act permit program, 42 U.S.C. § 6925 (1983 & Supp. 1991), 40 C.F.R. §§ 264-67.

103. 57 Fed. Reg. 32,251 (1992).

104. *Id.*

105. See *supra* note 10 (discussion of Title III's air toxins provisions); Novello, *supra* note 72, at 10,511 (describing the relationship between title III and the permit program).

106. 56 Fed. Reg. 21,713 (1991); see *supra* note 11 (discussion of Title IV's acid rain provisions).

107. 56 Fed. Reg. 21,714 (1991). The principles listed in the proposed rule were also used in formulating the final rule. 57 Fed. Reg. 32,252 (1992). "The EPA intends that these principles be appropriately incorporated into all aspects of [permit] program development" *Id.*

108. 57 Fed. Reg. 32,252 (1992). The principles are to ensure environmental protection, incorporate broad-based perspective for rule development, maintain an effective partnership with state and local governments, minimize redundancy in SIPs and permit programs, encourage early state program development, minimize small business concerns, promote pollution prevention, facilitate use of market-based incentives, allow flexibility in state programs and source permits, establish certainty for permitted sources, enable effective and efficient information transfer, prioritize EPA oversight on overall program implementation, promote possibilities for integrated permit programs, and promote simple and streamlined regulations. 56 Fed. Reg. 21,714-15 (1991). Addi-

sions which the EPA used to develop the rules of the program. Two of these principles have an important impact on the businesses subject to the permit program. The principles are to (1) "minimize small business concerns"¹⁰⁹ and to (2) "allow flexibility in . . . source permits."¹¹⁰ The rules that flow from these principles provide relief to both small and large businesses from the potentially harsh impact of the Act.

a. Small Business Assistance Programs

The most significant benefit that Title V provides small businesses is the "Small Business Stationary Source Technical and Environmental Compliance Assistance Program."¹¹¹ Title V requires each state to include an assistance program in its state implementation plan.¹¹² Further, the EPA must establish its own assistance program. The EPA program must help state agencies develop assistance programs and must provide assistance to those businesses located in states that fail to provide adequate programs.¹¹³ The programs must provide small businesses with information concerning compliance methods, help them with permit applications, and help them obtain permission to modify the source.¹¹⁴ This program is vital for small businesses to meet their obligations under the Act.¹¹⁵

A business must meet the following five criteria to be eligible for the program:¹¹⁶ (1) the business must employ one hundred or less individuals; (2) the business must be a small business concern as defined in

tionally, in the final rule, the EPA Administrator agreed to incorporate the "enhancement of the nation's productive capacity . . . into the first implementation principle" of ensuring environmental protection. 57 Fed. Reg. 32,261 (1992).

109. The term "small business" calls to mind small, traditional, "Mom and Pop" operations. Thus, use of this term to describe the businesses which the Amendments now require to be regulated might seem misleading. After all, these "small businesses" are subject to regulation only if they emit pollutants in excess of twenty-five tons per year. See *supra* notes 79-95 and accompanying text (defining sources to be regulated and required to obtain permits). While these small businesses are not all Mom and Pop operations that evoke sympathy and understanding of special treatment, they also require special consideration. First, some of the businesses will be traditional, small businesses. See *supra* note 10 (the Act will impact dry cleaners, printers, painters, small shops using degreasers, and air conditioner and refrigeration repair businesses). Second, even businesses that do not meet the traditional concept of a small business may lack the financial and technical resources necessary to comply with the requirements of the act. See CAA § 507.

110. 56 Fed. Reg. 21,714 (1991).

111. See H.R. CONF. REP. NO. 952, *supra* note 8, at 346 (conferees intend that EPA develop flexible regulation based on the technical and financial limitations of small businesses).

112. CAA § 507.

113. CAA § 507(b); see 57 Fed. Reg. 32,259 (1992); 56 Fed. Reg. 21,722 (1991).

114. 56 Fed. Reg. 21,722 (1991).

115. See 22 Env't. Rep. (BNA) 227 (letter from Sen. Bumper stating that the economic survival of small businesses depends on this program).

116. CAA § 507(c).

the Small Business Act;¹¹⁷ (3) the business must not be a "major source;"¹¹⁸ (4) the business must emit less than fifty tons per year of any regulated pollutant; and (5) the business must emit less than seventy-five tons per year of all regulated pollutants.¹¹⁹ A business that fails any of the latter three criteria, but emits less than one hundred tons per year of all pollutants, may petition its state agency for inclusion in the program.¹²⁰ The state then has discretion to allow the source to participate in the program after notice and opportunity for a hearing.¹²¹

Businesses that fail to satisfy the criteria may still be admitted to the assistance program. Additionally, both the EPA and the states have discretion to exclude a business from the program. Any business that has sufficient technical and financial capabilities to meet the requirements of the Act without assistance may be excluded from the program.¹²²

b. Deferment

The EPA's permit program also implements the principle of minimizing small business concerns by allowing deferments.¹²³ The program exempts any source that is not a "major source" from the permit program.¹²⁴ All nonmajor sources receive a five year deferment from participation in the permit program.¹²⁵ This deferment begins on the date the EPA approves the permit program of the state in which the source is located. Further, Congress has authorized the EPA to continue to exempt sources from the permit program if compliance with the requirements of the program is "impracticable, infeasible, or unnecessarily burdensome" to the sources.¹²⁶ Thus, exemption from the permit program may continue beyond the initial five year period if the EPA

117. 15 U.S.C. § 632 (1983 & Supp. 1991) The two primary criteria for being defined as a small business concern are first, that the business is independently owned and operated, and second, that the business is not dominant in its field of operation. *Id.*

118. CAA § 501(2); *see supra* notes 83-87 and accompanying text (explaining criteria for classifying sources as major sources).

119. CAA § 507(c).

120. CAA § 507.

121. *Id.*

122. CAA § 507(3)(A)(B).

123. 57 Fed. Reg. 32,259 (1992).

124. *Id.* at 32,261; *see* 57 Fed. Reg. 32,297 (1992) (to be codified at 40 C.F.R. § 70.3 (b)(1)).

125. 57 Fed. Reg. 32,261 (1992).

126. CAA § 502(a).

determines that requiring a source to participate remains "impracticable, infeasible, or unnecessarily burdensome."¹²⁷

c. General Permits

General permits are another method of alleviating the burdens of the permitting process for small sources.¹²⁸ Small sources that might be the proper subject of a general permit are small businesses that are similar in the nature of their operations and emissions, such that the EPA may classify and regulate many of these sources in a general document.¹²⁹ The nature and number of such businesses make detailed individual permits unnecessary. The EPA is authorized to issue general permits to cover numerous single sources.¹³⁰

A general permit establishes a set of rules under which certain similar types of facilities may operate.¹³¹ General permits simplify the permitting process for both the source and the EPA.¹³² A source wishing to receive a general permit must still submit a permit application. The application, however, will be less complex than an ordinary, source specific, permit application.¹³³ General permits offer a significant aid to businesses encountering the regulatory process for the first time.

127. 57 Fed. Reg. 32,263 (1992). The EPA will address the continuing deferment of nonmajor sources in a rule within three years of the approval of a State permit program. The rule will also address whether to grant permanent exemptions to some nonmajor sources. *Id.* At least two sources are already permanently exempted. Exempted sources include those subject to the demolition and renovation regulations for asbestos under NESHAP, 40 C.F.R. part 61, subpart M, § 61.145, and residential wood heaters regulated under NSPS, 40 C.F.R. part 60, subpart AAA.

The proposed rule provided exceptions to the automatic five year exemption for nonmajor sources located in nonattainment areas. 56 Fed. Reg. 21,770 (1991). The EPA proposed that nonmajor sources that emit the pollutant for which the area is in nonattainment would not qualify for the automatic deferment. *Id.* Nonmajor sources in nonattainment areas, however, would have received the same five year deferment if the state permitting authority could demonstrate that allowing the deferral would not prevent the area from meeting its obligations to achieve the applicable NAAQS. The EPA removed the requirement of such a demonstration by the State in the final rule because it was impractical, unnecessary, and not required by section 502(a).

128. 57 Fed. Reg. 32,276 (1992); see H.R. 101-490, 101st Cong., 2d Sess. 350 (1990). The general permit provision, however, does not apply to affected sources regulated under title IV unless provided in those regulations. 57 Fed. Reg. 32,276 (1992).

129. 57 Fed. Reg. 32,278 (1992).

130. CAA § 504(d). Examples of sources that could receive general permits are dry cleaners and printers. See 57 Fed. Reg. 32,279 (1992) (listing categories that might include such small businesses).

131. See *supra* note 130.

132. 56 Fed. Reg. 21,739 (1991); see BNA's ANALYSIS, *supra* note 73, at 189-90.

133. 56 Fed. Reg. 21,740 (1991).

d. Reduced Fees

Finally, the permit program softens the impact on small business by allowing the EPA or the state to reduce the fee a business is charged for its permit.¹³⁴ The permit fee is based on the amount of pollution the business emits. The permit fee is normally \$25 per ton of regulated pollutant for up to 4,000 tons of pollutant.¹³⁵ Fees will generate an estimated \$300 million per year for state pollution agencies.¹³⁶ Fees make the state permit programs self-sustaining and, thus, viable implementation mechanisms. Although permit fees are necessary to the programs survival, flexibility toward small businesses is also necessary to ensure their continued viability. Thus, the fee may be reduced based on the financial capabilities of the business.¹³⁷ Businesses will not be forced to pay high fees if they are unable to do so, and the permit fee will not put any source out of business.

e. Analysis of Small Business Considerations

Although the possibility exists that nonmajor sources may receive deferment indefinitely from the permit program, businesses should use the deferment period to prepare to participate in the permit program. The deferment allows businesses time to gather information regarding their new obligations under the Act. The deferment period also provides businesses with time to acquire technical assistance and to install emissions controls. Businesses will receive help in such preparations from the Small Business Assistance Program.¹³⁸

These provisions indicate Congress' concern over the impact of the Act on small businesses. Ultimately, these businesses must comply with the emission standards of the Act, whether or not they receive a permit. Compliance, however, will force few sources out of business. Most sources, small or large, will be able to comply with the requirements of the Act either by installing new emissions control equipment or by changing operational procedures. The cost of compliance, however, will directly impact both employees and consumers. Compliance will force some businesses with tight budgets to cut jobs. It will also force owners to increase the prices charged for their products. Both results will adversely impact the economy.¹³⁹ When these costs are weighed against

134. CAA §§ 502(b)(3)(B)(i)-(iii).

135. *Id.*

136. EPA NEWS, *supra* note 77.

137. CAA § 507(f); see 56 Fed. Reg. 21,722 (1991).

138. 56 Fed. Reg. 21,722 (1991).

139. See 22 Env't. Rep. (BNA) 1347 (1991) (suggesting that policymakers need a better understanding of environmental regulations' costs and benefits before imposing them on society), Joel A. Mintz, *Agencies, Congress and Regulatory Enforcement: A Review of EPA's Hazardous*

the emissions reductions gained by regulating these small sources, it seems clear that the detriment to individual employees, consumers, and the economy greatly outweighs the benefit gained through this regulation.¹⁴⁰ The permit program will ease the burden on small businesses to the extent that such businesses remain viable. However, the value and wisdom of bringing such businesses under Clean Air Act regulation at all is doubtful.

2. Operational Flexibility

Operational flexibility refers to a source's ability to deviate from the practices, procedures, or emissions contained in its operating permit. Significant disagreement occurred over the appropriate amount and extent of operational flexibility that should be given to sources at both the legislative¹⁴¹ and regulatory¹⁴² stages of the permit program's development. Industry contended that, without the ability to make changes, businesses would be unable to respond to developments in the market, or even to install improved emissions control equipment.¹⁴³ Environmentalists contended that much of the flexibility sought by industry was actually an attempt to avoid complying with the law.¹⁴⁴

Congress, however, recognized the necessity of allowing sources operational flexibility and provided for it in Title V.¹⁴⁵ The EPA follows Congress' lead in the permit program.¹⁴⁶ The EPA provides sources with the ability to change without requiring a source to un-

Waste Enforcement Effort, 1970 to 1987, 18 *Env'tl. L. Rep.* 683 (*Env'tl. L. Inst.*) (1988)(suggesting that competing environmental and economic interests must be balanced).

140. See *supra* note 4 (estimated cost of implementation is approximately \$25 billion); see *supra* note 6 (estimated number of lost jobs is 2.4 million).

141. See Roady, *supra* note 70, at 10,178 (describing the compromises concerning the permit and enforcement titles that took place in the conference committee).

142. See National Environmental Development Association (NEDA) Comments on Proposed Rule for Operating Permit Programs (July 9, 1991) (stating that industry's primary concern is regulation issues that might present obstacles to economic growth and strongly advocating operational flexibility); Comment of the Clean Air Implementation Project (CAIP) on the EPA's Proposed Rule for the Establishment of the Title V Operating Permit Program Under the Clean Air Act Amendments of 1990 (July 9, 1991) (stating that the permit process needs to be simplified in terms of permit revisions, renewals, and paperwork); see also Statement of David Hawkins, general counsel to the Natural Resources Defense Council before the EPA Public Hearings on Proposed Rules for Operating Permit Programs, (June 5, 1991) (testifying that the EPA's proposed permit program creates a world of disappearing control requirements, immunity from citizen oversight, and new defenses against enforcement).

143. See testimony of David A. Chittick, AT&T Corporate Environment and Safety Vice President, before the EPA Public Hearings on Proposed Rules for Operating Permit Programs, (June 4, 1991) (testifying that installation of new emitting units to reduce emissions would take 18 months without adequate operational flexibility provisions).

144. See Hawkins statement, *supra* note 142.

145. See CAA § 502(b)(10).

146. 57 Fed. Reg. 32,295-312 (1992)(to be codified at 40 C.F.R. part 70).

dergo a lengthy permit revision process. The EPA bases this flexibility on the Congressional concern that the modification process be "streamlined."¹⁴⁷ Thus, the statutory language of section 502 provides the EPA with discretion to adopt procedures that allow sources to modify their permits without undergoing the revision process.¹⁴⁸

The provisions allowing for change do not remove the source's responsibility to conform to the requirements of the Act. Every change made must remain within the requirements applicable to the source. The EPA provides this flexibility because the time and effort spent processing permit modifications for such changes would waste both administrative and business resources, while, at the same time, providing little or no environmental benefit.¹⁴⁹

a. Operational Changes Not Requiring a Permit Revision

The implementation principle of providing businesses with operational flexibility impacts the Title V permit program in two ways. First, the final rule includes regulations that allow businesses to change their operational procedures without undergoing the revision process.¹⁵⁰ Second, businesses that do make changes in operations extensive enough to require a permit revision will find that the revision process itself has

147. CAA § 502(b)(6). The statute provides:

Adequate, streamlined, and reasonable procedures for expeditiously determining when applications are complete, for processing such applications, for public notice, including offering an opportunity for public comment and a hearing, and for expeditious review of permit actions, including application renewals or revision and including an opportunity for judicial review in State court of the final permit action by the applicant, any person who participated in the public comment process, and any other person who could obtain judicial review of that action under applicable law.

Id.

148. Sources wish to avoid revision because it entails going through the whole permit process of agency review, public comment, and possible judicial review a second time. Further, the process may take up to eighteen months. Section 502(b)(9) of the Amendments provides:

A requirement that the permitting authority, in the case of permits with a term of 3 or more years for major sources, shall require revisions to the permit to incorporate applicable standards and regulations promulgated under this Act after the issuance of such permit. Such revisions shall occur as expeditiously as practicable and consistent with the procedures established under paragraph (6) but not later than 18 months after the promulgation of such standards and regulations. No such revision shall be required if the effective date of the standards or regulations is date after the expiration of the permit term. Such permit revision shall be treated as a permit renewal if it complies with the requirements of this title regarding renewals.

Id.

149. 56 Fed. Reg. 21,746 (1991). See generally NEDA and CAIP comments on the proposed rule, *supra*, note 142.

150. See *supra* notes 108-137 and accompanying text. In order to meet EPA approval, a state permit program must allow changes without requiring a permit revision. 57 Fed. Reg. 32,301 (1992) (to be codified at 40 C.F.R. § 70.4(d)(3)(ix)).

been "streamlined" to ensure their ability to make changes in operations.¹⁵¹

i. Alternate Operating Scenarios

One option available to businesses which ensures their ability to make changes in operations is to include the anticipated change in the permit.¹⁵² Under this option, the source would include common or anticipated changes in its permit application.¹⁵³ The "anticipated scenario" then becomes part of the source's permit. Thus, a source may make changes in its operations and yet remain in compliance with the terms of the permit.¹⁵⁴

This option is entirely without controversy. Even the environmental groups that opposed operational flexibility generally supported this type of change.¹⁵⁵ Under this option, the alternate scenarios, as well as the primary operating procedures, are subject to the full review provided for in the application process.¹⁵⁶ The primary problem with this option, however, is that most businesses cannot predict all of the changes that will be necessary over the course of the five year permit. Thus, if limited to this option, businesses would be handcuffed and the permit program would fail to provide the operational flexibility necessary to allow businesses to be competitive.¹⁵⁷

ii. Changes Contravening Permit Terms

Each state permit program must allow sources to make certain changes that contravene specific permit terms without requiring a permit revision. Such changes may be made only if the resulting emissions do not exceed the amounts expressed in the permit.¹⁵⁸ This option for change arises out of the EPA's determination that the term "changes"¹⁵⁹ is meant to apply to changes that contravene the source's

151. 57 Fed. Reg. 32,301 (1992).

152. *Id.* at 32,266-67; *see also id.* at 32,305 (to be codified at 40 C.F.R. § 70.6(a)(9)) (an example would be changing a brand of coating). The final rule provides three options for operational flexibility that must be included in the state programs: (1) operational changes that contravene specific permit terms; (2) emissions trading where provided in the SIP but not provided in the permit (optional); and (3) provisions for emissions trading for the purpose of complying with federal emissions caps that are independent of or more strict than application requirements of the Act. *Id.*

153. *Id.*

154. *Id.*

155. *Id.* at 32,266. In fact, the environmentalists claim that alternate scenarios are the only type of operational flexibility allowed under the Act. *Id.*

156. *Id.*

157. Section 502(b)(10) is not a mere mandate to include alternate operational scenarios. 57 Fed. Reg. 32,267 (1992).

158. 57 Fed. Reg. 32,299 (1992)(to be codified at 40 C.F.R. § 70.4(b)(12)).

159. CAA § 502(b)(10).

permit.¹⁶⁰ Thus, state permit programs must provide the ability to make such "changes" without requiring a permit revision.¹⁶¹

A source may make such a change after giving seven days notice of the change.¹⁶² The notice should include a description of the change and its impact on the permit. The notice should also identify terms no longer applicable as a result of the change.¹⁶³ After giving notice, the source is no longer required to comply with the outdated permit terms. The strong incentive to comply with the qualifications of this option for change, however, is that if it is discovered that the change did not qualify for this option, the original permit remains enforceable against the source.¹⁶⁴

iii. Off-Permit Changes

A source may make changes in its operational procedures that are not governed by its permit.¹⁶⁵ Such changes do not require the revision process and, thus, do not need to be incorporated into the permit until the permit is renewed.¹⁶⁶ Changes in operations that are neither addressed nor prohibited in the permit do not alter the source's obligation to comply with the recordkeeping provisions in the permit.¹⁶⁷

Provisions for off-permit operations under the new rule are options available to the states.¹⁶⁸ Thus, despite the importance of this type of operational flexibility, states may choose to prohibit "off-permit" operations under state law.¹⁶⁹ Although the rule allows states to prohibit off-permit changes, it also provides that states choosing to pursue such a course of action will not be able to enforce the prohibition as a matter of federal law.¹⁷⁰ This means that neither the EPA nor citizens may bring an enforcement action based on the source's operation without a permit covering the change.¹⁷¹

160. 57 Fed. Reg. 32,267 (1992).

161. *Id.*

162. *Id.* at 32,299 (to be codified at 40 C.F.R. § 70.4(b)(12)).

163. *Id.*

164. *Id.*

165. 57 Fed. Reg. 32,269 (1992).

166. *Id.*

167. *Id.* at 32,269-70.

168. *Id.* at 32,298 (to be codified at 40 C.F.R. § 70.4).

169. *Id.* at 32,270; see 56 Fed. Reg. 21,746 (1991)(a permit is not meant to include everything a source can do).

170. 57 Fed. Reg. 32,270 (1992).

171. *Id.* Changes that are not covered by the permit, but which constitute Title I modifications or are subject to Title IV, must undergo the revision process. *Id.* at 32,269. Further, sources that do make changes must provide contemporaneous notification to the state permitting authority and the EPA in order to prevent sources from circumventing the Act. *Id.* Sources must also keep a record of these changes. *Id.*

b. Operational Changes Requiring a Permit Revision

In addition to the operational flexibility provisions that require states to allow changes without a permit revision, the rule also provides for expedited processes in cases where a permit revision is required.¹⁷² Revisions are required any time a source makes changes that exceed the amount of emissions provided in the permit.¹⁷³

i. Administrative Amendments

Administrative amendments allow sources to correct errors in their permits. Such changes include changes in address, typographical errors, or changes in ownership.¹⁷⁴ While administrative amendments are less than controversial, they serve an important purpose in the permit program. Administrative amendments generally address rather mundane changes in permits. The delay and backup of operations that a source would face as the result of the complete revision process would be unfair for something as insignificant as a typographical error. The extended revision process would unduly burden the source with an unreasonable shutdown of operations. Further, such a revision would not improve air quality and, thus, would provide no corresponding environmental benefit. The administrative amendment provision¹⁷⁵ allows sources to make changes immediately upon submission of the change to the state permitting authority¹⁷⁶ and, thus, provides the necessary ability to change.

In addition to the typographical error-type changes allowed under the administrative amendment, sources may also use the procedure to make changes that have previously undergone a state preconstruction review program.¹⁷⁷ Such changes would have already received sufficient review to satisfy the requirements of the Act.¹⁷⁸ In order to use this procedure, however, the state's NSR program¹⁷⁹ must satisfy the review requirements of the Act.¹⁸⁰

172. 57 Fed. Reg. 32,200 (1992) (to be codified at 40 C.F.R. § 70.4(b)(13)) (requires all state programs to include "provisions for adequate, streamlined, and reasonable procedures for expeditious review of permit revisions or modifications"). *Id.*

173. *Id.* at 32,280.

174. *Id.* at 32,256, 32,289, 32,307 (to be codified at 40 C.F.R. § 70.7(d)).

175. *Id.* at 32,307 (to be codified at 40 C.F.R. § 70.7(d)).

176. *Id.* at 32,290 (to be codified at 40 C.F.R. § 70.7(d)(3)(iii)).

177. *Id.* at 32,289.

178. *Id.*; see CAA § 502(b)(6) (permit revision procedure).

179. See *supra* note 73.

180. 57 Fed. Reg. 32,289 (1992).

ii. Minor Permit Modifications

The minor permit modification procedure allows a source to change operations immediately after submitting an application demonstrating that the source qualifies for the procedure.¹⁸¹ While the source is waiting for the EPA's decision regarding the change, the source may operate pursuant to a qualified exemption from its permit.¹⁸² During this interim time, the source must operate in accordance with its proposed change.¹⁸³ Failure to comply with the proposed change results in forfeiture of the source's exemption from its permit, and the terms of the original permit become enforceable.¹⁸⁴ Further, since the source must always comply with the applicable requirements of the Act, it is always subject to enforcement actions for the applicable requirements upon which the proposed change is based.¹⁸⁵

The minor permit modification process requires EPA review, but it does not require public notice and comment.¹⁸⁶ Thus, sources are assured of the ability to change operations as necessary without unreasonable delay.¹⁸⁷

While the minor permit modification procedure appears to provide industry with the flexibility necessary to remain competitive, this may not actually be the case. Both the criteria for qualifying for the procedure and the procedure itself are mere models.¹⁸⁸ The rule provides states with the authority to establish criteria and procedures that are more stringent than the EPA model.¹⁸⁹ By setting a mere maximum

181. The EPA provides model criteria that sources must satisfy to qualify for the expedited Minor Permit Modification process. In order to qualify, a source must *not* do the following: (1) violate any applicable requirement of the Act; (2) make significant changes in monitoring or recordkeeping; (3) change a case-by-case determination of an emission limitation or standard; (4) change a permit term, which is not an applicable requirement that the source assumed, to avoid an applicable requirement; (5) make a change constituting a Title I modification; and (6) make a change constituting a significant modification under the state program. 57 Fed. Reg. 32,287 (1992); *see id.* at 32,307 (to be codified at 40 C.F.R. § 70.7(e)).

182. 57 Fed. Reg. 32,287 (1992).

183. *Id.*

184. *Id.*

185. *Id.*

186. *Id.* at 32,280.

187. *Id.* at 32,281. "If Congress meant to require a comment period for all permit revisions, Congress would have directly so stated. The absence . . . of any explicit provision for public comment . . . suggests that Congress did not intend to require such notice." *Id.* at 32,282.

The Minor Permit Modification is limited to de minimus changes. *See* 57 Fed. Reg. 32,384 (1992) (citing *Public Citizen v. Young*, 831 F.2d 1108, 1113 (D.C. Cir. 1987) (a presumption exists in favor of de minimus exemptions). There is no public review for de minimus changes since such review provides no significant advancement of the goal of compliance with the Act. *Id.* at 32,285; *see Alabama Power Co. v. Costle*, 636 F.2d 323, 361 (D.C. Cir. 1980) (providing for exemption where the "burdens of regulation yield a gain of trivial or no value").

188. 57 Fed. Reg. 32,284 (1992).

189. *Id.*

amount of flexibility allowed,¹⁹⁰ the rule fails to ensure that the "adequate, streamlined process" required by the Act¹⁹¹ for permit revisions will be available in all states. As a result, businesses in a state that chooses to provide "more stringent" revision procedures may be placed at a competitive disadvantage to businesses located in neighboring states which have adopted the EPA's most streamlined process. The only protection afforded to businesses is that all state programs must be substantially similar to the EPA model.¹⁹²

iii. Significant Modifications

Any operational change that does not qualify for the minor permit modification or the administrative amendment processes is designated a significant modification.¹⁹³ No other specific criteria are provided for determining whether a change is significant.¹⁹⁴ Rather, the rule requires states to develop their own criteria.¹⁹⁵ Significant changes must undergo public participation¹⁹⁶ and, thus, final action on the proposed modification is not required for nine months.¹⁹⁷ Therefore, the primary differences between minor and significant permit modifications are: (1) delayed implementation of the change, and (2) public participation in the review process. As a result, the significant modification process is virtually identical to the process of obtaining an initial permit.¹⁹⁸ The only indication that the significant modification process will be less time consuming than an initial permit issuance is that, during the modification process only the proposed change, rather than every term in the permit, will be reviewed.¹⁹⁹

iv. Permit Shields

Any source that is in compliance with the obligations set forth in its permit is deemed to be in compliance with section 502 as well as

190. *Id.* at 32,281.

191. CAA § 502(b)(6).

192. 57 Fed. Reg. 32,287 (1992).

193. *Id.* at 32,288-89, 32,309 (to be codified at 40 C.F.R. § 70.7(e)(4)(i)-(ii)).

194. *Id.*

195. *Id.*

196. *Id.*

197. *Id.* at 32,289.

198. *Id.*

199. *Id.* at 32,290. This section requires that all permit proceedings except minor permit modifications include an opportunity for public participation. *Id.* Denial or issuance of a permit may be challenged in state court by any person that participated in the public comment process. *Id.* at 32,265. Review by the state court is the exclusive means of judicial review of the permit. If a permitting authority fails to act on a modification application and the source has implemented the proposed change, then an action may be brought. *Id.*

with other provisions of the Act.²⁰⁰ There must be express language in the permit, however, to receive the permit shield.²⁰¹ Thus, compliance with the permit shields the source from liability for alleged violations of obligations not included in the permit. Permit shield status provides sources with security and promotes compliance.²⁰² The permit shield provides sources with security by eliminating the need to defend against purported violations of obligations not contained in its permit. The permit provides a source with a complete list of its obligations. All alleged violations may be answered by referencing the permit and documenting compliance with the terms of the permit. Thus, the permit shield removes the unknown factor and provides security.²⁰³ Accordingly, it is beneficial for a source to comply with the requirements of its permit.

Moreover, noncompliance with the permit makes it easier for enforcement officials to identify and enforce violations. Sources realizing this will have an added incentive to comply with their permits. Changes that are not included in the permit as anticipated operating scenarios do not receive the benefit of the permit shield.²⁰⁴ Thus, to the maximum extent possible, sources should use the alternate operating scenario option in order to benefit from the permit shield.

v. Analysis of Operational Flexibility

The provisions for operational flexibility, together with the permit shield status that changes receive, could be viewed as allowing sources to incorporate violations of the requirements of the Act into their per-

200. *Id.* at 32,276-78. The source is in compliance provided that the permit includes other applicable provisions or a statement by the state permitting authority that the other provisions are not applicable. The shield, however, does not prevent the EPA from exercising its emergency powers against the source under CAA § 303.

201. 57 Fed. Reg. 32,277 (1992). A permit that fails to include express language regarding the shield creates a presumption of non-shield status. *Id.*

202. Roady, *supra* note 70, at 10,178.

203. See Pederson, *supra* note 68, at 1,059 (suggesting that lack of such a list and lack of security were primary problems in using the SIP as the implementation mechanism for the Act).

204. 57 Fed. Reg. 32,277 (1992). In the proposed rule, the EPA construed the permit shield broadly in a number of ways in addition to its relation to operational flexibility. 56 Fed. Reg. 21,744 (1991). In the final rule, however, the EPA rejected its former broad application of the permit shield in favor of a more narrow approach. 57 Fed. Reg. 32,277 (1992). None of the off-permit changes or operational flexibility changes receive shield status under the final rule. *Id.* Further, while the proposed rule would have shielded sources from enforcement of regulations promulgated after approval of their permits, 56 Fed. Reg. 21,744 (1991), the final rule finds no authority for this position. 57 Fed. Reg. 32,277 (1992). The final rule, notwithstanding its narrow interpretation of the permit shield, does maintain the proposal's rule regarding the continuing shield status of sources during the interim period between application for and receipt of a new permit. *Id.* at 32,278; see *id.* at 32,275 (describing the application shield). While the permit shield remains an important aspect of the permit program, the narrow approach adopted in the final rule reduces its value.

mits without the opportunity for review. This, however, is an incorrect view of the operational flexibility provisions. The fallacy of this view lies in its equivocation of the Act's "ability to change" and "violations of the requirements" language. All operational changes are not necessarily violations of the Act. All changes that are violations of the Act are disallowed by the operational flexibility procedures.²⁰⁵ Both the EPA and the states are required to screen all changes to ensure that no violations occur.

The operational flexibility of the permit program rule, therefore, merely provides sources with the "streamlined" and "expeditious" procedures that Congress mandated.²⁰⁶ Either the EPA or the state must object to all impermissible changes. Thus, no change may be made that violates the Act. Further, any change in operations that amounts to a modification is required to undergo the complete review process.²⁰⁷ Therefore, it would be incorrect to say that allowing flexibility results in violations. Rather, although favorable to businesses, the rule provides exactly what Congress intended. Less operational flexibility would be burdensome to both industry and the EPA and would fail to provide any benefit to the environment.

C. *Summary of the Permit Program*

The purpose of Title V's permit program is to provide a mechanism for both compliance and enforcement.²⁰⁸ The program will facilitate compliance by compiling and documenting the obligations of individual sources. Thus, both the source and enforcement officials will know what the source's obligations are. Congress, however, did not intend the program to prevent businesses from making changes necessary to remain competitive and economically viable.

The permit program's provisions for deferments, assistance programs for small businesses, and operational flexibility should allow it to meet its task of enhancing compliance with the Act. The program provides incentives for businesses to comply with the Act and, thus, reduce emissions. The permit shield provision provides a practical incentive to comply because a source wishing to avoid enforcement actions will do its best to comply with the requirements of its permit in order to receive the benefit of the permit shield. The fee provision provides an economic incentive to reduce emissions because a source wishing to reduce its permit fee will reduce its emissions.

205. CAA § 505(b); see 56 Fed. Reg. 21,779 (1991) (to be codified at 40 C.F.R. § 70.8).

206. CAA § 502(b)(6).

207. See 57 Fed. Reg. 32,257 (1992).

208. See EPA NEWS, *supra* note 77; Pederson, *supra* note 68, at 1059.

Further, the permit's contents provide enforcement agencies with information regarding the source's obligations. The permit program also will facilitate enforcement through its reporting and monitoring requirements. Thus, the enforcement agencies' tasks of identifying and prosecuting violations of the Act are simplified. This should also improve compliance with the Act.

In addition to creating the permit program as the Act's enforcement mechanism, Congress substantially increased the EPA's enforcement power in Title VII of the Amendments. Thus, Title VII's enforcement provisions complement Title V's permit program by giving the EPA access to penalties and enforcement procedures that make non-compliance with the requirements of the Act both unprofitable and unwise. The permit program helps the EPA know when a source is not complying, while the enforcement program helps the EPA deter violations.

IV. ENFORCEMENT

Enforcement of current environmental laws is a national priority.²⁰⁹ Increased enforcement efforts by the Department of Justice (DOJ) and the EPA reflect this priority.²¹⁰ This priority has created a trend in recent environmental laws to increase both the enforcement power of pollution control agencies and the penalties for violations.²¹¹ Enforcement efforts and penalties for violations are increasing because aggressive enforcement is seen as the key to a clean environment.²¹² The purpose of stringent enforcement penalties is not merely to punish offenders but, more importantly, to deter future violations.²¹³ Aggressive enforcement of the increased options and penalties for violations is

209. Dick Thornburgh, *Criminal Enforcement of Environmental Laws - A National Priority*, 59 GEO. WASH. L. REV. 775 (1991); see also James M. Strock, *Environmental Criminal Enforcement Priorities for the 1990s*, 59 GEO. WASH. L. REV. 916 (1991).

210. 21 Env'tl. L. Rep. (Env'tl. L. Inst.) 1564 (1991). In 1989, the DOJ recovered \$1.2 billion under the Superfund program, \$23 million in fines for criminal enforcement actions, and indicted 130 persons. In the same year, the EPA undertook 4,000 administrative actions, assessed penalties of nearly \$40 million, and produced 76 criminal convictions. *Id.* To this end, Congress increased the EPA's budget by \$575 million to \$6.67 billion for 1992. 22 Env't. Rep. (BNA) 1756. Of this amount, \$500 million was designated for the Clean Air Act. *Id.*; see Pub. L. No. 102-139, 105 Stat. 736 (1991) (appropriating the funds for the EPA budget).

211. See, e.g., Clean Water Act, 42 U.S.C. § 1319 (1983 & Supp. 1991); Resource Conservation and Recovery Act, 42 U.S.C. § 6928 (1983 & Supp. 1991).

212. See *Hearings on S. 1630 Before Senate Comm. on Environment and Public Works*, 100th Cong., 2d Sess. 24 (1989) (statement of EPA Administrator, William Reilly).

213. See 1990 COUNCIL ON ENVIRONMENTAL QUALITY ANNUAL REPORT 144.

intended to provide this deterrence.²¹⁴ Title VII's enforcement provisions continue this trend.²¹⁵

Prior to 1990, the Clean Air Act's framework did not facilitate enforcement.²¹⁶ Use of the SIP as the primary means of implementation and enforcement, together with inadequate penalty and enforcement provisions, made the Act difficult to enforce. The Title V permit program is designed to improve enforcement of the Act. The permit program provides enforcement officials with the information necessary to discover and prosecute violations. The enforcement provisions of Title VII provide enforcement officials with the means to proceed against violators. Title VII also updates the Clean Air Act to the standards of contemporary environmental laws.²¹⁷ Title VII does this in two ways. First, it provides new enforcement options and expands old ones. Second, it defines new criminal violations and increases the penalties for both criminal and civil violations.

A. Enforcement Options

Title VII provides new options to the EPA and expands existing options. Compliance orders²¹⁸ and administrative penalties²¹⁹ are strengthened. The EPA has greater discretion and more extensive authority to punish violators under both of these enforcement options. Newly created field citations²²⁰ allow enforcement officials to assess penalties for small violations in the most efficient manner possible. Civil penalties²²¹ are increased and are now available as remedies in citizen suits. Under each of these options, the offender bears the burden of proving that the violation has ceased. These enforcement options are a substantial improvement over the old enforcement provisions.

1. Compliance Orders

The first option available to the EPA in cases of noncompliance is to order the source to comply with the requirements of the Act.²²² The EPA must notify both the noncomplying party and the state agency of

214. See Robert Adler and Charles Lord, *Environmental Crimes: Raising the Stakes*, 59 GEO. WASH. L. REV. 781 (1991) (suggesting that increased criminal penalties for environmental crimes are necessary).

215. See Rody, *supra* note 70, at 10,178.

216. See *supra* notes 19-54 and accompanying text (discussion of problems in prior clean air legislation).

217. See Rody, *supra* note 70, at 10,178.

218. CAA § 113(a)(4).

219. CAA § 113(d).

220. CAA § 113(d)(3).

221. CAA § 113(b).

222. CAA § 113(a)(1)-(4).

the violation. After thirty days, the EPA may issue the compliance order. The order must state the nature of the violation and specify a deadline for compliance. The date set for compliance may not exceed one year. The source must then comply with the requirement as quickly as possible. A compliance order issued pursuant to this option does not prevent the EPA from taking other enforcement actions against the source.²²³ Thus, the function of the compliance order is to put the source on notice that other action may be taken if compliance is not achieved quickly. The compliance order also satisfies the thirty day notice requirement necessary for other actions to be taken.²²⁴

This option provides the EPA with discretion on how to ensure compliance. The EPA may choose to rely on the compliance order alone, or it may pursue other avenues of enforcement as well. It is faster, less costly, and more beneficial to the environment for the EPA to rely on the compliance order. The source may respond quickly to an order to avoid other more serious enforcement consequences. Thus, other enforcement options may be unnecessary. In this manner, the compliance order may make the best use of limited enforcement resources.

2. Administrative Penalties

The second enforcement option provided for in Title VII is the administrative penalty.²²⁵ Under Title VII, the EPA has authority to impose civil penalties on persons who fail to comply with any obligation imposed by the Act.²²⁶ The EPA may impose an administrative penalty for both past and present violations.²²⁷ This provision is a change from the old Clean Air Act which places the 1990 Act on par with the CWA and the RCRA.²²⁸ The amount of the penalty may be up to \$25,000 per day, but may not exceed \$200,000.²²⁹ The EPA must give the source thirty days notice before issuing the administrative penalty.²³⁰ This does not mean, however, that if the source complies within thirty days, the penalty will not be imposed.²³¹ The Act clarifies the meaning

223. CAA § 113 (a)(4).

224. CAA § 113(b), (c), (d) (each enforcement option requires the EPA to wait 30 days before any action is taken).

225. CAA § 113(d); *see* 56 Fed. Reg. 33,401 (1991) (to be codified at 40 C.F.R. § 22)(rules of practice for assessing administrative civil penalties).

226. CAA § 113(d).

227. *Id.*

228. *See* Roady, *supra* note 70, at 10,178 n.4.

229. CAA § 113(d)(1)(C).

230. *Id.* § 113(a)(1).

231. *Id.* § 113(a)(1).

of the thirty day notice period.²³² Under the old law, the notice period was arguably a grace period providing a source with thirty days to comply. The EPA now has explicit authority to bring enforcement actions for past violations.²³³

Before a penalty is issued, the source in violation is given an opportunity to be heard²³⁴ in accordance with the Administrative Procedure Act.²³⁵ The administrative penalty option allows the EPA to impose penalties for noncompliance without litigation. In cases where the violations involve penalties which are below the \$200,000 limit, the administrative penalty provides the EPA with an efficient and economical enforcement option.

3. Field Citations

A new enforcement option available to the EPA under the administrative penalty is the field citation.²³⁶ Field citations are a sort of environmental traffic ticket in that both the violation and the fine involved are minimal. This enforcement option provides the EPA's officers and employees with authority to assess penalties for minor violations at the time of the violation. Penalties of up to \$5,000 may be assessed under this option.²³⁷ Field citations would be issued as a result of an on-site inspection. The assessment of a field citation does not prevent further action from being taken against the source.²³⁸

4. Civil Actions

The fourth enforcement option available to the EPA under the Act is the civil action.²³⁹ The EPA may bring a civil action against any source that is in violation of the Act. The procedures under this option are similar to the administrative penalty procedures. Since the administrative penalty is something of a short cut, certain restrictions apply—such as a \$200,000 maximum penalty.²⁴⁰ In civil actions, how-

232. See S. REP. NO. 228, 101st Cong., 1st Sess. 1,361 (1990).

233. Roady, *supra* note 70, at 10,178.

234. CAA § 113(d)(2). Persons subject to an administrative penalty may seek judicial review of the penalty. *Id.* § 113(d)(4). However, the court must not set aside the penalty unless the EPA failed to provide substantial evidence to support the finding of a violation or the penalty appears to be an abuse of discretion. *Id.*

235. 5 U.S.C. §§ 554, 556 (1983 & Supp. 1991).

236. CAA § 113(d)(3).

237. *Id.*

238. *Id.*

239. CAA § 113(b). Civil actions may be instituted in the district court of the United States for the district in which the violation occurred, where the defendant resides, or where the defendant's business is located. *Id.* § 113(b)(3).

240. See *id.* (guidelines determining the amount of the penalty).

ever, there is no limit on the total amount that may be recovered.²⁴¹ The EPA may also seek injunctive relief under this option in addition to the \$25,000 per day penalty.²⁴² Injunctive relief may be a more efficient deterrent in many cases since the source will be forced to stop operations. Injunctive relief also provides an instant impact on air quality. This impact might be needed in an area that is only marginally in attainment. The injunction would prevent such an area's reclassification as a nonattainment area and, thus, maintain the current air quality standards for the area.

5. Shifted Burden of Proof

Whether the EPA chooses to enforce the Act through administrative penalties or civil actions, Title VII provides a substantial advantage over the old Act in terms of the duration of the violation. Pursuant to either option, the penalty is assessed for each day the source is in violation of the applicable requirements of the Act.²⁴³

For purposes of determining the number of days that a source has been in violation, Title VII creates a presumption that the violation continued until the source can prove continuous compliance.²⁴⁴ The EPA need only establish a *prima facie*²⁴⁵ showing that the violation is likely to have continued after notice of the violation was given.²⁴⁶ The burden of proving whether the violation continued or ceased is placed on the source because the source is in a better position to know and prove exactly what happened.²⁴⁷ This shift places a premium on record-keeping and monitoring as well as on compliance.²⁴⁸

241. *Id.*

242. *Id.*

243. CAA §§ 113(b),(d).

244. CAA § 113(e)(2).

245. A *prima facie* case is evidence "such as will prevail until contradicted or overcome by other evidence." BLACK'S LAW DICTIONARY 1189 (6th ed. 1990).

246. CAA § 113(e)(2).

247. CAA section 113(e)(2) overrules *United States v. SCM Corp.*, 667 F. Supp. 1110 (D. Md. 1987), where the court refused to shift the burden of proof to the source after the EPA established that a violation had occurred. S. REP. NO. 228, 101st Cong., 2d Sess. 366 (1990).

248. S. REP. NO. 228, 101st Cong., 2d Sess. 366 (1990). For example, if the EPA determines through an inspection that a source has violated its emissions standards on the day of inspection, the EPA is not required to continue to monitor or inspect the source to prove that the violation continued. Rather, it is the source's responsibility to stop the violation and to prove compliance. If the violation lasts only one day, but the source fails to document compliance until a later date, then the penalty will lie for the subsequent days even though no violation existed on those days. *Id.*

6. Criminal Action

The final option available to the EPA is to request that the Attorney General commence a criminal action.²⁴⁹ This option is not available or appropriate for all violations. The EPA may use discretion in choosing this course of action.²⁵⁰ Criteria that influence this decision are the source's past record, the extent and severity of the violation, and the economic benefit that the source received from the violation.²⁵¹ Given the current trend in the enforcement of environmental law toward pursuing criminal actions as a means of deterring future violations, this option may be used more extensively in the future. Title VII provides several types of violations that are subject to criminal enforcement.

B. Knowing Criminal Violations and Penalties

Title VII provides penalties for knowing violations of the Act and clarifies what constitutes a knowing violation. A person who knowingly violates any provision of the Act is subject to these penalties. Under the Act, "knowing" means actual awareness or actual belief possessed.²⁵² Circumstantial evidence may be used to prove that the defendant was in a knowing state of mind.²⁵³ Such evidence may include proof that the defendant took affirmative steps to be shielded from relevant information.²⁵⁴ A person²⁵⁵ convicted of knowingly violating any requirement of the Act could be sentenced to five years of imprisonment and/or fined under Title Eighteen of the United States Code.²⁵⁶ Additionally, Title VII sets out specific offenses that receive special attention. These offenses are: (1) failure to keep proper records;²⁵⁷ (2) failure to pay fees;²⁵⁸ and (3) knowing endangerment.²⁵⁹

1. Recordkeeping

The first specific "knowing" criminal violation relates to recordkeeping. A person who tampers with records, reports, or monitoring equipment may be sentenced to not more than two years imprisonment

249. CAA § 113(a)(3)(D).

250. CAA § 113(c).

251. S. REP. NO. 228, 101st Cong., 2d Sess. 361 (1990).

252. CAA § 113(c)(5)(B).

253. *Id.*

254. *Id.*

255. For the purposes of all "knowing" crimes, a "person" is defined to include any responsible corporate officer in addition to the entities listed in CAA section 302(e). CAA § 113(c)(6).

256. CAA § 113(c)(1).

257. CAA § 113(c)(2)(A).

258. CAA § 113(c)(3).

259. CAA § 113(c)(5).

and/or fined.²⁶⁰ This violation is dealt with specifically because of the importance of monitoring and reporting to efficient enforcement of the Act. Monitoring and reporting are essential to ensure compliance. Without accurate records of emissions, the EPA would be faced with the impossible task of inspecting and monitoring each source at all times.

2. Failure to Pay Fees

The second specific "knowing" crime is the failure to pay any fee owed under Title III, IV, V, or VI.²⁶¹ If convicted of this violation, a defendant may be sentenced to not more than one year of imprisonment and/or fined.²⁶² This provision is extremely important to the permit program. The fees that a state receives from sources under the Title V permit program finance the operation of the entire act.

Without the fees, the states would not be able to provide the program.²⁶³ The designation of failure to pay fees as a crime makes it more likely that fees will be paid. It is more cost efficient to pay the fee alone rather than to pay the fee and the additional fine, not to mention the additional possibility of imprisonment.

3. Knowing Endangerment

The third specific "knowing" crime is knowing endangerment. Any person who releases a section 112 hazardous air pollutant into the air in such a way as to place another person in imminent danger of death or serious injury may be sentenced to not more than fifteen years of imprisonment and/or fined.²⁶⁴ A defendant convicted of the same action, but of doing so in a negligent rather than a knowing state of mind, may be sentenced to not more than one year of imprisonment and/or a fine.²⁶⁵ Congress provided that both the term of imprisonment and the fine for each knowing crime will be doubled upon a subsequent conviction. This provision is consistent with Congress' goal of deterring future violations of the Act.

C. Analysis of Enforcement

The rationale behind increased enforcement options and increased penalties is to deter violations. By increasing possible terms of impris-

260. CAA § 113(c)(2).

261. CAA § 113(c)(3).

262. *Id.*

263. See MOYER & FRANCIS, *supra* note 9, at 5-2.

264. CAA § 113(c)(5)(A). An organization convicted of this crime may be fined one million dollars per violation. *Id.*

265. CAA § 113(c)(4).

onment and defining "person" to include corporate management, Congress attempted to create punishments that will deter future violations. Civil penalties and criminal fines do not truly punish the person found guilty of a violation. Rather, the owner of the business is able to pass the cost of his or her fines or penalties on to consumers. The penalty of imprisonment, on the other hand, cannot be passed on to anyone other than the person who is controlling the company and who is responsible for the violation.

The EPA's and the DOJ's increased efforts in pursuing criminal actions should further deter noncompliance.²⁶⁶ The increased penalties provided in Title VII make noncompliance risky. Increased enforcement agency activities make conviction more likely and, thus, make noncompliance even more risky. Criminal provisions should, therefore, have a higher deterrent value than the increased civil penalties.²⁶⁷ Deterrence is paramount to compliance. Without compliance, attainment of clean air is a practical impossibility.

V. ANALYSIS OF THE IMPACT OF THE 1990 AMENDMENTS

Public support for air pollution legislation has been strong from the time it first appeared. That support continues up to the present time and is reflected in the passage of new environmental laws and the strengthening of existing laws. Indeed, it would be both politically incorrect and political suicide to hold "anti-environment" views. Ethical and moral concerns motivate current trends in environmental legislation. Such concerns are legitimate and must be addressed in legislation. These concerns, however, should not be the sole factor dictating environmental policy. This is especially the case with respect to the Clean Air Act.

The Act's impact on the economy must be balanced against moral and ethical concerns.²⁶⁸ Industry's abuse of the environment makes it is easy to jump on the "environmental bandwagon," condemn industry,

266. QUARLES & LEWIS, *supra* note 8, at 54. In addition to increased activity on the part of EPA and DOJ, citizens are likely to increase their activities as well. *Id.* Citizen suits are provided for in CAA section 304. Under the old CAA, citizens were limited to seeking injunctive relief. *Id.* For ongoing violations, the amendments, however, provide citizens with the authority to seek civil penalties as well as injunctive relief. *Id.* This authority includes past as well as present violations. This may well result in an increase in citizen suits just as similar provisions in the Clean Water Act increased the number of citizen suits. *Id.*

267. *But see* William Farran & Thomas Adams, *Environmental Regulatory Objective: Auditing and Compliance or Crime and Punishment*, 21 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 10,239 (1991). In addition to deterring violations of the act, the new penalties may also deter self auditing and monitoring by sources. Fear that data gained through self monitoring may be used as evidence against the owner of a source may prevent valuable information from being obtained. *Id.*

268. Sagoff, *supra* note 8, at 88.

and resolve to stop all future abuses at any cost.²⁶⁹ This response, while understandable, fails to account for other ethical concerns resulting from an anti-industry approach. Economic concerns impact people in a more immediate way than esoteric environmental concerns. Displaced workers from whole segments of industry,²⁷⁰ increased layoffs in related industrial and service businesses, and increased costs for products ranging from electricity to home appliances²⁷¹ create immediate economic concerns for many Americans.

The competing interests of economics and the environment, however, should not be viewed as mutually exclusive.²⁷² Rather, legislators must integrate the concerns to create effective environmental laws. The 1990 Clean Air Act Amendments attempt to follow this approach. The attempted balance is apparent in Title IV's acid rain provisions and Title XI's displaced worker provisions. This approach is also apparent in Title III's shift from a health-based standard to a technology-based standard. The attempted balance is present, but is less effective, in the permit program.

While Congress did take steps to protect small business interests, whether it achieved the proper balance is questionable. Including smaller businesses in the clean air program will result in minimal improvements in air quality.²⁷³ The EPA should continue to focus its activities on larger polluters to the extent that the new law allows. To do so is the most efficient way to use limited agency resources. While the permit program contains provisions that attempt to address these problems, the provisions fall short with regard to small businesses. Using the permit program as the primary implementation and enforcement mechanism, however, is a vast improvement over the old Act.

VI. CONCLUSION

The 1990 Clean Air Act Amendments represent a comprehensive update of clean air legislation. The amendments attempt to do what prior clean air laws failed to do—bring all areas of the country within acceptable air quality standards. The use of the permit program as the primary implementation and enforcement mechanism, together with stronger enforcement provisions, is the best means of implementing the

269. *Id.* at 22.

270. *See supra* note 16 (discussion of the Amendments' provision for relief to displaced workers).

271. *See supra* note 13 (discussion of Title VI's provisions relating to protection of stratospheric ozone).

272. Sagoff, *supra* note 8, at 88.

273. *See supra* note 8 (industry produces only fifteen to twenty percent of air pollution in any given area and, therefore, little improvement can be expected through regulation of businesses that comprise only small portion of these emissions).

stringent standards that the Clean Air Act places on sources of air pollution.

The permit program is generally an improvement over the SIP as the primary implementation mechanism. It is self-sustaining and provides a mechanism through which the standards may be enforced. It is a much needed improvement over the SIP as the primary implementation mechanism. The permit program ensures that this mechanism is in place and attempts to provide fairness to businesses that are either regulated for the first time or asked to further reduce emissions.

The balance the Act strikes between the economic interests and the environmental interests is inadequate. The regulation of small business provides little environmental benefit compared to the economic costs. As applied to larger polluters, however, both the permit program and the new enforcement provisions significantly increase the efficiency of the Clean Air Act.

Total attainment of NAAQS is not a realistic goal. Improvement of air quality, however, is a realistic goal. The permit and enforcement provisions should increase air quality due to increased compliance with the Act. Cost to industry is undoubtedly translated into cost to consumers. Thus, it is the public who will pay for whatever improvements that are achieved in air quality. It is doubtful that the improvements in air quality are worth their economic cost.

Daniel F. O'Sullivan

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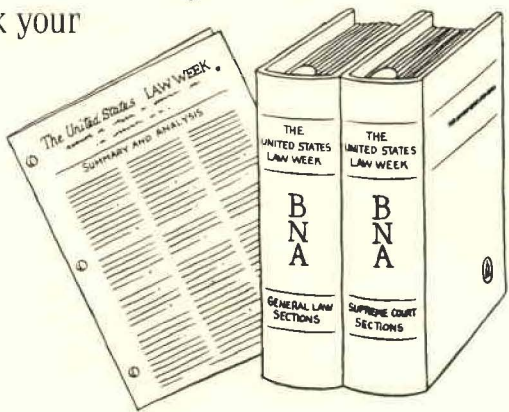
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