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ON THE TOPOLOGY OF UNIFORM ENVIRONMENTAL STANDARDS IN A FEDERAL SYSTEM—AND WHY IT MATTERS

JAMES E. KRIER*

*A foolish consistency is the hobgoblin of little minds, adored by little statesmen . . . .***

—Ralph Waldo Emerson

Uniform standards are much favored among the makers of federal environmental policy in the United States, which is to say, among the members of Congress. By and large—judging at least from the legislation it has enacted—Congress expects the air and water eventually to meet the same minimum levels of quality in every state in the country, and expects each pollution source in any industrial category or subcategory to be controlled just as much as every other such source, notwithstanding the source's location or other peculiar characteristics. There are exceptions to these generalizations, but they *are* exceptions and not the rule.[1] Since 1970, environmental policy in the United States increasingly has been *federal* (meaning that standards and controls are, for the most part, imposed by the national government, although they generally are implemented at the state and local levels). And, nominally at least, the federal policy has been one of *uniform* standards and controls in the sense suggested above. The standards have been set in ways essentially indifferent to territorial and, to some considerable degree, source variation.

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** RALPH W. EMERSON, *Self-Reliance*, *in* ESSAYS: FIRST AND SECOND SERIES 29, 35 (1990).

1. The federal Clean Air Act, for example, prescribes uniform minimum air quality standards for all parts of the country, and uniform control standards for various categories of stationary sources. *See, e.g.*, Clean Air Act § 109, 42 U.S.C. § 7409 (1988) [hereinafter CAA] (ambient air quality standards); CAA § 111, 42 U.S.C. § 7411(b) (new source emission standards); *see also* the Federal Water Pollution Control Act §§ 301, 306, 33 U.S.C. §§ 1311, 1316 (1988) [hereinafter FWPCA] (source effluent limitations); FWPCA § 510, 33 U.S.C. § 1370 (allowing states to set more demanding, but not less demanding, standards); ROBERT V. PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY 118 (1992) ("The principal federal pollution control schemes . . . required EPA to establish uniform national standards that can be implemented and administered by states subject to federal supervision. Most federal environmental statutes specify that the standards they require are minimum standards that must be met by every state, while expressly authorizing states to establish more stringent pollution controls if they desire.").

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In thinking about federal uniform environmental standards, I shall focus for the most part on the pollution problem, to the exclusion of other environmental problems having to do with such concerns as vanishing species, land reclamation, or the regulation of toxic waste sites. Air and water pollution controls are my general subject, and air pollution controls my chief case in point. This is partly a matter of convenience, a way to get to the bottom of some fundamental considerations that display themselves in superficially disparate ways across the vast reaches of federal environmental legislation. Mostly, though, my focus reflects the reality that federal pollution policy, and air pollution policy in particular, is especially plagued by the vices of uniformity. In any event, what I have to say about the case of pollution policy can be applied to other environmental policies to the extent (probably considerable) that the arguments in the one case fit the situations in the other cases.

I narrow my focus—though again not its bearing—in another way as well. The discussion thus far has alluded to two different kinds of pollution standards: (1) ambient quality standards that limit the amount of pollution permitted in any state's air or water, and (2) emission or effluent standards that in one way or another limit the amount of pollution that can come from sources in any state (cars, factories, power plants, and the like). Both types of standards are aimed at controlling pollution, but there is nevertheless a difference between them that impels me to be concerned, here, primarily with the first category, ambient quality standards. My topic is environmental policy in a federal system, and it is with its ambient controls that the federal government specifies the obligations of the various states with respect to water or air quality. Ambient standards dictate, at a minimum, how clean the environmental media (in this case water, and particularly, air) in a given area must be. Any area may choose to clean up more if it wishes.[2] In short, ambient standards directly limit what the states, not pollution sources, are free to do. Hence they are the immediately interesting subject from the standpoint of federalism.[3]

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2. *See* James E. Krier, *The Irrational National Air Quality Standards: Macro- and Micro-Mistakes*, 22 UCLA L. REV. 323 n.2 (1974).

3. Indirectly, of course, ambient standards have the effect of controlling sources as well, because states must regulate sources to the degree necessary to achieve the federally mandated ambient standards. Beyond this, federal air and water pollution legislation also sets its own independent standards for large numbers of pollution sources, *see supra* note 1, but the states must impose stricter controls on these sources, if necessary, to achieve the required ambient quality.

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I. THE VICES AND VIRTUES OF UNIFORM STANDARDS

Consider first what might be bad about the federal government setting uniform ambient standards of, for example, air quality for every state in the union, and then what might be good about it.

A. *Vices*

On this topic, I have earlier written at some length (and I do not think any differently today), so what follows is merely a summary. Anyone who is skeptical or otherwise interested can consult the original item.[4]

The chief problem with uniform ambient standards is that the territory upon which they are imposed is itself not uniform, but rather, variable in a number of relevant respects. The harm that pollution causes, and the difficulty of limiting that harm, are functions of, among other things, natural resource endowments, degrees of development, human attitudes, and the size and nature of the population of any particular area. Assuming that these characteristics are not distributed with even rough uniformity across the country—an obviously correct assumption—it follows that the implications of achieving any given level of environmental quality will not be uniform either. In particular, the costs of pollution and pollution control will differ significantly from place to place.

Consider first the costs of pollution, and the contentious example of health costs, which vary in several respects as a function of population. Suppose the existence of two states, $S1$ and $S2$, both of which are mandated to have ambient air quality of the level Q. Level Q is relatively safe but not perfect because some especially vulnerable or sensitive people exposed to it would suffer ill effects.[5] Suppose, in addition, that $S1$ has a small and generally robust population, whereas $S2$ has a large and somewhat less vigorous one (assume, for example, that we are talking about Alaska and New Jersey). Negative health effects—health costs—obviously will be larger in $S2$ than in $S1$, not

4. *See* Krier, *supra* note 2, at 324-30 (arguing that "uniform national ambient standards represent a fundamental error" in the approach to air quality regulation).

5. The general view today is that there is no perfectly safe level of, say, air pollution, except a zero level. That is, there is no threshold—even a small amount of pollution is likely to lead to some negative health effects. *See* George Eads, *The Confusion of Goals and Instruments: The Explicit Consideration of Cost in Setting National Ambient Air Quality Standards*, *in* TO BREATH FREELY 222, 228 (Mary Gibson ed., 1985).

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only per capita (because S2's population is more vulnerable) but also in total (because S2's population is larger).[6]

For a less contentious example of the same general point, consider how the aesthetic costs of pollution blight will vary with the territory. For example, one reason people value beautiful mountain areas is for the wonders of the vista. Smog that obscures a magnificent view, and shrouds a noble symbol, is an especially undesirable thing. However, some places in the country are not beautiful—in fact they are ugly—and hiding them (all other things equal) could be a kind of blessing. In any event, most of us would consider it odd for someone to suggest working as hard, and purely for the sake of beauty, to keep Newark's atmosphere as utterly pristine as the mountain air of the Rockies. It would be odd, that is, unless it happened to cost nothing to make the air perfectly clean anywhere, in which case any resulting benefit, however minuscule, would be worthwhile.

The fact, of course, is that it does cost something (actually a lot) to clean the environment; if it did not, we would not have pollution problems. And just as the pollution costs of a given level of environmental quality differ from place to place, so too do the costs of pollution control. The meteorology and topography of an area, the size and distribution of its population, the size and distribution and nature of its industrial base—all of these and other factors affect the costs of controlling pollution.[7]

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6. The example is contentious for a variety of reasons, one of them being the matter of talking about health in terms of "costs"—of which more later—and another being the matter of aggregating individual health effects to arrive at a "total cost" for the population in question. One might call this kind of aggregation a utilitarian approach, as contrasted to looking only at individual (per capita) health effects, a Kantian approach. Federal legislation is ambiguous on this matter. Air quality standards are supposed to protect the individual (indeed, the vulnerable individual). *See* 42 U.S.C. § 7409(b) (1988) (declaring protection of public health and welfare as the goal underlying national primary ambient air quality standards); *see also* DAVID P. CURRIE, AIR POLLUTION: FEDERAL LAW AND ANALYSIS § 4.06 (1981) (noting that legislative history indicates a congressional intent to protect even "particularly sensitive citizens, such as bronchial asthmatics") (quoting S. REP. NO. 1196, 91st Cong., 2d Sess. 10 (1970)). Yet statistical data regarding the health costs of air pollution routinely measure aggregates.

7. *See, e.g.*, Dallas Burtraw & Paul R. Portney, *Environmental Policy in the United States*, *in* ECONOMIC POLICY TOWARDS THE ENVIRONMENT 289, 311 (Dieter Helm ed., 1991) ("[T]he benefits and costs of pollution control may vary with geography, so that uniform (minimum) air-quality standards such as would be enforced under the Clean Air Act may not be appropriate from a cost-benefit perspective. For instance, our research has found that the economically efficient standard for total suspended particulates for Baltimore—the concentration at which marginal benefits are equalized with marginal costs—is nearly 50 per cent greater than the optimal standard for St. Louis."); Alan J. Krupnick & Paul R. Portney, *Controlling Urban Air Pollution: A Benefit-Cost Assessment*, 252 SCIENCE 522, 526 (1991) ("Because the benefits and costs of air pollution control are sure to vary considerably among

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Because uniform ambient quality standards neglect the rich variegation on the ground, to impose them is necessarily to make some places too clean while leaving others too polluted—unless, of course, Q is very stringent, in which event some places simply will be too clean. For them, achieving Q will entail control costs larger than the pollution costs avoided.[8]

B. *Virtues*

The foregoing amounts to saying that inefficiency is a chief vice of uniform ambient standards. To leave the matter at that, however, would leave me looking like a mindless utilitarian, not simply because I have considered only the "economics" of the matter, but also because even the economic analysis is incomplete. So let me take up some possible advantages or virtues of uniformity, economic and otherwise. I put these in terms of (1) matters of administration; (2) matters of justice; and (3) matters of political rhetoric.[9]

1. Matters of Administration.—The argument here—a more mindful economic argument than the one sketched above—is that even if uniform standards were otherwise a bad idea, they are redeemed by economies of scale. It is easier and cheaper to establish and administer a set of uniform standards than it is to establish and administer a set of varying standards. The difficulty and cost of this sort of administrative system presumably will go up, perhaps exponentially, as the number of different standards increases.

The premise of this argument is probably correct in some instances, but the argument itself is hardly conclusive. Congress and the United States Environmental Protection Agency (EPA), knowing full

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metropolitan areas, it may make economic sense to control a great deal in some places but little in others."); Susan Rose-Ackerman, *Environmental Policy and Federal Structure: A Comparison of the United States and Germany*, 47 VAND. L. REV. 1587, 1590 (1994) (observing that the "optimal level of cleanup may vary by location").

8. In fact, federal ambient quality standards tend to be very strict indeed, which is one reason why most major urban areas in the United States have not been able to meet one or more of them. *See* U.S. ENVTL. PROTECTION AGENCY, NATIONAL AIR QUALITY AND EMISSIONS TRENDS REPORT, 1993, at 83 (1994) [hereinafter EPA REPORT] (tabulating nonattainment areas for the various ambient air pollutants and indicating, for example, that 93 areas have not attained the ozone standard, 83 the particulate standard, 47 the sulfur dioxide standard, and 38 the carbon monoxide standard). Only with respect to lead and nitrogen dioxide is nonattainment a minor problem. *Id.*

Given this, it is rather off the point to suggest that, because states are free to set ambient standards more demanding than the federal ones, the standards are not in fact really uniform.

9. For expanded treatment, especially of items (1) and (2), see Krier, *supra* note 2, at 330-35.

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well that achieving Q in some areas is more difficult than achieving it in others, already makes regular provision for various kinds of waivers or delayed timetables—variances—to account for that disparity. In the face of reality, federal policy-makers have made categorical and particular exceptions to take account of our imperfect, nonuniform world.[10] But notice what these measures are often called, as least in common parlance—*variances.* By definition, they introduce variety, and for the purpose of saving (not wasting) time and effort. Beyond this, the variances generally are most influenced by one consideration: the *cost* of trying to meet Q too quickly in some areas relative to other areas.[11]

In short, federal policy-makers regularly let differential costs affect ambient requirements for the various states, at least in the short and medium runs. This means not simply that policy-makers must consider these departures from uniformity to be worthwhile; it must also mean that the federal government *already has* much of the information it thinks it needs to take varying circumstances into account. But if the government already has the information and already uses it, then it is hard to understand why nonuniform standards would entail a wealth of administrative trouble. It seems they do not.

In any event, even if they do entail quite a lot of trouble, this is hardly conclusive—because the added costs of that trouble (the added costs of varying standards) might nevertheless be more than offset by the benefits of nonuniformity (the benefits of avoiding undercontrol and overcontrol). The federal government implicitly concedes this very point in its routine practice of variances. Either that, or the government is engaging in a practice it does not regard as worthwhile!

2. *Matters of Justice.*—The word "costs" has run through the discussion thus far, and no doubt this raises the hackles of many environmentalists, conservationists, and public health advocates.[12] But this is

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10. *See* 3 WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW: AIR AND WATER § 4.2A, at 16 (Supp. 1994) (discussing EPA's power, under the 1987 amendments to the Clean Water Act, to develop "case-specific" pollution standards).

11. As a term of art, "variances" usually refers to waivers and the like for particular pollution sources. *See* PERCIVAL ET AL., *supra* note 1, at 906-07. But variation in requirements, waivers, and delay in deadlines is the rule, rather than the exception; hence, the term describes the situation with respect to federal ambient air quality standards, which, since 1990, have had a diverse set of attainment dates for various categories of areas across the United States. *See id.* at 810-14 (discussing the non-attainment problem and the 1990 amendments to the Clean Air Act).

12. For this reason, perhaps, Congress has nominally insisted that costs be ignored in setting most environmental standards. *See, e.g.,* Peter Passell, *Economic Scene: Cleaning the Environment Gets Harder, but There are Solutions,* N.Y. TIMES, Jan. 5, 1995, at D2. "Five major

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odd. After all, the word "benefits" bedecks this discussion too, yet the very same people who usually oppose reference to costs seem not at all to mind talking about benefits. The irony is that one cannot even begin to think about benefits in the absence of thinking as well about costs, except in a world of absolute abundance with respect to everything everyone might ever want. A cost, after all, *is* but a forgone benefit. The cost of leisure is the forgone wage of working; of working, the forgone leisure; of polluting, the forgone improvement in the environment; of controlling pollution, the forgone savings of not spending on control devices. The costs of pollution control, passed on to consumers, employers and employees, stockholders, and taxpayers are diverted from other worthy objectives. In a world of scarce resources (our world, like it or not) the cost of every benefit is the value of some alternative benefit one could have realized instead.

Thus one can think, if one likes (as many environmentalists do), solely in terms of benefits. To achieve some unit of benefit by protecting health from air pollution, we necessarily have to give up some unit of benefit that would result were we instead to protect health against some other threat. Health benefits here mean health costs there. This hydraulic effect is inescapable. All that can be escaped is waste.

A critic might find injustice in such a state of affairs, but only because life itself is hard. Justice is not free. (If it were, then, as with pollution control, we would have all we wanted; we would be sated with rich justice.) There simply are not, and surely never will be, all the resources necessary to provide all the justice we would ideally like to have. So, with respect to justice in particular, waste seems intolerable. Yet this means that if our present uniform standards are (and clearly many of them are) wasteful and inefficient, then they must be intolerable as well, for they cost us opportunities to do more and better with the means available.

These observations lead directly into two other, more substantial concerns about the potential injustice of considering costs. The first concern is this. To take costs into account we have to be able to calculate them with some accuracy, yet in the case of environmental harms, in most instances, we cannot. True enough, but notice that it follows from this that we cannot calculate benefits either, given the discussion

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environmental acts, including those setting standards for air, water and toxic waste, actually prohibit regulators from weighing costs against benefits," even though everyone knows this is a fiction, and that "when the crunch comes, onerous requirements are postponed." *Id.* On the fiction, *see also* Eads, *supra* note 5, at 229.

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above of the relationship between costs and benefits.[13] In fact, we can only estimate both, and in fact we must. We must also compare the estimates, at least implicitly, because *we have to choose between policies*—between types of environmental policies, as well as between environmental policies and other types of policies. In the course of making these choices, some degree of calculation and comparison is unavoidable. The real question is whether the exercise should be conducted out in the open, or instead *sub rosa*, on the pretense that calculations are being ignored. I subscribe to the former approach, and Congress, it seems, to the latter.[14]

The second substantial concern with costs and justice has to do with distributional justice, with the idea that a more efficient—here a less uniform—environmental policy might raise average welfare, but in a way that most hurts the poor and disadvantaged relative to everybody else. If, for example, some areas end up more polluted than others, then no doubt the people with the lowest incomes will usually live in the most polluted areas.[15] This will not always be the case, of course—consider Los Angeles, or downtown Manhattan, two areas (one large, one small) where rich and poor alike breathe the same poor air.[16] At the other extreme, consider that rural (agricultural) areas of the country tend to be both poorer[17] and, in many respects, purer.[18]

Still, it would not be surprising to find as a general pattern that those with lower incomes end up consuming (can afford) less environmental quality. The difficulty is that they also probably end up bearing a disproportionate (regressive) share of the costs of environmental cleanup.[19] A related difficulty, then, is the implicit as-

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13. *See* PERCIVAL ET AL., *supra* note 1, at 815 (noting that "estimates of both benefits and costs are uncertain").

14. *See supra* note 12.

15. *See generally* Vicki Been, *Locally Undesirable Land Uses in Minority Neighborhoods: Disproportionate Siting or Market Dynamics?*, 103 YALE L.J., 1383, 1393-97 (1994) (discussing studies that assessed whether locally undesirable land uses are disproportionately located in poor or minority neighborhoods).

16. *See* EPA REPORT, *supra* note 8, at 85-87 (listing "Los Angeles-South Coast Air Basin" and "New York-New Jersey-Long Island" as ozone nonattainment areas).

17. *See* MARTY STRANGE, RURAL ECONOMIC DEVELOPMENT AND SUSTAINABLE AGRICULTURE 11-15 (1991) (noting that farming counties have higher poverty rates than other rural counties, and roughly twice the poverty of metropolitan counties).

18. *See* EPA REPORT, *supra* note 8, at 85-87 (listing cities and areas of nonattainment, showing that major metropolitan areas have more nonattainment problems than rural areas).

19. *See, e.g.*, PERCIVAL ET AL., *supra* note 1, at 814-15 (discussing federal estimates of the extraordinarily high costs of attaining the federal ozone standard in areas—primarily major metropolitan areas—with high ozone levels).

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sumption that people with low incomes prefer more environmental quality to more jobs, more subsidized health care, more housing allowances, or whatever. At the least, if our present policy of uniform standards is wasteful, then by definition we would increase the potential welfare of the poor by opting for a more efficient approach that frees resources for alternative purposes. And if the politics of wealth redistribution in our society makes transfers of this newfound wealth to the poor unlikely, then it is equally unlikely that our present policy of uniformity actually benefits the poor after all, in ways the more powerful and well-to-do have not yet been smart enough to notice.

There is a relationship between the two concerns just considered that should be mentioned in closing this brief discussion of costs and justice. The poor, to the no doubt considerable degree they lack political power, will have a relative disadvantage in bringing their views to bear on the slippery politics of calculating costs and benefits. But it must then be the case that the poor already have a relative disadvantage in shaping environmental policy, along any lines. This suggests little reason to suppose that present policy—including the policy of uniformity—happens to benefit them. In the end, the redistributional impact of any environmental policy that would ever get on the table is more or less indeterminate, suggesting that more efficient pollution policies are the prudent course.

3. Matters of Political Rhetoric.—No doubt politicians shun open talk of costs in connection with health and the environment precisely because they believe that the rhetoric itself would prove costly—to their political careers. And to ignore costs is, as we saw, to invite uniformity. Something else invites uniformity as well when the topic is, as here, *federal* standards imposed on *the states.* As a point of constitutional principle, if not of constitutional law, and surely as a point of practical politics, the central government must recognize that the members of the union stand on *equal* footing. If they are to be treated on a differential basis, there must be some compelling reason—ideally a reason that is consistent with the norm of state equality. Just as it is politically unwise to talk openly about costs in connection with health and the environment, so it is worrisome for the members of Congress to act as though some states should be treated better or worse than others.[20]

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20. For example, federal disaster relief is made available for all the states, despite the predictably more numerous and more costly disasters of some states.

For an especially whimsical example of the equality norm at work in the air pollution context, note that for many years federal legislation permitted California, and only Califor-

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The norm of state equality is, therefore, a real constraint on federal policy-making.[21] Consider, for example, how Richard Stewart resorted to the norm in criticizing a proposal—drafted, as it happens, by me—to establish *non*uniform federal ambient air quality standards set to vary with the circumstances of given states. Stewart wrote:

> Even supposing nonuniform standards are desirable, there are serious political obstacles to congressional agreement on nonuniform measures which would permit greater economic development in some states than others. Members of Congress would also be reluctant to confer on administrative officials discretion to impose nonuniform measures.[22]

This is an exceedingly strange view. As Stewart is, and was, aware, Congress had *already* established an air pollution program that "would permit greater economic development in some states than in others." Moreover, "administrative officials" (in EPA) *already* had, and had exercised, "discretion to impose nonuniform measures" regarding air quality.[23] Indeed, Professor (later, Assistant Attorney General during the Bush administration) Stewart's generalization about federal uniformity so contradicts what the federal government commonly does in practice that one has to wonder how such a sober, well-informed, and intelligent person could possibly have said what he did.

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nia, to set more demanding emission standards for new motor vehicles than could other states. The authority, however, was expressed in terms allowing any state to set such standards provided the state had adopted emission standards prior to March 30, 1966. But as Congress well knew when it drafted this language in 1967, only California had adopted such standards. *See* CURRIE, *supra* note 6, § 2.40 (discussing federal preemption of state motor vehicle emission standards).

21. It is also, however, a constraint that can usually be satisfied easily enough, a point I take up shortly. *See infra* Part III.B.

22. Richard B. Stewart, *History and Policy Analysis*, 31 STAN. L. REV. 1159, 1173 (1979) (reviewing JAMES E. KRIER & EDMUND URSIN, POLLUTION AND POLICY (1977)). The proposal in question can be found at 327-34 in *Pollution and Policy*. For the original treatment of the issue, see Kenneth L. Heitner & James E. Krier, *An Approach to Air Quality Management Standards*, 24 AIR POLLUTION CONTROL ASS'N J. 1039 (1974).

23. Stewart, *supra* note 22, at 1174 (noting Congress's unwillingness and inability to enforce clean air deadlines in regions such as Los Angeles). When in 1970 the federal government set uniform ambient air quality standards for all parts of the country, it necessarily constrained development in some states more than others, because some states had to clean up more than others. Moreover, under the 1970 legislation, EPA was allowed to extend limited extensions to states that could not meet the ambient standards by the congressionally established deadlines. Policy has since moved much further, and more straightforwardly, in this direction.

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II. UNIFORM STANDARDS AND FEDERAL STANDARDS

Professor Stewart noted an additional consideration in the course of his critique. "Leaving standard-setting to state or local authorities risks inadequate standards," he wrote, "because of interregional competition for economic development."[24] This, obviously, is a very different sort of point, one that relates not to *uniform* standards but rather to *federal* ones. A common but crucial error (not necessarily Stewart's) is to conflate these two subjects, reasoning as though "federal" necessarily implies "uniform."

It is evident that were states allowed to set their own environmental quality standards, those standards would not be uniform. A few states, perhaps a number of them, might mimic each other in one respect or another. This mimicking would, however, be neither universal nor complete.[25] The "state" standards would be utterly uniform only if the federal government instructed the states that they could set any standards they wished so long as those standards were the same as specified federal standards—but those, of course, would simply be federal standards, fooling no one.

Why would state standards vary? One reason, an innocent one, lies in the considerations we mentioned earlier: states differ among each other in a number of relevant respects.[26] Professor Stewart suggested another, more sinister, reason when he mentioned "interregional competition." What he meant is this: Each state would worry that if it set relatively demanding pollution standards, it would lose industry to states with more relaxed standards. This in turn would mean that no state would set any standards more demanding than the standards of the state that represented the lowest common denominator. There would be "a race to the bottom."[27]

This familiar argument is incorrect. It is convincing only in the presence of externalities—situations where one state can arrange to transport *its own* pollution to another state's airshed. Absent an ability to do that, any state in setting standards would have to make its own internal tradeoff between the level of economic growth it wanted

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24. *Id.* at 1173.

25. Before 1970, states were free to set their own air quality standards, so long as they were consistent with uniform federal criteria. Needless to say, different states set different standards, and some set none at all. *See* CURRIE, *supra* note 6, §§ 1.07-1.08 (discussing state air pollution regulation prior to 1970).

26. *See supra* text accompanying notes 5-7.

27. Richard B. Stewart, *Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 YALE L.J., 1196, 1211-12 (1977) (describing the "Tragedy of the Commons" rationale for centralized environmental regulation).

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within its boundaries and the amount of pollution it would tolerate *within its boundaries.* The need to make that tradeoff does not impel the race to the bottom that worried Stewart, so long as the states differ among themselves (and they do) in their tastes for prosperity on the one hand and environmental quality on the other. Externalities are, therefore, another sinister reason, but now also a good reason, for federal standard setting.[28] There is little evidence, however, that they are the reason behind our federal quality standards, and, in any event, externalities do not demand uniform federal standards.[29]

Notice that whereas state standard setting necessarily means, in reality, *non*uniformity, federal standard setting does *not* necessarily mean *uni*formity. Certainly in reality it does not; in reality the federal uniform environmental quality standards have failed (and probably always will fail) to achieve uniform environmental quality across all the states. And certainly as a logical proposition federal does not mean uniform, for the federal government could as well set *different* standards for *different* states. Indeed, as we have seen, in a sense it already does.[30]

But what then of the norm of equality in a federal system? We are now positioned to consider that matter with a little more scrutiny than before.

III. THE EMPTY IDEA OF UNIFORMITY—AND A TOPOLOGY

A. *An Empty Idea*

"Equality," a colleague of mine has demonstrated, is an idea or ideology that is empty of itself, meaningful only in some particular comparative context.[31] This is unsurprisingly true of "uniformity" as well, because uniformity is a kind of equality. When things are equal to each other they are uniform, otherwise not; equal shares do not mean more for you than me, they mean a uniform distribution. The one term means the other.

But what does either mean? The answer is nothing, absent a context. Suppose, for example, that we decide to form a cadre as a part of which each of us will wear the same distinctive outfit—a "uniform."

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28. *See id.* at 1215-16.

29. *See* Richard L. Revesz, *Rehabilitating Interstate Competition: Rethinking the "Race-to-the-Bottom" Rationale for Federal Environmental Regulation,* 67 N.Y.U. L. REV. 1210, 1213-27 (1992).

30. *See supra* note 23 and accompanying text.

31. *See* Peter Westen, *The Empty Idea of Equality,* 95 HARV. L. REV. 537 (1982) (discussing the confusion derived from the arguably empty concept of equality); PETER WESTEN, SPEAKING OF EQUALITY (1990) (discussing the varying contextual meanings of equality).

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Does this mean that we are all to wear the same size, even though we are of different sizes? Uniforms of uniform size would, after all, be uniform; and they would be (very) distinctive. The problem is that they would look stupid, and so would we.

One can think of our federal environmental policy in the same way. We form a cadre—call it a more perfect union—and adopt a distinctive outfit. Outfitting could mean the same amount of material for every member (every state), or it could mean something less stupid. If federalism requires, as a matter of principle or politics, the distinction of uniformity, there remains a question regarding the dimension(s) along which we should *measure* uniformity. The answer to that question in the environmental context is not at all obvious, except in one respect. Many environmental standards should not be uniform in the way they are now, but rather in some other way, along some other dimension.

There are a host of alternatives, some of them more sensible than others. Consider.

B. A Topology

1. Perfectly Efficient Uniformity.—Many economists complain that uniform environmental standards, whether quality standards or emission and effluent standards, are woefully inefficient because they treat unlike circumstances in like ways. In other words, they treat the relevant universe as though costs and benefits were the same everywhere within it, when in fact they are not. The result is that we sometimes spend more for a unit of benefit than that unit of benefit is worth, and (contrariwise) we sometimes forgo benefits that would exceed their costs. Given sufficient information, and on the assumption of easy administration, we could avoid this waste of uniformity by setting differing federal standards for different areas in different situations. Nevertheless, we could still have uniformity. In fact, the economists' dream program would be perfectly uniform (and perfectly efficient) in that all costs and benefits, everywhere, would be *equal* at the margin.

2. Wonderfully Just Uniformity.—As we saw, many people find it distasteful to think about costs (but, of course, not benefits) in the context of public health and environmental quality.[32] The contradictions in this kind of thinking were examined earlier; put them aside for now. Assume—as I did above—that access to information is easy

32. *See supra* Part I.B.2.

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and administration is cheap. We could then define justice in whatever way we thought right and adopt the federal program of uniform standards that best fulfilled the aspirations of that definition. Instead of insisting that justice requires the same environmental quality for everybody everywhere, the federal government could, for example, insist on standards imposing equal burdens on all the states (as opposed to the unequal burdens of the present scheme), or, alternatively, standards requiring all the states to improve quality by the same percentage every year. Either of these approaches seems relatively just; none seems patently unfair.

3. Real World Programs.—The assumptions of easy information and administration are, of course, unrealistic (though no more so than the nominally implicit assumption in much of our existing federal environmental policy—that it is easy enough to realize the same levels of quality everywhere). Every sensible analyst knows that policy has to be somewhat rough and ready. Because both information and administration are costly, we have to work with crude estimates of relative costs and benefits, and shape policy in terms of categories that are far less than perfectly tuned. This hardly means, however, that we must ignore all tradeoffs (costs and benefits) between alternative approaches, or that we should treat every situation as though it were identical to all others, when obviously it is not. Instead, we could focus on extremely costly and beneficial approaches, and we could think of areas that are pretty much the same as each other, or obviously different from each other. Indeed, our present system of uniformity is probably so off the mark that just one degree of differentiation—simple enough to accomplish—would entail very significant savings.

4. Tailoring Real World Approaches to the Norm of Equality.—How can the idea of differentiation among states be squared with the norm of equality? Easily, once we remember that equality in the abstract is an empty idea.[33] It is empty, I now suggest, precisely because it is so full.

Consider federal air pollution policy, which since 1970 has approached uniform ambient air quality standards in terms of the following dimensions.[34] First, there is a *concentration* dimension—ozone, for example, is not to exceed .12 parts per million (ppm.) in the ambient atmosphere.[35] Second, there is what I shall call a *measurement* di-

33. *See supra* note 31 and accompanying text.
34. *See* EPA REPORT, *supra* note 8, at 19.
35. *Id.*

mension. Twelve parts per million of oxidant refers to a maximum daily average concentration.[36] Third, there is a *time* dimension. In the case of oxidant, for example, the .12 ppm. standard is not to be exceeded more than one day per year.[37] Finally, there is a *deadline* dimension, requiring the states to meet the concentration standard in different years.[38]

Since 1970, all of the foregoing dimensions have been uniform across the country, with the exception of the deadline dimension, which has to some degree never been uniform and which most surely is not uniform now, save for the long run.[39] So is our present policy uniform, or is it not? The answer is that it is either, as one likes.

IV. TOWARD A WISE (NOT A FOOLISH) CONSISTENCY

The challenge of shaping environmental (or any other) policy in a federal system is to honor the norm of state equality in ways that are wise rather than foolish, fair and efficient rather than wasteful. Our air pollution policy has moved haltingly in this direction, with much delay and no doubt considerable unnecessary expense. The policy is uniform—along, for example, the concentration, measurement, and time dimensions—but it is variable along the deadline dimension, extending to the year 2010 (which outside date will, I predict, one day be moved out further for the areas with the biggest attainment problems). It is also variable in that states are still required to shoulder differential burdens regarding control costs and economic development, even with the differential deadlines.

So is ours a wise or a foolish policy? If it is wise, we can leave it alone and justify it, in terms of the norm of equality, along any number of dimensions. If it is foolish—for example, wasteful or unfair in that some states are being unduly strapped, even in the long run—then it can be amended for the sake of equal burdens, and nevertheless remain uniform (and justifiably so).[40] Indeed, and this is true of virtually any federal environmental policy, and probably of most federal policies of any sort, the norm of equality does not fore-

36. *Id.*

37. *Id.*

38. *See supra* note 11.

39. *See supra* text accompanying notes 11 and 23.

40. For example—and this would be a variation on federal air pollution policy since 1990—concentration standards and measurements standards could be set uniformly for all the states, but the number of days of violation per period, and the deadlines for stages of improvement, could vary with state circumstances.

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close sensible approaches that might be (roughly) more just and (roughly) more efficient than what we have now.

It is an empirical question whether the present uniform pattern of federal environmental policy would be improved—in a scientifically, economically, and politically feasible way—by switching to some alternative measure or measures of uniformity. Judging from the evidence, however, it is safe to suppose it would. Twenty-five long and troubled years of experience with federal air pollution legislation suggest that it would have been rather difficult to come up with a worse program. There have been enormous costs, laughable delays, and extraordinarily differential burdens, all for the sake of someday achieving standards that are, in the extreme cases, probably impossible and in many instances not worthwhile.[41] It is for these very reasons that federal air pollution policy has gradually evolved in the direction of more sensible differentiation (or, one could also say, more sensible uniformity). Yet the policy promises to persist in its wasteful ways come the end of the first decade of the next century. In any event, and more generally, Congress persists in the view that environmental quality should eventually be the same everywhere. That is not a commendable objective. It is a foolish consistency at the price of a wiser one.

41. *See supra* text accompanying note 19; *Air Pollution: New York, New Jersey Ask EPA for Help Controlling Pollution from Outside Area*, 25 Env't Rep. (BNA) 1483 (Nov. 25, 1994) (discussing the impossibility of achieving standards in some cases).

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