



Clean Air—Is the Sky the Limit?

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Society is inclined to see clean air as a priceless amenity, and the U.S. Supreme Court recently ruled that Congress held that view when it wrote the Clean Air Act—that costs should not be considered in setting air quality standards. How disproportionate a burden are we willing to bear to keep this appealing, and expensive, faith?

On February 27, 2001, the U. S. Supreme Court ruled in *Whitman v. American Trucking Associations (ATA)* that only health factors can be considered in setting national ambient air quality standards (NAAQS). Media accounts called the opinion, which upheld an interpretation of the Clean Air Act (CAA) that had been in place for decades, “the dog that didn’t bark.”

Was this a nonevent? When the Supreme Court ruled against cost-benefit analysis for NAAQS, did society dodge a bullet or take one? This article will argue that: as a matter of law, reasonable people can differ with the two different opinions filed on this point, and as a matter of policy, society now faces greater risks to its well-being from keeping the no-cost rule than it would have from overturning it.

Taken at its word, the Supreme Court ruling requires the U.S. Environmental Protection Agency (EPA) to set air quality standards that are by definition too pristine to be in the public interest, and it requires the courts to make sure that they do. How did we get here?

The Clean Air Act

The costs and benefits of CAA are both enormous, but they are moving in opposite directions. As the air gets cleaner over time, the benefits of further improvement in air quality decline while the costs increase. EPA esti-

mates that from 1970 to 1990, the first 20 years of CAA, society devoted \$1.6 trillion to reducing air pollution, about 40% in compliance costs borne by businesses, consumers, and governments and 60% in aggregate gross national product losses. Under the strengthened CAA Amendments of 1990, EPA estimates that society will spend \$45.8 billion on compliance costs alone in 2010, a 140% increase from such costs in 1990. EPA’s separate estimate of the additional costs of its 1997 ozone and particulate standards, the rulemaking action that set in motion the Supreme Court’s recent decision, comes to \$48 billion per year.

Is this money well spent? This is a challenging question since both the benefits and the costs are hard to measure. Challenges include the difficulty of assessing ever-smaller health risks, valuing improvements in human health that have no direct market price, and anticipating the cost and performance of as-yet-unknown mitigation technologies. But we know that the rising marginal costs of cleaner air will eventually exceed the declining marginal benefits, and that society will be worse off once they do. Weighing costs and benefits is essential to finding a stopping point before we pursue a degree of purity that lowers the quality of human life in favor of advancing the quality of air. Did Congress really intend to make this illegal?

The Court Case

Four years ago, in July 1997, EPA published new NAAQS for ozone and small particulate matter. In the case of ozone, the new standard replaces a previous one established in 1979. That standard is well overdue in its originally scheduled achievement—one fifth of the U.S. population still lives in nonattainment counties. But it has produced a significant improvement in air quality—urban ozone concentrations have fallen 25% since 1980. The new tighter standard will require additional emissions reductions that, in the case of Los Angeles, exceed total current motor vehicle emissions. Reductions of this magnitude will require unprecedented technological change of a nature we can't currently identify and at a sustained pace we have never experienced.

A large group of plaintiffs—consisting of manufacturing, electric utility and transportation companies along with three midwestern states—filed suit against EPA's regulation in the U.S. Court of Appeals for the District of Columbia, which ruled on their petition in May 1999. The Appeals Court found that EPA's regulation “effected an unconstitutional delegation of authority” that went beyond the discretion that Congress could grant the agency. The remedy imposed by the court was not that the law should be changed, but that EPA should enunciate an “intelligible principle” to explain how it was going to limit its own discretion by determining how much protection was enough. There is only one way to make this determination properly, and that is by weighing costs and benefits. By definition, protection that costs us more than we think it is worth is too much.

However back in 1980, this same Appeals Court, affirming a position advanced by EPA, had declared this cost-benefit decision rule unlawful. The Court was now facing up to the fact that its no-cost rule—coupled with advancing science capable of detecting or inferring health benefits down to zero concentrations—had delegated to EPA essentially unlimited power over human activity. The Appeals Court solved the problem of having attributed to Congress an open-ended decision rule by declaring that rule as exercised by EPA unconstitutional. This solution was arguably a bigger reach legally, and definitely more significant in policy potential, than reversing the no-cost rule would have been.

EPA appealed to the Supreme Court, which took the case, and then also accepted a cross-filing from the opposite side seeking further review of the no-cost rule. For both advocates and opponents of cost-benefit analysis, the stage was set for an historic decision.

The Supreme Court Ruling

In two separate opinions, the Supreme Court unanimously reaffirmed the Appeals Court ruling that costs could not be considered in setting air quality standards. In the majority opinion, Justice Antonin Scalia argues that costs are too important to be read into NAAQS. Because of their significance, costs must be “expressly mentioned” in the NAAQS language or they are “unambiguously” barred. Only Justice Stephen Breyer eschews this ominous “silence is prohibition” argument. In a separate opinion concurring with the judgement of the majority he says:

In order to better achieve regulatory goals—for example, to allocate resources so that they save more lives or produce a cleaner environment—regulators must often take account of all of a proposed regulation's adverse effects, at least where those adverse effects clearly threaten serious and disproportionate public harm. Hence, I believe that, other things being equal, we should read silences or ambiguities in the language of regulatory statutes as permitting, not forbidding, this type of rational regulation.

In this case, however, other things are not equal. Here, legislative history, along with the statute's structure, indicates that [section] 109's language reflects a congressional decision not to delegate to the agency the legal authority to consider economic costs of compliance.

The record Justice Breyer cites shows a Congress driven by health concerns and convinced that forcing action to clean up the air in 1970 was clearly warranted. But did that Congress go on to lay down a rule that, no matter how clean the air might become over time, EPA could never consider whether additional reductions would be a net gain or net loss to society? This plunge into the irrational is an awfully big leap.

In support of this leap, Justice Breyer argues that a no-cost decision rule is not necessarily irrational, since “[t]echnology-forcing hopes can prove realistic.” He cites the impressive performance of catalytic converter technology in achieving the 90% auto emissions reductions called for in the 1970 Act, despite dire industry warnings that such a standard could force them out of business.

But technological change is uncertain, and things that are uncertain need more thought to get a handle on, not less. Justice Breyer, who wrote the book on risk regulation, understands this, but he's not so sure about Congress. “[E]fforts to take costs

RESOURCES FOR THE FUTURE

into account can breed time-consuming and potentially unresolvable arguments about the accuracy and significance of cost estimates. Congress could have thought such efforts not worth the delays and uncertainties that would accompany them.” While he does not say that this would have been a reasonable thought, Justice Breyer’s use of this language in an argument supporting Congress’ rationality seems to say as much.

As a matter of law then, cost-benefit analysis has taken a considerable hit in *Whitman v. ATA*. It has again been read out of the most expensive and expansive regulatory statute of our time and characterized as arguably too complicated, time-consuming, and subject to misuse to be worthwhile. Those who doubt the merit of either of these verdicts will just have to lick their wounds.

The Policy Consequences

What will be the practical effect of this cost-benefit ruling? One line of reasoning says not much. In this view EPA would have coped handily with a cost-benefit mandate, much like industry figures speaking alarmingly of ruinous costs and then surviving with new capabilities. The agency would have handled the economists and their cost conundrums with the same skill it has shown with health scientists and their epidemiology statistics, bringing NAAQS out pretty much where it wanted to. Conversely, without costs, EPA will probably carry on as it always has, cleaning up the air and imposing severe excess burdens in the process, but not enough to force the hand of others to intervene. EPA’s chosen path may be costly, but it is invariant to the Court’s opinion.

Under a different line of reasoning, the Court ruling does matter. One alternative scenario could be called “decision forcing,” an analogy to “technology forcing”—that is, applying long-term pressure to improve. In this view, EPA’s decision trajectory under cost-benefit analysis would tend over time to bend away from minimizing health effects toward maximizing net social benefits, a very different and superior path. Critics of EPA may doubt that any such voluntary bending would occur, while opponents of cost-benefit analysis express fear that it would go too far. Based on the record to date, the latter group has the harder argument. Under a provision of the 1990 CAA Amendments as well as President Clinton’s 1993 Executive Order on Regulatory Planning and Review, EPA has had years of experience doing cost-benefit analyses that support its clean-air decisions, although not using those results to set NAAQS. Were such analyses to



FRANZ JANSEN

become part of the decision record, they would enjoy the same deference that courts give to all agency deliberations. So EPA would not be deflected from its preferred path in this scenario, but its preferences might change for the better.

A third scenario does involve perturbation of EPA’s preferred path. This story starts with the old chestnut that costs are not considered in setting NAAQS because they are taken into account at the implementation stage—the stage of deciding who must reduce emissions and how in order to meet the standard. The introductory summary to *Whitman v. ATA* says “[o]ther CAA provisions, which do require cost data, have no bearing upon whether costs are to be taken into account in setting the NAAQS.” The fact that economic considerations play a role in implementing the standards does not explain why they are excluded in setting the standards, nor does it ameliorate that exclusion. Relief from economic burdens comes not from implementing the standards but from staying their effect—through provisions like exemptions, variances, and deadline extensions.

This is the big tradeoff in ozone regulation—unmeetable standards mitigated by unmet deadlines. What happens if EPA can’t maintain the flexibility in timing and penalties it needs to keep too-difficult standards from becoming untenable? Litigation currently is under way to block EPA’s attempt to extend deadlines for its existing (1979) ozone standard. Earthjustice Legal Defense Fund, on behalf of the Sierra Club, has sued to prevent EPA from extending that deadline for metropolitan areas of Washington, DC, Connecticut, and Massachusetts without reclassifying those areas to greater nonattainment status. Such

RESOURCES FOR THE FUTURE

reclassification would mean a significant step-up in emissions reduction requirements, with major effects on production, transportation, and electric generation. The 1990 CAA Amendments also reduce administrative flexibility as to when and how ozone standards are to be met, and EPA's efforts to sidestep those confining effects in its 1997 ozone rule were struck down as unreasonable in another part of *Whitman v. ATA*.

So the Supreme Court ruling comes at a time when EPA's effort to temper standards with discretion is becoming more difficult, and it increases that difficulty. Justice Scalia seems almost cheery about this, at one point warning the administrator that if any allegation that EPA "is secretly considering the costs of attainment without telling anyone . . . could be proved, it would be grounds for vacating the NAAQS because she had not followed the law." It is Justice Breyer who wants to avoid a train wreck. He says that the CAA's words allow the administrator to "take account of context when determining the acceptability of small risks to health. And they give her considerable discretion when she does so." This broad language gives EPA major running room for accepting nonzero residual health effects, if it chooses to do so. The tradeoff Justice Breyer will not grant in costs he partially restores in acceptability of small risks, although the statute is equally silent on both.

When the rock of impossible standards does meet the hard place of unavoidable enforcement, the only relief is congressional action. This may help EPA hold its course or, less likely, blow it out of the water. The one thing that does seem improbable, after 30 years in the air wars, is Congress's adopting a straightforward public-interest standard for NAAQS.

As a matter of policy then, a noticeable change in EPA's regulatory path seems unlikely, although this will probably require a greater resort to congressional dispensation as time goes on. In addition to mounting costs, this raises the prospect of federal policy being made as a series of discretionary responses to affected parties petitioning for relief from the law. As CAA is

opened up to these extenuating amendments, there is always the chance that some genuine harm could befall the statute. None of these prospects is attractive.

Conclusion

Law and policy notwithstanding, clean air is not a free good. As the air has become cleaner over the last 30 years, the costs of further cleanup have risen substantially, even as technology has improved. Meanwhile the benefits of further cleanup have fallen. EPA's Clean Air Science Advisory Committee, tasked with developing the health science on which to base the 1997 ozone standard, advised the agency that health would be adequately protected at the equivalent of the existing standard, and that science did not provide a basis for recommending that the standard be tightened. But EPA did tighten. Its estimate of the incremental annual compliance cost of the new standard, while implausibly low, is still 3.5 times the federal FY 2000 budget for the Centers for Disease Control and Prevention. We could buy a lot of health improvement for that money, but we won't.

Saying that costs don't count in deciding how clean we want the air to be sounds good to people accustomed to viewing environmental policy as a struggle between the black hats and the white hats. But beyond the interest group struggle, there is an objective public interest in beneficial regulation and in good analysis to support it. Failure to find a place for that interest in setting air quality standards is a loss for society, for good government, and for sound environmental policy. With all three branches of government accepting the no-cost rule, none of the usual checks and balances is in place to protect the public from its worst effects. For now, there is no limit to the sky-high costs of clean air.

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