



History

You are here: [EPA Home](#) [History](#) [Topics](#) [Clean Air Act of 1990](#) The New Clean Air Act: An Environmental Milestone

<http://epa.gov/history/topics/caa90/03.htm>
Last updated on Thursday, September 10th, 2009.

The New Clean Air Act: An Environmental Milestone

by **William K. Reilly**

[[EPA Journal - January/February 1991](#)]

Twenty years ago, with a law whose modest size belied its revolutionary impact, Congress made a promise to all Americans: the promise of clean air. Now, as EPA takes on the challenge of carrying out the sweeping and complex changes in the clean air law adopted last fall, the promise is finally back on the path to fulfillment.

The 1970 Clean Air Act was a legislative landmark in many ways. It marked a high point in Congressional concern for the environment up to that time, and it incorporated what were then major departures in the nation's approach to regulation, including national, as opposed to regional, air quality standards and statutory deadlines for compliance. In fewer than 50 pages - tiny compared to the nearly 800 pages of the 1990 law - the 1970 Clean Air Act also sent a compelling message to the nation: The time had come for us to get serious about protecting the environment. Much of this country's environmental progress over the last two decades can be credited to the changes in attitude signaled by the 1970 Clean Air Act.

But while this clean air law accomplished a great deal - substantially reducing emissions of such pollutants as sulfur oxides, volatile organic compounds, carbon monoxide, particulates, and especially lead - we are not yet able to say we achieved its goals. Ninety-six of our cities have still not attained the national standard for ozone, the primary ingredient in smog. Forty-one cities do not meet the standard carbon monoxide, and 72 do not meet the standard for particulate matter. And since 1970, EPA has been able to regulate only seven hazardous air pollutants, out of a potential list of several hundred, because of controversy and legal challenges over provisions of the 1970 law.

It has been obvious for nearly a decade that the Clean Air Act would have to be revised, and revised substantially, before its promise could be realized. Yet it was not until last year that Congress, responding to the determined leadership of President Bush and Congress members who had long championed clean air, finally was able to overcome paralyzing regional and sectoral differences and follow through on the initial burst of environmental enthusiasm that had produced the hope, but not yet the reality, of clean air.

Like the 1970 law, the Clean Air Act Amendments of 1990 represent a significant departure from the past. In its innovative approaches to pollution control, in the extent to which its implementation envisions an unprecedented degree of cooperation between government and the private sector, and in its promise of a renewed national commitment to environmental protection, the new law is a major milestone in the evolution of environmental protection in the United States.

The law also presents one of the most daunting regulatory tests yet faced by EPA. The Agency is required to publish more than 55 new rules in the next two years - five times as many clean air

rules as our average until now. To meet this challenge, we have committed 70 percent of the proposed increase in Agency operating funds for Fiscal year 1992 to Clean Air Act programs; and we are hiring 200 new employees to work in the air program, including scientists, engineers, public policy experts, analysts, and writers.

In the face of this monumental task, EPA also has committed itself to making some fundamental changes in the way we do business. Instead of relying on traditional rule-making - and risking the time-consuming litigation it often provokes - we are working hard to build consensus at the outset of the process. Collegiality and cooperation will be the hallmark of the Agency's implementation strategy. Every step of the way, we intend to involve state and local governments, and to consult with industry, labor, and environmental groups through advisory committees, regular informal consultations, and a formal regulatory negotiation process. Such consensus-building efforts are essential if we are to achieve the multiple objectives of the new law within the tight deadlines set by Congress.

Our regulatory approach is entirely consistent with the basic thrust of the new clean air law - to achieve specific and ambitious environmental goals without necessarily damaging the nation's economic health or hampering its growth.

This is, above all, a flexible, results-oriented law. It is not wedded to hard and fast formulas or specific technological requirements. Instead, the law was designed with the marketplace in mind. The Clean Air Act sets specific air quality standards, yet it also allows a great deal of latitude in deciding how to achieve these objectives.

Equally important, the law provides real incentives for companies to seek environmental solutions that work best for them, instead of waiting for EPA or state and local authorities to impose solutions through government directives. Ultimately, the Clean Air Act challenges industry to seize the initiative - to take the lead in the business of environmental protection.

Since the Clean Air Act was passed last October, numerous articles have appeared describing the impact of its costs. Such costs are indisputable. They are also unavoidable if the nation is to have cleaner air even as more jobs, factories, and cars are added to the equation. It is important, however, to see these costs in the context of the remarkable policy breakthroughs embodied in the new law and the economic implications of these new policies. Two critical new directions for clean air policy - two innovations not previously seen in environmental policy - deserve particular attention as part of that context.

The first is clean fuels as a means of controlling air pollution, particularly in the "nonattainment" areas that have failed to meet the national standards for ground-level ozone. Congress endorsed the President's goal of cleaning up our automobile fuels by setting tough standards for the reformulation of gasoline in the nation's nine most polluted cities. Before the end of the year, EPA will be issuing regulations setting specific requirements for this reformulated fuel program. Other cities have the option of joining the program if they choose.

Congress also required the introduction of hundreds of thousands of clean-fuel cars in California beginning in 1996 and through a voluntary "opt-in" provision, the California pilot program could be extended to other states as well. This provision, intended to stimulate clean-fuel technology, makes real-world sense. For as a practical matter, without altering what goes into car and truck engines, a number of polluted areas - most notably Southern California - could not possibly attain clean air standards. As a consequence of the new law, an array of innovative fuels - compressed natural gas,

methanol from natural gas, ethanol from corn, electricity, and others - will be getting a real-world test. And very likely, many areas in addition to California will choose to require their use.

The second and broader innovation has to do with economics. The United States now spends more than \$100 billion a year on environmental protection - more than three times as much, in constant dollars, as we spent in 1972. That figure will continue to rise over the next 10 to 15 years as the Clean Air Act gradually takes effect and as the nationwide cleanup of hazardous and operating waste sites proceeds. Expenditures for environmental protection are expected to reach about 2.7 percent of our Gross National Product by the year 2000. It seems clear, given these figures, that the nation must devote a good deal more attention than in the past to meeting environmental commitments in cost-effective ways.

To say this is not to use costs as a rationale for pulling back on environmental progress, nor is it to imply that the nation cannot afford an ambitious environmental program. After all, the clean air bill President Bush proposed was costed somewhere between \$14 and \$19 billion per year: The Administration's bona fides should be indisputable. The point is simply this: New environmental proposals should pay careful regard to cost-effectiveness so that expensive new measures carry with them commensurate benefits in terms of reducing threats to health and the environment.

The new Clean Air Act meets that test. Forged in a crucible of genuine compromise and cooperation, the legislation evolved first within the Administration as many diverse interests, including those of the EPA, the Council of Economic Advisors, and the Office of Management and Budget, were reconciled through the white House domestic policy process; and then on Capitol Hill as Members of Congress and representatives of the Administration, industry, and environmentalists debated its provisions. Bearing the clear imprint of all the individuals and groups that participated in its shaping, the final bill not only gives Americans the promise of clean air but also moves the nation into an era of economically sound environmental stewardship.

To achieve environmental gains within a reasonable timeframe at the lowest feasible cost, the new law will take hold in incremental stages, with most controls fully in effect by 2005. What, specifically, are some of these gains? Emissions that cause acid rain (sulfur dioxide and nitrogen oxides) will be cut to roughly half of 1980 emission levels. More than 30 million tons of noxious air pollutants will be removed from the air each year. Every part of the country finally will have means to attain healthy air on a realistic schedule. And the risk from toxic air emissions will be cut by three-fourths.

Overall health risks, including risks of cancer, respiratory disease, heart ailments, and reproductive disorders, will be reduced dramatically. Also drastically reduced will be damage to sensitive ecosystems and to buildings, monuments, and other manmade structures. To cite one particularly dramatic benefit, well over half the toxic substances that contaminated the Great Lakes should be eliminated.

These badly needed environmental improvements would not be possible without a fundamental shift in our approach to environmental policy. The President's proposals, on which the new legislation is largely based, were not only sensitive to the costs of pollution control; they also included provisions to supplement traditional "command-and-control" regulations with flexible, market-based programs that will enlist the power of the marketplace on behalf of the environment.

The use of economic incentives, such as an innovative system of tradable emissions "allowances" for sulfur dioxide, will enable the nation to achieve significant improvements in air quality at compliance costs \$1 billion lower than would otherwise be possible. The emissions-trading program we designed

drew heavily on concepts put forward by the Environmental Defense Fund.

The statute also introduces a number of other market-based innovations, many of which are discussed elsewhere in this issue of *EPA Journal*. These include, for example, performance-based standards for hazardous pollutants; incentives or "credits" for companies which act quickly to reduce toxic emissions or go beyond minimum compliance requirements; tradable emission credits for producers of certain kinds of reformulated fuels, for manufacturers of clean-fuel vehicles, and for vehicle fleets subject to clean-fuel requirements; and performance targets for reformulated fuels, allowing industry to meet these emission-reduction targets in the most cost-effective way possible.

With the Clean Air Act Amendments of 1990, the United States set a precedent for cost-effective environmental policy that will be followed around the world. Economic incentives are given prominence in a recent British White Paper on the environment, for example, and we can look for new policy directions in Britain and other countries.

Moreover, advanced pollution-control technologies, developed in the United States, will help to meet worldwide needs for environmental protection and cleanup, especially in the newly emerging (and heavily contaminated) democracies of Eastern and Central Europe. Last year, the Soviet Union announced its intention to purchase \$1 billion in air pollution control equipment from the United States. The new Clean Air Act will stimulate further positive developments in environmental technology.

At home, the cost-effective, market-based approach to environmental protection embodied in the statute will serve as a model for other Administration proposals - in the future. The lesson of the Clean Air Act is clear: The nation need not give up its aspirations for a cleaner, healthier environment, or for other worthwhile social goals, even at a time of limited economic resources.

The key is to devise programs that harmonize economic and social goals: programs that put the marketplace to work on behalf of the environment. Thanks to the example of the 1990 Clean Air Act, we now know this can be done.

Reilly was Administrator of EPA, February 1989 - January 1993.