

REVIVING THE CLEAN AIR ACT’S REQUIREMENT THAT STATES ADEQUATELY FUND AND STAFF CLEAN AIR PROGRAMS

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Section 110(a)(2)(E)(i) of the Clean Air Act requires that each state submit to the U.S. Environmental Protection Agency (“EPA”) “necessary assurances that the State . . . will have adequate personnel [and] funding . . . to carry out” the state’s implementation plan to improve the state’s air quality. Though this provision has been a part of the Clean Air Act since 1970, it has garnered little academic attention and has largely been ignored by states and by EPA. This Note presents legal and policy arguments for a revival of the section 110(a)(2)(E)(i) requirement through a more rigorous approval process for newly submitted state implementation plans and a more robust enforcement regime for states that fail to adequately fund their clean air programs.

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INTRODUCTION

The Clean Air Act (“CAA” or “Act”) requires state governments and the U.S. Environmental Protection Agency (“EPA”) to work together to improve air quality throughout the country. EPA is responsible for identifying air pollutants and setting maximum exposure levels for the pollutants that it determines endanger public health.¹ These maximum exposure levels, called the National Ambient Air Quality Standards (“NAAQS”), must be met in every state.

1. 42 U.S.C. §§ 7409(a)–(b) (2012); see also Michael R. Barr, *Introduction to the Clean Air Act: History, Perspective, and Direction for the Future*, in *THE CLEAN AIR ACT HANDBOOK* 1, 5 (Robert J. Martineau & David P. Novello, eds., 2d ed. 2004). EPA has set NAAQS for six pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. See *Criteria Air Pollutants*, EPA, <https://perma.cc/AD6B-PZZZ>.

Under the CAA, states have primary responsibility for meeting the NAAQS within their own borders.² States have flexibility to determine how to implement programs to meet the federal standards, but they are also largely responsible for funding their own clear air programs.³ In recent years, many state legislatures have made significant cuts to clean air funding. The National Association of Clean Air Agencies explains that “[s]tate and local air quality agencies have struggled with insufficient resources. . . . The adverse economic situation at the state and local levels strains already overburdened budgets and causes air agencies to make painful choices to cut air pollution programs that are important for public health and/or eliminate staff.”⁴ For example, since 2005, Texas has cut funding for air quality and assessment over seventy percent;⁵ expenses per permit dropped over forty percent;⁶ the number of permits reviewed per staff member has doubled.⁷ Meanwhile, states like Texas struggle with poor air quality. For instance, an area of Texas with a population roughly equal to that of Pennsylvania is out of attainment for the eight-hour ozone

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2. 42 U.S.C. § 7401(a)(3) (2012). States must also include some commitment to reduce pollution that travels outside of a state’s borders. *See id.* § 7410(a)(2)(D)(i) (“good neighbor provision”).
 3. The Clean Air Act requires states to provide at least 40% of the funding for clean air programs. *Id.* § 7405(a)(1)(A). In reality, states provide over 75% of their own funding. *See Fiscal 2016 Appropriations: Interior, Environment: Hearing Before the Subcomm. on Interior, Environment, and Related Agencies*, 114th Cong. 2 (2015) (statement of National Association of Clean Air Agencies), <https://perma.cc/8ZSC-GVP7> [hereinafter *Fiscal 2016 Appropriation Testimony*].
 4. *See Fiscal 2016 Appropriation Testimony*, *supra* note 3, at 2.
 5. The data used has been adjusted for inflation. In 2005, Texas spent \$342 million on air quality assessment and planning; this dropped to \$171 million in 2013 and is projected to be \$119 million in 2017, a reduction of 71%. TEX. COMM’N ON ENVTL. QUALITY, LEGISLATIVE APPROPRIATIONS REQUEST FOR FISCAL YEARS 2008 AND 2009 at 2.A. (2006), <https://perma.cc/88EX-S9VW> [hereinafter TEX. FISCAL REPORT 2008 AND 2009]; TEX. COMM’N ON ENVTL. QUALITY, LEGISLATIVE APPROPRIATIONS REQUEST FOR FISCAL YEARS 2016 AND 2017 at 2.A. (2014), <https://perma.cc/MVJ5-M3Y8> [hereinafter TEX. FISCAL REPORT 2016 AND 2017]. Inflation rates calculated using the Consumer Price Index. *Consumer Price Index*, BUREAU OF LAB. STATS., <https://perma.cc/GD3P-CH66>. Other percentages in this paragraph are also adjusted for inflation.
 6. Expenses per permit issued decreased 42%. In 2005, Texas spent \$11.4 million on air permitting and reviewed 5,741 permit applications, and in 2013, Texas spent \$14.3 million and reviewed 9,482 permit applications. *See* TEX. FISCAL REPORT 2008 AND 2009, *supra* note 5, at 2.A.–3.A.; TEX. FISCAL REPORT 2016 AND 2017, *supra* note 5, at 2.A.–3.A.
 7. The average number of permits per staff was twenty-seven in 2006 and fifty-four in 2014. *See* TEX. FISCAL REPORT 2008 AND 2009, *supra* note 5, at 3.A. (In 2006, the Texas Commission on Environmental Quality’s air permitting division had 203.5 full-time employees responsible for reviewing 5,600 permits); TEX. FISCAL REPORT 2016 AND 2017, *supra* note 5, at 3.A. (In 2014, the air permitting division had 192.8 full-time employees responsible for reviewing 10,500 permits).

standard—that is, it has a higher level of smog than that which EPA has determined is safe.⁸

This Note focuses on section 110(a)(2)(E)(i) of the CAA (the “adequate-state-resource requirement” or “section 110(a)(2)(E)(i) requirement”),⁹ which requires that each state submit to EPA “necessary assurances that the State . . . will have adequate personnel [and] funding . . . to carry out such implementation plan.”¹⁰ This requirement has garnered little attention in the past three decades. It seems to be largely ignored by states and by EPA in the state implementation plan (“SIP”) approval and enforcement process, and it has rarely been the subject of litigation by industry or environmental groups. But given the massive funding cuts facing many state clean air programs, renewed attention to section 110(a)(2)(E)(i) is critical. This Note presents legal and policy arguments that this requirement should be revived.

Parts I and II provide background information, describing how the adequate-state-resource requirement operates and tracing the history of this requirement from the passage of the CAA to the present. Part III presents the argument that EPA’s current approval practice with respect to section 110(a)(2)(E)(i) is impermissibly lenient. This Part proposes approval criteria to be used by EPA that could be implemented via a new regulation. Citizen groups can also play a role in effectuating this provision’s requirements by commenting on dubious state plans during EPA’s rulemaking and by suing when

8. As of October 1, 2015, eighteen counties within the Dallas-Fort Worth and Houston metropolitan areas are out of attainment. *The Green Book Nonattainment Areas for Criteria Pollutants*, EPA, <https://perma.cc/PS9K-ECTX>; *Classifications of 8-Hr Ozone (2008) Nonattainment Areas*, EPA, <https://perma.cc/NGM5-W2P7>. Nearly thirteen million people reside in these eighteen counties. *Population Estimates of Texas Counties, 2010-2014: Arranged in Alphabetical Order*, TEX. ST. LIBR. & ARCHIVES COMM’N, <https://perma.cc/ZW9F-KP3J>.
9. This Note uses “adequate-state-resource requirement” and “section 110(a)(2)(E)(i) requirement” interchangeably as shorthand to refer to the portion of section 110(a)(2)(E)(i) that requires that each State Implementation Plan provides “necessary assurances that the State . . . will have adequate personnel [and] funding . . . to carry out such implementation plan.”
10. 42 U.S.C. § 7410(a)(2)(E)(i) (2012). The full text of section 110(a)(2)(E)(i) reads: “necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof).” *Id.* However, this Note does not address the part of section 110(a)(2)(E)(i) that requires that a SIP contain an assurance that the state has adequate *authority* to carry out the plan. This authority requirement is completely separate from the personnel and funding (resources) requirement and is treated as such by EPA. *See, e.g.*, *Partial Approval and Disapproval of Air Quality Implementation Plans; Arizona; Infrastructure Requirements for Ozone and Fine Particulate Matter*, 77 Fed. Reg. 66,398, 66,401 (Nov. 5, 2012) (to be codified at 40 C.F.R. pt. 52). This Note also does not address the potential for administration by a local, rather than state, air agency.

EPA approves plans that do not meet the requirement. Part IV then describes EPA's current enforcement practice under section 110(a)(2)(E)(i) and suggests that EPA should take more deliberate enforcement action when states underfund their clean air programs. This Part suggests that citizen groups can assist EPA by drawing the agency's attention to states that gradually reduce clean air funding. Finally, Part V argues that the robust approval and enforcement scheme proposed in this Note could benefit the CAA's cooperative federalism structure as a whole by placing incentives on states to better fund their clean air programs and providing additional benefits for climate change policy.

I. OVERVIEW OF THE ADEQUATE-STATE-RESOURCE REQUIREMENT AND STATE IMPLEMENTATION PLANS

State implementation plans are at the heart of the CAA's cooperative federalism scheme. The CAA requires that each state create a SIP describing how the state will meet each NAAQS set by EPA.¹¹ These plans must be submitted to EPA for approval.¹² Once approved by EPA, a SIP is binding on the state under federal law.¹³ A SIP is a living document; there are many circumstances under which a state is required to update or submit new additions to its SIP.¹⁴ For example, states are required to submit new "infrastructure" SIPs within three years of the promulgation of a new air quality standard;¹⁵ to submit "nonattainment" SIPs demonstrating progress towards any air quality standards that have not yet been met;¹⁶ and to submit "Prevention of Significant Deterioration" SIPs showing that the state's major polluters are not causing deteriora-

11. 42 U.S.C. § 7410(a)(1).

12. *Id.*

13. *See id.* § 7413 (providing for federal enforcement when a state fails to comply with its SIP).

14. The term "state implementation plan" is used in two ways: it can refer to either the state's implementation plan as a whole or to refer to a portion of the plan (e.g., "infrastructure SIP for 2008 ozone"). *See* EPA, GUIDANCE ON INFRASTRUCTURE STATE IMPLEMENTATION PLAN (SIP) ELEMENTS UNDER CLEAN AIR ACT SECTIONS 110(A)(1) AND 110(A)(2) 1 n.2 (2013), <https://perma.cc/JW2G-RFPB> [hereinafter EPA INFRASTRUCTURE SIP GUIDANCE]. Although section 110(a)(2)(E)(i) applies to all SIP submissions, it is important to note that it does not apply to every possible document that a state could submit to EPA relating to clear air programs. For instance, this requirement may not apply to a state's submission of a "maintenance plan" that solely demonstrates how the state will maintain the NAAQS level that it has already attained in a designated area. *See* Wall v. EPA, 265 F.3d 426, 426 (6th Cir. 2001). Furthermore, EPA believes that the scope of the application of this requirement is somewhat ambiguous. *See, e.g.,* Approval and Promulgation of State Implementation Plans; Arizona; Infrastructure Requirements for 2008 Lead (Pb) and the 2008 8-Hour Ozone National Ambient Air Quality Standards (NAAQS), 79 Fed. Reg. 69,796, 69,797 (Nov. 24, 2014) (to be codified at 40 C.F.R. pt. 52).

15. 42 U.S.C. § 7410(a)(1).

16. *Id.* § 7502(b).

tion in air quality.¹⁷ Given these requirements, state air agencies are often required to update their SIPs, and EPA is continuously evaluating new state SIP submissions.

The CAA requires EPA to consider whether the state SIP submissions comply with the thirteen statutory requirements enumerated in section 110(a)(2). If EPA determines that a SIP meets all of the statutory criteria, it must fully approve the SIP.¹⁸ Alternatively, if EPA determines that a SIP meets some but not all of the criteria, it must partially approve the SIP (with respect to the requirements that have been met) and partially disapprove the SIP (with respect to the other, unmet requirements).¹⁹ EPA must disapprove in full a SIP that meets none of the statutory requirements.²⁰

The adequate-state-resource requirement, section 110(a)(2)(E)(i), is one of the thirteen statutory criteria with which each SIP submission must comply in order to be approved in full by EPA. Section 110(a)(2)(E)(i) of the CAA requires that each SIP provide “necessary assurances that the State . . . will have adequate personnel [and] funding . . . to carry out such implementation plan.”²¹ EPA has reiterated that the adequate-state-resource requirement applies to all SIP submissions.²²

Once a SIP is approved, all specific strategies or commitments in the SIP are binding upon the states and enforceable under federal law.²³ With respect to the adequate-state-resource requirement, a SIP that is approved for section 110(a)(2)(E)(i) gives rise to a substantive state commitment to adequately fund and staff its clean air programs as it committed to do in the SIP. If a state fails to meet this obligation, which stems from its own approved SIP, EPA can take enforcement action against the state for failure to adequately fund and staff its clean air programs, for example, by withdrawing state highway funds.²⁴

17. *Id.* § 7471.

18. *Id.* § 7410(k)(2). Conditional approval means that the state must complete certain measures within a year. *Id.* § 7410(k)(4).

19. *Id.* § 7410(k)(3); *see also, e.g.*, Limitations of Approval of Prevention of Significant Deterioration Provisions Concerning Greenhouse Gas Emitting-Sources in State Implementation Plans, 75 Fed. Reg. 82,536, 82,539. (Dec. 30, 2010) [hereinafter Narrowing Rule].

20. 42 U.S.C. §§ 7410(k)(3), 7410(c)(1)(B).

21. *Id.* § 7410(a)(2)(E)(i).

22. *See, e.g.*, Guidance Memorandum from Richard D. Wilson, Acting Assistant Adm’r for Air and Radiation to EPA Regional Adm’r (Oct. 24, 1997), <https://perma.cc/KA94-UJVS> (“[A]ll SIP creditable programs . . . must demonstrate adequate personnel and program resources to implement the program.”).

23. *See, e.g.*, Bayview Hunters Point Cmty. Advocates v. Metro. Transp. Comm’n, 366 F.3d 692, 695 (9th Cir. 2004); Conservation Law Found. v. Busey, 79 F.3d 1250, 1258 (1st Cir. 1996).

24. EPA may take enforcement action against a state when “*any requirement* of an approved plan . . . is not being implemented.” 42 U.S.C. § 7509(a)(4) (emphasis added); *see also id.* §§ 7413(a)(2), 7410(m) (other enforcement provisions); *id.* §§ 7410(k)(5)–(6) (non-enforcement actions that can be taken against states).

II. HISTORY OF THE ADEQUATE-STATE-RESOURCE REQUIREMENT

The modern incarnation of the Clean Air Act was passed in 1970, with a grand, aspirational vision of eliminating air pollution across the nation. When it was passed, the CAA included the cooperative federalism scheme that continues to operate today at the core of the statute. Originally, the CAA required that each SIP meet eight statutory requirements, one of which was the same adequate-state-resource requirement that remains in effect today: “necessary assurances that the State . . . will have adequate personnel [and] funding . . . to carry out such implementation plan.”²⁵

A. Judicial Interpretation

In the early 1970s, EPA approved many states’ first SIP submissions.²⁶ Environmental groups, led by Natural Resources Defense Council (“NRDC”), soon launched lawsuits challenging EPA’s approval of SIPs on several grounds, including the agency’s review of the adequate-state-resource requirement.²⁷ In consolidated cases challenging EPA’s approval of Massachusetts and Rhode Island’s SIPs, NRDC argued that the word “assurance” required the state SIP submission to include a legally binding commitment of a precise amount of resources that would be used on clean air programs in the future, which could later be enforced through EPA action or—especially important to environmental groups like NRDC—through a citizen suit. NRDC argued that a mere description of the resources, as required by the regulation promulgated by EPA, could not suffice to meet the statute’s requirements and therefore could not serve as a basis for EPA approval.²⁸

In a 1973 decision, the First Circuit rejected the environmentalists’ interpretation of the adequate-state-resource requirement.²⁹ The court determined that NRDC’s interpretation would violate the state separation-of-powers scheme because the state’s executive branch, through its environmental agency or governor, cannot bind future legislatures to appropriate a set amount of funds for air programs.³⁰ It explained that the environmentalists’ proposal “might have a symbolic effect; however, they would have little more, since a

25. This requirement was originally designated as Clean Air Act section 110(a)(2)(F). *See* Pub. L. No. 91-604, § 4, 84 Stat. 1676, 1680 (1970).

26. *See, e.g.*, Approval and Promulgation of Implementation Plans, 37 Fed. Reg. 10,842 (May 31, 1972) (“All 50 States, plus the District of Columbia, Puerto Rico, Virgin Islands, Guam, and American Samoa have submitted implementation plans.”).

27. *See* Nat. Res. Def. Council v. EPA (*NRDC v. EPA I*), 478 F.2d 875, 883–84 (1st Cir. 1973); Nat. Res. Def. Council v. EPA (*NRDC v. EPA II*), 494 F.2d 519, 527 (2d Cir. 1974).

28. *NRDC v. EPA I*, 478 F.2d at 883–84.

29. *Id.*

30. *Id.*

governor or even a present session of the legislature cannot make binding commitments on behalf of their successors, nor would such representations seem to be enforceable.”³¹ After foreclosing the environmentalists’ interpretation, the court explained that it would defer to EPA’s determination as to whether a state’s assurance was adequate.³² It found that the statutory language of the adequate-state-resource requirement indicates that “Congress has left to the [EPA] Administrator’s sound discretion determination of what assurances are necessary. . . . The ‘necessary assurances’ clause seems to us to call less for rhetoric than for the Administrator’s reasoned judgment as to the adequacy of resources.”³³

One year later, the Second Circuit adopted the First Circuit’s interpretation of the adequate-state-resource requirement.³⁴ In rejecting a challenge to EPA’s approval of New York’s SIP, the court clarified that the deference afforded to EPA does have a limit: “a plan which provides only a negative statement that resources are inadequate cannot be approved.”³⁵ Because New York had apparently done so, the court remanded to EPA to provide a more detailed rationale for its approval.

These two early circuit cases created a settled judicial interpretation of the adequate-state-resource requirement. It was not challenged again for nearly three decades. In the early 2000s, the NRDC renewed litigation about the proper interpretation of the adequate-state-resource requirement in a challenge to EPA’s approval of a Texas SIP revision. In 2004, the Fifth Circuit in *BCCA Appeal Group v. EPA* rejected NRDC’s challenge.³⁶ Relying on the First and Second Circuit precedent from the early 1970s, the court reaffirmed the early interpretation that EPA’s “sound discretion” is key to determining whether assurances are adequate under section 110(a)(2)(E)(i).³⁷ The court held that

31. *Id.*

32. *Id.*

33. *Id.* at 884.

34. *NRDC v. EPA II*, 494 F.2d 519, 527 (2d Cir. 1974) (“The present posture of this aspect of the plan is thus identical to that confronting the First Circuit with regard to the Massachusetts plan. Along with that Circuit, we recognize the practical side of this issue, including ‘the difficulties faced by the Administrator were a state adamantly to refuse to provide for sufficient personnel and funding.’ We also agree ‘that Congress left to the Administrator’s sound discretion determination of what assurances are necessary, and that the Administrator was realistic in concluding that an inventory of state resources constitutes ‘the best practical assurances he can obtain.’ Finally, we are in full accord with the comment that ‘the necessary assurances clause seems . . . to call less for rhetoric than for the Administrator’s reasoned judgment as to the adequacy of resources.’” (citations omitted)).

35. *Id.*; see also *Council of Commuter Orgs. v. Gorsuch*, 683 F.2d 648, 656 (2d Cir. 1982); *Friends of the Earth v. EPA*, 499 F.2d 1118, 1123 (2d Cir. 1974).

36. 355 F.3d 817, 844–45 (5th Cir. 2003).

37. These cases were decided before much of the modern administrative framework came into place, including the familiar tests laid out in *Chevron U.S.A. Inc. v. Natural Resources Defense*

EPA's "past experience with Texas's air quality program and its relationship with the state" warranted deference to EPA's determination that the Texas assurances met the minimum requirements.³⁸

B. EPA Guidance

In 1971, EPA promulgated a regulation that directs states to include three elements in their SIP submissions to meet the adequate-state-resource requirement: (1) "a description of the resources available to the State and local agencies at the date of submission of the plan," (2) a description of "any additional resources needed to carry out the plan during the 5-year period following its submission," and (3) "projections of the extent to which resources will be acquired at 1-, 3-, and 5-year intervals."³⁹ This regulation remains in effect today.

Over time, non-binding EPA guidance occasionally reiterated and expanded on the 1971 regulation's list of information that states must provide to EPA in their SIP submissions. For example, a 1978 guidance document directed states to include in their SIP submissions:

An identification of and commitment to the financial and manpower resources necessary to carry out the plan . . . made at the highest executive level having responsibility for SIP . . . includ[ing] written evidence that the State, the general purpose local government or governments, and all state, local or regional agencies have included appropriate provision in their respective budgets and intend to continue to do so in future years for which budgets have not yet been finalized⁴⁰

A recently published non-binding EPA guidance document similarly elaborates on the regulatory requirement with respect to infrastructure SIP submissions:

[An] infrastructure SIP submission should identify organizations that will participate in developing, implementing, and enforcing EPA-approved SIP provisions related to the new or revised NAAQS and thus require resources for doing so. The infrastructure SIP submission should describe the resources that are available to these organizations

Council, Inc., 467 U.S. 837 (1984), and *Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29, 43 (1983).

38. *BCCA Appeal Grp.*, 355 F.3d at 844.

39. *See* Requirements for Preparation, Adoption, and Submittal of Implementation Plans, 36 Fed. Reg. 22,398, 22,404 (Nov. 21, 1971). In 1986, the SIP application requirements were renumbered and the wording of this subsection was slightly changed. *See* Air Quality Implementation Plans; Restructuring SIP Preparation Regulations, 51 Fed. Reg. 40,674 (Nov. 7, 1986).

40. Criteria for Proposing Approval of Revision to Plans for Nonattainment Areas, 43 Fed. Reg. 21,673, 21,675 (May 18, 1978).

for carrying out the SIP. Resources to be described should include: (1) those available to these organizations as of the date of infrastructure SIP submission; (2) those considered necessary during the 5 years following infrastructure SIP submission; and (3) projections regarding acquisition of the described resources. . . . [T]he air agency should explain in the infrastructure SIP submission how resources and personnel . . . are adequate and provide any additional assurances needed to meet changes in resource requirements by the new or revised NAAQS.⁴¹

Guidance documents like these have largely reiterated the longstanding regulatory requirement and have provided some additional suggestions for information that states should submit to EPA, but have provided little further insight into how EPA considers whether states have met the requirements of § 110(a)(2)(E)(i).

C. Clean Air Act Amendments

Congress passed two major sets of amendments to the CAA in 1977 and 1990. These amendments preserved the core cooperative federalism structure of the CAA, but made some fundamental alterations to the structure of SIPs by requiring new permitting programs, allowing states additional time to meet the NAAQS and adding EPA enforcement options.⁴² These amendments did not alter the language of the adequate-state-resource requirement, although other changes to the statutory language caused the provision to move to its current position in section 110(a)(2)(E)(i).⁴³ There is scant legislative history from the amendments that indicates significant attention to the adequate-state-resource requirement, although a few statements suggest that some legislators were aware of the requirement and intended to preserve it. For example, Rhode Island Senator John Chafee commented in a 1990 Senate debate that “[t]he failure to show how . . . measures will be funded, or to include commitments from the authorized funding sources, will preclude approval of the State’s plan. EPA is not authorized to approve plans containing measures that are speculative because of the lack of funding commitments.”⁴⁴

41. EPA INFRASTRUCTURE SIP GUIDANCE, *supra* note 14, at 40–41.

42. *See* Barr, *supra* note 1, at 6.

43. *See* 42 U.S.C. § 7410(a)(2)(E)(i) (2012). This requirement was originally designated as Clean Air Act section 110(a)(2)(F), *see* Pub. L. No. 91-604, §4, 84 Stat. 1676, 1680 (1970), and was codified at 42 U.S.C. § 1857c-5(a)(2)(F) (1974).

44. CONG. RES. SERV., SENATE DEBATE 10-27-90, COMMENTS OF SENATOR CHAFFEE, *in A LEGISLATIVE HISTORY OF THE CLEAN AIR ACT AMENDMENTS OF 1990*, at 959 (1993); *see also* S. REP. NO. 101-228, at 3414 (1989) (“Credit should be given for [SIP] elements . . . only where such funding commitments, regulatory requirements or tax policies in place, are enforceable and are incorporated into the applicable implementation plan.”); H.R. REP. NO.

In summary, the statutory language of the adequate-state-resource requirement has remained unchanged since the passage of the CAA. Early judicial interpretation of this requirement foreclosed an interpretation of “assurance” in the statute that required a specific commitment of future resources that would become legally binding against the state. Instead, courts have emphasized the importance of EPA’s role in providing “reasoned judgment as to the adequacy of resources” in a state’s submitted SIP.⁴⁵ Since 1971, EPA’s own regulation has required that states submit particular documentation for the SIP to be approved, and EPA guidance has regularly reaffirmed and expanded on this regulatory requirement. Since the 1970s, the adequate-state-resource provision has remained unchanged through two major amendments, has rarely prompted litigation, and has largely been out of the public eye.

III. SECTION 110(a)(2)(E)(i) AND EPA APPROVAL OF STATE SIP SUBMISSIONS

This Part begins by demonstrating that the plain language of section 110(a)(2)(E)(i) requires EPA to engage in a three-step process to approve SIPs. Then, this Part shows that EPA’s current approval practice is impermissible and explains how EPA should change its practices to best effectuate section 110(a)(2)(E)(i). Finally, it suggests how citizen groups can help bring about that change.

A. Section 110(a)(2)(E)(i) Requires EPA to Follow a Three-Step Process to Approve SIPs

The plain language of section 110(a)(2)(E)(i) requires that EPA follow three steps to approve state SIP submissions with respect to the adequate-state-resource requirement: (1) EPA must ensure that the state has provided a resource “assurance” in its SIP submission; (2) EPA must ensure that this assurance meets the requirements of the binding regulation; and (3) EPA must make an independent determination that the state will provide adequate resources to carry out the SIP.

490, 101st Cong., 2d Sess., pt. 1, at 218 (1990); Alan Mitchell, *Transportation Planning and the Clean Air Act*, 25 ENVTL. L. 927, 936–37 (1995).

45. *NRDC v. EPA I*, 478 F.2d 875, 884 (1st Cir. 1973); *see also NRDC v. EPA II*, 494 F.2d 519, 527 (2d Cir. 1974); *BCCA Appeal Grp. v. EPA*, 355 F.3d 817, 844 (5th Cir. 2003); *Council of Commuter Orgs. v. Gorsuch*, 683 F.2d 648, 658 (2d Cir. 1982); *Friends of the Earth v. EPA*, 499 F.2d 1118 (2d Cir. 1974).

1. States Must Submit an “Assurance”

Section 110(a)(2)(E)(i) requires that each SIP provide “necessary *assurances* that the State . . . will have adequate personnel [and] funding . . . to carry out such implementation plan.”⁴⁶ “Assurance” is the operative term in the provision. When the First Circuit considered NRDC’s challenge to EPA’s approval of Massachusetts’s and Rhode Island’s SIPs with respect to the adequate-state-resource requirement, the court consulted Webster’s Dictionary to define assurance as “something that inspires or tends to inspire confidence . . . the quality or state of being sure or certain: freedom from doubt.”⁴⁷

It is thus clear from the plain meaning of the text that the state’s SIP submission must contain a statement that inspires confidence or certainty. Although the statutory provision does not explicitly state the object of the state’s assurance—in whom must the statement inspire confidence?—the structure of the CAA makes clear that the statement must inspire confidence in EPA, because EPA is the entity that reviews SIPs. So, the word “assurance” in section 110(a)(2)(E)(i) requires that the statement submitted by the state to EPA be one that could inspire confidence in EPA that the state will provide adequate resources. EPA should consider this “assurance” requirement as a threshold inquiry: if the state does not provide a submission that, on its face, could inspire confidence that the state will adequately fund its programs, then EPA must disapprove the SIP with respect to section 110(a)(2)(E)(i) for failure to provide an “assurance” at all.

2. The State Assurance Must Comply with EPA’s Regulation

The “resources” provision in EPA’s implementing regulation represents the agency’s longstanding interpretation of the statutory term “assurance.”⁴⁸ This regulation requires that each SIP submission contain “a description of the resources available to the State and local agencies at the date of submission of the plan and of any additional resources needed to carry out the plan during the 5-year period following its submission . . . includ[ing] projections of the extent to which resources will be acquired at 1-, 3- and 5-year intervals.”⁴⁹ EPA may

46. 42 U.S.C. § 7410(a)(2)(E)(i) (2012) (emphasis added).

47. *NRDC v. EPA I*, 478 F.2d at 883 (quoting Webster’s Third New International Dictionary). A very similar definition can be found in dictionaries today. See, e.g., *Assurance*, MERRIAM-WEBSTER, <https://perma.cc/D252-BMEU> (defining assurance as “something that inspires or tends to inspire confidence”).

48. Resources, 40 C.F.R. § 51.280 (2016). Although it does not appear that any parties have challenged the resources regulation, EPA’s regulation, as an interpretation of an agency-specific statute, would receive deference and would likely be upheld under *Chevron U.S.A. Inc. v. Natural Resource Defense Council, Inc.*, 467 U.S. 837 (1984).

49. Resources, 40 C.F.R. § 51.280.

only approve state SIP submissions that contain the three elements required in the regulation.

3. *EPA Must Make an Independent Determination That State Resources Will Be Adequate*

It is necessary, but not sufficient, that a SIP submission contain an assurance that complies with the regulation. The language of the statute makes clear that in order for the SIP to be approved, EPA must additionally use its independent judgment to determine that the assurance submitted by the state demonstrates that state resources will be adequate.

The text of section 110(a)(2)(E)(i) requires that each SIP provide “assurances that the State . . . will have *adequate personnel [and] funding* . . . to carry out such implementation plan.”⁵⁰ Adequacy is a key component of this statutory provision. EPA’s duty to approve SIPs comes from section 110(k)(3), which mandates that EPA approve each component of a SIP when it meets the “applicable requirement[] of this chapter.”⁵¹ Therefore, EPA is statutorily obligated to make a determination as to whether state personnel and funding will be adequate when making its decision for approval.

Judicial interpretation of section 110(a)(2)(E)(i) has emphasized that EPA must make an independent determination of the adequacy of the state’s assurance.⁵² EPA’s determination *does not* mean that the assurance legally binds the state to a particular resource commitment. The assurance submitted by the state executive branch predicts, but does not control, the state legislative branch’s future appropriations.

The plain meaning of the text is reinforced by § 706 of the Administrative Procedure Act (“APA”), which subjects administrative agencies like EPA to arbitrary-and-capricious review.⁵³ Each agency must “examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.”⁵⁴ The prospect of arbitrary-and-capricious review means that EPA’s decision to approve a SIP must be made with a rational connection between the facts included in the state’s SIP submission and the decision made by EPA to approve the SIP, with an articulable explanation for doing so. With respect to the adequate-state-resource re-

50. 42 U.S.C. § 7410(a)(2)(E)(i) (emphasis added).

51. *Id.* § 7410(k)(3).

52. *NRDC v. EPA I*, 478 F.2d at 884 (referring to the “reasoned judgment as to the adequacy of resources”); *see also* BCCA Appeal Grp. v. EPA, 355 F.3d 817, 844 (5th Cir. 2003). *See generally* *NRDC v. EPA II*, 494 F.2d 519 (2d Cir. 1974).

53. 5 U.S.C. § 706(2)(A) (2012).

54. *Motor Vehicles Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (citations omitted).

quirement, then, EPA must make an independent judgment about the adequacy of the state's resources.

B. EPA's Current Approval Practice is Impermissible

EPA records show that there is currently not a single state infrastructure SIP submission that is in a state of “disapproval” or “proposed disapproval” for failure to meet the adequate-state-resource requirement.⁵⁵ This means that each and every complete infrastructure SIP that has been considered by EPA and is currently in effect has been approved with respect to section 110(a)(2)(E)(i). An examination of these approved SIPs suggests that EPA currently may not be engaging in *any* of the three required steps in the section 110(a)(2)(E)(i) SIP approval process: EPA has approved many SIP submissions that do not constitute an assurance, comply with the implementing regulation, or adequately provide a rational basis upon which EPA can make a determination that resources will be adequate.

1. EPA Impermissibly Approves State SIP Submissions that Are Not “Assurances”

Three sets of recently approved SIP submissions illustrate EPA's lenient approach to section 110(a)(2)(E)(i):⁵⁶

- Many recent Texas infrastructure SIP submissions have been approved with only the brief statement: “The [Texas Commission on Environmental Quality] has consistently included assurances in SIP revisions that the State has adequate personnel, funding, and authority under State law to carry out the SIP.”⁵⁷

55. See *National Status of State SIP Infrastructure Requirements*, EPA, <https://perma.cc/9A6K-PXKH>. Although three states are listed as in “disapproval” for section 110(a)(2)(E) generally—Arizona (1997 Ozone, 1997 PM_{2.5}, 2006 PM_{2.5}), Mississippi (2008 8-hour Ozone), and New Jersey (2006 PM_{2.5})—all three have been approved with respect to the section 110(a)(2)(E)(i) funding and personnel requirement. See *Partial Approval and Disapproval of Air Quality Implementation Plans*; Arizona; *Infrastructure Requirements for Ozone and Fine Particulate Matter*, 77 Fed. Reg. 66,398, 66,401 (Nov. 5, 2012) (to be codified at 40 C.F.R. pt. 52); *Approval and Promulgation of Implementation Plans*; Mississippi; *Infrastructure for the 2008 8-Hour Ozone National Ambient Air Quality Standards*, 80 Fed. Reg. 11,131, 11,132 (Mar. 2, 2015) (to be codified at 40 C.F.R. pt. 52); *Approval and Promulgation of Implementation Plans*; New Jersey; *Infrastructure SIP for the 1997 8-Hour Ozone and the 1997 and 2006 Fine Particulate Matter Standards*, 78 Fed. Reg. 35,764 (June 14, 2014) (to be codified at 40 C.F.R. pt. 52).

56. Note that the statements quoted below from Texas and Washington represent the entirety of those states' submissions with regard to section 110(a)(2)(E)(i).

57. See, e.g., TEX. COMM'N ON ENVTL. QUALITY, STATE IMPLEMENTATION PLAN (SIP) INFRASTRUCTURE REQUIREMENTS OF FEDERAL CLEAN AIR ACT (FCAA), § 110(a)(2) (PM_{2.5}) 7 (Nov. 23, 2009), <https://perma.cc/3ECP-48PQ>; TEX. COMM'N ON ENVTL.

- Washington provided slightly more information in a recent submission: “[Washington’s] Air Quality Program is funded through the following funding sources: the state General Fund, Section 105 of the CAA grant program, Air Operating Permit Account . . . , and Air Pollution Control Account. . . . The funding is appropriated biennially by the state’s Legislature.”⁵⁸
- By some contrast, one recent Ohio SIP provided an appendix to its SIP submission that contained a chart showing all state funding sources, estimated annual revenue, and details about revenue acquisition for each account.⁵⁹

Many of the submissions that EPA has approved do not contain sufficient detail to qualify as assurances under the statute. For example, neither the Texas nor Washington submissions described above can be assurances because neither one clearly provides any plausible basis on which EPA could find that resources will be adequate. As the Supreme Court recently made clear, EPA does not have the authority to take action that amounts to ignoring or re-writing the express terms of a statute.⁶⁰ Because the CAA specifically requires that EPA

QUALITY, STATE IMPLEMENTATION PLAN (SIP) INFRASTRUCTURE REQUIREMENTS OF FEDERAL CLEAN AIR ACT (FCAA), § 110(a)(2) (2008 OZONE) 7 (Apr. 4, 2008), <https://perma.cc/B2TC-EJRS>; *see also* Approval and Disapproval and Promulgation of Implementation Plans; Texas; Infrastructure and Interstate Transport Requirements for the 1997 Ozone and the 1997 and 2006 PM_{2.5} NAAQS, 76 Fed. Reg. 81,371 (Dec. 28, 2011) (to be codified at 40 C.F.R. pt. 52) (approving Texas SIP submissions).

58. WASH. DEP’T. OF ECOLOGY, WASHINGTON STATE IMPLEMENTATION PLAN INFRASTRUCTURE SIP CERTIFICATION FOR THE 1997 8-HOUR OZONE NATIONAL AMBIENT AIR QUALITY STANDARD 9 (2012), <https://perma.cc/FZ6C-CYKJ> (giving a brief description of revenue accounts); *see also* Partial Approval and Promulgation of Implementation Plans; Washington: Infrastructure Requirements for the 1997 8-Hour Ozone National Ambient Air Quality Standard, 77 Fed. Reg. 30,902 (May 24, 2012) (to be codified at 40 C.F.R. pt. 52) (approving Washington SIP submission under section 110(a)(2)(E)(i)). Many other states have provided (and EPA has approved) similar submissions. *See, e.g.*, PENN. DEP’T OF ENVTL. PROT., PROPOSED STATE IMPLEMENTATION PLAN REVISION SECTIONS 110(A)(1) AND 110(A)(2) REQUIREMENTS FOR THE 2008 LEAD NATIONAL AMBIENT AIR QUALITY STANDARD 8–9 (June 2012), <https://perma.cc/Z49Q-9YHC> (providing a more detailed explanation of revenue sources); *see also* Approval and Promulgation of Implementation Plans; Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania; Infrastructure Requirements for the 2008 Lead National Ambient Air Quality Standards, 79 Fed. Reg. 19,009 (Apr. 7, 2014) (to be codified at 40 C.F.R. pt. 52) (approving Pennsylvania’s SIP submission).
59. OHIO ENVTL. PROT. AGENCY, OHIO LEAD INFRASTRUCTURE SIP APPENDIX 4, <https://perma.cc/8ER2-A2L2>; *see also* Approval and Promulgation of Air Quality Implementation Plans; Ohio; Infrastructure SIP Requirements for the 2008 Lead and 2010 NO₂ NAAQS, 79 Fed. Reg. 60,075 (Oct. 6, 2014) (to be codified at 40 C.F.R. pt. 52) (approving Ohio’s SIP submission).
60. *See Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427 (2014).

only approve SIP submissions if they provide an “assurance” of adequate resources, EPA’s approval of Texas’s and Washington’s SIPs is impermissible.

2. *EPA Approves SIPs that Do Not Comply with Its Own Regulation*

Furthermore, many SIP submissions that have been approved with respect to the section 110(a)(2)(E)(i) requirement, including all three examples above, violate EPA’s resources regulation.⁶¹ None of these submissions contains a projection of revenue at 1-, 3-, and 5-year intervals as required by the regulation; even the detailed Ohio SIP appendix contains only a single projection for “estimated revenue” under each account.⁶² EPA should not approve SIP submissions that do not comply with the agency’s own regulations.

3. *EPA Impermissibly Fails to Independently Determine the Adequacy of State Resources*

The fact that every single SIP submission that has been considered by EPA has been approved with respect to the section 110(a)(2)(E)(i) requirement suggests that EPA does not make an independent case-by-case determination of whether a state’s submission actually demonstrates that resources will be adequate, as required by statute and by the general prohibition on arbitrary and capricious agency action. EPA is not permitted to “take the state’s word for it” and approve the SIP submissions without independent consideration.⁶³ By doing so, it is abdicating its statutory responsibility delegated to it by Congress that requires independent judgment to determine whether resources are adequate.⁶⁴

61. Resources, 40 C.F.R. § 51.280 (2016).

62. See OHIO ENVTL. PROT. AGENCY, OHIO LEAD INFRASTRUCTURE SIP, *supra* note 59; TEX. COMM’N ON ENVTL. QUALITY, *supra* note 57; WASH. DEP’T OF ECOLOGY, *supra* note 58.

63. See *supra* Part III.A.3.

64. Even though it appears that EPA approves SIPs without using its independent judgment, it is possible that EPA staff actually exercise that judgment by negotiating and communicating with state officials outside of the public SIP approval process. Even assuming without any evidence that these negotiations are happening and are effective, negotiation alone cannot meet the statutory requirement. The APA requires that agencies make findings in relation to their decisions on the record so that those decisions are reviewable in court. See *Motor Vehicles Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). Furthermore, citizen participation and transparency are key components of the Clean Air Act, and behind-the-scenes negotiation between states and EPA undermines these key values. Without a clear understanding of how EPA determines whether state resources are adequate, the public cannot meaningfully comment on a state’s proposed SIP or on EPA’s proposed approval of a SIP during the statutorily required public comment period. See 5 U.S.C. § 553(c); 42 U.S.C. § 7607(d)(3); see also Public Hearings, 40 C.F.R. § 51.102 (2016). The lack of transparency also makes it more difficult for states to ensure that they are treated fairly and lawfully.

C. Steps EPA Should Take to Comply with Section 110(a)(2)(E)(i)

EPA should take two actions to enforce a proper reading of the section 110(a)(2)(E)(i) requirement. First, as explained above, EPA must change its SIP approval practices to comply with statutory and regulatory requirements.⁶⁵ EPA has not only the statutory authority, but also the statutory obligation to give full effect to section 110(a)(2)(E)(i) even though it has not done so in the past. It is a fundamental principle of administrative law that agencies must give effect to the words enacted by Congress. EPA must alter its current approval process to make sure it complies with the three steps required by law to approve SIPs with respect to section 110(a)(2)(E)(i): ensure the submission is an assurance, ensure the submission complies with the regulation, and use its independent judgment to determine that resources will be adequate.

Second, EPA should improve its approval process by amending the current resources regulation or promulgating a new regulation pursuant to section 110(a)(2)(E)(i). Notwithstanding that it seems to be largely ignored by EPA, the current regulation could be improved in a way that would provide more transparency and assist states in forming SIP submissions that will conform to the statutory requirements. This new regulation would serve two functions: first, it would require a state to provide much more detailed information to EPA in its SIP submission and, second, it would make public the criteria on which EPA bases its determinations of whether a state's funding and personnel are adequate to carry out the SIP. This section proposes a new regulation that specifies what documentation is needed for approval with respect to section 110(a)(2)(E)(i) and what criteria EPA will use to determine approval.

A new regulation should make clear exactly what information is required in SIP submissions. First, it should preserve the longstanding regulatory requirements that state submissions contain:

- A "description of the resources available to the State and local agencies at the date of submission of the plan,"
- A description of "any additional resources needed to carry out the plan during the 5-year period following its submission," and
- "[P]rojections of the extent to which resources will be acquired at 1-, 3-, and 5-year intervals."⁶⁶

Second, the new regulation should require SIP submissions to include additional relevant data. These data will provide EPA with objective criteria to de-

65. Under the current regulatory regime, it is almost certain that any SIP that meets the regulatory requirement will also meet the statutory requirement of being an "assurance." However, it is important to recognize that the statutory requirement of providing an assurance exists apart from the regulation because the regulation can be revoked or altered by EPA at any time so long as it follows appropriate APA procedures. If the regulation were to be revoked by EPA, state SIP submissions would still need to contain an "assurance" under the statute.

66. 40 C.F.R. § 51.280 (2016).

termine whether state funding is adequate. Additional data requested by EPA could include:

- Actual revenue by source for the past five years,
- Projected revenue by source for the next five years at 1-, 3-, and 5-year intervals,
- Actual program expenses and staffing for the past five years,
- Projected necessary program expenses and staffing for the next five years at 1-, 3-, and 5-year intervals,
- Actual number of air permits issued by state agency over the past five years,
- Projection for air permits issued by state agency over the next five years at 1-, 3-, and 5-year intervals, or
- Comparison with overall, per capita, or per-permit air spending of other states in the same EPA region.

These additional data should be accompanied by a narrative explanation. Because submitted data alone may not be sufficient for a state to explain why its resources are adequate to carry out the SIP, requiring a narrative submission will expedite the reviewing process by giving EPA an opportunity to initially determine that resources are adequate, rather than first proposing to disapprove the SIP with respect to section 110(a)(2)(E)(i) based on submitted data and then waiting for the state's narrative response.⁶⁷

The new EPA regulation should also make public a list of objective criteria on which EPA bases its determination of adequate state funding and personnel. EPA's current decisions as to whether a SIP submission meets the adequate-state-resource requirement are not transparent; the Agency has offered little insight into how it makes this determination. By stating decisionmaking criteria explicitly in a federal regulation, states and citizens' groups will be informed of how EPA reviews SIPs. EPA could base its decision on criteria tied to the required submissions, such as:

- The state's recent history and future projection of revenue,
- The state's recent history and future projection of necessary expenses and staffing,
- The state's recent history and future projection of demand for air permitting programs, or
- Comparison with other states' allocation of resources.

67. For example, the narrative explanation could be required only when the state data meets one of the following criteria suggesting inadequate funding: (1) a state projects that program revenue will decline from current levels, (2) the state projects that necessary program expenses or staffing will decline from current levels, (3) a comparison between projected state expenditures and projected permits issued indicates that the state projects a decline in expenditures per permit, or (4) the state air spending remains lower than other states in the EPA region.

The criteria would be best articulated as a list of presumptions of disapproval.⁶⁸ For example, EPA could issue criteria stating that resources will be presumptively inadequate if the SIP indicates that funding for a particular permitting program will be reduced by more than 10% of the state's average funding of that program over the past five years. This would be only a presumption that could be overcome by a legitimate showing that the need for funding has decreased, for example, if major sources in the state had been retired or the state's agency had begun to operate more efficiently. A set of criteria articulated as presumptions would allow the public to understand how EPA makes its decision and to serve as a watchdog by notifying EPA when state plans do not meet EPA's own criteria.

A new binding regulation that requires states to submit more information to EPA and makes clear to states (and to the public) the criteria upon which EPA bases its approval would significantly improve EPA's approval process. However, EPA may not be able or willing to go through the rulemaking process immediately to implement the changes in the SIP approval process described above. If EPA is reluctant to do so, it could begin by issuing non-binding guidance modeled on this potential regulation. Non-binding guidance would provide notice to states that EPA plans to change its approval practice, give EPA an opportunity to determine what data are most helpful in making these decisions before binding regulations are imposed, and give states time to adjust their expectations to the new SIP submission procedures.

D. How Citizens Can Help Improve EPA's Section 110(a)(2)(E)(i) Approval Process

EPA may not be willing to make the changes described above of its own accord. Citizens can take action to prompt EPA to make changes in its process for approving SIPs with respect to the section 110(a)(2)(E)(i) requirement by commenting on pending SIP submissions, challenging the approval of dubious SIPs, and petitioning EPA for further rulemaking.

1. Citizen Groups Can Comment on Pending SIP Submissions

The first step that citizens can take is to make comments on state SIP submissions during the public comment period. A citizen's comment could argue that a SIP submitted by a state should be disapproved by EPA because the SIP (1) is not an "assurance" as required by statute, (2) is not in compliance with 40 C.F.R. § 51.280, or (3) is otherwise insufficient to serve as a basis for an EPA determination that the state actually has adequate funding. Citizen

68. An analogous scheme with presumptions of approval is used as part of the Clean Power Plan final rule. See Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662, 64,668 (Oct. 23, 2015).

comments can also point out information about a state's history of funding and staffing its clean air programs that might be relevant to EPA's decision. Citizen comments that suggest a state has inadequate funding may prompt EPA to think seriously before approving a SIP with respect to section 110(a)(2)(E)(i).

2. *Citizen Groups Can Sue to Challenge the Approval of Individual SIPs*

Once EPA has approved a SIP with respect to the section 110(a)(2)(E)(i) requirement, citizen groups can sue to challenge this approval—but only if the issue of adequate resources was raised during the public comment period.⁶⁹ Such a lawsuit would require a court to determine whether EPA's approval of the plan with respect to this requirement is arbitrary and capricious. Environmental petitioners could argue that the SIP approval was deficient because the SIP submission did not have an "assurance" or because EPA erred in determining that the state would actually have adequate funding to carry out the plan. Under the current regime, it may be difficult for environmental challengers to succeed in court under the second prong, precisely because reviewing courts give significant deference to EPA's "reasoned judgment" of whether a state has sufficient resources to meet the section 110(a)(2)(E)(i) requirement.⁷⁰ However, EPA's discretion is not limitless, and the lack of on-the-record findings about whether a state's submission is adequate may suffice to persuade a court that EPA's approval is arbitrary and capricious.⁷¹

3. *Citizen Groups Can Petition EPA for Rulemaking to Clarify Section 110(a)(2)(E)(i)*

Additionally, citizens can petition EPA to promulgate regulations that clarify and expand the requirements of section 110(a)(2)(E)(i) as described above. Under general APA requirements,⁷² EPA has a legal obligation to respond to a petition for rulemaking with a rational explanation that is not unrea-

69. The CAA specifically provides for citizen suits "for review of the Administrator's action in approving or promulgating any implementation plan under section [110]" and requires that they are filed in the circuit that contains the state that submitted the SIP, 42 U.S.C. § 7607(b)(1), but makes clear that "[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review," *id.* § 7607(d)(7)(B).

70. *NRDC v. EPA II*, 494 F.2d 519, 527 (2d Cir. 1974); *see also NRDC v. EPA I*, 478 F.2d 875, 884 (1st Cir. 1973) ("The 'necessary assurances' clause seems to us to call less for rhetoric than for the Administrator's reasoned judgment as to the adequacy of resources."); *BCCA Appeal Grp. v. EPA*, 355 F.3d 817, 844 (5th Cir. 2003).

71. *See NRDC v. EPA II*, 494 F.2d at 527.

72. Although the CAA provides specific procedures for some rulemaking petitions, these procedures do not apply to interpretation of section 110(a)(2). *See* 42 U.S.C. § 7607(d)(1).

sonably delayed.⁷³ Petitioners have a right to judicial review of the agency's decision,⁷⁴ but courts are generally quite deferential to the agency. Therefore, if EPA rejects the petition, it would be difficult for citizens' groups to successfully challenge that decision.

IV. POST-APPROVAL ENFORCEMENT OF SECTION 110(A)(2)(E)(I)

EPA is authorized to take enforcement action against the state for a violation of its SIP.⁷⁵ In addition, the Clean Air Act has a citizen suit provision that allows many of the elements of SIPs to be directly enforced by individual citizens and environmental groups. This Part shows that section 110(a)(2)(E)(i) imposes on states a substantive requirement after a SIP is approved to provide funding and staffing at a level adequate to carry out the SIP. Further, EPA is authorized under the statute to take enforcement action when the state subsequently underfunds its program. Then, it demonstrates that EPA has used this authority in the past, but only rarely and only under circumstances in which legal change had led to a wholesale defunding of a state's program. This Part finally argues that EPA should increase its enforcement action under this provision and shows that citizen groups can aid EPA in doing so.

A. The Substantive Requirement of Section 110(a)(2)(E)(i) Is Legally Enforceable

The enforcement provisions of the CAA make clear that section 110(a)(2)(E)(i)—like the other section 110(a)(2) requirements—gives rise to a substantive requirement that states adequately fund and staff their clean air programs. The Act's enforcement provisions permit EPA to take enforcement action for any violation of a SIP—including section 110(a)(2)(E)(i)'s requirement to provide adequate resources.⁷⁶ EPA has taken enforcement action against states for failure to adequately fund their programs (although, as shown in the next section, this has only occurred under limited circumstances), demonstrating the agency's interpretation of its own enforcement power. Furthermore, the legislative history of the CAA amendments shows that members of Congress likewise understood this substantive component.⁷⁷

73. 5 U.S.C. § 555(b), (e) (2012); *see also* *Massachusetts v. EPA*, 549 U.S. 497, 534 (2007).

74. 5 U.S.C. § 706(1).

75. 42 U.S.C. § 7509.

76. Enforcement by EPA can be taken whenever “any requirement of an approved plan . . . is not being implemented.” 42 U.S.C. § 7509(a)(4).

77. *See* S. REP. NO. 101-228, at 3415 (1989) (“[C]redit should be given for [SIP] elements . . . only where such funding commitments, regulatory requirements or tax policies are in place, are enforceable and are incorporated into the applicable implementation plan.”).

A number of provisions authorize enforcement action to cure deficiencies under section 110(a)(2)(E)(i). First, section 113 allows for EPA enforcement against a state when EPA “finds that violations of an applicable implementation plan . . . are so widespread that such violations appear to result from a failure of the State . . . to enforce the plan or permit program effectively.”⁷⁸ Second, section 179 of the CAA allows for EPA enforcement against a state when EPA “finds that any requirement of an approved plan . . . is not being implemented” in relation to an area of the state that is out of attainment with at least one of the NAAQS (a “nonattainment area”).⁷⁹ Under section 179 of the CAA, sanctions are mandatory and may include withdrawal of federal highway funds or withholding of federal grant money.⁸⁰ Third, section 110(m) of the CAA allows EPA to issue the same sanctions as under section 179 on a wholly discretionary basis.⁸¹ Though not technically “enforcement” actions, EPA can also enforce the section 110(a)(2) requirements by finding that the “plan for any area is substantially inadequate to attain or maintain the relevant national ambient air quality standard” as a basis to require a state to revise a SIP or by rescinding or narrowing its prior approval when it realizes that it has made an error in its analysis of a SIP.⁸²

B. EPA Rarely Takes Post-Approval Enforcement Actions Against States for Failing to Adequately Fund Clean Air Programs

Although EPA has the authority to take post-approval enforcement action against a state for violating the terms of its SIP, EPA enforcement actions against states for failure to adequately fund their programs are exceedingly rare. EPA has pursued this type of enforcement action only when legal changes have led to a sudden defunding of a portion of a state’s clean air program. In con-

78. 42 U.S.C. § 7413(a)(2). After EPA makes this finding and notifies the state, a thirty-day waiting period begins. If the state still fails to comply, the EPA Administrator may enforce any requirement or prohibition of the SIP or its permitting programs by: (1) issuing an order for the state to comply, (2) issuing an administrative penalty against the state, or (3) bringing a civil action against the state. *Id.*

79. *Id.* § 7509(a)(4). If EPA makes this finding, it must give the state eighteen months to correct the deficiency. *See* *Sierra Club v. Koresleski*, 681 F.3d 342, 344 (6th Cir. 2012).

80. 42 U.S.C. § 7509. After the Supreme Court’s decision in *National Federation of Independent Businesses v. Sebelius*, 132 S. Ct. 2566 (2012), some scholars have suggested that the sanctions under Clean Air Act section 179, which provide for withdrawal of highways funds for unrelated Clean Air Act violations, may be unconstitutionally coercive under the Spending Clause. *See, e.g.,* Samuel R. Bagenstos, *The Anti-leveraging Principle and the Spending Clauses After NFIB*, 101 GEO. L.J. 861, 919–20 (2013). *But see* David Baake, *Federalism in the Air: Is the Clean Air Act’s “My Way or No Highway” Provision Constitutional After NFIB v. Sebelius?*, 37 HARV. ENVTL. L. REV. F. 1 (2012).

81. 42 U.S.C. § 7410(m).

82. *Id.* § 7410(k)(5)–(6).

trast, EPA has not taken enforcement action against states due to voluntary and gradual resource cuts. Three examples of EPA enforcement action in relation to section 110(a)(2)(E)(i) due to legal change are illustrative.

In the early 2000s, Texas updated its SIP to include the new Texas Emission Reduction Program (“TERP”), which was designed to reduce emissions in the Houston metropolitan area—an ozone nonattainment area.⁸³ The Texas SIP submission projected that TERP would receive over \$100 million in funding from a tax on out-of-state vehicle registrations that had been newly passed by the state legislature.⁸⁴ Based on the submission, EPA approved Texas’s SIP revision with respect to the section 110(a)(2)(E)(i) requirement. However, soon after EPA approved the SIP, the new tax intended to fund TERP was struck down as unconstitutional under the dormant Commerce Clause.⁸⁵ As a result, Texas had no source of funding for TERP—and therefore no program for reducing air pollution in the Houston area.⁸⁶ EPA then published a proposed finding under CAA section 179(a)(4) that a “requirement of an approved plan . . . is not being implemented” in relation to a nonattainment area.⁸⁷ This proposal was the prerequisite to sanctions under section 179. Ultimately, the Texas legislature passed a different funding source for TERP after EPA made the proposed finding, and so EPA did not pursue further action or impose sanctions against Texas.⁸⁸

A second example of post-approval enforcement action due to failure to adequately fund a SIP arose from a very similar situation. In the early 1980s, EPA approved a portion of a Pennsylvania SIP that included a vehicle inspection and maintenance program. However, soon after the SIP was approved, the Pennsylvania legislature passed a statute that prohibited any state funds from being used for the inspection and maintenance program. EPA published a no-

83. See Finding of Failure to Implement a State Implementation Plan; Texas, Houston/Galveston Nonattainment Area; Ozone, 67 Fed. Reg. 49,895 (Aug. 1, 2002) (to be codified at 40 C.F.R. pt. 52).

84. *Id.*

85. *Id.* (citing H.M. Dodd Motor Co. Inc. v. Tex. Dep’t of Pub. Safety, No. GNID2585 (200th Judicial District Court, Travis County, Feb. 21, 2002)).

86. See Polly Ross Hughes, *Texas’ Air Plan May Rely on Fee Increases*, HOUSTON CHRON. (July 26, 2002), <https://perma.cc/A7FU-A4QS>.

87. See Finding of Failure to Implement a State Implementation Plan; Texas, Houston/Galveston Nonattainment Area; Ozone, 67 Fed. Reg. 49,895 (Aug. 1, 2002) (“We are proposing to find that Texas is not fully implementing the Texas Emission Reduction Program. Section 110(a)(2)(E) of the Act requires a SIP to have adequate funding. . . . Unfortunately, the major funding source, a tax on out-of-state vehicle registrations was found to be in violation of the commerce clause of the Fourteenth Amendment of United States Constitution and Article I[,] Section 3 of the Texas Constitution. . . . Without sufficient funding [Texas] will not be able to achieve all of the emission reductions projected for the TERP in the State Implementation Plan.” (citations omitted)).

88. See CLAYTON D. FORSWALL & KATHRYN E. HIGGINS, CLEAN AIR ACT IMPLEMENTATION IN HOUSTON: A HISTORICAL PERSPECTIVE 1970-2005, at 62 (2005).

tice of deficiency to Pennsylvania, explaining that “[a]s a result of this legislation, the Pennsylvania SIP now lacks any assurances that the Commonwealth will provide adequate funding.”⁸⁹ Because Pennsylvania’s obligation to promulgate the SIP had stemmed from an earlier consent decree, the Commonwealth of Pennsylvania and executive branch officials were subsequently held in contempt.⁹⁰ The Pennsylvania legislature responded by passing a new statute that authorized vehicle inspection and maintenance funding when required to comply with federal law.⁹¹

The most recent example of post-approval enforcement stems from EPA’s expansion of its Prevention of Significant Deterioration (“PSD”) program to regulate greenhouse gases.⁹² EPA faced a difficult problem: (1) EPA had previously approved states’ SIPs that contained PSD programs, (2) the addition of greenhouse gases to the PSD program vastly expanded the number of sources in each state that would be covered under the PSD program, and therefore (3) states would not have adequate resources to manage the PSD program for all of these newly covered sources. EPA explained:

EPA has the authority to define, under CAA section 110(a)(2)(E)(i), what assurances are ‘necessary’ so that the state will have ‘adequate’ resources. . . . EPA [reads this provision] to require that the state have a plan for acquiring the requisite additional amount of resources in the case of an expansion in PSD applicability. . . . [T]he SIPs subject to this action are flawed. They each are structured in a manner that may impose PSD applicability on new pollutants in an unconstrained manner, and yet they do not have a plan for acquiring resources to adequately administer any large new components of the PSD program, and to do so on the same schedule that sources may become subject to PSD. As previously explained, the SIPs’ unconstrained applicability is not by itself a flaw. The flaw is the combination of that unconstrained applicability and the failure of the SIP to plan for adequate resources for that applicability, and do so on the appropriate time-table. In short, the SIPs’ PSD applicability provi-

89. See Pennsylvania State Implementation Plan; Deficiency, 46 Fed. Reg. 58,593 (Dec. 2, 1981).

90. *Del. Valley Citizens’ Council for Clean Air v. Pennsylvania*, 533 F. Supp. 869, 881 (E.D. Pa. 1982), *aff’d*, 678 F.2d 470 (3d Cir. 1982) (“[T]he Court cannot accept the Commonwealth defendants’ argument that for the purposes of the present proceeding the conduct of the state’s executive branch should be considered separately from that of its legislative branch. . . . Accordingly, the Court finds that the Commonwealth of Pennsylvania and the other Commonwealth defendants that are part of that Commonwealth are in civil contempt for failing to comply with the judgment of the Court.”).

91. 75 PA. CONS. STAT. § 4706(b) (1983).

92. The Supreme Court ultimately adjudicated this issue in 2014. *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427 (2014).

sions and their state assurances are mismatched and therefore the SIP is flawed. . . . Because the SIPs were flawed, EPA approval of them was in error.⁹³

EPA proposed under CAA section 110(k)(6) to correct its prior approval of the PSD programs in the SIPs in twenty-four states that did not have a higher triggering threshold in effect.⁹⁴

These examples of EPA's post-approval enforcement action against states illustrate that EPA is willing to take this action when a clearly identifiable legal change leads to a significant drop in resources at a single point in time. However, there is no evidence that EPA has taken enforcement action against states when gradual funding cuts render the program inadequate.

C. *EPA Should Take Enforcement Action When States Cut Funding Gradually*

Once a state's SIP has been approved, EPA has a statutory responsibility to ensure that states actually provide enough funding and personnel to carry out the plan effectively. The only way that EPA can execute this statutory duty is by taking post-approval enforcement action when states fail to provide adequate funds and, in its discretion, EPA finds enforcement warranted. EPA should extend its enforcement of section 110(a)(2)(E)(i) to circumstances where the funding cut is gradual. There are many instances in which voluntary, gradual funding cuts are more significant in terms of dollars lost than sudden defunding of particular programs. For example, Texas's TERP cut that prompted EPA action was a loss of \$133 million,⁹⁵ while Texas's budget for air program enforcement declined by \$177 million from 2005 to 2013.⁹⁶

The proposed changes in the section 110(a)(2)(E)(i) approval structure, described above in Part III, facilitate more robust enforcement of this provision. Under this proposed approval regime, states must submit detailed information to EPA within their SIP submissions relating to projected funding sources and amounts. Making more information available to EPA and to the public pre-approval may motivate post-approval enforcement. A dramatic difference between a state's actual funding levels and the expectations included in its SIP submission is not a per se enforceable violation—but it is good evidence that EPA should take a hard look at the state's funding and staffing structure to determine whether the state is in violation and whether to pursue enforcement.

93. Narrowing Rule, *supra* note 19, at 82,542–43.

94. *See id.* at 82,542–44 (“Specifically, EPA is withdrawing their previous approvals of those programs to the extent the SIPs apply PSD to increases in GHG emissions from GHG-emitting sources with emissions below the Tailoring Rule thresholds. The portions of the PSD programs regulating GHGs from GHG-emitting sources with emissions at or above the Tailoring Rule thresholds remain approved.”).

95. *See* Finding of Failure to Implement a State Implementation Plan, *supra* note 87 at 49,895.

96. *See supra* note 5.

In this way, the proposed approval process sets the stage for a complementary robust enforcement process.

D. Citizen Groups Can Petition EPA to Take Enforcement Action

Here, again, citizen groups can play a useful role. There are legal complications with this approach; EPA's decision to take enforcement action is wholly discretionary and cannot be forced by citizen suit.⁹⁷ Therefore, a citizen's petition to EPA for failure to take enforcement action is not legally enforceable. However, a citizen petition will call EPA's attention to a state's failure to adequately fund its clean air programs. As a parallel to the role recommended for them during the SIP approval process, citizens' groups can play an important watchdog function in enforcement by alerting EPA to situations where the state's actual funding and staffing of programs falls far below the level outlined in the SIP submission.

V. CONSEQUENCES OF A MORE ROBUST APPROVAL AND ENFORCEMENT REGIME

Parts III and IV of this Note have presented the argument that section 110(a)(2)(E)(i)'s adequate-state-resource requirement mandates a more robust EPA approval process and that EPA should also impose a more stringent enforcement regime against states that voluntarily cut their clean air program funding. This Part considers the consequences of this proposed approval and enforcement regime for the CAA's cooperative federalism scheme.

The first section shows that clean air funding is in crisis in many states. The second section considers how the proposed approval and enforcement regime for section 110(a)(2)(E)(i) could help to provide a much-needed solution to this crisis by offering incentives to state and federal actors. Finally, the third section shows how this regime may support the effort to fight climate change.

A. The Clean Air Funding Crisis

State budgets have undergone deep cuts, particularly since the recession of 2008.⁹⁸ The funding cuts have devastated some states' clean air programs. The National Association of Clean Air Agencies ("NACAA")—a non-partisan,

97. See *City of Seabrook v. Costle*, 659 F.2d 1371, 1374 (5th Cir. 1981) ("The language of neither § 113 nor any other section of the statute imposes a mandatory duty on the Administrator to make a finding every time some information concerning a possible violation of a SIP is brought to his attention.").

98. See, e.g., NICHOLAS JOHNSON ET AL., CENTER ON BUDGET AND POLICY PRIORITIES, AN UPDATE ON STATE BUDGET CUTS (2011), <https://perma.cc/T5GG-PUYJ>.

non-profit association of air pollution control agencies that represents the majority of states—has been clear:

For many years, state and local air pollution control agencies have struggled with insufficient resources. A NACAA study revealed an annual shortfall of \$550 million in federal grants for state and local air programs, which has caused our agencies to make difficult choices to cut air pollution programs that are important for public health and/or eliminate staff.⁹⁹

Eighty-five percent of surveyed state air agencies cut their budgets and eighty percent laid off staff between fiscal years 2008 and 2011.¹⁰⁰ During this same period, many states made cuts in—or have eliminated altogether—a number of essential clean air programs. A 2011 survey found that states experienced cuts to the following clean air programs: monitoring (30%), permitting (28%), inspections (25%), toxins (20%), and public education and outreach (30%).¹⁰¹

Texas provides an instructive example. Total spending of Texas's environmental agency dropped from \$596 million in 2007 to \$390 million in 2014: adjusted for inflation, this represents a forty-three percent decrease.¹⁰² Specifically, as described in the Introduction, cuts in Texas's clean air programs have been even more drastic. Funding for air quality and assessment has been cut over seventy percent since 2005;¹⁰³ expenses per permit issued dropped over forty percent;¹⁰⁴ and the number of permits reviewed by each staff member has doubled.¹⁰⁵ Nor did these budget cuts reflect a rise in state air quality, as many regions of the state are in non-attainment zones. Eighteen counties within the Dallas-Fort Worth and Houston metropolitan areas are out of attainment for the eight-hour ozone standard.¹⁰⁶ El Paso County and Collin County, each

99. *See Fiscal Year 2016 Appropriations: Interior and Environment: Hearing Before S. Subcomm. on Interior, Environment, and Related Agencies*, 114th Cong. (2015) (testimony of NACAA), <https://perma.cc/N25R-286Y>.

100. *See* Letter from S. William Becker, Executive Director, NACAA, to Rep. Michael Simpson & James Moran, Subcomm. on Interior, Environment, and Related Agencies, Comm. on Appropriations 2 (June 28, 2011), <https://perma.cc/28XH-YZ3H>.

101. *Id.*

102. *Spending by Agency*, TEXAS COMPTROLLER OF PUBLIC ACCOUNTS, <https://perma.cc/BFH7-H8MQ>.

103. *See supra* note 5.

104. *See supra* note 6.

105. *See supra* note 7.

106. *8-Hour Ozone (2008) Nonattainment Area/State/County Report*, EPA (Oct. 1, 2015), <https://perma.cc/E484-R7C4>.

with nearly one million residents,¹⁰⁷ are out of attainment for lead and particulate matter.¹⁰⁸

*B. A More Robust Approval and Enforcement Regime for
Section 110(a)(2)(E)(i) Could Help to Alleviate the Clean Air Act
Funding Crisis*

A more robust approval and enforcement scheme under section 110(a)(2)(E)(i) properly aligns the incentives of state actors to adequately fund their programs and provides transparency so that the state decisionmakers can be accountable to the public. However, if the new regime does not prompt a state to increase its funding, it could lead to a Federal Implementation Plan (“FIP”) being issued for the state’s underfunded program. This section postulates how this FIP would be implemented and suggests that it may ultimately serve the goals of the regulatory regime in the long run.

*1. A More Robust EPA Approval and Enforcement Regime Provides
Incentives for States to Appropriately Fund their Clean Air
Programs*

There are three primary actors involved in a state’s CAA funding: the state environmental agency, which creates the SIP and makes funding projections; the state legislature, which appropriates funds to state air programs; and EPA. This section describes five ways in which an improved scheme will place incentives on each of these actors to adequately fund clean air programs.

First, a more robust SIP approval system will require state environmental agencies to provide a much more detailed projection of what funds will be required for the agency to carry out the programs in its SIP. In contrast to state legislators, who often speak out against onerous federal regulation, a core part of the work that state environmental agency staff perform is ensuring compliance with federal regulations. Because state environmental agency officials are used to following federal requirements, they are likely to seek to comply with the new section 110(a)(2)(E)(i) submission requirements of their own accord.

Second, the transparency created by the air agency’s SIP submission can serve an educational function. The details included in the submission would

107. *Population Estimates of Texas Counties, 2010–2014: Arranged in Alphabetical Order*, TEX. ST. LIBR. & ARCHIVES COMM’N, <https://perma.cc/ZW9F-KP3J>.

108. See *8-Hour Ozone*, *supra* note 106; see also *Classifications of PM-2.5 (2012) Nonattainment Areas*, EPA (Oct. 1, 2015), <https://perma.cc/U4FK-PCMT>; *Classifications of PM-10 (1987) Nonattainment Areas*, EPA (Oct. 1, 2015), <https://perma.cc/A87Z-X8W9>; *Carbon Monoxide (1971) Maintenance Area/State/County Report (Redesignated from Nonattainment)*, EPA (Oct. 1, 2015), <https://perma.cc/ZJX2-DWSR>; *Lead (2008) Nonattainment Area/State/County Report*, EPA (Oct. 1, 2015), <https://perma.cc/LHP5-EH7M>.

educate the state legislature and the public about what resources the state air agency believes are required to maintain air quality standards. This alone might be sufficient to incentivize a well-meaning state legislature to appropriate adequate funds after seeing a statement that is *by* state officials (the air agency) and *for* state officials (the legislators making appropriations) that describes what resources are needed.

Third, a transparent SIP submission would increase the political accountability of the state legislature. Transparency in the SIP submission raises the likelihood that the public—which now has access to the data in the SIP submission—will hold legislators accountable for failure to provide adequate funding. The legislature will no longer be able to claim that its funding levels are sufficient if they are not, because the state environmental agency—as the state’s expert on the matter—will have made it clear in the SIP submission that more resources are needed.

Fourth, if the state legislature does not respond to these incentives by properly funding the program, and EPA takes enforcement action, the transparency provided by SIP approval will implicate the state legislature as the responsible entity. The public will understand the exact source of the state-federal conflict. EPA can point to the state’s own SIP submission as evidence of underfunding, mitigating the impression that top-down federal regulation is being imposed on the state. On the other hand, if EPA’s enforcement is perceived as excessive or punitive, the state’s prior submission makes that position clear—giving the state legislators ammunition against EPA.

Finally, the mere prospect of the federal government taking over a state’s clean air programs through a FIP may prompt even the most anti-federal agitators to fund programs adequately. Under the CAA’s enforcement scheme, the federal government serves as a backstop to state regulation. EPA must step into the shoes of a state when the state does not submit an adequate SIP or when EPA takes enforcement action against a state. Under these circumstances, EPA must create a FIP for that state and take charge of implementing that plan, just as a state air agency would.¹⁰⁹ The same ideological framework that leads state legislators to staunchly oppose EPA regulation and underfund environmental programs is also likely to make those legislators particularly opposed to the federal government intervening in the state’s own affairs. After all, the only thing worse than having the state air agency implement the CAA is watching EPA come in and do the job itself. So, the prospect of a FIP might incentivize states to comply with the funding requirements.¹¹⁰

109. 42 U.S.C. § 7410(c)(1) (2012). EPA is required only to create a FIP after the state has been given a chance to cure the deficiency.

110. It is unclear how states would actually respond to this threat, but the recent backlash by states against the Clean Power Plan may prove instructive. See Mitch McConnell, *States Should Reject Obama Mandate for Clean-Power Regulations*, LEXINGTON HERALD-LEADER (Mar. 3, 2015), <https://perma.cc/HJT9-5T32>.

2. *Implementing a FIP*

Although a robust approval and enforcement scheme may provide a potential route to alleviating the CAA funding crisis, it is far from foolproof. When the state remains firm and refuses to fund its programs adequately, EPA is statutorily required to create a FIP.¹¹¹

In general, a FIP is implemented for the Clean Air programs for which the state has failed to submit or to implement an adequate SIP. As an EPA regional administrator recently explained, “[t]he FIP should correct the deficiency in the SIP, no more, no less.”¹¹² A cursory glance at this requirement for FIPs may indicate that a FIP with respect to section 110(a)(2)(E)(i) would require EPA to fund all of the state’s clean air programs with none of the accompanying flexibility to manage the programming. However, this interpretation of the FIP requirement is untenable and would undermine the statutory scheme set up by the CAA. If this is how a FIP would be implemented, no state would ever have any reason to fund its own air programs because they could refuse to do so and EPA would be required to step in. This would turn the CAA exclusively into a federal grant program, which has never been how it is interpreted, and was not Congress’s intent. In fact, this interpretation would violate the *existing* grant program within the CAA, which allows federal funding of state air programs only up to sixty percent of a state’s total clean air budget and requires the states to provide the other forty percent or risk losing federal funding.¹¹³

It is clear, then, that a FIP for section 110(a)(2)(E)(i) would only be issued on a program-by-program basis. If a SIP submission for a particular NAAQS or a particular state permitting program is disapproved, then EPA would issue a FIP that matched the scope of that program. This is consistent with EPA’s approach to issuing the Narrowing Rule just a few years ago: EPA’s finding with respect to section 110(a)(2)(E)(i) was limited only to a single pollutant under the PSD program.¹¹⁴

While implementing a FIP for underfunded state programs would cost EPA money in the short term, it may be a prudent investment for EPA in the long run. It is possible that the total money paid for the FIPs will pale in comparison to broad-scale reduction in pollution that results from a more robust approval and enforcement scheme. As a responsible agency, EPA should make the decision about this trade-off—whether the gains from a more robust approval and enforcement regime can offset the costs of occasionally imple-

111. 42 U.S.C. § 7410(c)(1).

112. Marcia Spink, *Sanctions, Federal Implementation Plans (FIPs), and SIP Calls Under the Clean Air Act*, EPA REGION THREE 14, <https://perma.cc/E7PF-GSE7>.

113. 42 U.S.C. § 7405(a)(1)(A).

114. See generally *Narrowing Rule*, *supra* note 19. GHGs are considered a single regulated pollutant for the purposes of the Clean Air Act.

menting FIPs—with intention and data. Right now, there is little evidence that EPA has considered a more robust regime at all. Fear of ever implementing a FIP should not freeze EPA; the current system of over-approval and under-enforcement certainly does not lead to optimal results.

C. *Implications for Climate Change*

A revived section 110(a)(2)(E)(i) has the potential to help alleviate the CAA funding crisis. If it does so, the most direct and immediate effects will be on the plans for the six criteria pollutants regulated under section 110.¹¹⁵ These do not include greenhouse gases (“GHGs”). However, there are a number of ways in which this proposal has the potential to influence climate change policy within the CAA in the long run.

First, a more rigorous approval and enforcement regime for SIPs could help establish a similar regime for the Clean Power Plan. The Clean Power Plan relies on Clean Air Act section 111(d), which allows EPA to regulate existing sources of pollutants through a “procedure similar to that provided by section [110].”¹¹⁶ Accordingly, a more stringent approval process for section 110(a)(2)(E)(i) may be incorporated by reference into the Clean Power Plan.

Second, and most directly, it is possible that GHGs will be regulated as a criteria pollutant at some point in the future. In this event, a revived section 110(a)(2)(E)(i) requirement would create a regulatory structure that would ensure that states actually fund GHG-reduction programs adequately.

Finally, the section 110(a)(2)(E)(i) adequate-state-resource requirement applies to all parts of the SIP, including the PSD program. In fact, the funding requirement under section 110(a)(2)(E)(i) has already been an issue for PSD programs, which prompted EPA to issue the Narrowing Rule in 2010.¹¹⁷ The impact on these programs from a more robust approval and enforcement regime would be immediate and direct. States would have to provide adequate funding for their PSD programs, or face enforcement action from EPA.

CONCLUSION

This Note argues for a revival of the CAA’s section 110(a)(2)(E)(i) requirement that each State Implementation Plan provides “necessary assurances that the State . . . will have adequate personnel [and] funding . . . to carry out such implementation plan.” The statutory language of this provision compels

115. See *Criteria Air Pollutants*, *supra* note 1.

116. 42 U.S.C. § 7411(d)(1) (2012); see Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015).

117. See Narrowing Rule, *supra* note 19, at 82,542–44.

EPA to provide a more robust process for SIP approval; the current practice is impermissible. The statute warrants a similarly robust enforcement scheme. This new, robust approval and enforcement regime may help alleviate the CAA funding crisis by placing beneficial incentives on state and federal government actors. This Note has provided concrete steps that EPA should take to revive this requirement and actions that citizen groups can take to prompt EPA action.

The CAA is vital to ensuring public health and welfare. It also plays an important role in addressing global climate change. EPA cannot continue to fall down on the job while states cut funding for their environmental programs. A more robust interpretation of section 110(a)(2)(E)(i) is compelled by the statute and is an important step in ensuring air quality. EPA should make this a priority, and citizens should voice their support.