CHANGES IN THE AIR: INNOVATION AND STREAMLINING IN THE STATE IMPLEMENTATION PLAN PROCESS AND MAINTENANCE OF NATIONAL AIR QUALITY STANDARDS IN MINNESOTA

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I. INTRODUCTION

More than 159 million people in the United States live in areas that do not meet the federal ambient air quality standard for ground level ozone.[2] This pollutant has respiratory impacts and is also thought to be responsible for over one billion dollars in crop damages in this country each year.[3] Air pollutants in general have been estimated to cause $40 to $50 billion in health care costs annually and between 50,000 and 120,000 premature deaths.[4] On February 1, 2005, the Minnesota Pollution Control Agency issued an "unhealthy for all" air pollution alert for the Twin Cities area, the first time this level of alert had been reached in at least 25 years.[5]

In 1997, the United States Environmental Protection Agency (EPA) proposed new health-based standards for ozone and for fine particulate matter, while acknowledging that for both pollutants there was no ambient air level below which a standard could be assumed completely protective of human health.[6]

The EPA implements and enforces ambient air standards through a State Implementation Plan (SIP) process.[7] While air quality has improved,

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[2] OFFICE OF INSPECTOR GENERAL, EVALUATION REPORT NO. 2004-P-00033, EPA AND STATES NOT MAKING SUFFICIENT PROGRESS IN REDUCING OZONE PRECURSOR EMISSIONS IN SOME METROPOLITAN AREAS, Executive Summary at i (2004), *available at* http://www.epa.gov/oig/reports/2004/ (last visited Apr. 1, 2005).

[3] *Id*.

[4] *Id*. at 4.

[5] Tom Meersman, *Minnesota has a Rare Bad Air Day; 'Unhealthy for all' Alert is the First One in About 25 Years*, Minneapolis Star Tribune, Feb. 2, 2005 at 1A. The high level was attributed to an accumulation of fine particles in the air during stagnant weather conditions. *Id*.

[6] Am. Trucking Ass'ns., Inc. v. United States Envtl. Prot. Agency, 175 F.3d 1027, 1034 (D.C. Cir. 1999), *rev'd in part, aff'd in part*, 531 U.S. 457 (2001) (describing ozone and fine particulate matter as "threshold pollutants," with the possibility of some adverse effect at any level above zero). A number of petitioners asserted that the EPA had construed §§ 108 and 109 of the Clean Air Act (CAA) so loosely as to constitute an unconstitutional delegation of legislative power. *Id*. The court agreed and remanded the rule to the EPA to develop a constitutional construction of the CAA, reasoning that the EPA had not asserted an "intelligible principle" from which it could determine an appropriate level of environmental protection for a non-threshold pollutant. *Id*. at 1033-34.

[7] *See infra* notes 40-58 and accompanying text (describing the SIP process).

the rate of improvement for ozone has decreased since 1990.[8] This Comment discusses the SIP process and concludes that regulatory and policy changes are needed at the federal level to streamline the process in areas where there is unnecessary administrative burden on the States, and to remove barriers to voluntary and innovative state-level programs.

This Comment provides a review of the purpose, means of enforcement, administrative processes and evolution of the SIP as a tool for achieving compliance with National Ambient Air Quality Standards (NAAQS).[9] The emphasis is on attainment of standards for fine particulate matter ($PM_{2.5}$) and ozone, including an analysis of what the States and the EPA can do to remedy administrative limitations and to encourage voluntary and innovative measures.

II. BACKGROUND INFORMATION

The SIP program has been characterized as a "bold experiment in cooperative federalism."[10] It allows states to design their own programs, subject to federal approval, in lieu of compliance with certain federal regulations.[11] In doing so, state programs that are approved into the SIP become subject to the federal and citizen enforcement measures of the Clean Air Act (CAA).[12] The SIP process presents a number of administrative hurdles that states need to meet in order to modify any provision in their SIPs.[13] These administrative steps are the same no matter what level of significance the action has, and as such the SIP regulations in the CAA have been criticized as burdensome and the cause of unnecessary delay, particularly for relatively minor actions.[14]

Attaining the $PM_{2.5}$ and ozone standards requires increased emphasis on multi-state or national strategies because ambient levels in one state are subject to interstate transport of air pollutants, geographical factors and weather conditions.[15] At the same time, innovative local strategies are

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[8] U.S. ENVIRONMENTAL PROTECTION AGENCY, THE OZONE REPORT 2 (2003), *available at* http://www.epa.gov/airtrends/ozone.html (last visited Apr. 1, 2005).

[9] Section 109 of the CAA requires the EPA to publish primary and secondary ambient air quality standards for each air pollutant for which air quality criteria have been established. 42 U.S.C. § 7409 (2000).

[10] Connecticut v. EPA., 696 F.2d 147, 151 (2d Cir. 1982).

[11] 42 U.S.C. § 7410 (2000). *See, e.g.*, Sweat v. Hull, 200 F. Supp. 2d 1162, 1178-79 (D. Ariz. 2001).

[12] 42 U.S.C. § 7604 (2000). *See, e.g.*, Cate v. Transcon. Gas Pipe Line Corp., 904 F. Supp. 526, 528-29 (W.D. Va. 1995).

[13] *See infra* notes 149-151.

[14] *Id*.

[15] MINNESOTA POLLUTION CONTROL AGENCY, ANNUAL POLLUTION REPORT TO THE LEGISLATURE 11 (2004), *available at* http://www.pca.state.mn.us/publications/index.html (last visited Apr. 1, 2005) (noting that "fine particles can be carried by the wind for hundreds of miles"); U.S. ENVIRONMENTAL PROTECTION AGENCY, THE OZONE REPORT 13 (2003),

needed in order to reach small but numerous sources of pollution, such as lawn mowers and wood stoves.[16]

A portion of this Comment focuses on the prospects for continued attainment of the $PM_{2.5}$ and ozone NAAQS in Minnesota. While Minnesota is currently in attainment with all the NAAQS, there are challenges in maintaining that status.[17] This Comment illustrates some of the current technical and policy issues that need to be addressed in order to facilitate $PM_{2.5}$ and ozone NAAQS compliance, with reference to other sections of the CAA where applicable.

On January 5, 2005, the EPA published a final rule announcing and promulgating air quality designations with respect to the new $PM_{2.5}$ NAAQS.[18] $PM_{2.5}$ is characterized as a complex mix of particles with a diameter of less than about one-thirtieth the thickness of a human hair.[19] It has been associated with premature death, respiratory problems and cardiovascular problems.[20] Planning and control measures applicable to states with respect to $PM_{2.5}$ nonattainment areas will be promulgated in a separate rulemaking.[21] Sources of $PM_{2.5}$ include "cars, trucks, buses, diesel construction equipment, coal-fired power plants, biomass (wood, vegetation, etc.), burning and agriculture."[22]

A final EPA rule announcing and promulgating air quality designations with respect to the new eight-hour ozone NAAQS was published in the Federal Register on April 30, 2004.[23] Ground level ozone is formed by the reaction of volatile organic compounds and nitrogen oxides in the atmosphere in the presence of sunlight and is primarily an issue in summer months.[24] Its impact is greatest on those most susceptible to respiratory problems, such as children and persons with asthma.[25] Sources of precursor emissions that contribute to ground level ozone formation include

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available at http://www.epa.gov/airtrends/ozone.html (last visited Apr. 1, 2005) (observing that "[o]zone is more readily formed when it is sunny and hot and the air is stagnant.").

16 *See infra* notes 136-137 and 196

17 *See infra* notes 178-184 and 188-190.

18 Air Quality Designations and Classifications for the Fine Particles (PM2.5) National Ambient Air Quality Standard; Final Rule, 70 Fed. Reg. 944-1,019 (Jan. 5, 2005) (to be codified at 40 C.F.R. pt. 81) (designating nonattainment areas for $PM_{2.5}$ on a state by state basis).

19 *Id*. at 945.

20 *Id*.

21 *Id*. at 944.

22 MINNESOTA POLLUTION CONTROL AGENCY, ANNUAL POLLUTION REPORT TO THE LEGISLATURE 11 (2004), *available at* http://www.pca.state.mn.us/publications/index.html (last visited Apr. 1, 2005).

23 Air Quality Designations and Classifications for the 8-Hour Ozone National Ambient Air Quality Standards; Early Action Compact Areas With Deferred Effective Dates, 69 Fed. Reg. 23,858-951 (Apr. 30, 2004) (to be codified at 40 C.F.R. pt. 81) (designating nonattainment areas for ozone on a state by state basis).

24 U.S. ENVIRONMENTAL PROTECTION AGENCY, THE OZONE REPORT 13 (2003), *available at* http://www.epa.gov/airtrends/ozone.html (last visited Apr. 1, 2005).

25 *Id*. at 3.

a mix of stationary sources, such as utilities, refineries, chemical manufacturers, and automobile manufacturers; area sources, such as dry cleaners, service stations, wood burning stoves; and mobile sources, including cars, trucks, locomotives, heavy construction machinery, generators and off-road vehicles.[26]

III. THE SIP PROGRAM GENERALLY – PROCESS, FEDERAL ENFORCEMENT, CITIZEN SUITS AND EPA REVISION OF STANDARDS

A. Overview

The term "State Implementation Plan" is perhaps deceptively simple, implying the existence of a coherent, focused document. However, a SIP is a complex mix of state rules, statutes, orders, permits and plans, which the EPA has approved one by one for each state beginning in May 1972, when the initial SIPs were approved for all fifty states, four territories and the District of Columbia.[27] Taken as a whole, these approvals make up a toolbox of federally enforceable state requirements designed to ensure attainment of the National Ambient Air Quality Standards.[28]

The SIP program has become increasingly complex over the years, as a result of the Clean Air Act Amendments of 1970, 1977 and 1990, and as a result of the increasing complexity of federal and state regulation in general.[29] In a recent Federal Register notice promoting the availability of SIPs for public inspection, the EPA characterized the SIP as "indeed a complex document, containing both many regulatory requirements and non-regulatory items such as plans and inventories."[30]

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[26] OFFICE OF INSPECTOR GENERAL, EVALUATION REPORT NO. 2004-P-00033, EPA AND STATES NOT MAKING SUFFICIENT PROGRESS IN REDUCING OZONE PRECURSOR EMISSIONS IN SOME METROPOLITAN AREAS 2 (2004), *available at* http://www.epa.gov/oig/reports/2004/ (last visited Apr. 1, 2005).

[27] *See, e.g.,* Availability of Federally-Enforceable State Implementation Plans for All States, 69 Fed. Reg. 76,617, 76,618 (Dec. 22, 2004) (citing 37 Fed. Reg. 10,842 and explaining that since 1972 each state and territory has submitted numerous SIP revisions).

[28] Nat'l. Mining Ass'n. v. EPA., 59 F.3d 1351, 1363 (D.C. Cir. 1995) (citing to 42 U.S.C. § 7413). "Once included within the SIP, a state control becomes enforceable not only by the state which is its primary regulating authority, but also by the [EPA] Administrator." *Id.*

[29] *See* Arnold W. Reitze, Jr., *Air Quality Protection Using State Implementation Plans – Thirty-Seven Years of Increasing Complexity*, 15 VILL. ENVTL. L.J. 209 (2004) (providing a comprehensive review of the development of the SIP program from 1967-2004).

[30] Availability of Federally-Enforceable State Implementation Plans for All States, 69 Fed. Reg. 76,617, 76,618 (Dec. 22, 2004) (notifying pursuant to Section 110(h)(1) of the CAA, which requires that EPA "assemble and publish a comprehensive document for each State . . ." and publish the availability of that document).

The cumulative SIP for each state is codified at 40 C.F.R. Part 51.[31] Historically, the format of the codified regulations does not clearly articulate what constitutes the sum total of a SIP. There is a listing of all SIP submittals and approvals for each state, but for the most part the regulations merely list a summary of the federal rulemaking actions in a roughly chronological order.[32] In its notice of availability, the EPA stated that SIP documents are available for public inspection at its various regional offices and also contained the web site addresses where each regional office maintains a listing of SIP content.[33] While technically available, these are of limited use to, say, a Minnesota citizen, since the regional office is in Chicago. The Region 5 web site does contain a list of rule citations and document names, but little substance beyond that.[34] In February 2005 the EPA went some way toward improving the situation for Minnesota by publishing a revised format for listing materials incorporated by reference into the Minnesota SIP.[35] The change does not affect sections of 40 C.F.R. part 52 relating to provisions that are not subject to the incorporation by reference method of review by the EPA.[36] This change is part of a larger effort by the EPA to transition to a new system of identification of state SIPs.[37]

Title I of the CAA, as amended in 1990, forms the basis of the current SIP process.[38] The purpose of Title I of the CAA is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population" and "to encourage and assist the development and operation of regional air pollution prevention and control programs."[39]

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[31] *See, e.g.,* 40 C.F.R. §§ 52.1219-37 (2004) (containing the contents and chronology of the Minnesota SIP).

[32] *Id*. Note that the summary table at 40 C.F.R. 52.1222 has no legal significance and in fact contains at least one error, listing Minn. R. 7017.2000 among the state rules in the SIP, whereas 40 C.F.R. §52.1220(58) incorporates the rule that superseded it. *Id.*

[33] Availability of Federally-Enforceable State Implementation Plans for All States, 69 Fed. Reg. 76,617 (Dec. 22, 2004).

[34] *See* http://www.epa.gov/region5/ (last visited Apr. 1, 2005) (showing that the EPA Region 5 office serves Minnesota, five other states and thirty-five Indian tribes); http://www.epa.gov/region5/air/sips/sips.htm (last visited Apr. 1, 2005) (listing names of rules and plans in the Minnesota and other Region 5 states' SIPs).

[35] Approval and Promulgation of Air Quality Implementation Plans; Minnesota; Revised Format of 40 C.F.R. part 52 for Materials Being Incorporated by Reference, 70 Fed. Reg. 8,930-40 (Feb. 24, 2005). The revised format, effective on the publication date, lists elements of the Minnesota SIP in separate tables for regulations, permits and non-regulatory plans. *Id.*

[36] *Id*. at 8,930. Incorporation by reference review applies to specific, identifiable state documents or regulations such as state rules and permits issued by the state.

[37] *Id*. at 8,931. After an initial two year period the EPA will review its experience with the new system. *Id.*

[38] 42 U.S.C. §§ 7401-7515 (2000).

[39] 42 U.S.C. §§ 7401(b) (2000).

Section 108 of the CAA establishes criteria for the EPA to use in determining pollutants for which a NAAQS is to be promulgated.[40] These pollutants are generally known as "criteria pollutants" and are currently sulfur dioxide,[41] particulate matter (PM_{10}),[42] fine particulate matter ($PM_{2.5}$),[43] carbon monoxide,[44] ozone,[45] nitrogen dioxide[46] and lead.[47]

When a primary or secondary NAAQS is promulgated or revised, states are required to submit a SIP within three years of that promulgation to show how the standard will be implemented, maintained and enforced.[48] If the EPA designates an area as nonattainment, the designation has direct economic impact on that area since it places restrictions on expansion that would increase emissions of the NAAQS pollutant in the area.[49]

A state can request that a nonattainment area be reclassified to attainment by submitting a redesignation request to the EPA.[50] In order to grant the redesignation, the EPA Administrator must determine that the area has attained the standard under a fully approved SIP, that the improvement in air quality is a result of "permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan . . ." and that a maintenance plan has been approved for the area.[51] The EPA has eighteen months to review the designation request from the date of submittal of a complete request.[52] The redesignation is not final until after the approval is published in the Federal Register and the federal rulemaking comment period ends.[53]

While the EPA must complete a federal rulemaking action to formally approve the SIP or SIP amendment, it has been able to characterize this step as not being a "significant regulatory action" since it is merely approving a state law as meeting federal requirements.[54] The EPA thereby

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[40] 42 U.S.C. § 7408 (2000).

[41] 40 C.F.R. §§ 50.4–50.5 (2004).

[42] 40 C.F.R. § 50.6 (2004).

[43] 40 C.F.R. § 50.7(a)(1) (2004).

[44] 40 C.F.R. § 50.8 (2004).

[45] 40 C.F.R. §§ 50.9–50.10 (2004).

[46] 40 C.F.R. § 50.11 (2004).

[47] 40 C.F.R. § 50.12 (2004).

[48] 42 U.S.C. § 7410(a)(1) (2000).

[49] *See infra* note 195.

[50] 42 U.S.C. § 7407(d)(3)(D) (2000).

[51] 42 U.S.C. § 7407(d)(3)(E) (2000). A maintenance plan must be provided for each redesignation. 42 U.S.C. § 7505a (2000).

[52] 42 U.S.C. § 7407(d)(3)(D) (2000).

[53] *See, e.g.,* Approval and Promulgation of Implementation Plans; Minnesota, and Designation of Areas for Air Quality Planning Purposes; Minnesota, 67 Fed. Reg. 48,787 (July 26, 2002) (approving redesignation from nonattainment to attainment for particulate matter in St. Paul, Minnesota, effective Sept. 24, 2002). Approval may be delayed if the EPA receives comments. *Id.*

[54] *See, e.g.,* Approval and Promulgation of Implementation Plans; Minnesota, 67 Fed. Reg. 31,963, 31,965 (May 13, 2002) (approving Minnesota's revised performance testing rules into the SIP).

ensures that the mandates of the CAA are enforced while avoiding the need to expend its own resources on federal rulemaking procedures involving review by the Office of Management and Budget,[55] review of implications for Indian Tribes,[56] the requirements of the Unfunded Mandates Act,[57] and review of federalism implications.[58]

B. Federal Oversight of State Programs – Sanctions and State Sovereignty Issues

When the CAA was amended in 1970 and 1977, Congress anticipated a partnership between the EPA and the states for attaining national air quality goals.[59] The 1990 amendments added new incentives and sanctions to encourage state compliance, and while extending certain attainment deadlines, added a number of shorter term deadlines for certain administrative steps.[60] "Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State by submitting an implementation plan for such State which will specify the manner in which national primary and secondary air standards will be achieved."[61] Despite the deference to state design and enforcement of plans, the EPA maintains significant leverage over the states through a number of available sanctions.[62]

In *NRDC v. Browner*, the scope of the mandatory sanctions was at issue.[63] If a state fails to submit a required plan or fails to submit a complete plan, if the state plan is disapproved by the EPA or if it is found that the state

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[55] Exec. Order No. 12866, 58 Fed. Reg. 51,735 (Oct. 4, 1993). This executive order, signed by President Clinton on Sept. 30, 1993, details the role of the Office of Management and Budget in review of federal rulemaking and the resultant obligations of federal agencies. *Id.*

[56] *See* Exec. Order No. 13175, 65 Fed. Reg. 67,249 (Nov. 9, 2000).

[57] *See*, *e.g.*, 2 U.S.C. § 1532(a) (requiring a regulatory impact statement to be prepared when proposing a significant regulatory action).

[58] *See* Memorandum from Jacob J. Lew, *Guidance for Implementing E.O. 13132, "Federalism,"* OFFICE OF MANAGEMENT AND BUDGET (Oct. 28, 1999), *available at* http://www.whitehouse.gov/omb/inforeg/regpol-agency_review.html (last visited Apr. 1, 2005). This memorandum instructs heads of executive agency departments on the implementation of Executive Order 13132, which was issued by President Clinton of Aug. 4, 1999, with the purpose of ensuring that the "principles of federalism established by the Framers guide the executive departments in the formulation and implementation of policies." *Id*.

[59] Natural Res. Def. Council, Inc. v. Browner, 57 F.3d 1122, 1123 (D.C. Cir. 1995).

[60] *Id*.

[61] 42. U.S.C. § 7407(a) (2000).

[62] *See infra* notes 63-77.

[63] *Natural Res. Def. Council, Inc*., 57 F.3d at 1123. The NRDC contested the EPA's interpretation of 42 U.S.C. § 7607(b) regarding the type of state action that the EPA views as sufficient to halt the sanctions clock when a state has failed to submit a complete SIP. *Id.* at 1125.

has failed to implement any element of the plan, one of two mandatory sanctions applies until the deficiency has been corrected.[64] These sanctions involve either withholding of highway funding or limitations on "offset" allowances (which would make it more difficult for a source in a nonattainment area to obtain a permit to increase its emissions since it would have to find a greater amount of pollution reduction from elsewhere to offset).[65] While this could have given the EPA some discretion to tailor the sanction to the cause of the deficiency, whether it be the result of an administrative failure, a consequence of a violation, or intransigence on the part of an emission facility, the EPA enacted regulations that stipulate that the offset requirement be applied first.[66] The first mandatory sanction under § 179 must be imposed if a state does not correct the deficiency within eighteen months after the EPA finding and the second sanction must be imposed if the deficiency remains uncorrected for a further six months.[67]

In *NRDC v. Browner*, the EPA had determined that a state can halt and reset the sanctions clock when, after having submitted an incomplete plan, it submits a complete plan, even when that complete plan cannot ultimately be approved.[68] The court held that "Congress intended to allow states to avoid mandatory sanctions by correcting only the specific deficiency that initially triggered the sanctions countdown."[69]

Discretionary sanctions are available to the EPA in Section 110(m) of the CAA.[70] These sanctions can be applied at any time after EPA makes one of the deficiency determinations in Section 179(a) rather than having to wait for expiration of the eighteen-month period necessary for mandatory sanctions, and these sanctions can be applied on a statewide basis rather than being limited to the nonattainment area at issue.[71] Both the discretionary and mandatory sanction provisions reference the same list of available sanctions at Section 179(b) of the CAA.[72]

Section 105 authorizes the EPA Administrator to provide grants to state air pollution control agencies in an amount up to sixty percent of the cost of implementing the air program as it relates to the NAAQS.[73] As an incentive for state, local and tribal agencies to maintain their efforts the Administrator may withhold a grant for any fiscal year following a year where the agency did not maintain or increase its budgeting level.[74] Section 105 thus provides significant economic leverage over states to maintain

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64 *Id*. at 1124 (interpreting 42 U.S.C. § 7509(a)(2000)).
65 *Id*. at 1124 n.5.
66 40 C.F.R. § 52.31(d)(1) (2004).
67 *Natural Res. Def. Council, Inc*., 57 F.3d at 1124 n.5.
68 *Id*. at 1125.
69 *Id*.
70 42 U.S.C. § 7410(m) (2000).
71 *Natural Res. Def. Council, Inc*., 57 F.3d at 1124.
72 42 U.S.C. § 7410(m); 42 U.S.C. § 7509(b) (2000).
73 42 U.S.C. § 7405(a)(1)(A) (2000).
74 42 U.S.C. § 7405(c)(1) (requiring maintenance of effort by the States).

regulatory efforts, while also allowing for federal funding to continue in a case where state spending was reduced but the reduction was attributable to non-selective factors among all branches of state government.[75]

The EPA is required to promulgate a Federal Implementation Plan (FIP) if the state deficiency has not been corrected within two years.[76] This has the effect of taking away state authority to choose how to implement NAAQS related pollution control measures in the state.[77] Presumably, a state could, through inaction, choose to let the EPA develop a FIP in place of a portion of its SIP for various reasons, such as technical complexity or cost of a new regulatory scheme.

C. Enforcement of SIPs - Citizen Suit Provisions of the Clean Air Act

In *Sweat v. Hull*, the Governor of Arizona and the director of the State's environmental agency argued that they were entitled to Eleventh Amendment sovereign immunity against a Clean Air Act citizen action.[78] The Arizona SIP included a Random On-Road Testing Program which the State agency was questioning as to its effectiveness in addressing motor vehicle pollution.[79] The Arizona legislature repealed the statute that was the basis for the program, and the agency terminated the testing program.[80] Plaintiffs filed suit pursuant to 42 U.S.C. § 7604(a)(1), which empowers any person to commence a civil action "against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the Eleventh Amendment. . . .)" in regard to an alleged violation of an emission standard or limitation.[81] The federal district court of Arizona considered whether directing the Governor of a state and a director of a state administrative agency to implement the EPA-approved SIP would violate the Eleventh Amendment.[82] The court reasoned that a State is still required to enforce a SIP even if it has filed a proposed revision and that a state may not alter or repeal a SIP without EPA approval.[83] Neither state agencies nor state courts have the power to vacate a SIP.[84] When a revision is sent to the EPA, the SIP remains enforceable in the period where EPA approval is pending.[85] The state must continue to comply with the SIP until a revision is approved and either the EPA or any person may bring suit for a violation of the SIP in federal court against the state to the extent allowed by

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75 42 U.S.C. § 7405(c)(2).
76 42 U.S.C. § 7410(c)(1) (2000).
77 *Natural Res. Def. Council, Inc*., 57 F.3d at 1124.
78 Sweat v. Hull, 200 F. Supp. 2d 1162, 1165 (D. Ariz. 2001).
79 *Id*. at 1164.
80 *Id*.
81 *Id*. at 1164; 42 U.S.C. §7604(a)(1) (2000).
82 *Sweat*, 200 F. Supp. 2d at 1168.
83 *Id*. at 1169-70.
84 *Id*. at 1170.
85 *Id.*

the Eleventh Amendment.[86] Also, since the testing program, when incorporated into the SIP, was enforceable under federal law, the state legislature's repeal of the statute and the agency's non-enforcement of the program was preempted and invalid pursuant to the Supremacy Clause of the United States Constitution.[87] The court held that the agency director fell within the *Ex Parte Young* exception to Eleventh Amendment sovereign immunity as she was "charged with the specific responsibility of implementing the SIP."[88] However, the claim against the Governor was dismissed as the plaintiff's contention that she was connected to the claim by having appointed the director was unrelated to the relief sought and did not establish that the Governor had responsibility for enforcing the SIP.[89]

The defendants in *Sweat v. Hull* also asserted a Tenth Amendment defense, since compelling the State to enforce the testing program that no longer existed in state law would violate the Tenth Amendment.[90] The court, however, characterized the CAA as "a bold experiment in cooperative federalism" which does not compel state officials to act but provides states with the choice of adopting a SIP of the state's own design or having state law preempted by federal regulation.[91] The State had chosen to propose its own SIP and its Tenth Amendment claim was rejected by the court.[92]

Similarly, in *Kentucky Resources Council, Inc. v. EPA*, a citizen group filed suit in federal court when the Kentucky legislature terminated a state vehicle emission testing program.[93] The federal court for the western district of Kentucky held that the CAA authorized citizens to file a civil action in federal court against any federal, state or local entity, and that as the SIP was enforceable as federal law, the Kentucky legislature's action was preempted by the Supremacy Clause of the United States Constitution.[94] The court did not agree that the defendant had sovereign immunity under the Eleventh Amendment, in an analysis consistent with that in *Sweat v. Hull*.[95] The court further reasoned that citizen suits serve as a supplement to state and federal enforcement of the provisions of the SIP and that a citizen's right

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[86] *Id*. at 1171.

[87] *Id*. at 1172. "[A]ny state law conflicting with federal law is preempted by the federal law and is without effect." *Id.* (citations omitted).

[88] *Sweat*, 200 F. Supp. 2d at 1172-73. The exception requires that the "official to be enjoined have 'some duty' to enforce the state law at issue." *Id.* at 1173

[89] *Id*. at 1175.

[90] *Id*. at 1177-78. "Congress may not simply 'commandeer the legislative processes of the States by directly compelling them to enact and enforce a federal regulatory program." New York v. United States, 505 U.S. 144, 161 (1992) (quoting Hodel v. Virginia Surface Mining & Reclamaion Ass'n Inc., 452 U.S. 264, 288 (1981)).

[91] *Sweat*, 200 F. Supp. 2d at 1178-79.

[92] *Id*. at 1179.

[93] 304 F. Supp. 2d 920, 922 (2004).

[94] *Id*. at 926.

[95] *Id*. at 928-29.

to bring a civil suit is not negated when a state or federal agency exercises its discretion not to enforce the SIP.[96]

Citizen suits have not been limited to SIP requirements that are directly related to the NAAQS. In *Save Our Health Organization v. Recomp of Minnesota, Inc*., plaintiffs alleged that a solid waste composting facility had exceeded the odor limits in its solid waste permit and as specified in Minnesota State rules.[97] The Minnesota federal district court found that the Minnesota odor rule was a part of the State's approved SIP and fell within the meaning of an emission standard or limitation that is enforceable by a citizen under the CAA.[98] The court also found, without reaching the question as to whether the EPA exceeded its authority in approving Minnesota's odor regulation into the SIP, that since the EPA had not taken steps to remove those regulations, they were subject to a citizen suit.[99] Thus, the plaintiff was able to bring a civil suit in federal court against both the facility and the State agency that issued the permit even though the permit was not a permit that was issued under an air emissions permitting program, and the requirement in the SIP was arguably beyond the EPA's authority to have approved it.[100]

In *Cate v. Transcontinental Gas Pipe Line Corp*., the federal district court for the western district of Virginia held that while the CAA does not enable a citizen suit addressing compliance with a NAAQS itself, since a NAAQS is not an "emission standard or limitation" as defined in the Act, a suit to enforce requirements that establish a mechanism to enforce the NAAQS are enforceable by citizens under the act.[101] Thus an agreement between the Virginia environmental agency and the pipeline company requiring the company to take measures to reduce emissions could be considered an emission standard or limitation under the CAA.[102] However, the court held that the agreement was not yet "in effect" as it had not yet been incorporated into the Virginia SIP and therefore was not enforceable by means of a citizen suit.[103] The court also articulated a policy basis for not enforcing a NAAQS violation directly against a single source.[104] A state has discretion to assess emissions from a number of sources in an area and may

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[96] *Id*. at 930.

[97] Save Our Health Org. v. Recomp of Minnesota, Inc., 829 F. Supp. 288, 289 (D.Minn. 1993), *aff'd*, 37 F.3d 1334 (8th Cir. 1994).

[98] *Id*. at 290-91.

[99] *Id*. at 291.

[100] *Id*.; *See, also,* 40 C.F.R. § 52.1220(40) (2004); Approval and Promulgation of Implementation Plans; Minnesota, 60 Fed. Reg. 27,411-12 (May 24, 1995) (eliminating certain regulations from the SIP). Minnesota's odor rule was removed from the SIP in response to a Nov. 1993 request from the State to remove the rule on the basis that it was "not intended for purposes of achieving air quality standards or other Clean Air Act purposes. . . ." Approval and Promulgation of Implementation Plans; Minnesota, 60 Fed. Reg. at 27,411.

[101] 904 F. Supp. 526, 530-31 (W.D. Va. 1995).

[102] *Id*. at 532.

[103] *Id*. at 535.

[104] *Id*. at 536.

determine that requiring reductions from an alternate facility would be a more cost-effective means of bringing an area back into compliance while allowing the first facility to continue emitting the pollutant at the rate that initially triggered the violation.[105] The citizen plaintiff's allegation of a violation of Virginia's odor rule was found to be enforceable under the citizen suit provisions of the CAA as it had been approved into the SIP and was therefore "in effect" despite the State's contention that it had only been submitted for informational purposes.[106] The state contended that the rule was not intended to be included in the SIP and that it was evident that the EPA did not consider that State odor rules could properly be included in the SIP.[107]

D. Periodic Updates of Ambient Standards

The EPA is required to review the NAAQS every five years and to "promulgate such standards as may be appropriate. . . ."[108] The EPA's final rules revising the $PM_{2.5}$ and ozone standards in 1997 were challenged on the basis of cost and as effecting an unconstitutional delegation of legislative power.[109] The Court of Appeals for the D.C. Circuit found that the EPA had not adequately explained an intelligible principle for setting the ozone standard at 0.08 ppm when ozone has potential health effects at any level above zero.[110] On appeal, the United States Supreme Court interpreted the CAA as requiring the EPA to establish uniform standards based on published criteria and the latest scientific knowledge that are "requisite to protect public health from the adverse effects of the pollutant in the ambient air" and that requisite means "sufficient, but not more than necessary."[111] In deciding on the cost issue, the Court reasoned that Congress had already considered the cost of compliance when it enacted the Clean Air Act in 1969.[112] As will be seen, *infra*, the costs of nonattainment can be high indeed.[113] In addition, the concept that certain pollutants are non-threshold pollutants[114] implies that there may be future justification for making these standards more stringent. This should provide additional impetus for voluntary programs such as those discussed in Part III.

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105 *Id*.
106 *Id*. at 538.
107 *Cate*, 904 F. Supp. at 538.
108 42 U.S.C. § 7409(d)(1) (2000).
109 Am. Trucking Ass'ns., Inc. v. EPA, 175 F.3d 1027, 1033 (D.C. Cir. 1999).
110 *Id*. t 1034.
111 Whitman v. Am. Trucking Ass'ns., Inc., 531 U.S. 457, 473 (2001).
112 *Id*. at 466.
113 *See infra* note 199.
114 *Am. Trucking Ass'ns., Inc.*, 175 F.3d at 1034.

E. Interaction with Other State and Federal Programs

While the CAA requires the EPA to promulgate ambient air quality standards for "criteria" pollutants and to promulgate emission standards for industry sectors,[115] it also emphasizes the role of non-regulatory strategies and technologies to enable pollution prevention rather than relying solely on post-emission control.[116] As applied to the SIP program, such non-regulatory strategies are limited in scope because SIP-based emission reductions must be "permanent and enforceable" in order to be credited for redesignation purposes.[117] The role of non-regulatory strategies and innovative approaches is discussed in Parts III and IV.

The Clean Air Interstate Rule, proposed in January 2004, seeks to address the emissions originating in twenty nine States and the District of Columbia that the EPA has determined make a significant contribution to $PM_{2.5}$ and ozone levels in downwind states.[118] In January 2005 the EPA Administrator, Mike Leavitt, described this rule as "the Acid Rain Program for this decade."[119] He attributed the success of the Acid Rain Program to market forces and predicted a 70% reduction of sulfur dioxide and nitrogen dioxide emissions from power plants by implementing a cap and trade plan that would provide financial incentives for power plants to find innovative, low-cost ways of reducing their emissions.[120] However, while providing this multi-state regulation as a measure to help achieve NAAQS attainment in eastern states, the uncertain future impact of the rule at this time can be a hindrance to the affected States that are also currently developing or enforcing traditional SIPs.[121]

A number of regional planning organizations have been established to enable states to work together to address common air quality issues, including ozone, PM2.5 and regional haze.[122] The EPA itself participates as

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[115] 42 U.S.C. § 7411(b)(1) (2000) (requiring the Administrator to propose regulations for new sources within categories of sources that cause or contribute significantly to air pollution which may endanger the public health or welfare); 42 U.S.C. § 7412(d)(1) (2000) (requiring the Administrator to promulgate regulations for sources of certain hazardous air pollutants).

[116] 42 U.S.C. § 7403(g) (2000) (requiring the Administrator to evaluate and develop pollution prevention and other non-regulatory strategies).

[117] 42 U.S.C. § 7407(d)(3)(E) (2000).

[118] Rule To Reduce Interstate Transport of Fine Particulate Matter and Ozone (Interstate Air Quality Rule), 69 Fed. Reg. 4566 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. Pts. 51, 72, 75, and 96). The rule would operate by requiring the upwind States to amend their SIPs to require emissions reductions of ozone and $PM_{2.5}$ precursors. *Id*.

[119] *Clean Air Progress: A Generational Relay*, EM 18, 19, AIR AND WASTE MANAGEMENT ASSOCIATION (Jan. 2005).

[120] *Id*.

[121] *See infra* notes 131-135 and accompanying text (discussing issues faced by North Carolina while the EPA is working on a federal rulemaking with multi-state impact).

[122] *See, e.g.,* ABOUT LADCO/MRPO, *at* http://www.ladco.org/about.html (last visited Apr. 1, 2005) (describing the Lake Michigan Air Directors Consortium (LADCO) as an organization set up in 1990 to provide technical assessments and assistance to member

a member in multi-state efforts addressing regional haze.[123] Regional haze requirements stem from §§ 169A and 169B of the CAA, addressing visibility in Federal class I areas.[124]

IV. NEED FOR STREAMLINING AND INNOVATION

With the CAA in place, a 51% reduction in total emissions of the six current criteria air pollutants was achieved between 1970 and 2003 despite significant increases in population (39%), energy consumption (45%), gross domestic product (176%) and vehicle miles traveled (155%) that occurred in the same period.[125] However, despite the impressive overall reduction in criteria pollutants, there are still over 159 million Americans living in areas that do not meet the current 8-hour NAAQS for ozone, and it is estimated that ozone is responsible for over one billion dollars in American agricultural crop losses each year.[126]

Acting on National Research Council recommendations, the Air Quality Management Workgroup was formed to evaluate these recommendations and make specific recommendations.[127] This workgroup included representatives of state, local and regional organizations, tribal interests, environmental and public health organizations and the EPA.[128]

The National Research Council had concluded that "continued non-attainment for ozone and $PM_{2.5}$. . . will require a multi-pronged approach that includes innovative, federally supported local measures as well as regional or national controls."[129] As such, the SIP program as it stands has been

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states, and describing the Midwest Regional Planning Organization as an organization focused on regional haze).

[123] *Id*.

[124] 42 U.S.C. § 7491(a)(1) (2000). "Congress hereby declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution;" A class I area is a national park exceeding 6,000 acres in size and which was in existence at the time of enactment of the Clean Air Act amendments of 1977. 42. U.S.C. § 7472(a)(4) (2000).

[125] AIR QUALITY MANAGEMENT WORKGROUP, RECOMMENDATIONS TO THE CLEAN AIR ACT ADVISORY COMMITTEE 6 (2005), *available at* http://www.epa.gov/air/caaac/aqm.html (last visited Apr. 1, 2005). The Clean Air Act Advisory Committee (CAAAC) is chartered under the Federal Advisory Committee Act and the Air Quality Management Workgroup was formed and charged by CAAAC to assess air quality recommendations of the National Research Council and advise the CAAAC on ways to improve air quality management over the near term. *Id*. at 7.

[126] OFFICE OF INSPECTOR GENERAL, EVALUATION REPORT NO. 2004-P-00033, EPA AND STATES NOT MAKING SUFFICIENT PROGRESS IN REDUCING OZONE PRECURSOR EMISSIONS IN SOME METROPOLITAN AREAS, Executive Summary at i (2004), *available at* http://www.epa.gov/oig/reports/2004/ (last visited Apr. 1, 2005).

[127] AIR QUALITY MANAGEMENT WORKGROUP, RECOMMENDATIONS TO THE CLEAN AIR ACT ADVISORY COMMITTEE 7 (2005), *available at* http://www.epa.gov/air/caaac/aqm.html (last visited Apr. 1, 2005).

[128] *Id*.

[129] *Id*. at 17.

criticized as having outlived its usefulness due to outdated assumptions that air pollution can be handled in a localized manner, as a state program with minimum federal involvement.[130]

Evidence of conflict between traditional state-level SIP controls and enactment of federal action can be seen in North Carolina's attempt to petition the EPA, pursuant to § 126(b) of the CAA, to make findings that emission sources in thirteen states significantly contribute to $PM_{2.5}$ and ozone attainment problems in North Carolina.[131] Section 126(b) authorizes the EPA to establish federal emission limits on sources that it finds are contributing significantly to nonattainment in downwind states and it states that, "Within 60 days after receipt of any petition under this subsection and after public hearing, the Administrator shall make such a finding or deny the petition."[132] In response, EPA gave itself a six-month extension to this deadline, invoking Section 307(d)(10) of the CAA, which allows for an extension for rulemaking purposes.[133] The rulemaking referred to here is the EPA's Clean Air Interstate Rule, proposed in January 2004, which would require twenty nine states and the District of Columbia to revise their SIPs to achieve region-wide reductions in nitrogen oxides and sulfur dioxide emissions.[134] Following expiration of the six-month extension and failure of the EPA to complete its response to the Section 126(b) petition, the Attorney General of North Carolina signaled the State's intent to sue pursuant to Section 304 of the CAA.[135]

Recognizing that rulemaking is a complex and time consuming activity, the Air Quality Management Workgroup emphasized the need for national guidance for local programs in key sectors such as residential wood stoves, open burning and mobile sources, with a concentration on those areas exceeding or close to the ambient standards for $PM_{2.5}$ and ozone.[136] Residential wood stoves contribute 420,000 tons of direct $PM_{2.5}$ emissions

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[130] Arnold W. Reitze, Jr., *Air Quality Protection Using State Implementation Plans – Thirty-Seven Years of Increasing Complexity*, 15 VILL. ENVTL. L.J. 209 at 365-66 (2004) (concluding that SIPs will become more complex and irrelevant and that federally mandated measures will be needed to achieve significant emissions reductions in the future).

[131] 42 U.S.C. § 7426(b) (2000); Final Determination to Extend Deadline for Promulgation of Action on Section 126 Petition From North Carolina, 69 Fed. Reg. 30,038 (May 26, 2004).

[132] *Id*.

[133] 42 U.S.C. § 7607 (2000); Final Determination to Extend Deadline for Promulgation of Action on Section 126 Petition From North Carolina, 69 Fed. Reg. 30,038 (May 26, 2004).

[134] Final Determination to Extend Deadline for Promulgation of Action on Section 126 Petition From North Carolina, 69 Fed. Reg. 30,038 (May 26, 2004).

[135] Letter from Roy Cooper, Attorney General, State of North Carolina, to Michael Leavitt, Administrator, Environmental Protection Agency (Nov. 19, 2004) (copy on file with author).

[136] AIR QUALITY MANAGEMENT WORK GROUP, RECOMMENDATIONS TO THE CLEAN AIR ACT ADVISORY COMMITTEE 23-24 (2005), *available at* http://www.epa.gov/air/caaac/aqm.html (last visited Apr. 1, 2005).

per year and are known to cause serious health problems in Indian communities.[137] It follows that a federal initiative to increase voluntary replacement of older, polluting wood stoves could provide significant and early benefit to $PM_{2.5}$ problem areas. However, in order for states to take credit for such reductions a mechanism is needed to make the voluntary program federally enforceable and permanent.[138]

In September 2004, the EPA made available a new policy addressing the use of emerging and voluntary measures in SIPs.[139] The policy strives to enable "emission reduction strategies that do not meet the enforceability or quantification requirements in the *standard* way."[140] (emphasis added). The policy defines an "emerging measure" as a reduction strategy having less than the normally required level of certainty, conditioned on the state agreeing to periodic evaluations of actual emissions reductions.[141] A voluntary measure is an emission reduction strategy that is not enforceable against individual sources, but a state may claim it as a credit for SIP purposes if the state retains enforceable responsibility for the reduction.[142]

To gain federal approval in the context of a SIP, emerging and voluntary measures must be surplus (i.e. not already assumed as part of some other requirement), enforceable, quantifiable and permanent, and must meet anti-backsliding requirements.[143] In order to ensure enforceability of voluntary measures, the state must agree to the EPA having the ability to apply penalties and secure corrective actions from the state.[144]

This policy does not apply to mobile emission sources, including both on-road and non-road vehicles.[145] The policy also limits the total creditable emission reduction from emerging and voluntary measures to 6% of the required emissions reduction.[146]

The 6% cap, while somewhat cautious, doubles the 3% allowable under the 1997 policy memorandum used as the basis for the EPA's

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[137] *Id*. Given the disproportionate effect on Indian communities, EPA could also further its goal "to integrate environmental justice into. . .policies, programs, and activities." *See* http://www.epa.gov/compliance/environmentaljustice/index.html (last visited Apr. 1, 2005).

[138] *See infra* note 143 and accompanying text (providing criteria for the EPA's approval of such measures in SIPs).

[139] *See generally* OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY, INCORPORATING EMERGING AND VOLUNTARY MEASURES IN A STATE IMPLEMENTATION PLAN (SIP) (2004), *available at* http://www.epa.gov/ttn/oarpg/t1pgm.html (last visited Apr. 1, 2005).

[140] *Id*. at 2.

[141] *Id*.

[142] *Id*.

[143] *Id*. at 3-4.

[144] OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY, INCORPORATING EMERGING AND VOLUNTARY MEASURES IN A STATE IMPLEMENTATION PLAN (SIP) 3 (2004), *available at* http://www.epa.gov/ttn/oarpg/t1pgm.html (last visited Apr. 1, 2005).

[145] *Id*. at 7.

[146] *Id*. at 9

consideration of approval of non-regulatory voluntary emissions reductions program measures for Maryland and Virginia.[147] Here, both states submitted SIP amendments proposing non-regulatory measures such as low volatile organic compound (VOC) content paint use by state and local agencies, auxiliary power units on locomotives, and reformulated consumer products in order to receive rate of progress credit.[148]

The Air Quality Management Workgroup report also identifies a need to streamline the SIP process itself.[149] Such measures include alignment of SIP submittal dates to encourage multi-pollutant strategies, development of standard SIP protocols and streamlining minor revisions.[150] The report points out that even "minor" SIP revisions must undergo the full administrative process, which includes a public hearing.[151] It suggests that an interested state should work with the EPA to explore the legal issues involved in defining a *de minimis* level at which a public hearing is not necessary, and notes that the State of Minnesota has commenced such a process with the EPA Region 5 office.[152] Section 110(a)(2)(A) of the CAA requires that states must provide for reasonable public notice and hold a public hearing prior to submitting any SIP revision.[153] The EPA has interpreted the statutory requirement and the regulation codified at 40 C.F.R. section 51.102 as not being met by merely offering the opportunity for a public hearing upon request.[154] But, as 40 C.F.R. section 51.102(g)(2) provides that "[p]rocedures different from this part may be approved if they (i) [e]nsure public participation. . .and (ii) [p]rovide adequate public notification of the opportunity to participate," it may be possible for a state to utilize such a process for certain pre-defined categories of SIP revision.[155] Questions remain regarding whether the EPA could approve this type of process without contradicting the plain language of the CAA and regarding which SIP revisions, if any, should always be afforded a public hearing.[156] While the amount of discretion accorded to the EPA is uncertain, the EPA's

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[147] Approval and Promulgation of Air Quality Implementation Plans; Maryland and Virginia; Non-Regulatory Voluntary Emission Reduction Program Measures, 69 Fed. Reg. 76889, 76,890-93 (Dec. 23, 2004) (to be codified at 40 C.F.R. pt. 52).

[148] *Id*. at 76,889.

[149] AIR QUALITY MANAGEMENT WORKGROUP, RECOMMENDATIONS TO THE CLEAN AIR ACT ADVISORY COMMITTEE 25-33 (2005), a*vailable at* http://www.epa.gov/air/caaac/aqm.html (last visited Apr. 1, 2005).

[150] *Id*. at 25-28.

[151] *Id*. at 27-28.

[152] *Id*. at App. B, 60, n.13.

[153] 42 U.S.C. § 7410 (2000).

[154] Letter from Stephen Rothblatt, United States Environmental Protection Agency Region 5 to Bob Hodanbosi, Ohio Environmental Protection Agency (Jan. 28, 2004) (copy on file with author).

[155] AIR QUALITY MANAGEMENT WORKGROUP, RECOMMENDATIONS TO THE CLEAN AIR ACT ADVISORY COMMITTEE, Appendix B at 60 (2005), a*vailable at* http://www.epa.gov/air/caaac/aqm.html (last visited Apr. 1, 2005).

[156] *Id*.

regulations do allow a state to seek the EPA Administrator's approval of alternatives to the general requirement for a mandatory hearing.[157]

The term "public hearing" is not defined in the CAA, which may give the EPA some discretion in determining how formal a meeting is necessary for a particular SIP revision. When considering the notice and hearing requirements of the National Environmental Policy Act at 23 U.S.C.S. section 128, the court in *Sierra Club v. United States Department of Transportation*, held that approval of the state's "open house" style public meeting was not barred by the plain language of the statute.[158] The statute required that state highway departments conduct public hearing or afford the opportunity for public hearing for certain planned actions involving federal aid, and that a transcript of any such hearing be submitted to the United States Department of Transportation.[159] The court found that the statutory language was ambiguous in that it did not define the terms "public hearing" or "transcript."[160] Given this ambiguity, the court reasoned, using as a test the rule that an agency's interpretation of its own rules is to be given substantial deference so long as the interpretation is reasonable and in conformance with the wording of the regulation, that the federal agency had the discretion to approve an "open house" style of public meeting.[161] However, the court qualified its holding by stating its concern that an "open house" meeting, where comments are taken on a walk-in basis rather than in a structured forum where all attendees can hear all the comments and the agency responses, has some serious deficiencies when addressing matters of great importance to the public.[162] The court characterized the purpose of a public hearing under this statute as (1) "to make sure that state planning officials are apprised of the nature and depth of local residents' feelings about the wisdom of a particular project"; and (2) to "provide a formal means of documenting, ascertaining, testing and filtering all possible environmental, community and transportation elements."[163]

Similar reasoning might be applied to the public participation requirements of the SIP process, which is similarly ambiguous in that it does not define the term "public hearing."[164] The court in *Sierra Club* alluded to the need for structured hearings in cases of great importance to the public, implying that the degree of formality of the hearing can be adjusted according to the subject matter.[165]

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157 40 C.F.R. § 51.102(g)(2) (2004).

158 Sierra Club v. United States Dep't of Transp., 310 F. Supp. 2d 1168, 1207-08 (D. Nev. 2004).

159 *Id*. at 1205.

160 *Id*. at 1206.

161 *Id*. at 1207.

162 *Id*. at 1208.

163 *Sierra Club*, 310 F. Supp. 2d at 1208.

164 *See generally* 42 U.S.C. §§ 7401-10

165 *Sierra Club,* 310 F. Supp. 2d at 1208.

Unlike the one size fits all approach for SIP revisions, the EPA exempted "minor" permit modifications and "administrative" permit amendments from the public participation procedures under the federal air permitting program established pursuant to Title V of the CAA.[166] A minor permit modification is a revision that does not violate or require changes to certain applicable requirements.[167] Administrative amendment procedures apply to actions such as correction of typographical errors, requiring more frequent monitoring requirements of a permittee, and allowing for a change of ownership of the facility.[168] To make similar changes to source-specific requirements under a SIP, the full SIP notice and comment procedure, with a public hearing, is required even if such changes are either reasonably *de minimis* or presumptively increase the likelihood of compliance with the underlying air quality standards.[169]

The extended time frame over which state SIP development and EPA approval occurs can also lead to situations where the approved SIP contains an outdated rule or source-specific requirement that has been modified by the state but not submitted into the SIP.[170] Case law indicates that a state can be compelled to enforce the SIP requirement until EPA has approved an amendment, even if the program or regulation has been abolished through legislative action at the state level.[171]

The EPA has up to eighteen months from receipt of a SIP revision to approve a request for an amendment to the SIP.[172] However, the actual time for the EPA to publish an approval in the Federal Register varies widely.[173] For example, on May 13, 2002, the EPA published its approval of Minnesota's new rules governing performance tests, forty one months after the Minnesota Pollution Control Agency submitted them in December 1998.[174] This delay occurred despite the EPA having determined, in March 1999, that the submittal was complete and later concluding that the new rules "vastly improve the performance testing requirements found in the

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[166] 40 C.F.R. §§ 70.7(a)(ii) and 70.7(e)(3) (2004). 40 C.F.R. Part 70 establishes minimum requirements for State operating permit programs for issuance of federally enforceable permits pursuant to 42 U.S.C. § 7661 *et seq*. (2000).

[167] 40 C.F.R. § 70.7(e)(2) (2004).

[168] 40 C.F.R. § 70.7(d) (2004).

[169] *See supra* notes 149-151 and accompanying text (explaining that the full SIP process applies even to minor revisions).

[170] *See supra* notes 78-86 and accompanying text (describing how a SIP requirement remained enforceable despite its repeal at the State level by legislative and administrative agency action).

[171] *See supra* notes 78-86 and accompanying text.

[172] 42 U.S.C. § 7410(k) (2000). 42 U.S.C. § 7410(k)(1) allows the EPA up to six months to determine that the submittal is complete; 42 U.S.C. § 7410(k)(2) allows the EPA an additional twelve months to act on the submittal.

[173] *See infra* notes 174-176

[174] Approval and Promulgation of Implementation Plans; Minnesota, 67 Fed. Reg. 31,963 (May 13, 2002).

Minnesota SIP."[175] In contrast, the EPA approved the redesignation of the Saint Paul PM_{10} nonattainment area within six weeks.[176]

It is anomalous that a public hearing is required prior to submitting a revised rule when the state rulemaking process itself ensures the right of public participation but does not require that a hearing be held unless a petition is received during the public comment period.[177]

V. MINNESOTA'S SIP AND PROSPECTS FOR CONTINUED ATTAINMENT

A. Current Attainment Status

Presently, Minnesota has no nonattainment areas.[178] The last redesignation from nonattainment to attainment status became effective on September 24, 2002, following the EPA's approval of Minnesota's redesignation request for a portion of Saint Paul that had been in nonattainment status with respect to the PM_{10} standard.[179] Consequently this area of Saint Paul is now a maintenance area.[180]

Nine other redesignations from nonattainment to attainment occurred between 1993 and 2001, creating a total of ten maintenance areas in the state: three for carbon monoxide,[181] four for sulfur dioxide,[182] two for PM_{10}[183] and

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[175] *Id.*

[176] Approval and Promulgation of Implementation Plans; Minnesota, and Designation of Areas for Air Quality Planning Purposes; Minnesota, 67 Fed. Reg. 48,787 (July 26, 2002). The redesignation request was submitted on June 20, 2002, and EPA published its approval as a "direct final" rule on July 26 of that year, specifying an effective date of Sept. 24, 2002, unless adverse comments were received. *Id.*

[177] Minn. Stat. § 14.25 (2003). "If, during the 30-day period allowed for comment, 25 or more persons submit to the agency a written request for a public hearing of the proposed rule, the agency shall proceed under the provisions of sections 14.14 to 14.20." *Id.*

[178] 40 C.F.R. § 81.324 (2003) (listing status by county for each pollutant, with no designations of nonattainment).

[179] 40 C.F.R. § 52.1230(c) (2004); 40 C.F.R. § 81.324 (2004); Approval and Promulgation of Implementation Plans; Minnesota, and Designation of Areas for Air Quality Planning Purposes; Minnesota, 67 Fed. Reg. 48,787-90 (July 26, 2002) (portion of Saint Paul redesignated from nonattainment to attainment for PM10, effective Sept. 24, 2002).

[180] *See supra* note 51.

[181] 40 C.F.R. § 52.1220(c)(31) (2004); 40 C.F.R. § 52.1237(c) (2004); 40 C.F.R. 81.324 (2004); Redesignation of Areas for Air Quality Planning Purposes; Minnesota, 58 Fed. Reg. 34,532-35 (June 28, 1993) (Saint Cloud area redesignated to attainment, effective Aug. 27, 1993); Approval of Maintenance Plan and Designation of Areas for Air Quality Planning purposes; Minnesota, 59 Fed. Reg. 17,708-10 (Apr. 14, 1994) (Duluth area redesignated to attainment, effective June 13, 1994); Approval and Promulgation of State Implementation Plans; Minnesota, 64 Fed. Reg. 58,347-55 (Oct. 29, 1999) (Twin Cities 7-County Metropolitan Area and a portion of Wright County redesignated to attainment, effective Nov. 29, 1999).

[182] 40 C.F.R. § 52.1220(c)(42) (2004); 40 C.F.R. § 52.1220(c)(56) (2004); 40 C.F.R. § 81.324 (2004); Approval and Promulgation of Implementation Plans and Designation

one for lead.[184] The PM_{10} lead and sulfur dioxide redesignations represent the traditional stationary source approach to abatement of air quality issues.[185]

B. Emerging Issues and Voluntary Efforts at the State Level

As on the national scale, there has been an impressive reduction in total annual emissions of most of the criteria pollutants.[186] From 1985 to 1994 there was a downward trend in ambient levels of 43% for carbon monoxide, 27% for sulfur dioxide, 38% for nitrogen oxides, 10% for ozone, 25% for particulates and 87% for lead.[187] However, in more recent years the peak concentrations of ozone in the Twin Cities have increased at all monitoring sites in the area.[188] Levels of close to 80-90% of the standard have been recorded and trend data suggests ozone levels will increase.[189] The Minnesota Pollution Control Agency (MPCA) issued air pollution health

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of Areas for Air Quality Planning Purposes; Minnesota, 60 Fed. Reg. 28,339-44 (May 31, 1995) (Twin Cities 7-County Metropolitan Area, excluding Pine Bend and Saint Paul Park areas redesignated to attainment, effective July 31, 1995); Designation of Areas for Air Quality Planning Purposes; Minnesota, 62 Fed. Reg. 26,230-35 (May 13, 1997) (Saint Paul Park Area redesignated from to attainment, effective July 14, 1997); Approval and Promulgation of Implementation Plans; Minnesota, and Designation of Areas for Air Quality Planning Purposes; Minnesota, 66 Fed. Reg. 14,087-92 (Mar. 9, 2001) (Olmsted County redesignated to attainment, effective May 8, 2001).

[183] 40 C.F.R. § 52.1220(c)(42) (2004); 40 C.F.R. § 81.324 (2004); Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes; Minnesota, 60 Fed. Reg. 28,339-44 (May 31, 1995) (Olmsted County redesignated to attainment, effective July 31, 1995); *See supra* note 176 (portion of Saint Paul redesignated to attainment, effective Sept. 24, 2002).

[184] 40 C.F.R. § 52.1220(c)(36) (2004); 40 C.F.R. § 81.324 (2003); Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes; Minnesota, 59 Fed. Reg. 52,431-36 (Oct. 18, 1994) (portion of Dakota County redesignated to attainment for lead, effective Dec. 19, 1994).

[185] *See, e.g.,* 40 C.F.R. § 52.1220(c)(36)(i)(A) (2004) (incorporating by reference an administrative order for a source of lead emissions);40 C.F.R. § 52.1220(c)(41)(i) (2004) (incorporating by reference and amending a number of administrative orders that the State issued to addressed particulate matter); 40 C.F.R. § 52.1220(c)(56)(i) (2004) (incorporating by reference air emission permits for sources of sulfur dioxide emissions).

[186] *See supra* note 125; *See infra* note 187.

[187] *See* http://www.pca.state.mn.us/air/aqemissions-trends.html (last visited Apr. 1, 2005) (summarizing the findings of an MPCA report, available at the same location, through 1995).

[188] MINNESOTA POLLUTION CONTROL AGENCY, AIR QUALITY IN MINNESOTA: INTO THE FUTURE, 3 (2003), *available at* http://www.pca.state.mn.us/publications/reports/lr-airqualityreport-2003.html (last visited Apr. 1, 2005) (showing as an example an upward trend in ozone concentration at the Blaine, Minnesota, monitoring site and providing a list of contributing factors).

[189] *Id.* A violation of the federal standard occurs when the fourth highest eight-hour average for the year exceeds the 8-hour standard. The trend data compares actual fourth highest recordings to the standard.

alerts for ozone on four occasions in 2001, the first alerts issued for this pollutant since the 1970s.[190]

The MPCA maintains an Air Quality Index and issues alerts when the index exceeds certain levels.[191] On February 1, 2005, the index reached a level sufficient for the MPCA to issue an alert of "unhealthy for all," the first alert at this level in at least twenty five years.[192] This alert was triggered by fine particles that had accumulated during a period of stagnant weather patterns.[193]

Increasing population and rising vehicle mileage in the Twin Cities area present challenges in maintaining attainment with the NAAQS, particularly for ozone.[194] Air pollution health alerts have alerted a unique partnership of business, environmental groups, and government and citizen interests to the need to promote voluntary measures to avoid nonattainment status.[195] This partnership, named Clean Air Minnesota, recognizes that air pollution is the sum of many kinds of personal and business activity and promotes reductions ranging from businesses switching to alternative solvents to individuals switching to less polluting lawn mowers.[196] Similar efforts are underway in other urban areas.[197] The Wisconsin Department of Natural Resources has established an emission reduction registry and those responsible for achieving voluntary reductions can be given public recognition on the agency's web site.[198]

A 1999 study conducted for the Minnesota Chamber of Commerce estimated the economic impact of a nonattainment designation for ozone in the Twin Cities to be between $189 million and $266 million per year due to the need for emissions controls and other measures.[199] Such measures would

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[190] *Id*.

[191] *See* http://aqi.pca.state.mn.us/hourly/ (last visited Apr. 1, 2005). The index is calculated from monitoring results for carbon monoxide, sulfur dioxide, fine particulates and ozone, with the latter two being of greatest concern. *Id.*

[192] *See supra* note 5 and accompanying text.

[193] *Id*.

[194] *See supra* note 188 and accompanying text.

[195] *See* http://www.mn-ei.org/air/index.html (last visited Apr. 1, 2005) (providing summary of goals and activities of Clean Air Minnesota).

[196] *Id*.

[197] *See, e.g.,* http://www.ohiolung.org/ccacc.htm (last visited Apr. 1, 2005) (describing a voluntary, cooperative effort in Cleveland, Ohio aimed at reducing health and environmental risk from air toxic pollutants); http://cleanaircounts.org/aboutcac.shtml (last visited Apr. 1, 2005) (describing a northeastern Illinois collaboration between local, state and federal government and business interests aimed at improving air quality and enabling economic development).

[198] http://dnr.wi.gov/org/aw/air/registry (last visited Apr. 1, 2005).

[199] *See supra* note 195 (this information is taken from ENERGY AND ENVIRONMENTAL RESEARCH CENTER, UNIVERSITY OF NORTH DAKOTA, ESTIMATED ECONOMIC IMPACT OF TWIN CITIES OZONE NONATTAINMENT (1999) (copy on file with author)).

likely include vehicle inspection programs such as those seen in Arizona and Kentucky.[200]

In addition to avoidance of costs to Minnesota citizens and businesses, voluntary efforts made while an area is still meeting the NAAQS have the advantage of not being subject to the percentage of required reduction caps in EPA policy memoranda since they need not be included in the SIP when an area is in attainment.[201]

VI. ANALYSIS

A. Cooperative Federalism Remains Viable, But Change is Needed

The SIP program continues to provide a convenient and effective mechanism for the EPA to further the goals of the CAA while allowing states a good deal of flexibility in determining how best to address problems that are primarily local in nature.[202] It plays an essential role in maintaining air quality in areas that were formerly in nonattainment status and applies attainment deadlines for areas not attaining the standards.[203] Impressive reductions in emissions have been realized.[204] Of course, the SIP process itself is not responsible for emissions reductions. It is a vehicle by which state programs enforce federal standards, and SIP approval of these programs sets up an enforcement mechanism that helps ensure that the goals of the CAA are met.

Rather than having outlived its usefulness, the program is suffering from structural limitations in that the burden of the administrative process outweighs the significance of the state action for minor SIP revisions.[205] Additionally, it is not well suited to addressing multi-pollutant strategies and more interstate action and federal intervention is needed in order to address long range transportation of pollution.[206] Neither of these issues is fatal. Administrative procedures can be amended and the EPA is slowly introducing policy allowing for more innovative and voluntary measures.[207]

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[200] *See supra* notes 79, 93 and accompanying text (discussing federal enforceability and citizen enforcement of vehicle emissions testing plans once incorporated into a SIP).

[201] *See supra* notes 139-147 and accompanying text (describing attributes of voluntary and emerging measures needed for inclusion in a SIP).

[202] *See supra* notes 59-61 (explaining process and limits under which the EPA gives deference to states in implementing their own air pollution programs).

[203] *See supra* note 48 and accompanying text.

[204] *See supra* note 125 (comparing emission reductions to increases in population and economic indicators).

[205] *See supra* notes 151-153 and accompanying text (referring to CAAAC report and suggestions that minor and *de minimis* SIP amendments should not go through the full administrative process).

[206] *See supra* notes 118-121 and accompanying text (describing proposed federal Clean Air Interstate Rule).

[207] *See supra* notes 122-124 and accompanying text.

States have been cooperating through regional planning organizations in planning for regional haze regulations, with collateral benefit to ozone and $PM_{2.5}$ control at least to the extent that there are some far-traveling precursor pollutants in common.[208]

The SIP program is still cooperative in nature but the CAA sets up an administrative process for approval of initial and revision SIPs that is overly rigid.[209] It acts as a convenient means of enacting federal programs at the state level and the process has withstood constitutional challenge. Citizen suits can be brought in federal court against the head of a state agency responsible for enforcing SIP requirements at the state level without violating the Eleventh Amendment.[210] State agencies can be compelled, through citizen suits brought in federal court, to enforce SIP requirements without violating the Tenth Amendment.[211] The SIP process enables the creation of federally enforceable pollution control requirements in the states with minimal rulemaking effort on the part of the EPA and reduced application of the Federal Administrative Procedures Act.[212] In return for consenting to EPA and citizen enforceability in federal court, and to a degree of administrative burden associated with the process, the states retain flexibility and receive federal grants[213] from the EPA.

From an environmental standpoint there appears to be little or no need to upset this balance between the state and federal governments. Impressive emissions reductions have been achieved despite rising population and economic activity, there is a strong and well-established enforcement mechanism, and the high costs of nonattainment have worked as incentives for voluntary action and cooperation between business and environmental groups.[214] However, there is a need for reduction of the administrative burden on the states in order to facilitate voluntary and innovative approaches to improving air quality and to enable states to focus resources where they are most needed. Some of this can be accomplished by fine tuning of existing federal policies and practices, but some revisions to the CAA itself are needed in order to overcome the rigidity of the existing process.

For example, a relaxation of the requirement that SIP requirements be permanent and enforceable could help to spur innovative and voluntary programs in areas where most needed.[215] The administrative process itself is overly burdensome when applied to minor SIP revisions.[216] By building

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[208] *See supra* notes 122-124 and accompanying text.

[209] *See supra* notes 10-14 and accompanying text.

[210] *See supra* notes 86-89 and accompanying text.

[211] *See supra* notes 90-92 and accompanying text.

[212] *See supra* notes 54-58 and accompanying text.

[213] *See supra* notes 73-75 and accompanying text.

[214] *See supra* notes 195-199 and accompanying text.

[215] *See supra* 143-147 and accompanying text (describing limits of the EPA's policy on the integration of voluntary measures into SIPs).

[216] *See supra* notes 151-153.

more into the federal regulations and, where necessary, the CAA itself, the EPA could help shift limited state and federal agency resources from minor, routine actions to NAAQS issues more directly related to health and economic concerns.

The EPA should allow states additional flexibility when overlapping federal rulemaking is in progress. Just as it allowed itself additional time to respond to a SIP petition from North Carolina,[217] it should be prepared to afford the full flexibility allowed under the CAA when development of a SIP is going to be influenced by the outcome of federal rulemaking. As the schedule for implementation of federal rules tends to be unpredictable, in part due to legal challenges, increased flexibility will not overcome all of the procedural issues. However, the need to address long range transport of pollution through coordinated national and local measures provides an incentive to amend the CAA itself in order to reduce the administrative burden on states, as discussed in Subsection E.

B. The Content of Each State's SIP Should Be More Clearly Identified in Order to Foster More Meaningful Public Involvement

As a practical matter, it is difficult for citizens to ascertain exactly what is in a SIP.[218] While the CAA sets up a strong mechanism for citizens to sue government entities and regulated parties in federal court for SIP violations, the right is muddied by this lack of clarity. Even when a state program is unquestionably part of the SIP, there can be confusion as to its interim status when the state attempts to remove it.[219] In some cases the state agency itself appears to be uncertain, or at least feels justified in contesting, whether one of its regulations is in the SIP and whether it remains federally enforceable or enforceable by citizens.[220]

The manner in which SIPs are incorporated into 40 C.F.R. part 52 does not provide a clear picture of the contents of the SIP.[221] Historically, it is difficult for the layperson and apparently difficult for government agencies and legal practitioners too, to sift through this information and determine, for example, how many maintenance areas a state has or whether a certain site-specific requirement is in the SIP.[222] Such information may be available

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[217] *See supra* notes 131-135 and accompanying text.

[218] *See supra* notes 31-34 and accompanying text.

[219] *See supra* notes 97-100, 107 and accompanying text (holding that the Minnesota and Virginia odor rules were enforceable by citizens under the SIP despite having no direct relationship to compliance with the NAAQS).

[220] *See supra* notes 97-100, 107 and accompanying text.

[221] *See supra* notes 31-34 and accompanying text (describing format of SIP approvals documented in the Code of Federal Regulations).

[222] *See supra* notes 31-34 and accompanying text.

from the EPA or individual state web sites[223] but there is no guarantee that such information is being kept up to date or that it has received adequate peer review. The EPA should continue and accelerate its efforts to tabulate and explain the content of the SIP, applying the principle of clear presentation of information beyond just those portions of 40 C.F.R. 52 that relate to incorporation by reference of state material.[224] It is not sufficient that the documents are available for inspection in the EPA's regional offices or that the information is available to varying degrees on federal and state agency web sites.

An overhaul of the format used to document SIP actions in the Code of Federal Regulations would be an appropriate starting point. By adopting an easy to follow, plain English format with tables and graphics the EPA could introduce much-needed clarity and at the same time introduce a format that is more easily adapted to display on a web site. Since the Code of Federal Regulations contains only a fraction of the information and discussion contained in the preceding Federal Register notice, the web version of the SIP contents could be usefully supplemented by including links to the electronic version of the Federal Register.[225] Similarly, key documents from the states could be scanned and included on the web site rather then merely making the documents available in various EPA regional offices.

C. The EPA Should Adopt the Air Quality Management Workgroup's Recommendation to Define Minor SIP Actions That Do Not Require Mandatory Public Hearings

With all SIP revisions going through public comment and public hearing at the State level, the EPA can administer the SIP program at arms length since it is likely that controversies will have been resolved by the state agency before a revision is sent to the EPA. The federal rulemaking can then progress as a "direct final" rule on the assumption that additional comment is unlikely and that the federal action is basically an approval of the state action.[226] While no doubt convenient for the EPA in terms of its own rulemaking resources, the administrative burden on the state outweighs the benefits when the SIP revision in question is minor in character.[227] Also, the

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[223] *See supra* note 33 and accompanying text (referring to a notice of availability published by the EPA in the Federal Register, providing web site addresses for SIP information).

[224] *See supra* notes 35-37 and accompanying text (describing recent reformatting by the EPA of the portions of 40 C.F.R. part 52 relating to items in the Minnesota SIP that have gone through an incorporation by reference review by the EPA).

[225] *See supra* note 35 and accompanying text (citing a section of the Code of Federal Regulations where Minnesota SIP documents are incorporated by reference rather than reproduced verbatim in the federal regulation).

[226] *See supra* notes 54-58, 176 and accompanying text.

[227] *See supra* notes 151-156 and accompanying text.

EPA's reliance on issues being resolved at the State level may become increasingly misplaced when SIP revisions address issues that are impacted by interstate transport of pollutants. Since a state agency can only regulate air quality issues within its borders, it is possible that controversies affecting more than one state as a source of pollution will receive heightened degrees of public comment at the federal SIP approval stage.

The EPA has interpreted the CAA to allow alternate public hearing procedures to be developed.[228] Under this interpretation it has a degree of discretion to work with individual states to define what types of SIP action are minor enough such that they need not go through a mandatory public hearing at the state level, provided that at least the *opportunity* for a public hearing is available.[229] Thus the procedures once used by Ohio and Minnesota, where actions were placed on public notice with a provisional hearing date that would apply if a hearing was requested, should be approvable under the regulations for minor actions. Plan revisions that are of significant interest to the public should still be presumed to be subject to the mandatory hearing process.[230] While a somewhat vague test, the EPA and the states could establish varying levels of public interest based on the level of public participation during past actions. Since an amendment to the process for public hearings pursuant to 40 C.F.R. § 51.102(g)(2) would be a SIP amendment in itself, such a revision would be subject to public comment and hearing and would therefore provide stakeholders with the opportunity to voice any objections to any procedural changes.[231]

Some state agency actions, most notably rulemaking, already have public participation procedures built in, providing an opportunity for hearing.[232] It is unduly burdensome on states to apply a mandatory hearing requirement for SIP purposes when the opportunity for hearing has already been made available. Permitting and rulemaking actions that have progressed with an opportunity for a public hearing, but where no hearing was actually requested are presumptive candidates for SIP action without hearing, provided that the intent to amend the SIP was clear during the permitting or rulemaking action.

Since the SIP process would still require that a state offer the opportunity to request a hearing prior to the revision being submitted to the EPA, sufficient process would remain available in any case where the change to the SIP raises more concern than the initial State action. Eliminating duplicative public participation procedures would lead to faster and more

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[228] *See supra* notes 153-155 and accompanying text (referring to 40 C.F.R. § 51.102(g)(2)).

[229] *See supra* note 155 and accompanying text (providing that maintaining the opportunity to participate is a prerequisite to approval of an alternative scheme under 40 C.F.R. § 51.102(g)(2)).

[230] *See supra* notes 162-163 and accompanying text (expressing the court's reservations as to the use of informal hearings for actions of significant public interest).

[231] *See supra* note 157 and accompanying text.

[232] *See supra* note 177 and accompanying text.

efficient overall completion of SIP revisions without removing the right of the public to a hearing on the proposed SIP revision. As the cost of a mandatory hearing is likely to be a deterrent to initiating small revisions, removal of the mandatory nature of the hearing could also help states to keep their SIPs current at reasonable cost.

An open question is whether a reduced public participation process is allowable under section 110(a) of the CAA, or more accurately whether the EPA regulations provide a reasonable interpretation of that section of the CAA with respect to public hearings.[233] In determining the degree of discretion that the CAA may allow, the citizen suit provisions may be instructive. Citizen suits can be initiated to enforce an emission standard or limitation that is in effect under the SIP.[234] A factor in defining whether a SIP revision is "minor" might therefore be whether the revision creates or revises requirements that are enforceable by citizens.

Since the EPA regulation does allow for flexibility in this area, the pilot project articulated by the Air Quality Management Workgroup should proceed with the goal of eliminating unnecessary or duplicative public hearings.

By establishing a rigid notice and hearing requirement, the CAA places emphasis on public participation towards the end of the SIP process.[235] By this stage a state agency is likely to have committed substantial resources to the action and prepared documents in anticipation of a submittal to the EPA. This late-process emphasis ultimately works against public involvement in the SIP development process unless the agency is willing to expend resources in both soliciting early citizen input and in going through a late-process hearing. At best this is a duplication of effort, since one goal of early stakeholder involvement is to minimize the likelihood that a relatively expensive public hearing will be requested later on.

Thus, a SIP revision should be subject to a mandatory public hearing under the current CAA only if it (1) implicates an issue of significant public concern (i.e. it is non-minor); or (2) it creates or revises a requirement that is enforceable by citizens and that is still applicable to the source and in effect under the SIP.

For the longer term, Congress should amend section 110(a)(2)(A) of the CAA to require that states develop a public participation process subject to the Administrator's approval, replacing the current one size fits all provision mandating a hearing for all types of SIP action. This would enable states to propose public participation plans that are compatible with their administrative procedures statutes, permitting rules, etc. A state would need to demonstrate that the plan would always provide an opportunity for a

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[233] *See supra* notes 153-157 (discussing the amount of discretion available to the EPA to apply its regulations interpreting the CAA requirement for public hearing).

[234] *See supra* notes 100-103 and accompanying text.

[235] *See supra* notes 153 and accompanying text (mandating that a public hearing is required prior to submitting a SIP or SIP revision).

public hearing upon request and the Administrator could condition approval on certain, key SIP actions always requiring a hearing.[236] This would provide states with flexibility to build public participation process into different stages of SIP development, depending on the type and significance of the action. For SIPs that incorporate voluntary and innovative programs, public participation should be emphasized at an early stage so that the regulatory agency and concerned parties can come together and take maximum advantage of cooperative agreements.[237]

D. The EPA Should Adopt the Air Quality Management Workgroup's Recommendation to Adopt Expedited SIP Approval Procedures

Section 110 of the CAA should be amended to reduce the EPA response time for less complex SIPs. Alternate mechanisms for *de minimis* changes, such as letter approvals rather than federal register publication, or effectiveness by default upon expiration of a defined time period, would make for a more dynamic process. Small but environmentally beneficial changes to the SIP could then be made more quickly and implemented sooner. State and local economies would benefit in cases where a proposed SIP revision is environmentally neutral but needed in order for economic development to occur. It is probably reasonable that EPA needs up to eighteen months to review a complex SIP submittal such as a redesignation request with an accompanying maintenance plan because of the scope of the action and the need for a number of EPA experts to review the various portions of the submittal.[238]

However, such timelines are overly generous for minor submittals. Given the considerable amount of experience that the EPA and the states have accumulated in this area, it should be possible to define what constitutes a "minor" SIP amendment and require that these receive the EPA's approval in an expedited fashion. The administrative burden associated with processing a SIP revision may prompt a state to delay submitting revised versions of its rules until several revisions have occurred which can than be processed in one action. A good starting point might be the federal regulations governing minor and administrative amendments to Title V air permits.[239]

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[236] *See supra* notes 153-155 (discussing the possibility that EPA's regulations provide sufficient flexibility to approve different procedures for different kinds of SIP revisions).

[237] *See supra* notes 188, 195-196 and accompanying text (highlighting what can be achieved by groups acting voluntarily to improve or preserve air quality in order to avoid the regulatory consequences of nonattainment).

[238] *See supra* notes 51-52 and accompanying text.

[239] *See supra* notes 166-169 (illustrating that the Title V permitting program allows minor and administrative changes to be made without public participation whereas the full SIP process applies regardless of how minor the proposed revision may be).

E. Congress Should Amend the Clean Air Act to Allow an Increase in Utilization of Voluntary and Innovative Measures in Both Attainment and Nonattainment Areas

The statutory emphasis on enforcement[240] and the increasing complexity of environmental regulations,[241] along with the need to comply with increasingly stringent NAAQS[242] make the SIP process too inflexible for areas in, or close to, nonattainment with the ozone or $PM_{2.5}$ NAAQS. EPA policy measures and guidance documents have gone some way to ameliorating the rigidity problem[243] but a more fundamental review of the statutory and regulatory basis of the program is needed in order to streamline the process and to promote increased inclusion of voluntary and innovative programs that can be included in SIPs.

The present SIP process does not do enough to facilitate coordinated, voluntary initiatives on the part of business, citizen and environmental group interests. As shown by the Minnesota experience, the economic interests of business and the concerns of environmental groups and individuals can effectively blend together to make a difference.[244] The costs of nonattainment are considerable and the health impacts of ozone and $PM_{2.5}$ are well documented.[245] Voluntary groups such as Clean Air Minnesota can reach beyond the traditional stationary source focus of State agencies and encourage emissions reductions from automobiles, lawn mowers and wood stoves through cooperative approaches and educational efforts.[246] State and federal agency support and funding should be applied to the full extent available to support such efforts. Wisconsin's registry program is a good example of a state agency promoting and rewarding, through public recognition, voluntary emission reductions.[247]

While voluntary reduction is an excellent strategy for maintaining good air quality, it works less well for areas that are not already attaining the NAAQS. The EPA, through policy, has capped creditable emissions reductions at 6% for voluntary and innovative measures and requires that such measures still be permanent and enforceable against either a source or a state.[248] The policy is consistent with statutory provisions that reductions must be permanent and enforceable to be creditable.[249] In order to recognize

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[240] *See* discussion *supra* Parts III.B and III.C.

[241] *See supra* note 29 and accompanying text.

[242] *See supra* notes 108-111 and accompanying text.

[243] *See supra* notes 139-147 and accompanying text.

[244] *See supra* notes 195-198 and accompanying text.

[245] *See supra* notes 2-6 and accompanying text.

[246] *See supra* notes 195-197 and accompanying text (providing examples of voluntary programs in effect in Minnesota and Ohio).

[247] *See supra* notes 197-198 and accompanying text.

[248] *See supra* notes 143-147 and accompanying text.

[249] *See supra* note 51 and accompanying text (explaining statutory requirements for SIP approvability).

the valuable role that voluntary organizations can have, some flexibility needs to be introduced into the statute.

Business-led initiatives appear to be based on the existing or potential cost of a nonattainment designation.[250] While the SIP process does not directly facilitate voluntary and novel initiatives, the fact that the process is rigid and enforceable, along with the fact that nonattainment designations and sanctions are expensive does provide an indirect incentive to take action before they occur. Existing enforcement mechanisms and sanctions[251] should be left intact in order to preserve this incentive.

Since $PM_{2.5}$ and ozone levels are dictated to a large degree by transport of precursor pollutants from other states, one might ask how much can be achieved through local regulatory and voluntary action. The answer to this is (1) with more metropolitan areas adopting such measures, there will be a cumulative benefit to downwind states; and (2) relatively small local efforts can make the difference between attainment and nonattainment when an area, such as the Minneapolis-Saint Paul metropolitan area, has air quality close to a standard and when that standard would otherwise be exceeded if population and economic growth are not countered with reduction efforts.

VII. CONCLUSION

The SIP process was designed with the goal of careful, measured and enforceable progression towards attainment of federal air quality standards. This strategy has had some success but due to the increased number and complexity of air quality regulations, and the emergence of NAAQS for pollutants that travel great distances and have no threshold concentration, the process needs to adapt to these changes.

The process works well for the EPA because the requirements of approved SIPs are enforceable on an arms length basis. But the EPA, through concerted initiatives and regulatory changes to remove roadblocks, should do more to foster voluntary and innovative measures at the State level and to remove administrative burdens that distract State resources away from big picture initiatives.

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[250] *See supra* notes 196-198 and accompanying text.

[251] *See supra* notes 59-77 and accompanying text.