The Clean Air Act: An Environmental Veneer for Protectionism?

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The Clean Air Act (CAA)[1] was founded on the principle that a maximum safe national ambient air quality standard (NAAQS) concentration existed for each pollutant. Once those concentrations were defined, emission limitations for individual plants could be determined that ensured those concentrations would not be exceeded in ambient air. The CAA gives the states the primary authority to define the emission limitations necessary to meet the NAAQS in their airsheds.[2] The collection of emission limits forms the state implementation plan (SIP) that, when approved by the U.S. Environmental Protection Agency (EPA), becomes enforceable by EPA and the public as well as the state. Key features of SIP rules are (1) the emission limitations ensure compliance with, or attainment of, the NAAQS both within the state and in the air of its neighbors, and (2) the emission standards apply to all emission sources, both existing and new. No sources were grandfathered from compliance with the SIP limitations.[3]

In addition to emission limits that ensure compliance with the NAAQS, the CAA includes technology-based standards.[4] Among these programs is the New Source Performance Standard (NSPS), which is delegated to the states. Another is the Prevention of Significant Deterioration (PSD) program, which is part of the SIP. These programs were enacted, in part, to restrict economic development and, as discussed in this Article, prevent the movement of legacy sources.

Authors' Note: The opinions expressed in this Article are those of the authors and do not necessarily reflect those of the N.C. Department of Environment and Natural Resources.

1. 42 U.S.C. §§7401-7671q, ELR Stat. CAA §§101-618.
2. Whether states have actually been given the autonomy in defining these emission standards as envisioned by the U.S. Congress is a reasonable question. We will take Congress at their word.
3. "Grandfathering" is a term used to describe legacy sources, existing at the time of the promulgation of a given emission limitation, which would be exempted from new emission limitations. Legacy sources were not excused from SIP standards, because those limitations were required to protect public health.
4. A technology-based emission standard is determined simply by what available technology is capable of achieving.

Recently, Sen. Max Baucus (D-Mont.), who took part in the debates on the 1977 CAA Amendments, described some of the nonhealth-based standards in the CAA in a letter to Lisa Jackson, the Administrator of EPA. His comments provide some insight to the earlier congressional motivation. The letter, signed by both senators of Montana, responded to EPA's proposed federal implementation plan (FIP) to implement the Regional Haze Rule in Montana. The letter sought to convince EPA that their analysis of cost-effectiveness of the controls in the (EPA's) FIP of some of Montana's coal-fired power plants imposed costs that were not justified under the program. Relevant to the discussion in this Article, he reminded Administrator Jackson why the Regional Haze Program was created:

> In evaluating the cost effectiveness of the FIP, the legislative history of the regional haze program is illuminating. One of us participated in the debates in the 95th Congress that resulted in amending the Act to avoid pushing industrial pollution into areas that were already clean. *In seeking to prevent the flight of industry from metropolitan areas, Congress enacted several important provisions, including the regional haze program.* Congress simultaneously recognized the threat that impaired visibility could pose to economies that rely on tourism. In 1977, the House Committee on Interstate and Foreign Commerce contemplated the prospect that national parks and wilderness areas would be "despoiled or heavily shrouded in dense industrial pollution." It would have been a perverse outcome indeed if industrial migration caused by the Clean Air Act meant that tourists could no longer see across the chasm of the Grand Canyon of the Colorado or down the chutes of the Grand Canyon of the Yellowstone.[5]

Questions raised by the senators in this excerpt include why the CAA should cause industrial migration and how the provisions referred to by the senators could halt that migration. Also, what were the programs the senators referred to that "could prevent the flight of industry from metropolitan areas?"

5. Letter from Max Baucus to Lisa Jackson (Feb. 17, 2012) (emphasis added).

This Article seeks to explore the extent to which various programs were added to the CAA to prevent the mobility and migration of legacy sources as a result of the CAA's mandate to meet the NAAQS. The reasons the U.S. Congress believed that companies would be motivated to move as a result of CAA requirements will be discussed, including the ostensible fear of a "race to the bottom." Finally, the incipience of "grandfathering" is discussed and how this construct actually left existing airsheds dirtier than if migration had been allowed to occur. First, however, a brief review of what implementation of the NAAQS meant in the early 1970s is needed.

I. NAAQS

The 1970 Amendments to the CAA transformed the statute from one primarily designed to fund research into the effects of air pollution to a statute that granted sweeping new powers to the federal government to protect air quality. Congress charged EPA to define the primary NAAQS at levels that would "protect the public health" with "an adequate margin of safety."[6] The secondary NAAQS were to "protect the public welfare from any known or anticipated adverse effects. . . ."[7]

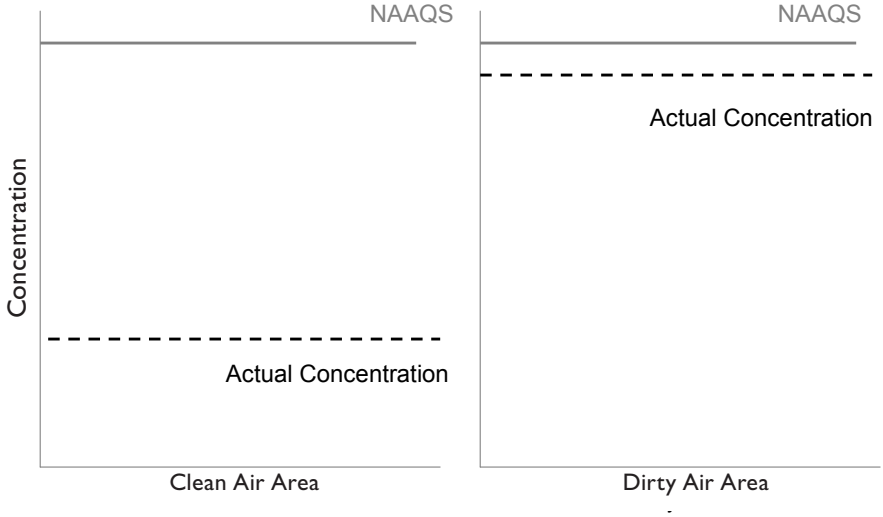
Many years later, the U.S. Supreme Court explained in *Whitman v. American Trucking Ass'n*[8] that EPA ". . . is to (a) identify the maximum airborne concentration of a pollutant that the public health can tolerate, (b) decrease the concentration to provide an adequate margin of safety, and (c) set the standard at that level."[9] As long ago as 1977, some in Congress expressed their belief that the NAAQS could not be completely protective without being set at zero.[10] However, no legislation was adopted toward that end, so it must be assumed that EPA carried out their charge in developing and then promulgating the NAAQS. Put differently, if concentrations of criteria pollutants defined as safe by EPA as the NAAQS are not protective, then the Agency should be forced to lower the NAAQS to such levels that are consistent with the CAA requirements.

Under the assumption that the NAAQS would be appropriately defined, Congress then told the states to develop their emission limitations to protect the NAAQS for approval by EPA into the SIP. The apparent duality of the SIP process was termed "experiment in federalism" in reference to the dual authorities Congress stated it was granting to both the federal government and the states.[11]

Assuming for now that EPA did correctly determine the NAAQS, and the states appropriately developed emission standards to protect the public from exposure to air at those levels, the question is begged why Congress added programs not related to the NAAQS in the CAA in 1970 (and again in 1977). Specifically, why was the NSPS program under §111 added in the 1970 Amendments? Why, seven years later, did Congress (a) revisit the NSPS program to add language regarding economic mobility, (b) add the PSD program under §165, which, for areas where the air is cleaner than the NAAQS, required technology standards at least as stringent as NSPS and defined new ambient ceilings that were unrelated to the NAAQS, and (c) add a Regional Haze Program with the goal of returning defined clean air areas to "'natural conditions' or the visibility conditions that would be experienced in the absence of human-caused impairment."[12]

Health-Based Standards and the Airscape in the 1970s. To help illustrate answers to these questions, consider the state of air quality in the United States in the late 1960s. In particular, consider what the imposition of the NAAQS for a given pollutant would mean for both a relatively clean air area and a relatively dirty air area.

Figure 1: Clean Air Areas and Dirty Air Areas



6. 42 U.S.C. §7409(b)(1); CAA §109(b)(1).
7. 42 U.S.C. §7409(b)(2); CAA §109(b)(2).
8. 531 U.S. 457, 465, 31 ELR 20512 (2001).
9. *Id.*
10. "The national primary and secondary standards were set for dirty air areas as the minimum necessary and the minimum reasonably attainable in the dirty air areas. . . . We would have to get down to zero pollution in order to eliminate all health effects." 95 Cong. Rec. 1030 (1977) (statement of Sen. Edmund S. Muskie).
11. "The Clean Air Act is an experiment in federalism, and the EPA may not run roughshod over the procedural prerogatives that the Act has reserved to the states . . . Bethlehem Steel Corp. v. Gorsuch, 742 F.2d 1028, 1036 [14 ELR 20740] (7th Cir. 1984) (internal citation omitted)." Tex. v. EPA, 690 F.3d 670, 675-76 (5th Cir. 2012).
12. *Guidance for Tracking Progress Under Regional Haze Rule*, EPA-454/B-03-004, Sept. 2003.

The representation above simply illustrates the fact that the concentration of a given pollutant in an area with more industrial development was closer to the NAAQS than in the clean air area. In the most general sense, many areas actually exceeded the NAAQS. The CAA of 1970 established the NAAQS through federal action while assigning the responsibility for compliance with the NAAQS to the states. The emission standards established by the states under §110 were designed to reduce ambient concentrations of the criteria pollutants to below the NAAQS. To ensure compliance with the NAAQS states with more heavily industrialized areas needed more stringent SIP emission standards than less-developed states with comparatively clean airsheds. That meant that two identical facilities could be required to meet different emission standards depending on where they were located. Concern that these differences could motivate existing industrial facilities—known as legacy sources—to flee dirty airsheds with their more stringent SIP emission standards to relocate in cleaner airsheds was voiced in the congressional debates discussed below. The concern was economic rather than health-related since the flight of any industry would have reduced the ambient concentrations in the dirty airshed of any pollutants emitted from the legacy source. In the clean airshed, the newly arrived facility would have introduced emissions that would lead to a degradation of the air quality, although not to the point of exceeding the NAAQS, assuming the state's SIP standards were appropriately defined.

II. Technology-Based Programs

In addition to the SIP requirements to protect the NAAQS, the 1970 Amendments introduced national emission standards under the NSPS program for new (or modified) facilities of certain categories. In discussions leading to those amendments, the Secretary of Health, Education, and Welfare explained the NSPS program as follows:

> If we are ever to begin preventing air pollution, instead of just attacking it after the fact, then we must at least insure that major new stationary sources, wherever they are located, are designed and equipped to reduce emissions to minimum feasible levels. *The application of national emission standards would also tend to minimize the competitive advantage of locating a new facility in an area where emission standards are less rigorous than in other areas.* This would eliminate "polluter havens" that have sprung up in this country.[13]

Congress recognized that clean air areas would require less-stringent emission limitations under §110 than dirty air areas. EPA also introduced a new criterion for control limitations, that of "minimum feasible levels." This is a technology criterion rather than a health-based criterion. The concern shifted from protecting the NAAQS to simply applying air pollution control technology regardless of risk. That is, instead of defining what emission rate would protect a health-based ambient concentration, the limitation would correspond to an emission rate that could be expected when employing the best-demonstrated control technology on the emission source. The motivation for the control-based standard was to limit competition for new sources from states with clean air areas. If clean air areas could use their air resources to attract new industry (or existing industry), their airshed would degrade to what the Administrator termed a "polluter haven." In lamenting the need to attack existing pollution after the fact, EPA ignored the beneficial aspects the migration of existing industries from the existing "polluter havens" would have on air quality in those areas.

The same provision was explained in the U.S. House of Representatives report as follows:

> The promulgation of Federal emission standards for new sources in the aforementioned categories will preclude efforts on the part of States to compete with each other in trying to attract new plants and facilities without assuring adequate control of . . . large-scale emissions there from.[14]

According to this statement, either the emission limitations passed by states with relatively clean air pursuant to the SIP would not be "adequate" to protect the NAAQS (in violation of the CAA), or the NAAQS are themselves not protective (also in violation of the CAA). The more plausible explanation was that the SIP in those clean air areas may not have been stringent enough to prevent the immigration of legacy facilities located in dirty air areas.

In further debate, Congressman Charles Vanik (D-Ohio) emphasized this point more bluntly[15]:

> I feel that Federal standards for pollution control on an industry-by-industry basis are necessary and inevitable. National standards of pollution control would prevent another State from attracting any industries because of a greater pollution tolerance. Such competition is unfair and against the public interest.[16]

The representative from Ohio was clear in recognizing that clean air areas could "tolerate" higher emission rates without threatening the NAAQS. In other words, the area would still be protective of human health and welfare after facilities had migrated to the area. Nevertheless, he makes the statement that relying on air resources that were not consumed in the past would be "unfair and against public interest." This is a remarkable position considering the air resources that had already been consumed in the dirty air areas by legacy sources without internalizing costs.

As a final illustration of the concern for legacy migration, Sen. Joseph Montoya (D-N.M.) stated[17]:

> In the past an industry received no reward if it controlled its pollution. In fact, it was penalized by raising its own

13. 91st Cong. House Hearings 281 (1970) (emphasis added).

14. 91st Cong. House Debates 19209 (1970).
15. 91st Cong., Floor Activity: House Consideration and Passage of H.R. 17255 (June 10, 1970).
16. 91st Cong. House Debates 19209 (1970).
17. CAA 70 Leg. Hist. 10, 33115.

> costs of production. The present bill would put all new facilities on the same footing, and would also do much to give Americans clean air. Competitive disadvantage is not created when all new facilities are required to adopt the same level of pollution control technology . This is a reasonable and workable scheme, and I would hope that my Senate colleagues would agree with this concept.[18]

Senator Montoya recognized that (1) air pollution controls cost money, (2) the costs matter to the bottom line of a business, (3) by exempting existing sources from the NSPS, only new sources would need to incur this added costs, and (4) national control levels would help to clean the air. The senator was careful to note that only new sources would be subject. Consequently, the NSPS program would actually force a competitive comparison between the continued operation of a legacy source under SIP standards alone versus the same plant subject to the more-stringent NSPS.

The 1977 CAA Amendments. The 1970 Amendments were passed and EPA began to develop NSPS for each "large-scale polluter" identified as a result of the new law.[19] In developing NSPS standards, EPA prioritized industries for which standards would be promulgated.[20] But some states were not satisfied with the pace and the priorities shown by EPA. For example, the governor of New Jersey petitioned EPA to move glass plants up in priority for coverage under the NSPS program. EPA obliged describing its reasoning in the preamble to the finalized rule subjecting glass plants to NSPS:

> On March 18, 1977, the Governor of New Jersey petitioned EPA to establish standards of performance for glass manufacturing plants. The petition was primarily motivated by the Governor's concern that the glass manufacturing industry might locate plants in other States rather than comply with New Jersey's air pollution regulations limiting emissions of particulate matter. The glass manufacturing industry is not geographically tied to either markets or resources. Only a few States have specialized air pollution standards for glass manufacturing plants in their SIPs, and these standards vary in the level of control required. Therefore, new glass manufacturing operations could be located in States which do not have stringent SIP regulations.[21]

EPA further noted that glass plants contribute significantly to emissions of particulate matter (PM), "especially when viewed as contributors to emissions in the limited number of States in which they are located."[22] Of course, only if the plants in question actually moved, thereby subjecting themselves to the more stringent NSPS, would emissions be reduced. But the entire purpose of the NSPS was to prevent the migration, so no emissions reduction were ever expected. A perhaps more plausible benefit to New Jersey would be nonair-related results described by EPA:

> Since they are free to relocate in terms of both markets and required resources, the possibility exists that operations could be moved or relocated to avoid stringent SIP regulations, thereby generating *economic dislocations*. For these reasons, emissions of particulate matter from new glass manufacturing plants have been selected for control by NSPS.[23]

Later in 1977, Congress explicitly instructed EPA to consider the possible migration of legacy sources by amending the NSPS under §111(f)(2)(C) to require that EPA take into account the "mobility and competitive nature" of each industrial category in determining whether an NSPS should be defined for that category. So, the CAA was used to prevent economic migration of legacy polluters by (1) defining a stringent national emission standard under §111 and (2) providing them a safe haven as a grandfathered source (exempt for the NSPS) in their current state.

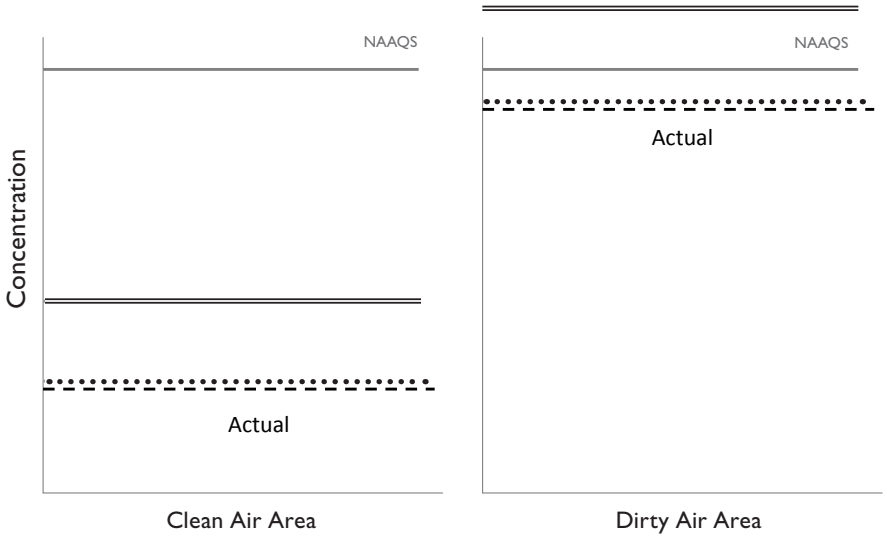
Congress Limits Degradation. In addition to amending the NSPS program in 1977 to explicitly prevent industrial migration, Congress added a wholly new program designed to prevent significant deterioration in attaining (clean air) airsheds.[24] Among other requirements, the new program defined a maximum allowable increment of degradation in air quality for all areas. For each criteria pollutant, and each averaging time, EPA was to define a maximum degradation above the local baseline level that would be allowed. Said another way, the ambient concentrations of each pollutant in all airsheds in the country would only be allowed to increase by the same amount, regardless of the then-current air quality in the thousands of airsheds in the country. This meant that both cleaner and dirtier airsheds would be allowed to degrade by the same amount.[25] It also meant that since the actual baseline varies for each airshed, each airshed would be "protected" to a different maximum concentration. As was the case for the NSPS program, this new provision would restrict emissions of regulated pollutants beyond that required to protect the NAAQS in clean air areas. By limiting cumulative degradation in air quality, this provision would limit the cumulative expansion in industrial development in a given airshed. This new program would only apply to new or modified sources.

18. 91st Cong. Senate Debates 33115 (1970).
19. Industrial categories that Congress expected to be on this list were the following: coal cleaning operations; coke byproduct manufacturing; cotton ginning; ferroalloy plants; grain milling and handling operations; gray iron foundries; iron and steel operations; nitric acid manufacturing; nonferrous metallurgical operations (e.g., aluminum reduction, copper lead, and zinc smelting); petroleum refining; phosphate manufacturing; phosphoric acid manufacturing; pulp and paper mill operations; rendering plants (animal matter); sulfuric acid manufacturing; soap and detergent manufacturing; municipal incinerators; and steam electric power plants. 91st Cong. Senate Debates 32919 (1970).
20. 40 C.F.R. §60.18.
21. 44 Fed. Reg. 34840, 34841 (June 15, 1979).
22. *Id.* EPA reported that 48% of all glass plants in the 1970s were located in New Jersey, Ohio, Pennsylvania, and West Virginia. EPA CC 1979 document. EPA noted that glass production was concentrated in 17 states. EPA CC 2-8.
23. 44 Fed. Reg. 34840, at 34841 (emphasis added).
24. The genesis of this program was a court decision with a fragile foundation as discussed in Arnold W. Reitze Jr & Michie Butterworth, Air Pollution Law 221 (1995).
25. The exception occurs in airsheds already within the increment from the NAAQS, since the NAAQS could in no event be exceeded.

Like the NSPS program, grandfathered sources were exempted under the nondegradation program.

The program provided for two increments to be added to the existing baseline air quality. The Class I increment was designed to protect certain federal lands designated as Class I areas and was the more restrictive. The Class II increment limited the remainder of the country.[26] The two increments are shown at right using the illustration introduced above.

Figure 2: PSD Increments for Class I and Class II Areas



Here, the double line represents the Class II increment, and the dotted line represents the Class I increment. Both are drawn to scale.[27] This meant that air quality in a Class II area located in the Clean Air Area could degrade up to the double line. In the example shown, in a Dirty Air Area, the NAAQS limits growth before the Class II increment does. Note the relatively more severe limitation on growth near Class I areas.

The baseline concentrations established by Congress (above which the air quality could only degrade by the increment amount) included any sources in existence prior to January 1, 1975.[28] Interestingly, Congress emphasized that even the unused capacities of these grandfathered sources were protected from inclusion toward the increment. In other words, these legacy sources were explicitly allowed to increase their emissions to full potential without triggering NSR. On the contrary, the potential emissions from new (and modified) plants would be counted when evaluating their impact against the increment. The legislative history provides that the full potential emissions of these grandfathered sources would not be required to "roll back" their emissions regardless of whether they were near Class I, II, or III areas.[29] This meant that large legacy facilities could increase the ambient concentrations in Class I areas, for example, by many times the increment without being regulated under this new PSD program.

A committee summary of the PSD program reviewed the need for increments as follows:

> First, the evidence of potential health and welfare effects from pollution at levels below the national ambient standards of currently unregulated pollutants is significant. This evidence alone warrants caution in allowing unchecked pollution increases in clean air regions."
>
> Second, air pollution does not confine itself to State boundaries. Therefore, if one State wants cleaner air and its neighboring State wants to permit more pollution which would prevent the first State from achieving its objectives, some federal policy is necessary to resolve interstate disputes.
>
> Third, there is a strong national interest in not encouraging industries to go forum shopping, seeking to locate new plants in areas which allow the greatest pollution. If there is no Federal policy, States may find themselves forced into a bidding war to attract new industry by reducing pollution standards. . . .
>
> Fourth, there is an indisputable national interest in and public support for, the protection of air quality over certain Federal lands.[30]

To summarize, Congress claimed that the increments in general were needed to (1) clean the air, (2) prevent interstate transport of pollution, (3) prevent migration of legacy sources, and (4) protect Class I areas. To illustrate the validity of these points, consider an example legacy glass plant consisting of four furnaces producing 150 tons per year (tpy) of glass in New Jersey prior to 1970. Because the legacy plant was located in a relatively dirty airshed, the SIP adopted by New Jersey pursuant to the PM NAAQS limited the emissions to 8.3 pounds per hour (lbs/hr) of PM. This represents 145 tpy for four furnaces. However, that same source could have operated in a clean airshed such as Oklahoma with an allowable emission rate of 15.6 lbs/hr PM for each furnace for a total of 270 tpy. Under the 1970 CAA, then, provided no NSPS had been defined for the legacy source, the source could relocate to the clean air state and incur lower air pollution costs. By moving, the dirty airshed would be benefitted by a reduction of 145 tpy, while the clean area would be degraded by 270 tpy. Both areas would remain in attainment thereby protecting public health in both areas.

26. Class III areas were provided for in the program with the least-restrictive growth allowances, but no Class III areas have been defined.
27. With notable exceptions, the majority of Class II increments are 25% of the NAAQS, while the Class I increments are 4% of the NAAQS.
28. See the 42 U.S.C. §7469(4) definition of "baseline concentration."
29. Leg. Hist. P. 6680.
30. 95th Cong. House Rep. 294, 151 (1977).

The NSPS was promulgated for glass plants, which limited emissions from each furnace to 6.25 lb/hr or 110 tpy of PM. Were the plant to move to Oklahoma after the NSPS, its emissions would need to be reduced from the SIP standard of 270 tpy to the NSP limit of 110 tpy. This would be more stringent than New Jersey's SIP standard. To infer that the NSPS standard would actually lead to cleaner air would, however, be fallacious. The purpose of the NSPS was to deincentivize the migration of the plant. As long as the plant did not move, its emissions would remain at the NJ SIP level of 145 tpy.

In the context of this example, we can consider each point given by Congress. The first point above argues that the NAAQS are not protective. If this were true, then EPA must reassess the NAAQS. If it were true that a concentration below the NAAQS is unhealthy, then the appropriate legislative response would be to bring the concentrations in all areas down, rather than only protecting the public who live in relatively clean areas. In fact, because each area had its own baseline concentration upon passage of the CAA, the addition of the increment to each baseline would result in a unique ambient limit for each and every airshed. It is difficult to see how such a disparity in air quality represents a nationally consistent approach to public health.

The second point regarding interstate transport of pollution is certainly valid, but is not relevant specifically to the question of legacy-source migration. Both §110 and §126 provide states that believe their air is being polluted by neighboring states, or even states farther away, mechanisms that prevent interstate pollution. In other words, states seeking to allow increases in pollution in their state may do so provided they do not significantly impact neighboring states' air quality in the §110 or the §126 context.

The third point may be the most forceful argument. Upon passage of the 1970 CAA, companies in heavily industrialized areas that had previously consumed the natural air resources at no internalized cost were forced to impose more-stringent SIP emission standards than clean air areas. All of the economic arguments that applied when the states sought to use the NSPS to prevent legacy sources from relocating apply once again in support of the increment. By arbitrarily imposing uniform ceilings on air sheds instead of the NAAQS, the potential of long-term growth is eviscerated in areas more tolerant to growth (clean air areas). The fact was that finite air resources had already been consumed at no cost to the facilities in dirty air areas. The specter of a "bidding war" is duplicitous. The dirty air areas with ambient concentrations of regulated pollutants at or near the NAAQS could not bid against a clean air area. More deceiving, however, is that the call against the "bidding war" ignores the entire notion of the NAAQS. No state could allow emissions from a would-be facility that would result in a violation of the NAAQS. The concept of the grandfathered source simply means that Congress approved the cost-free use of past and future air resources consumed by legacy sources while requiring future consumption to be limited.

The economic aspects of the increment as impediment to migration was perhaps most clearly stated in debate by Rep. Harry Waxman (D-Cal.), as he explained that the reason for the nondegradation provision was "not because we want to have [clean air areas] clean for cleanliness sake, it is because we want to control growth of those areas."[31] Similarly, Richard Lahn of the Sierra Club was quoted as saying, ". . . perhaps the most important reason for preventing significant deterioration of air quality in clean air regions is the possible impact the lack of this provision might have on the economic well-being of our already industrialized, urban centers." He then quoted a legal brief submitted by 16 states on this topic: "The health of the economies or urban-industrial regions is dependent upon industrial continuation and growth. It is in the best economic interest of these regions that sources remain in them. . . ."[32] Taken with the exemption of grandfathers, the nondegradation provision would seem to serve his stated purpose.

The essential unfairness to clean air areas was voiced by Sen. David E. Satterfield, (D-Va.), commenting that the purpose of the PSD program was

> . . . to shield the developed and polluted States from the natural advantages which may otherwise be enjoyed by less developed and cleaner States. Our federal system, based upon the equality of the several States is severely strained by the Federal Government favoring some States at the expense of others. It is particularly odious here that the relatively guilty (*i.e.* those whose pollution levels are high) are protected, while the relatively innocent (*i.e.* those whose pollution levels are low) are penalized.[33]

Finally, Congress cited a national interest in protecting air quality over certain federal lands. Their feigned interest is belied again by their explicit exemption from this effort of legacy sources when the legislative history made it clear that the unused capacity of legacy sources were exempt from Class I requirements and added, with emphasis: "Furthermore, no rollback in emissions from existing plants would be required under the provisions of this section, whether an area is designated Class I, Class II, or Class III."[34]

III. Conclusion

The CAA began as a science-based approach to the protection of health and welfare. Soon after the inception of the NAAQS, however, it became clear that compliance with these not-to-exceed levels in already industrialized areas of the country would open the door to industrial migration to cleaner air areas. Compliance with the NAAQS would not be threatened in these clean air areas, even with the relocation of industry into those areas. Congress moved to prevent such flight by constructing technology-based standards known as NSPS that were unrelated to health

31. 95th Cong. House Debates 16, 664 (May 25, 1977).
32. 95th Cong. Preliminary Statements 4586 (1977).
33. 95th Cong. House Rep. 294, 504 (1977).
34. *Id.* at 152.

and welfare protection. These standards were designed to be more stringent than the SIP requirements in the dirty air areas. To further dissuade legacy sources from moving, Congress exempted all of the legacy sources from the technology standards by grandfathering them from the subsequently promulgated regulations.

Dissatisfied with the pace and the effectiveness of the NSPS program, Congress amended the CAA in 1977, making it clear that EPA's priorities in setting the new standards should be informed by the likelihood that a particular source might relocate. Congress grandfathered legacy sources from the limitations of the increment, thereby further decentivizing migration.

As discussions on the reauthorization of the CAA continue, the distinction between health-based and technology-based programs may be helpful. The use of the CAA as a tool in economic protectionism may well continue, although recognition of that role may provide a deeper understanding of future amendments.