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ENVIRONMENTAL LAW STORIES

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Jody Freeman

The Story of *Chevron*: Environmental Law and Administrative Discretion

Chevron v. NRDC is, without question, one of the most important cases in the history of American administrative law.¹ Consider this: at the time of writing, Westlaw counts 119 law review articles with *Chevron* in the title,² including many by the leading scholars and jurists in the field.³ *Chevron* is also well on its way to being the most widely cited administrative law case of all time, with a conservative count yielding nearly 6800 citations in the federal courts.⁴ Give an administrative law professor three seconds to name the most important case in the field, or a recent administrative law student which case (if any) stands out from class, and they are most likely to say, *Chevron*. What's more, the case

1. *Chevron, U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837 (1984).

2. This is a conservative count arrived at by searching Westlaw's "Journals and Law Reviews" database.

3. The following is just a sample of the rich literature analyzing *Chevron*'s impact: Cynthia R. Farina, *Statutory Interpretation and the Balance of Power in the Administrative State*, 89 Colum. L. Rev. 452 (1989); John F. Manning, *Constitutional Structure and Judicial Deference to Agency Interpretations of Agency Rules*, 96 Colum. L. Rev. 612 (1996); Thomas W. Merrill, *Judicial Deference to Executive Precedent*, 101 Yale L.J. 969 (1992); Richard J. Pierce, Jr., *Chevron and Its Aftermath: Judicial Review of Agency Interpretations of Statutory Provisions*, 41 Vand. L. Rev. 301 (1988); Antonin Scalia, *Judicial Deference to Administrative Interpretations of Law*, 1989 Duke L.J. 511 (1989); Peter H. Schuck & E. Donald Elliott, *To the Chevron Station: An Empirical Study of Federal Administrative Law*, 1990 Duke L.J. 984 (1990); Kenneth W. Starr, *Judicial Review in the Post-Chevron Era*, 3 Yale J. on Reg. 283 (1986); Cass R. Sunstein, *Law and Administration After Chevron*, 90 Colum. L. Rev. 2071 (1990).

4. A conservative count from both the Westlaw and Lexis databases turns up between 6700 and 6800 citations to *Chevron* in the federal courts. See also Sunstein, *Law and Administration After Chevron*, 90 Colum. L. Rev. 2071, 2074-75 (1990), counting 1000 citations in the first six years after *Chevron* was decided.

has legs. Its progeny⁵ have produced their own cottage industry of commentary,⁶ and there appears to be no end in sight. Very few cases have such a long and active life, especially when they do not involve a constitutional challenge.

Yet what of *Chevron's* place in environmental law? Perhaps because of the sensation it caused in administrative law, it is easy to forget that *Chevron* is an enormously important Clean Air Act (CAA) case as well.⁷ After all, at issue in *Chevron* were some of the most complicated and stringent provisions of the (at the time) relatively new 1977 amendments to the CAA.⁸ This was the first case involving the controversial use of "bubbles" in air regulation to reach the Supreme Court, an auspicious moment that marked the debut of market approaches like netting and offsetting in environmental regulation.

It is hard to discern any of this complexity and importance from the decision itself, however. Justice Stevens' unanimous opinion offers only the most superficial analysis of the relevant statutory provisions,⁹ and instead frames the case more generally, in administrative law terms. *Chevron* is known, as a result, as the case in which the Supreme Court announced a sweeping rule of deference to agency interpretations of law.¹⁰ What people remember is not the details of the EPA's controversial bubble policy, which was at issue in the case, but the Court's two-part test for when to accept agency interpretations: Has Congress addressed the precise question in issue? If not, is the agency interpretation "reasonable"? If the answer to the first question is no, and the answer to the second yes, the court defers.¹¹ In a field as statutory as

5. *Christensen v. Harris County*, 529 U.S. 576 (2000); *United States v. Mead*, 533 U.S. 218 (2001).

6. Michael P. Healy, *Spurious Interpretation Redux: Mead and the Shrinking Domain of Statutory Ambiguity*, 54 Admin. L. Rev. 673 (2002); Ronald M. Levin, *Mead and the Prospective Exercise of Discretion*, 54 Admin. L. Rev. 771 (2002); Thomas W. Merrill, *The Mead Doctrine: Rules and Standards, Meta-Rules and Meta-Standards*, 54 Admin. L. Rev. 807 (2002).

7. 42 U.S.C. § 7402 (2000).

8. See 42 U.S.C. §§ 7502, 7503 (2000).

9. That *Chevron* involves the complicated "New Source Review" (NSR) provisions of the CAA Amendments of 1977 seemed almost incidental. This is especially apparent when one sees the extent to which the Court adopted the administrative law framing of the Petitioner's brief and declined to grapple with the statutory complexity provided by the Respondent's brief.

10. In adopting this new rule of deference, the Supreme Court dismissed, with almost no serious discussion, a complex body of law aimed at calibrating judicial deference on matters of law to a number of relevant considerations (including agency expertise, the timing of the legal interpretation, and the relative consistency of the agency's position over time).

11. Even environmental law casebooks tend to present *Chevron* in a section devoted to administrative law standards of review rather than in a chapter devoted to air quality.

environmental law, and as subject to conflicting policies and goals, deference determines important outcomes, as *Chevron* itself demonstrates.

But there is more to the story. *Chevron* is in the environmental law pantheon for additional good reasons. It was the first (and only) Supreme Court case to memorialize the turn toward market mechanisms in environmental regulation. The bubble concept was among the earliest emissions trading ideas to take root in EPA regulations.¹² The rationale for trading policies such as bubbles, netting¹³ and offsetting¹⁴ in these early days was to reduce the cost of compliance with environmental standards by affording firms the flexibility to achieve them in the least-cost manner. Yet at the time, and to this day, critics saw the bubble as a regulatory shell game.

In the ensuing years, emissions trading has become both more widespread and more sophisticated, evolving from controversial techniques like bubbles, to cap-and-trade programs like the acid rain provisions of the CAA that attract extensive praise. And the trading concept has leapt the fence of air regulation to make inroads into water regulation, habitat conservation and even wetlands preservation.¹⁵ While contemporary trading programs are meaningfully different from, and serve distinct purposes than, the bubble concept, the bubble is still fairly viewed as an early ancestor of today's market mechanisms.¹⁶

See e.g., Roger W. Findley, Daniel A. Farber & Jody Freeman, *Environmental Law* 138 (6th ed. 2003).

12. The earliest example appears to be the EPA's offset rule, adopted in the late seventies to avoid a construction moratorium in states that had not yet met attainment deadlines, and which ultimately found its way into the NSR provisions in the 1977 amendments to the Act.

13. Netting is an approach through which a company modifying one point in a source can avoid CAA abatement requirements by reducing emissions from other points within the source. The source's net emissions thus stay at the same level. See Richard A. Liroff, *Reforming Air Pollution Regulations: The Toil and Trouble of EPA's Bubble 6* (1986).

14. Through offsetting, companies can construct or modify pollution sources as long as they reduce emissions from existing sources to a greater extent. *Id.* at 7.

15. See James Salzman & J.B. Ruhl, *Currencies and the Commodification of Environmental Law*, 53 Stan. L. Rev. 607 (2000); see also Environmental Protection Agency, "A Summary of U.S. Effluent Trading and Offset Projects," available at <http://www.epa.gov/owow/watershed/trading/traenvrn.pdf>.

16. On the difference between the early bubble strategy and more recent cap and trade programs, NRDC's David Doniger says, "Cap and trade is distinctly more sound. The cap determines the total permitted pollution. The allowances and continuous emissions monitoring provide a near-foolproof way to assure that the cap is met. If a pollutant is broadly fungible and the cap and timetable is calculated to meet the public health and environmental goals, then a cap and trade program can be idea. But neither netting nor bubbles had an environmental motivation or justification. They were purely for evasion of

In a related vein, the case began a pattern that continues to this day, of industry efforts to minimize the CAA's reach by circumscribing the ambit of the New Source Review (NSR) program, along with countervailing efforts by environmental groups to expand the reach of that program as broadly as possible.¹⁷ First introduced in rudimentary form in 1970, but significantly strengthened by Congress in the 1977 Amendments, the NSR program is intended to regulate strictly the introduction of additional air pollution when plants either install new equipment or update existing equipment. The process applies with greatest rigor to all new or modified sources in "non-attainment zones"—the dirtiest parts of the country, where states have not yet attained air quality standards.¹⁸

Among other steps, NSR requires owners to install state-of-the-art pollution control technology that will achieve the "lowest achievable emission rate" (LAER) possible for that type of source. In addition, each new or modified source must secure offsetting reductions of pollution from other sources in the area. Not surprisingly, to avoid these burdens, firms generally wish to avoid NSR.

The issue in *Chevron* was whether the EPA could authorize states to use a plantwide definition of stationary source in the NSR program in addition to the unit-by-unit definition. The effect of this new approach would be to treat all the polluting units or "points" (such as boilers or blast furnaces) at a plant as if they constituted a *single* source under an imaginary "bubble." The concept would allow a firm to trade emission increases at one unit for emission reductions at another; NSR would not be triggered because emissions under the entire bubble would not increase.

This abstract policy idea had real world implications: the widespread use of bubbles threatened to slow or reverse efforts to improve air quality in non-attainment zones, where health risks, and damage to crops and habitat, due to air pollution were most serious. Just when Congress had singled out these areas for stringent regulation, the EPA was proposing to adopt a regulatory reform concept that seemed to

rules the industry advocates lacked the votes to change legislatively." Email from David Doniger, March 15, 2005 (on file with author).

17. The dispute over NSR that began in *Chevron* has far reaching effects, and is still relevant today. See the discussion of NSR reform, *infra* note 121 and accompanying text. NSR reform is a key element of the Bush administration's proposed Clear Skies legislation, which, if it passes, will be the first significant amendment of the CAA in fifteen years. The bill has recently faced significant setbacks, failing to reach the full Senate due to a 9-9 vote by the Environment and Public Works Committee. See Michael Janofsky, *Bush-Backed Emissions Bill Fails to Reach Senate Floor*, N.Y. Times, A24:5 March 10, 2005.

18. As discussed below, NSR also applies to a program known as "Prevention of Significant Deterioration" (PSD), where the goal is to avoid the degradation of air quality. However, the NSR provisions at issue in *Chevron* concerned non-attainment zones.

march in the opposite direction. In support of the idea, industry claimed that going through the NSR permit process, meeting the LAER standard, and securing offsets was excessively costly and time consuming for little real air quality gain. Further, they argued, NSR created a potential disincentive to modernizing plants: firms would avoid updating equipment to avoid triggering the program's requirements.¹⁹ On the other hand, environmentalists argued that the bubble was a sleight of hand—a gimmick that would allow industry to avoid making air quality improvements as they made capital investments, and enabling them to grandfather old pollution rates indefinitely.

This was the context in which *Chevron* arose, and why the stakes were so high for environmental policy.

I. The Clean Air Act and the Birth of the Bubble Approach

Traditionally, air pollution, like most environmental issues, had been a matter handled locally by the states. Yet the states had done precious little to control it, even in the face of growing public concern. As early as 1948, a four-day air inversion in Donora, Pennsylvania, had made the news when it led to numerous excess deaths.²⁰ Similar incidents occurred in the 1950s and 1960s and were blamed for yet more fatalities.²¹ By the 60s, the consequences of state inaction were apparent to the naked eye, as smog engulfed major cities and soot damaged buildings and crops. Studies emerged showing that polluted air would take a toll on human health, raising the risk of death from heart disease and cancer.²²

Such scientific findings became more alarming in the wake of several high-profile incidents that alerted the country to the air pollution problem. Los Angeles's infamous smog was perhaps the most persistently glaring problem; in 1965, the city's carbon monoxide concentrations violated what would later become the federal air quality standard 78 to 99 percent of the time.²³ The problem pervaded the northeast as well.²⁴ On Thanksgiving Day in 1966, an inversion episode in New York City

19. The requirements in PSD areas are slightly different because the goal of the PSD program is to maintain air quality in areas where the federal ambient air standards are already met.

20. Indur Goklany, *Clearing the Air* 24–25 (1999).

21. *Id.* at 26.

22. See Oliver A. Houck, *More Unfinished Stories: Lucas, Atlanta Coalition and Palila/Sweet Home*, 75 U. Colo. L. Rev. 331, 386 & n. 357 (2004) (citing Council on Environmental Quality, *Environmental Quality: Fifth Annual Report of the Council on Environmental Quality* 12–14 (1974), reporting death rates from heart disease rising from 137 per 100,000 to 362 in 1970 and death rates from cancer rising from 64 per 100,000 to 163.8).

23. *Id.* at 27 and studies cited therein.

24. *Id.*

was blamed for approximately 170 deaths.²⁵ Eventually, the public outcry reached Washington, D.C.

After trying unsuccessfully to induce the states to act,²⁶ Congress passed the CAA amendments of 1970, launching the nation's first real experiment with a strong federal pollution control law. The legislation instructed the EPA to set, for a class of pervasive "criteria pollutants," health-based national ambient air quality standards (NAAQS),²⁷ which all states would be required to meet.²⁸

Chevron arose because the initial deadlines Congress set for state compliance with the NAAQS were, whether intentionally or not, wildly optimistic. The statute required the states to develop state implementation plans (SIPs) for achieving attainment with the federal standards by 1975 (with some exceptions).²⁹ Yet for a variety of reasons, there was widespread non-compliance. Unquestionably, the initial deadlines were simply unrealistic in terms of the time needed to develop and install controls on the regulated sources. There were other contributing factors as well, however: EPA was under-resourced and over-tasked; many states dragged their feet while others, if willing, lacked the technical and administrative capacity to generate accurate SIPs; industry opposed the

25. See *id.* at 26 and studies cited therein.

26. Congress had passed the Air Pollution Control Act, the first federal legislation aimed at curbing air pollution, in 1955 but this early legislation sought primarily to induce more state regulation by providing research support along with technical and financial aid to the states.

27. To meet NAAQS for these pollutants, states would be required to produce state implementation plans (SIPs)—essentially a collection of emission limits, standards, and other constraints that the states would impose on the various sources of pollution (both stationary and non-stationary) within their respective jurisdictions. This approach allows states to take the lead in meting out the pain of complying with federal standards, but it reserves to the federal government the power to approve or disapprove those plans. In theory, when the EPA approves a SIP, it is saying that the measures adopted in it will, collectively, ensure attainment of NAAQS by the statutory deadlines.

28. The EPA is authorized to set standards for a small set of pervasive and harmful air pollutants (the so-called "criteria pollutants," including sulfur dioxide, carbon monoxide, particulate matter, nitrogen oxides, lead and ozone), at a level that is "requisite to protect human health with an adequate margin of safety." See CAA §§ 108—109, 42 U.S.C. §§ 7408—7409 (2000).

29. Although the harm-based approach to setting national ambient standards, which are then implemented through regulations devised in state plans, remains the core of the Act, this approach has been supplemented by a variety of technology-based emissions standards that are directly imposed on individual sources of pollution, depending on where they are located, what they emit, when they are built and whether they are considered "major" or not under the Act. These emission limits apply in addition to whatever measures states adopt in their SIPs to guarantee compliance with federal ambient standards. A single stationary source of pollution may be subject to a host of requirements. For a summary of these requirements, see Mark S. Squillace & David R. Wooley, *Air Pollution* 61–67 (1999).

regulations at every turn; environmental groups litigated to push the EPA further than it wanted to go; and new unanticipated problems arose.³⁰ Thus, because of a combination of legislative misjudgment or optimism (or both), technical difficulty, complexity, opacity, and outright resistance, compliance with the law was, to put it mildly, incomplete.³¹

Still, the NAAQS gave citizens and policymakers, for the first time, a way of gauging whether the air they were breathing was "healthy." And the news was not good. As of 1975, 153 of 247 air quality control regions—over 60%—were expected to fall short of the ambient air quality standards. Fueling public concern, scientific studies and media reports increasingly linked this air pollution to serious illness and even death. In one study, the excess annual number of angina attacks due to carbon monoxide (CO) exposure in Los Angeles was expected to be between 530,000 and 690,000.³²

Awareness of carcinogens was also rising. Noting that between 60 and 90 percent of cancer was caused by environmental factors, the Council on Environmental Quality (CEQ) drew a connection between air pollution and higher-than-normal cancer death rates.³³ It was increasingly clear, as well, that air pollution was costly for the nation. In 1972, the EPA suggested that \$25 billion was a "conservative" estimate of the annual cost of air pollution.³⁴ Given the public's already heightened concern about the detrimental effects of air pollution, compliance that was spotty at best was seen as a potent public threat. Widespread non-attainment was a source of fear and outrage—and a driving force for reform.

To address the problem of non-compliance Congress amended the Act only seven years later. The 1977 CAA amendments extended the deadlines for achieving NAAQS for non-attainment areas to 1982 (and in some cases 1987),³⁵ and strengthened the rudimentary NSR program.

30. John P. Dwyer, *The Pathology of Symbolic Legislation*, 17 *Ecology L.Q.* 233 (1990).

31. On incomplete compliance generally, see Daniel A. Farber, *Taking Slippage Seriously: Noncompliance and Creative Compliance in Environmental Law*, 23 *Harv. Envtl. L. Rev.* 297 (1999).

32. Council on Environmental Quality Ann. Rep. 168 (1977).

33. Council on Environmental Quality Ann. Rep. 17, 19 (1975).

34. Environmental Protection Agency, *The Economics of Clean Air*, S. Doc. No. 92-67, at 1-10 (1972).

35. However, as the 1987 deadline approached, it was clear that many areas of the country still had not achieved compliance with NAAQS. As a result, much of the population continued to breathe unhealthy air. Congress moved to extend the deadlines again in 1990, and most observers expect they will need to be extended yet again, particularly in light of the EPA's 1997 rulemaking which set still tighter standards for ozone and particulate matter. Clearly, the non-attainment problem is serious, and ongoing.

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Going forward, NSR would require all new or modified sources in non-attainment zones to obtain state issued permits; to equip their new or modified sources with state-of-the-art pollution control technology (or to make other process changes) capable of achieving the LAER; and to secure offsets of pollution from other sources in the region so that the net result, after the offsets, will guarantee that the state is making "reasonable progress" toward compliance with the national air standards. Finally, under NSR, plant owners were required to certify to the state that all of the facilities under their control were in compliance with the requirements of the state's implementation plan.³⁶

As the EPA began to implement the 1977 Amendments, however, it struggled with how to balance the statutory requirement of forcing states to meet air quality standards with the political imperative of allowing them to continue to pursue a reasonable amount of economic growth. The stage was set for the bubble.

II. *The Debate Over the Bubble Approach*

The bubble rule at issue in *Chevron* did not appear overnight. As the EPA began implementing the CAA in the early seventies, the agency began to consider the merits of using the bubble in a variety of CAA programs.³⁷ This was part of a larger move toward adopting emissions trading, a policy tool that was quickly swept up in the politics of environmental regulation.³⁸

In theory, the bubble concept seems completely unobjectionable. It simply treats all the polluting units in a firm as if there were a tent over them, with a single hole for emissions, and allows firms to distribute emissions reductions among the individual units in whichever manner they choose. The bubble concept is a way of affording firms flexibility to make operational decisions about how to reach a given regulatory target in the cheapest way possible, providing they meet the target. Why does this benefit firms? Given the cost of technology, it can be much more expensive to squeeze the last increment of pollution control out of a new piece of equipment than to take other steps—such as shutting down an

36. 42 U.S.C. §§ 7502-7503.

37. On the history and rationale of the bubble policy generally, see Michael H. Levin, *Building a Better Bubble at EPA*, 9 Regulation 33 (1985). For the history of emissions trading, see Tom Tietenberg, *Emissions Trading: An Exercise in Reforming Pollution Policy*, Resources for the Future, 1985.

38. See generally Liroff, *supra* note 13; see also Michael H. Levin, *Getting There: Implementing the "Bubble Policy" in Social Regulation: Strategies for Reform* 68-69 (Bardach & R. Kagan eds., 1982) (hereinafter Levin, *Bubble Policy*) (claiming that the bubble was originally proposed in the Nixon administration by major smelters, "a heavily polluting and recalcitrant industry," and was "fiercely opposed by EPA's Air Programs and Enforcement Offices on enforcement and equity grounds").

older and less efficient unit, switching fuels, or finding other practices to change at the facility that will yield improvements in air quality. The bubble allows firms to choose their poison.³⁹

To see the potential benefits of such an approach, consider what Mike Levin,⁴⁰ the head of EPA's Office of Planning and Management (OPM) at the time,⁴¹ often did in cafeterias around the country to illustrate it.

Take a salt shaker and a pepper shaker. Assume that command and control regulation typically requires uniform reductions from each emission point within an industrial category.⁴² If the shakers each are stacks at (say) a refinery, and each currently is allowed to (and does) emit 250 tons per year (TPY) of volatile organic compounds, a new rule would require each to reduce by 100 TPY. But let's say it will cost 5 times as much to reduce 100 tons at Salt as at Pepper because, for example, there's not enough room to install control equipment there, or because Salt's location is much hotter, so it will have to install condensers & refrigeration to make control equipment work reliably.

Why not allow Pepper (or Pepper plus another unregulated refinery source emitting the same pollutants) to reduce by 200 tons instead? Costs might not only be reduced fivefold in this case, but industry resistance to issuance of the rule in the first place could be reduced. So would foot-dragging on compliance, or applications for "variances" on grounds of cost-effectiveness (which if granted, would require little or no reduction at Salt). More important, the rule suddenly seems reasonable, because it allows adjustment for site-specific variations that regulators knew nothing about. Still more important, it encourages regulated sources to come forward with superior and more efficient reduction options than they had previously had reason to seek or disclose. Regulators can use this information to secure further reductions with less friction on a

39. For an explanation and defense of the rationale behind the bubble, see generally Levin, *Bubble Policy*, *supra* note 38.

40. Levin had gotten into the "reform game" as the Deputy Director of an Occupational Health and Safety Reform Act task force in the Carter administration, and was hired at EPA by Doug Costle at the end of the Carter Administration.

41. For a history of the role of OPM in developing the bubble during the late seventies, see Levin, *Bubble Policy*, *supra* note 38, at 69-87. See also Liroff, *supra* note 13, at 37.

42. Command and control regulation, generally, is described as a centralized, uniform and highly prescriptive approach. A classic example is traditional, technology-based standard-setting, in which all firms are required to meet a given regulatory standard, which they usually do by adopting the same technology the agency used in the setting the standard.

system-wide basis, as long as they do so without directly penalizing the sources that came forward this way.⁴³ Over time, regulators' jobs get easier, and more real reductions are secured.⁴⁴

Understood in these terms, bubbles seem eminently sensible.⁴⁵ Indeed, as an abstract policy idea, the bubble concept garnered praise from everyone: EPA officials, representatives of industry, and even environmentalists.⁴⁶ Yet the disagreement lay in details of the *application* of the bubble concept by EPA in nonattainment zones. There is a vast difference between using a bubble to help existing sources achieve compliance under approved state plans, and using it to allow offsets between units in non-attainment zones, as the EPA's bubble rule did.⁴⁷

To appreciate the "dark side" of the bubble⁴⁸ consider these objections: as implemented by EPA in nonattainment zones, the bubble allowed firms to retire or modify old units and apply the resulting emission credits to new or modified units. And this would occur without requiring the firm to install pollution control technology that would force an even greater reduction in emission levels over time. Allowing this kind of offsetting essentially enables firms to perpetuate existing emission levels indefinitely. They "bank" the excess pollution from old units, converting existing pollution levels into an entitlement going forward. The public never sees the air quality benefit of retired units with this approach. Over time, the bubble could also result in firms capturing future credits for what are called "anyway" tons—tons of

43. "Agencies easily can strike that balance by, for example, committing to impose new requirements which are based on this information, only to all sources in a category across-the-board—not just to the sources that showed they could reduce further. In this way, the incentives to come forward can become self-reinforcing because sources receive tangible balance sheet rewards. At the same time, the regulatory system gets a feedback loop for continuous improvement." Email from Mike Levin, March 15, 2005 (on file with author).

44. *Id.*

45. Levin Email, *supra* note 43. Levin's point then, and now, is that bubbles represented a superior alternative to the NSR program as it operated in reality, though not, perhaps, as it might have operated in an ideal world of perfect implementation. Sources were already getting variances from SIP rules for existing sources in nonattainment zones without producing any emissions reductions, so NSR was being "evaded" already. In his view, there were so many escape hatches from NSR that the notion of the bubble costing the nation "foregone" NSR reductions was fanciful.

46. David Doniger, *The Dark Side of the Bubble*, 4 *The Environmental Forum* 32 (1985) (hereinafter Doniger, *Dark Side*). After skewering the EPA's for its application of the bubble concept in non-attainment zones, Doniger writes: "Notwithstanding these criticisms of the application of the bubble, NRDC *likes* the concept itself; it has the real potential to do good in the fight for clean air." *Id.* at 35.

47. For this reason, it is more appropriate to describe *Chevron* as a case about "netting" rather than the bubbles.

48. Doniger, *Dark Side*, *supra* note 46; Doniger Email, *supra* note 16.

pollution that would have been retired anyway, as firms, in the regular course of business, replace old equipment with new units.⁴⁹

Moreover, when examined closely, the EPA's application of the bubble in fact allowed firms to calculate a net *increase* in pollution as if it were equivalent to no net increase. This was the result of the agency's definition of what constituted a "significant increase" for purposes of triggering NSR. Under the agency's definition, for example, a forty ton increase in emissions would not be considered significant.⁵⁰ So using bubbles in nonattainment zones would actually allow air quality to degrade in areas of the country where health risks were perceived to be greatest.

Perhaps the most fundamental objection to the bubble, was that companies were evading controls "obviously intended to apply when new capital commitments were made, by opportunistically seizing the inevitable 'headroom' between the actual operation of existing sources and the regulatory requirements applicable to them."⁵¹ The command and control limits "had always left considerable headroom in that the regulator's strategy was to impose a requirement tough enough to make a company install controls, but not so tough as to give the company a legitimate issue as to whether the controls would meet the limit. What the regulatory reforms sought to do was to capture this headroom and give it back to the companies, not to the public."⁵² The result for nonattainment zones then, was the exact opposite effect of what Congress

49. Many examples of beneficial trades are vulnerable to criticism on grounds that, when closely examined, those trades are of dubious value. See e.g., the example, cited by Liroff, of Armco's trade of fugitive emissions from blast and oxygen furnaces for reductions in road dust. Fugitive particulate emissions escape through windows and vents without going through stacks, so controlling them can be costly. In the Armco example, removing 587 tons of emissions (about 92% of emissions) would have been \$7.5 million using conventional controls. But reducing particulate emissions from the company's open dust sources (through road paving, road sweeping, chemical treatment of unpaved roads and a variety of other controls) would be much cheaper (a reduction of 3,965 tons per year, nearly seven times greater than the 587 tons expected from conventional controls on fugitive emissions). In theory, this example demonstrates how the cost per ton of emissions controlled would be substantially less for the firm using the alternative strategy. See Liroff, *supra* note 13, at 76-77. Yet furnace emissions are likely to be smaller and impregnated with toxics whereas road dust is likely to be on the high end of the size scale and relatively free of toxics. Unless such trades are for very large ratios, there is little rationale for them.

50. See Respondent's Brief, *NRDC v. Gorsuch*, 685 F.2d 718 (D.C. Cir. 1982), D.C. Cir. No. 81-2208, at 44-45. See also Transcript of Official Proceedings of the Supreme Court of the United States, *Chevron, Inc. v. NRDC, Inc.*, at 8 where David Doniger points this out to the Court. Indeed, each instance of using the bubble could produce a relatively small increase in pollutants when looked at alone (i.e., a net increase of forty tons which would not be considered "significant" under the EPA's regulation), but lead to a substantial increase in the aggregate (when these forty ton increases were added together).

51. Doniger Email, *supra* note 48.

52. *Id.*

seemed to require.⁵³ Finally, industry's argument that NSR would retard modernization was dubious: pollution control costs, it was argued, are only one factor in a firm's investment decisions.⁵⁴

Leading the opposition to the bubble on these grounds was the Natural Resources Defense Council (NRDC),⁵⁵ which had emerged by the mid-seventies as a forceful advocate for the environment (and which, of course, ultimately ended up as the plaintiff in *Chevron*).⁵⁶ In the NRDC's view, widespread adoption of the bubble would at worst reduce, and at best delay, the air quality gains that would otherwise have been made under NSR.

Perhaps surprisingly, many states opposed the bubble idea as well. They worried that this new policy idea would provide industry with new

53. A less obvious point is that if bubbles apply to modified or new units at existing plant in non-attainment zones, the effect could be to stifle economic growth by precluding the construction of entirely new plants in those areas. After all, under the CAA, states must ensure that they are making "reasonable further progress" toward the federal air standards. By foregoing gains that might otherwise be made due to installing technology at existing plants, states would have no choice but to more closely control the construction of new ones. Indeed, deploying the bubble in this way seems to favor existing firms that wish to expand or update their facilities over newer firms that might locate in the non-attainment zone. By allowing existing firms to expand without applying the most stringent pollution control technology, the bubble rule potentially shifts the burden of emissions reductions to other sources in the same region. The bubble appears to ease the burden on some firms at the expense of others. This point is not an argument against the bubble. In fact bubble advocates would likely agree that simply shifting the burdens around is perfectly consistent with achieving compliance with NAAQS. The real goal, they would say, is to ensure that SIPs guarantee compliance, however the burdens of doing so might be allocated. In this view, the SIP is the insurance policy against any tinkering that might be done with NSR. By contrast, opponents of the bubble believed that NSR was a minimum set of requirements for all new sources in non-attainment zones, the floor over which the SIP process would be laid.

54. That is, even if the marginal cost of controlling pollution from new units is greater than the cost of controlling older ones, this fact alone will not necessarily deter modernization. A firm might still choose to invest in new sources even if it means adopting expensive technological controls, either because the new sources will be more efficient, or because other factors suggest that doing so would be in the firm's interest. See Liroff, *supra* note 13, at 108-09.

55. In the late seventies the NRDC was arguably the major non-governmental player in air and water pollution policy and enforcement. Created in the late sixties by entrepreneurial Yale Law School graduates, and funded by the Ford Foundation, the organization was, by the late seventies, litigating hundreds of suits under both the CAA and the Clean Water Act. Its efforts were nothing short of Herculean in these early and relatively lean years, especially considering the resources and political influence wielded by the chemical and petroleum industries (among others) and their trade associations in Washington, D.C. See Robert Gottlieb, *Forcing the Spring—The Transformation of the American Environmental Movement*, 140-43 (1993); Marshall Robinson, *The Ford Foundation—Sowing the Seeds of Revolution*, *Environment* 11 (April 1993).

56. For a history of the inter-agency conflict over the 1979 proposal, and a description of its contents, see Liroff, *supra* note 13, at 42-48.

opportunities to litigate, potentially interfering with the states' attempts to revise their SIPs, and generally undermining ongoing enforcement efforts.⁵⁷ Moreover, a number of states believed they already had the authority to use bubbles, and some were already doing so; they thought they possessed the flexibility that the EPA wanted to bestow upon them.⁵⁸

The divide over bubbles also pervaded the agency itself. Scratch the surface of *Chevron* and one finds not a united EPA seeking policy flexibility and judicial deference, but a struggle within the agency based on two very different views of the law. On one side were regulatory reformers like Mike Levin, who believed that the promise of market mechanisms—in terms of cost savings, ease of administration, and incentives to modernization—outweighed the inflated predictions about what command and control strategies would otherwise achieve.⁵⁹ They argued that chasing every small emissions increase was a misallocation of resources that would cost firms dearly for little air quality gain. Command and control regulation was reaching its limits in terms of effectiveness. Bubbles would simply afford states flexibility as they wrote SIPs, and the SIPs could be relied upon to guarantee compliance with NAAQS.

On the other side were many career employees in the agency, both in the Office of Air Quality Planning and Standards (OAQPS) and the enforcement office, who believed that most of the progress on air pollution had been, and would continue to be, the result of forcing firms to apply technology to their sources (as in the New Source Performance Standards Program).

Their perspective was perhaps best embodied by engineers like Walt Barber (who directed OAQPS in the late seventies), and by lawyers like David Hawkins, the EPA's Assistant Administrator for Air quality programs (who had formerly been one of the NRDC's primary air lawyer),⁶⁰ who were sympathetic to the view that installing "hardware" on sources was the best way to achieve air quality gains. As one former EPA staff attorney put it, "The engineers didn't care about law and regulations. They wanted to see hardware on production units. They trusted hardware, not regulations. That's where they thought they'd get the reductions."⁶¹ To them the bubble was an abstraction they could not

57. *Id.* 38–39.

58. *Id.* at 44–45.

59. This characterization is based in part on a Telephone Interview of Michael Levin, January 13, 2005 (transcript on file with author).

60. Hawkins subsequently returned to NRDC.

61. Telephone Interview with Peter Wyckoff, November 16, 2004 (transcript on file with author).

verify, an example of how the regulatory "reformers" in OPM were simply gaming the system to facilitate industry evasion of air pollution control.

It was in the heat of this internal debate that the EPA moved forward toward adopting the bubble approach.

III. Prior Bubble Litigation

The EPA first adopted the bubble in 1975, for purposes of implementing the New Source Performance Standards (NSPS) of the CAA. The NSPS program requires that all new or modified sources of pollution meet emissions standards set according to the best demonstrated technology,⁶² on an industry-by-industry basis. The program's purpose is to ensure that all new sources of pollution adopt at least a minimal level of pollution control technology. In the NSPS provisions, Congress defined "stationary source" as "any building, structure, facility or installation" emitting an air pollutant. It defined "modification" as any change in a stationary source that increases emissions of any air pollutant.

In 1975, under pressure from both the smelting industry and the Department of Commerce, the EPA proposed using a bubble concept for modified sources in the NSPS program. The agency would not deem there to be a "modification" triggering NSPS if plants could offset increases in emissions from one unit with decreases in emissions from another unit at the same plant. As discussed above, this offered significant potential savings to plant owners.

In *ASARCO, Inc. v. EPA*, the first bubble case to reach the federal courts, the D.C. Circuit invalidated the agency's rule.⁶³ The Court reasoned that Congress intended the NSPS provisions to improve air quality. The plantwide definition of stationary source was incompatible with congressional intent because "netting out" emissions (subtracting reductions against increases to achieve no net increase) would simply maintain air quality at the same level. "Treating whole plants as single sources," said the Court, "would grant the operators of existing plants permanent easements against federal new source standards—and the worst polluters would get the largest easements. The 'best' pollution control technology would never have to be installed, and existing plants would use up much of the available clean air, inhibiting construction of new plants...."⁶⁴ In their first at-bat, the regulatory reformers had struck out.

62. Of course, this effectively results in firms adopting the technology that was used to set the standard.

63. 578 F.2d 319 (D.C. Cir. 1978).

64. *Id.* at 329-30 n.40.

Yet this proved a weak deterrent. The agency next deployed the bubble when implementing the PSD program, designed to prevent air quality in cleaner areas of the country from degrading below federal standards. The PSD program was adopted by the EPA in 1974 in response to a lawsuit by the Sierra Club, and ultimately added to the Act, with minor modifications, by Congress in 1977.⁶⁵ The PSD provisions limit the annual increment by which air pollution can increase—essentially capping and controlling the rate of air quality degradation. The program requires all proposed new or modified sources to go through a pre-construction review and permitting process to ensure that their emissions will not lead to an exceedance of the allowable increments. In addition, these sources must comply with a Best Available Control Technology standard (BACT), which must be at least as stringent as the NSPS standards. There would, however, be no need for preconstruction review or compliance with BACT if, using the bubble concept, the increases from one point of pollution could be offset by decreases from another point at the same plant.

This time, in *Alabama Power Co. v. Costle*, a different panel of the D.C. Circuit upheld the regulations.⁶⁶ Not only was the plantwide definition permissible in the PSD program, held the Court, it was mandatory. This was because the purpose of the PSD program, was not to *improve* air quality, as was the case with the NSPS provisions in *ASARCO*, but merely to *maintain* it. Bubbles were consistent with this goal. Indeed, the Court found that Congress had “clearly envisioned” that entire plants could be sources because the relevant section lists fourteen different types of “plants” as examples of stationary sources.⁶⁷ The opinion emphasized that the agency had discretion to define the meaning of “stationary source” in light of the different programs of the Act. The Court reasoned that in adopting the PSD provisions, Congress was concerned with controlling emissions of new sources “only where industrial changes might increase pollution in an area, not where an existing plant changed its operations in ways that produced no pollution increase.”⁶⁸ Modifications that result in no net increase in pollution, then, “are not ‘modifications’ at all.”⁶⁹

Thus, *Chevron* was the first case involving the bubble rule to reach the Supreme Court, but the third to have been heard by the D.C. Circuit. These two prior cases set the stage for *Chevron*, which seemed, on first

65. See *Sierra Club v. Ruckelshaus*, 344 F. Supp. 253 (D.D.C. 1972). For the EPA regulations, see 39 Fed. Reg. 42510, December 5, 1974.

66. 636 F.2d 323 (D.C. Cir. 1979).

67. *Id.* at 397.

68. *Id.* at 401.

69. *Id.*

glance, more akin to *ASARCO* than *Alabama Power*. After all, the EPA was again proposing to use the plantwide definition in a program designed to improve air quality. Why would the Court allow it this time?

IV. Setting the Stage for Chevron: The EPA's Adoption of the Bubble in Non-Attainment Zones

Chevron addressed the most controversial use of the bubble: the possibility of applying it to new and modified sources in non-attainment zones. The EPA had already taken a step in this direction in its 1976 "offset" policy, which allowed the addition or modification of sources as long as the new emissions could be offset with reductions from other sources in the area. Congress largely adopted this policy in the 1977 Amendments to the Clean Air Act, when it added the other NSR provisions, though it went further in prescribing additional requirements. Thus, while Congress did not forbid all new construction in these areas, it did establish a detailed set of preconditions under which economic development could proceed.

The EPA originally proposed using bubbles for existing sources only in non-attainment zones in 1977.⁷⁰ By all accounts, the idea was put forward by Armco Steel, which, like much of the steel industry, was at the time struggling to comply with air pollution regulations. Still, as noted earlier, the EPA remained internally divided over the wisdom of using the bubble in this context. And environmental groups were dead-set against it.

During the final years of the Carter Administration the agency tiptoed up to promulgating the plantwide definition of source. First, it modified its offset policy to allow netting in non-attainment areas (though only where states had revised their SIPs). Then, in 1980, the agency went so far as to issue a Notice of Proposed Rulemaking formally adopting the plantwide definition.

Yet at the last minute, EPA dropped the idea.⁷¹ The Carter Administration's definition of "stationary source" for the NSR program remained as it had been: each individual unit of equipment, such as a boiler or blast furnace, could be a stationary source, as could an entire plant—the so-called "dual definition" of source. Specifically, the regulation defined "stationary source" to mean "any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act."⁷² For obvious reasons, this approach expands the reach of the NSR Program. Every time a firm modifies a single unit, it triggers the application of the NSR requirements.

70. Liroff, *supra* note 13, at 4.

71. For an excellent chronology of these events, see Liroff, *supra* note 13, at 26.

72. See 40 C.F.R. 51.18 (j) (1)(k)-(iii) and 52.24(f)(1)-(3).

When the Reagan Administration swept into office on a deregulatory platform looking for ways to ease what they viewed as excessive burdens on industry, the regulatory reformers at the EPA had a sympathetic ear. President Reagan appointed Ann Gorsuch, an anti-regulatory crusader, to head the EPA. The administration quickly embraced the bubble concept and moved it high on the agenda.⁷³ In short order, the EPA adopted the bubble rule in nonattainment zones, stating clearly in the rulemaking record that the new definition was the result of "a Government-wide reexamination of regulatory burdens and complexities."⁷⁴ The agency had simply changed its mind. It now felt that the dual definition was a disincentive to modernization and would "retard progress in air pollution control by discouraging the replacement of older, dirtier processes and equipment."⁷⁵

Given the depth of disagreement over the bubble approach, the agency's new interpretation of "stationary source" was, to say the least, controversial. Congress had not defined the term in the NSR program, or anywhere else in the new non-attainment provisions. (Indeed, there is no evidence that Congress even considered the matter.) The agency itself had long rejected the "plantwide" definition of source in non-attainment zones; environmentalists had been resisting efforts to adopt it in other programs under the CAA since at least 1975; and industry had been pushing the idea for years behind the scenes. This was bound to wind up as a lawsuit.

V. The Chevron Litigation

The NRDC challenged the EPA's NSR bubble rule in 1982 in *NRDC v. Gorsuch*.⁷⁶ Various industry groups intervened in support of the regulation, including the Chemical Manufacturer's Association, the American Petroleum Institute and Chevron Inc. The panel was comprised of Judges Mikva, Ginsburg (Ruth Bader) and Jameson.⁷⁷ The NRDC's strategy was, in the words of David Doniger, who argued the case, to "ride the distinction the Court had drawn in *Alabama Power*."⁷⁸

73. The bubble concept falls well short of later proposals to adopt more full-blown market mechanisms (such as the sulfur dioxide trading scheme adopted in the 1990 Amendments to the Act) it was among the earliest ideas sanctioned by economists and championed by industry as an alternative to traditional command and control regulation.

74. See Petitioner's Brief, *NRDC v. Gorsuch*, 685 F.2d 718 (D.C. Cir. 1982), D.C. Cir. No. 81-2208, at 12; 46 Fed. Reg. 16281 (1981).

75. See Petitioner's Brief, *NRDC v. Gorsuch*, 685 F.2d 718 (D.C. Cir. 1982), D.C. Cir. No. 81-2208 at 13.

76. 685 F.2d 718 (D.C. Cir. 1982).

77. None of the members of the panel had heard either of the prior two bubble cases. Judge Jameson was a Senior District Judge from Montana.

78. Telephone Interview with David Doniger, July 28, 2004 (transcript on file with author).

Indeed, this appears to have worked. The Court ruled unanimously that the agency's new interpretation of "stationary source" was unlawful.

The Court claimed to be controlled by its prior decisions in *ASARCO* and *Alabama Power*, which together established a "bright line test" for determining when the bubble concept is permissible.⁷⁹ Then judge (and now Justice) Ruth Bader Ginsburg's unanimous opinion claimed that the bubble was "mandatory for [CAA] programs designed merely to maintain existing air quality; it is inappropriate...in programs enacted to improve [air quality]."⁸⁰ Because improving air quality was the "raison d'être"⁸¹ of the non-attainment provisions, the Court was "impelled by the force of [its] precedent"⁸² to hold that the EPA's new definition of stationary source for in the non-attainment program was unlawful. In so holding, the D.C. Circuit rejected the government's argument that there were a variety of plausible interpretations of "source;" that it was used inconsistently throughout the statute; and that the agency should be free to exercise its discretion unless its interpretation was contradicted by the statute.⁸³

Yet the NRDC's strategy would come back to haunt Doniger when the case reached the Supreme Court. In reflecting on the litigation strategy, Doniger (now returned to the NRDC after serving at the EPA during the Clinton administration) said that he did not appreciate, until the Reply stage before the D.C. Circuit, that the best argument against the bubble rule was based on the statute's plain meaning. The term stationary source simply *had to* mean each individual unit or the other specific NSR requirements would not make sense. Though he would go on to advance this argument in his Supreme Court brief (relying heavily on the legislative history of the 1977 amendments), he had argued it only in Reply to the D.C. Circuit. As a result, the Court's rationale was heavily dependent on the dubious distinction between *ASARCO* and *Alabama Power*. The Court appeared to be inventing its bright line test. In the words of Jose Allen, the head of the Environmental Defense Section at the Department of Justice, who argued the case for the government, the decision seemed to impose a "straitjacket" on the agency that wasn't there.

A. Seeking *Certiorari*

According to Allen, it was not obvious at the outset that the government would seek *certiorari* in *Chevron*. On the one hand, the

79. 685 F.2d at 726.

80. *Id.*

81. *Id.*

82. *Id.* at 720.

83. Telephone Interview with Jose Allen, August 2, 2004 (transcript on file with author). Allen wrote the brief and argued the case for the government in the D.C. Circuit.

bubble policy had become an important part of the Reagan administration's de-regulatory agenda, so when the D.C. Circuit ruled against the EPA, the decision had political consequences for the administration. There was considerable pressure from officials at the Office of Management and Budget, and in the White House, to seek *certiorari* in the case. And it was clear that Chevron, Inc. was going to seek *certiorari*, so the Solicitor General might do better to proceed as petitioner to get control.⁸⁴

On the other hand, however, there were those in both the EPA and the Solicitor General's office who took the view that the case presented a close question as to the appropriate definition of "stationary source" and perhaps did not merit a *certiorari* petition.

Similarly, many career staff at the EPA were sympathetic to the D.C. Circuit's holding, and did not favor the administration's position on the bubble policy. There was considerable concern among line personnel at the agency that if the Supreme Court reversed, and gave the agency the policy flexibility the regulatory reformers sought, it would ultimately hinder the advance of air pollution regulation.⁸⁵ Moreover, as Allen points out, even if the Court of Appeals' bright line test was dubious, to seek *certiorari* the government would need to argue that the D.C. Circuit had been mistaken in its judgment, regardless of its reasoning.⁸⁶

The discussion within the administration went back and forth until finally it resolved in favor of filing the petition, presumably for political reasons. Indeed, Doniger recalls "pitching" the Deputy Solicitor General, in a couple of conversations, that the government should not seek *certiorari*. Though critical of the D.C. Circuit's approach, the Deputy seemed convinced by Doniger's argument that the bubble was not consistent with the statutory text. He told Doniger that he would recommend against the petition. Yet Doniger later learned that the Deputy had been overruled, on the orders of the White House.⁸⁷

Just as the government's decision to seek *certiorari* was not a foregone conclusion, it was far from clear that the Supreme Court would take the case. As Bill Pedersen (who drafted the merits brief at the EPA) points out, there was no split in the Circuits, the case raised no

84. This was Mark Levy's understanding of the rationale for seeking *certiorari*, though he did not participate in contemporaneous discussions in the Solicitor General's office at the time. See Telephone Interview with Mark Levy, August 3, 2004 (transcript on file with author).

85. *Id.* Allen reports that it was difficult to get a consistent position out of the EPA regarding how sweeping the argument should be and how strongly to argue what the agency's past positions were. The memo to the Solicitor General requesting *certiorari* went back and forth to EPA numerous times. It was hard to get consensus from the agency because of the internal division.

86. *Id.*

87. Doniger Email, *supra* note 48.

constitutional issue and the interpretive issue was a small part of a single regulatory statute. Yet when the Court did take it, Pedersen says, Paul Bator, the Deputy Solicitor General, and others on the government side, thought they had a winner.⁸⁸ Why would the Court take it to affirm?⁸⁹

B. The Briefs

Consistent with Doniger's new strategy of emphasizing the "plain meaning" of the statute, the respondent's brief is a detailed, sustained argument that Congress clearly intended to preclude a plantwide definition of stationary source in the non-attainment zone provisions. The NRDC argued that the agency was due no deference because there was simply no statutory ambiguity.

Doniger's brief, pared down, argued as follows: The non-attainment zone provisions require permits for any new or modified major stationary source. Section 302(j) defines "Major stationary source" as any "stationary facility or source" which emits at least 100 tons per year of pollution. This restates but does not solve the interpretive problem concerning the term "source." However, Section 111 (the NSPS provisions) defines stationary source as any "building, structure, facility, or installation." Thus, a major stationary source is simply a large source as defined in Section 111. And the plainest meaning of each of the terms in Section 111 leads to the conclusion that at least two of them are incapable of a plantwide definition. While "facility" and "installation" could conceivably encompass a plant, neither "building" nor "structure" can.⁹⁰

Further, the brief argued, any other reading would effectively rewrite the non-attainment provisions. The Act imposes five separate conditions on new or modified sources in non-attainment zones: a complete SIP; offsets with other area sources to ensure net reduction in pollution; the application of LAER; and certification of company-wide compliance with all CAA requirements (plus, in areas with extended deadlines, a cost-benefit analysis).⁹¹ The government's construction of the Act would allow a project to be built when only *one* of these conditions is met. That is, Doniger's brief argued, if the plant complied with the offset condition alone it would not be a major stationary source. In the NRDC's estimation at the time, adopting a plant-wide definition of stationary source would exempt 90% of the sources otherwise subject

88. Telephone Interview with Bill Pedersen, June 1, 2004 (transcript on file with author).

89. Pedersen attributes this thought to Paul Bator, who voiced it in an internal meeting. *Id.*

90. See Respondent's Brief, *Chevron v. NRDC*, S. Ct. Nos. 82-1005, at 29.

91. *Id.* at 32.

to NSR.⁹² By not requiring the installation of state-of-the-art technology on all new or modified sources, the EPA would achieve a lesser level of control. This, the NRDC's brief argued, would directly contradict congressional intent.

The Petitioner's brief, by contrast, placed administrative law principles of deference at the center of its argument. It accused the court of appeals of inventing a "bright line test of its own . . . a test creating a set of rigid statutory pigeon-holes whose function is to strip the Administrator of any discretion whatever in working out the details of the non-attainment program."⁹³ The D.C. Circuit's decision "constitutes an unwarranted usurpation" of the authority reserved to the agency.⁹⁴ This is remarkable, argued the government, when the lower court admits that that text and legislative history do not provide a definition of the term in question.

The brief emphasized that giving states the option of using the bubble best balances the competing purposes of the Act: improving air quality and encouraging industrial growth.⁹⁵ The government raised the specter of severe economic consequences: "The resulting expense and delay" that would result from rejecting the plantwide definition, would "create a substantial disincentive to expand capacity or replace outmoded and inefficient equipment, hampering growth and retarding modernization."⁹⁶

The government did, however, have some problems. For example, the EPA had been inconsistent in its definition of "stationary source" over time and this flip-flopping might undermine the argument for deference. On the claim that the bubble was necessary to spur modernization, the evidence offered was a single hypothetical, and a citation to the EPA's rulemaking record, which itself relied on two anecdotal industry letters—hardly a compelling case for the bubble.⁹⁷

92. This figure was produced as a result of a single study by Communities for a Better Environment which was cited in the Respondent's brief. The assertion was not challenged in the litigation. Even if this figure is overstated, it is conceivable that widespread state adoption of the bubble concept would lead to substantial losses—in the form of foregone gains—in air quality. This conclusion seems inescapable unless one assumes that requiring firms to meet the most stringent technology standard inhibits modernization to such an extent that it effectively cancels out the beneficial effects of requiring compliance with the standard in the first place. I thank Craig Oren for making this point. Telephone conversation, October 24, 2004 (on file with author).

93. Petitioner's Brief, *Chevron v. NRDC*, S. Ct. Nos. 82-1005 at 16.

94. *Id.* at 19.

95. *Id.* at 17.

96. *Id.* at 29.

97. See Respondent's Brief, *Chevron v. NRDC*, S. Ct. Nos. 82-1005, at 44-45. The brief is also somewhat misleading in suggesting that a plantwide definition "would not

Even without much empirical evidence, however, framing the case in terms of "environment versus economy," may have been an especially wise move. Bill Pedersen credits Paul Bator with this framing, and speculates that it made the case seem more consequential to the Court. Perhaps, he speculates, it reinforced the Supreme Court's decision to grant *certiorari* in the first place.⁹⁸

The brief did two other things that may have been especially effective. First, whereas the *certiorari* petition had ended with the administrative law argument, the merits brief began with it. The petitioners took the view that it was in the overall interest of the government for agencies not to have their hands tied; that giving the expert regulators discretion was sensible in cases of such ambiguity and complexity; and that as long as the agency had a reasoned explanation, it could change its mind as administrations came and went.⁹⁹

Second, the brief stressed that the D.C. Circuit was simply making things up. Its bright line *ASARCO/Alabama Power* rule seemed too contrived.¹⁰⁰ How could the bubble be required in some instances and prohibited in others if it was not even mentioned in the statute? Paul Bator and Mark Levy (an Assistant to the Solicitor General at the time, who wrote the brief with significant input from the EPA), were not environmental lawyers and saw the case through an administrative law lens. Levy's approach played into the frustration the Supreme Court had recently expressed about the tendency of some judges on the D.C. Circuit to roll up their sleeves and wade into searching review of agency decisions. In *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*,¹⁰¹ the Supreme Court had already tried to rein in this kind of thing. Yet the D.C. Circuit was at it again.

C. Oral Argument

By all accounts, oral argument was a dismal affair.¹⁰² Neither side thought it went well. The Court was skeptical of the administration but gave the NRDC an equally difficult time. Some of the Justices appeared, at least at times, not to fully grasp the complexities of the case. Justice

materially affect *net* air quality, especially if one considers the aggregate and long term effects of the policy." As mentioned earlier, the EPA's calculation of "significant increase" allows for a net increase in emissions without triggering NSR. *Id.* at 29-30. See Respondent's Brief at page 45 for the counter-argument.

98. Pedersen Interview, *supra* note 88.

99. *Id.*

100. Levy Interview, *supra* note 84.

101. See *Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519 (1978).

102. This characterization of oral argument is based on interviews with a number of people who were present, and from my own reading of the transcript.

Rehnquist walked out at the start of oral argument and never returned.¹⁰³ There was both puzzlement and displeasure coming from the Bench. For example, at different points, Justice O'Connor seemed annoyed at Deputy Solicitor General Paul Bator, who at times appeared blustery, and who, on occasion, revealed a less than complete mastery of the intricacies of the statute.¹⁰⁴

After the argument, both sides were nervous. The only thing Jose Allen thought the government had going for it was that the Supreme Court "didn't rule with environmental interests."¹⁰⁵ At the EPA, there was some anxiety that the Deputy Solicitor General had not fared well in oral argument and that the Justices did not seem to understand the case. For his part, the NRDC's Doniger, in his first Supreme Court argument, got bogged down in the minutiae of the definition of "source," trying painstakingly to illuminate how the plain meaning argument worked. Later, when pressed by Justice Stewart about the effect of the bubble (the Justice assumed that pollution levels before and after netting were the same), he tried to impress on the Justice that in fact netting in this instance would result in emissions *increases*. The Justice did not look pleased.

Doniger also misinterpreted the intent behind a crucial question from the Bench. When Justice Stevens asked him, during an exchange, "So you think *Alabama Power* was wrongly decided?" Doniger answered yes, thinking that the Justice was persuaded by his newly minted plain meaning argument, and saw that the D.C. Circuit had simply used the wrong rationale for the right decision. But this was not at all what Justice Stevens meant. He thought the D.C. Circuit's bright line test was dubious. Doniger had no choice, however. He was boxed in by his plain meaning argument. He *had* to say that *Alabama Power* was wrongly decided.

This was a setback to Doniger, who had gone into oral argument feeling optimistic. His spirits had been lifted earlier that day when, after attending the morning session, he went to grab a bite in the cafeteria. There he overheard a conversation between two clerks discussing the afternoon cases, in which one clerk complained to the other about *Chevron*. The complaining clerk had initially thought it would "an interesting case about economics," but it turned out to be "just an

103. Doniger Interview, *supra* note 78.

104. For example, Bator did not seem to know the answer to a question from the Bench about the justification for the rule deeming increases in emissions up to 100 tons to be not "significant," when the statute on its face required new source review for "any increase." See 1984 U.S. Trans Lexis 68 at 5. The effect of this aspect of the rule is to allow emissions to *increase* under the bubble, rather than require that they net out. In the aggregate, this would lead to poorer air quality, a point Doniger tried to make.

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ordinary administrative law case."¹⁰⁶ Doniger thought this was a good sign—that the clerks would be focused on the statutory interpretation issues. Little did he know.

D. The Supreme Court Decision

The result in *Chevron* shocked everyone. Doniger was stunned to lose 6–0. The government, including Jose Allen and Mark Levy, had not anticipated the one-sidedness of their victory, or the sweeping nature of the decision. Indeed, no one involved in the litigation, or who was close to it, appears to have foreseen that *Chevron* would be a major administrative law case. True, the building blocks of Justice Stevens' opinion were laid out for the Court in the government's argument for deference, but as Levy observes, the opinion "is more path-breaking than the brief was."¹⁰⁷ It appears that the Solicitor General's office, along with everyone else, thought the administrative law questions would be resolved by applying established principles and precedents. No one thought it was a "big" case.

Everyone immediately recognized, however, what it meant when it was handed down. The Court had made new law, and in rather dramatic fashion. Justice Department and EPA officials knew that the case would be very helpful in ongoing battles over EPA regulatory programs, which were being litigated in federal courts all over the country. Academic commentators began to express concern about the latitude that would now be enjoyed by executive branch officials, and the incentives *Chevron* created for them to find and exploit statutory ambiguities. Would the government simply have to assert ambiguity in order to get *Chevron* deference, or would courts engage in scrupulous statutory interpretation? Those EPA officials who had always been uncomfortable with bubbles, and those who, more generally, did not want the kind of interpretive discretion being accorded to them, worried about what it would mean when "the other guys" got into power and got their hands on the doctrine.¹⁰⁸

The Court itself did not seem to anticipate this reaction. From his review of the Marshall papers, Professor Percival concludes that the Justices did not realize the full implications of *Chevron*.¹⁰⁹ He notes that

106. Doniger Interview, *supra* note 78.

107. Levy Interview, *supra* note 84.

108. Doniger recalls running into Joe Cannon, then head of the air program, shortly after the decision came down. Cannon told him, "I shudder to think what you'll do with deference when you get into power." Doniger replied that by then, the doctrine would be cut back. "And sure enough by the time of the Clinton administration, it was." Doniger Interview, *supra* note 78.

109. See Robert V. Percival, *Environmental Law in the Supreme Court: Highlights from the Marshall Papers*, 13 *Environmental Law Reporter* 10606, 10613 (Oct. 1993).

there was no comment in the written exchanges among the Justices that "reflect any appreciation of the major change in administrative law the decision effected." Percival notes that Justice Stevens' draft opinion was circulated on June 11, 1984 and that, within a week, four justices had already indicated, with little or no comment, that they would join it.¹¹⁰

If the Court failed to anticipate the impact of its holding on administrative law, surely the Justices were even less aware of *Chevron's* implications for air pollution regulation. The transcript of oral argument leaves some doubt as to the Justices' appreciation of the technical statutory issues, let alone the larger policy debate over the use of bubbles. And Justice Blackmun's handwritten notes from Conference reinforce that impression.¹¹¹ For example, he quotes Justice Stevens as saying that he is "not at rest," and that "when I am so confused, I go with the Agency." And he indicates that Justice O'Connor was leaning toward deferring to the agency because "the bubble makes sense as a concept" and "industry is suffering."¹¹²

The Court's failure to engage meaningfully with the environmental implications of the case should not be surprising. Environmental statutes were fairly new at the time, and the CAA stood out as the apotheosis of technical complexity. Four years earlier, dissenting from a denial of *certiorari*, Justice Rehnquist had commented that "the requirements of the Clean Air Act Amendments virtually swim before one's eyes..."¹¹³ and it is easy to imagine that he was not alone in this view.

Even the clerks at the time seemed to have no appetite for environmental statutes. As Percival notes, Justice Marshall's papers contain a clerk's note about a 1977 Clean Water Act case that says, "This certainly qualifies as the most boring this Term. I'm sure it's not Justice Stevens'

110. *Id.*

111. *Id.*

112. *Id.*

113. See *United States Steel Corp. v. EPA*, 444 U.S. 1035, 1038 (1980) (Rehnquist J., dissenting from denial of *certiorari*: "The fact that the requirements of the Clean Air Act Amendments virtually swim before one's eyes is not a rational basis, under these circumstances, for refusing to exercise our discretionary jurisdiction"). See also *The Official Papers of Justice Harry Blackmun*, Box 591, *CMA v. NRDC & USEPA v. NRDC*, Case Nos. 83-1013 & 83-1373, Box No. 416, Note Taken During Oral Argument by Justice Blackmun (November 6, 1984) ("What a dull case") (it is not clear whether this note was written by the Justice or by another Justice who was sitting next to Blackmun during oral argument and who jotted it on Blackmun's paper, which appears to have happened sometimes). There are repeated references in the Justices' oral arguments notes in environmental cases to how the cases were not necessarily the most interesting. See, e.g., *The Official Papers of Justice Harry Blackmun*, *Gwaltney v. Chesapeake Bay Foundation*, Case No. 86-473, Box 490, Notes Taken During Oral Argument (October 5, 1987) ("I am getting sleepy" and the advocate "drones").

fault." A memo from one of Justice Blackmun's clerks during this period confirms the sentiment: "I don't know what to advise you about these petitions. The clerks all call them 'those horrible EPA cases.'" ¹¹⁴

Especially interesting in light of how monumental the case would become, the Court in *Chevron* was at less than full strength: Justice Marshall did not participate in the case at all (he was apparently too ill to attend oral argument); then Justice Rehnquist was absent for the Conference because he had not participated at argument—he eventually recused himself; and Justice O'Connor, while attending both argument and Conference, eventually recused herself as well, due to a conflict of interest. ¹¹⁵ Justice O'Connor explained in a memo to the Court that the estate of her father, who had died after oral argument, owned stock in *Chevron*. ¹¹⁶

Yet the case was also closer than the final decision would lead one to believe. Justice Blackmun's notes indicate that the initial vote in Conference was 3–3. What ultimately swayed the Justices who were wavering? In the absence of any written exchanges among them, and without disclosures by clerks, it is hard to know. Some Justices may ultimately have seized on the administrative law principles raised by the case as a way out of the statutory morass. Perhaps some believed that in a case of such complexity, an interpretive "tie" ought to go to the runner—in this case the agency. Some Justices undoubtedly responded to the Solicitor General's skillful invitation to rebuke the D.C. Circuit—yet again—for its usurpation of executive prerogative through aggressive review. ¹¹⁷ (Doniger believes that this determined the outcome, and that the clerk's comment foretold it: the Court needed to put the D.C. Circuit in its place.) The government had given the Court an administrative law principle on which to hang its hat, and the Justices appeared to take the opportunity.

114. The Official Papers of Justice Harry Blackmun, Box 591, *Arkansas v. Oklahoma & EPA v. Oklahoma*, Case Nos. 90–1262 & 90–1266, Preliminary Memorandum to Justice Blackmun from Law Clerk (March 29, 1991). See Percival, *supra*, note 109, at 10617.

115. The Official Papers of Justice Harry Blackmun, Case Nos. 82–1005; 82–1247; 82–1591, Box 397.

116. See Justice O'Connor, Memorandum to the Conference, June 14, 1984 in the Official Papers of Harry Blackmun, Box 397.

117. It is entirely plausible that the Supreme Court viewed *Chevron*, six years after *Vermont Yankee*, as an opportunity to again rebuke those members of the D.C. Circuit who had a penchant for overly aggressive review of agency decision making, whether on matters of fact, policy, or in the case of *Chevron*, law. Here they had done it again: in rejecting the agency's interpretation of "stationary source," the D.C. Circuit panel had announced a bright line test regarding when bubbles could and could not be used under the Clean Air Act—a test that had no basis in the Act itself.

Conclusion

Scholars have now spent over twenty years debating *Chevron's* theoretical and practical implications for administrative law, including its potentially enormous impact on the separation of powers. The Supreme Court's test appears to shift to the executive branch interpretive authority traditionally lodged in the judiciary on the theory that Congress' failure to address "the precise question in issue" evidences an intent to delegate interpretive authority to the implementing agency—a controversial rationale, to say the least.

Yet while the deference issue and its separation of powers implications have come to dominate scholarly commentary on *Chevron*, the substantive battle in the case, it should not be forgotten, centered on the legal and policy implications of using bubbles in the NSR program.¹¹⁸ The progeny of this dispute are alive today in the debate over how to reform NSR after twenty-five years of experience, at a time when, according to the most recent EPA figures, approximately 126 million people still live in areas designated as nonattainment for at least one of the criteria pollutants; when people young and old across the country continue to breathe unhealthy air on many days of the year.¹¹⁹

In 2002, the EPA promulgated an NSR reform package that significantly altered NSR's applicability to existing sources.¹²⁰ In 2003, the EPA

118. Indeed, the bubble approach exists today in the form of Plantwide Applicability Limits (PALs) which allow firms to trade emissions among units under their control providing they achieve the established regulatory target. This is the more pure form of bubbles described earlier. PALS arguably supplant NSR. In return for limiting all of their emissions, PAL sources are allowed to use a much less demanding NSR regime than other sources (PAL sources may use an accounting mechanism for their emissions known as that is more favorable to the firm whereas other sources may not). PALS are intended help firms comply with their Title V permit limits by giving them operational flexibility. See, e.g., Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR), 61 Fed. Reg. 38,250, 38,264 (July 23, 1996) (*codified at* 40 C.F.R. §§ 51–52) (defining PAL for purposes of the proposed NSR Reform Rule). However, the 2002 NSR rule did not invent PALS; they have existed since 1994 by guidance document and case by case permit decisions.

119. See Environmental Protection Agency, *Air Pollution Trends* (2002) at <http://www.epa.gov/airtrends/non.html>.

120. Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Baseline Emissions Determination, Actual- to Future-Actual Methodology, Plantwide Applicability Limitations, Clean Units, Pollution Control Projects, 67 Fed. Reg. 80,186 (Dec. 31, 2002) (*codified at* 40 C.F.R. pts. 51, 52). The Package proposed, among other things, to expand the time frame for establishing a firm's "pre-modification baseline emissions," allowing sources greater flexibility in establishing the baseline; alter the basis on which existing sources can calculate emissions in a manner that is more favorable to them by providing an alternative to the "past actual versus future potential" calculus previously applicable; and establish a bubble-like "plantwide applicability limit" program for facilities that wish to make changes under an imaginary cap without triggering NSR. It

adopted a rule clarifying the longstanding exemption to NSR permitting requirements for "routine maintenance, repair and replacement activities." This rule sought to more clearly define which process changes would amount to "routine maintenance" of equipment that would not trigger NSR versus which changes would amount to a "modification" that would trigger NSR.¹²¹ The rule was subsequently stayed by the D.C. Circuit and is currently being reconsidered by the agency. NSR reform is also a key aspect of the Bush Administration's Clear Skies legislation.¹²²

Clearly, the question of whether, and for how long, to "grandfather" existing sources by allowing them to make capital improvements or to "modernize" without triggering strict pollution control requirements, remains as pressing as ever. The seeds of this dispute were sown in *Chevron*.

Beyond the matter of whether the bubble policy was a lawful interpretation of the statutory term "stationary source"—the key legal issue in *Chevron*—there remains the question of whether the bubble concept is good policy. At the time, there was little empirical evidence one way or the other; the likely effect of the bubble's widespread adoption was a matter of pure speculation.¹²³ So the policy debate turned mostly on a normative argument about whether using such a strategy would be, in theory, superior to the alternative of the unit-by-unit approach required by command and control. One's view of this depends heavily on one's beginning assumptions about the appropriate baseline from which to make comparisons. In the debate over whether the EPA's

was reconsidered by the agency, see 68 Fed. Reg. 63,021 (Nov. 7, 2003) (*codified at* 40 C.F.R. pts. 51, 52).

121. The new rule provided that the replacement of identical or functionally equivalent component parts would not be deemed a "modification" but instead would be deemed "Routine Maintenance" if (1) the replacement does not change the basic design parameters of the unit; (2) the replacement does not cause the unit to exceed applicable emissions or operation limits; and (3) the cost of the replacement activity does not exceed twenty percent of the replacement value of the process unit. See 68 Fed. Reg. at 61,252 (*codified at* 40 C.F.R. pts. 51, 52).

122. Clear Skies Act of 2005, S. 131, 109th Cong. (2005).

123. See Levin, *Bubble Policy*, *supra* note 38, at 70 on the absence of economic data for the bubble's asserted benefits in non-attainment areas. In a study conducted for the Conservation Foundation and published in 1986, Liroff concluded that many of the claims about the benefits of bubbles turned out to be overstated, or true only under certain circumstances. For case studies, see Liroff *supra* note 13, at 67–98. In some cases, the reductions in emissions only existed on paper, and amounted to administrative recognition of past emissions reductions. In other cases, administrative accounting techniques enabled firms to avoid reductions that would otherwise have been necessary or to make process changes that, one might argue, they ought to be required to make in any event. Still, Liroff's study did conclude that under certain circumstances, bubbles can reduce compliance costs, speed compliance and spur technological innovation. And Levin argues that EPA tried hard in the ensuing years to prohibit such trades.

bubble strategy would advance or retard progress toward the federal air quality standards, a key question was, and still is, "What, realistically, would NSR have *otherwise* required?"

This kind of conflict over baselines arises often in environmental regulation, especially in the context of air regulation. Should we assume that a command and control program will be perfectly implemented, and then compare the anticipated results to a market approach? Or is it more realistic to assume incomplete implementation, and to consider the cost and administrative expense associated with the command and control approach, when comparing it to the market alternative? And what are the transaction costs and compliance rates of the market alternative?

Whether trading of this sort, in any of its applications, is good policy, is not a "snapshot" issue. That is, any attempt at a real world answer must take account of how the policy has evolved over time, whether it has been reformed in light of criticism (in the case of the bubble, to eliminate the opportunity for "phony" paper trades).¹²⁴ And, most importantly, answering this question requires continually comparing the trading option to the (also evolving and also imperfect) alternatives. Would we have been better off without the bubble? Would cap-and-trade programs—now the preferred policy tool for addressing greenhouse gas regulation—have developed even if *Chevron* had come out the other way? The answer is unclear.

Industry and environmentalists still fight over such baseline issues and, as they did in *Chevron*, they continue to disagree over whether market instruments will work as well in practice as they sound in theory. At the root of these disagreements are very different views not only about appropriate baselines, but also about the narrowness and breadth of definitions and exemptions, and the accuracy of conflicting claims about what will induce modernization and technological innovation. The early stages of all of these disputes can be located in the history of the bubble policy, and in the briefs and arguments in *Chevron*. Despite its legacy as a high impact administrative law case then, *Chevron* remains a case very much at the heart of contemporary environmental law.*

124. In theory, the more questionable uses of the bubble are no longer permissible. See Final Emissions Trading Policy Statement 51 FR 43,814 (Dec. 4, 1986).

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