



1971

Air Pollution Control: New Goals in the Law

John T. Middleton

Environmental Protection Agency

Follow this and additional works at: <https://uknowledge.uky.edu/klj>

 Part of the [Environmental Law Commons](#)

Right click to open a feedback form in a new tab to let us know how this document benefits you.

Recommended Citation

Middleton, John T. (1971) "Air Pollution Control: New Goals in the Law," *Kentucky Law Journal*: Vol. 59 : Iss. 3 , Article 5.
Available at: <https://uknowledge.uky.edu/klj/vol59/iss3/5>

This Symposium Article is brought to you for free and open access by the Law Journals at UKnowledge. It has been accepted for inclusion in Kentucky Law Journal by an authorized editor of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

Air Pollution Control: New Goals in the Law

DR. JOHN T. MIDDLETON *

Public policy in the United States is beginning to reflect a new sense of environmental responsibility and awareness. It is about time, as our environmental problem is already of crisis proportions. The discarded leftovers of our advanced consumer society litter the landscape and strain the facilities of local governments. New products and new packaging methods pose new disposal problems. We are just beginning to make an impact on municipal pollution of lakes and rivers, and we have a long way to go in controlling the toxic wastes of industry and the ruinous runoff from farmlands.

It is only in recent years that the U. S. has thought about the air pollution, the noise, the debris, and the ecological effects of our enormous productive capacity upon man and his environment.

Even now, in view of the seeming vastness of the atmosphere, it is difficult for many people to believe that there is a danger of exhausting the supply of clean air. But that possibility distinctly exists. The earth is enveloped in a comparatively thin layer of air; about 95 percent of the total air mass being concentrated in the first 12 miles above the earth's surface. And only a portion of this thin envelope of air is used for the disposal of wastes and for breathing. In spite of daily and seasonal variations, the air supply to any particular area is basically fixed, and the ability of the atmosphere to dilute and disperse pollutants is quite limited.

Now we know dirty air constricts our throats and makes us sick. It debilitates and kills some of us ahead of our time.

* Acting Commissioner, Air Pollution Control Office, U.S. Environmental Protection Agency.

It besmirches our great cities and robs us of some of the material goods and pleasures for which we began enduring this pollution in the first place.

But we are finally beginning to educate ourselves in the area of pollution control and utilize our newly acquired knowledge. Each year, 200 million tons of man-made waste products are released into the air of the United States. About half of this pollution is produced as a result of the transportation system, coming chiefly from the internal-combustion engine. Combustion of fuel accounts for about one-quarter of the total, one-sixth is from industrial processes, and one-sixth is from municipal incineration and other miscellaneous sources.

Although information developed during the past decade on the effects of air pollution on human health is impressive, there is no facet of the problem where knowledge is wholly adequate. Even when air pollution does not affect health directly, it may have indirect effects of great significance. Although pollutants may be introduced initially into a local community's air, they may ultimately affect climate and contaminate distant lands, vegetation, animal life, and the water upon which all men depend for survival. Spirits are depressed and efficiency lowered by air pollution, not only through psychological depression, but also through eye irritation and other physiological responses. Living and production standards are reduced because air pollution leads to absenteeism and to reduced efficiency.

Economic losses due to air pollution may be viewed as a hidden tax paid by citizens to subsidize the inadequate waste-disposal practices of their industry, their government, and themselves. These costs may properly be regarded as a concealed factor in the gross national product. More than a decade ago, government officials estimated that annual expenses and material losses due to air pollution amounted to \$65 per capita, greatly exceeding the anticipated cost of control. This estimate has not been revised in recent years, but various local studies have shown that the per capita cost of pollution is far greater than \$65 in some areas.

Economic studies are beginning to identify some of the hidden costs of air pollution. To paint steel structures damaged by air pollution runs an estimated \$100 million a year; commercial

laundering, cleaning, and dyeing of fabrics soiled by air pollution costs about \$800 million; washing cars dirtied by air pollution costs about \$240 million; damage to agricultural crops and livestock is put at \$500 million a year or more. The adverse effect of air pollution on air travel costs from \$40 to \$80 million a year. It is even more difficult to tie down the costs of replacing and protecting precision instruments or maintaining cleanliness in the production of foods, beverages, and other consumables. It is equally difficult to assess damage, soiling, and added maintenance to homes and furnishings, or the effect of air pollution on property values. The cost of fuels wasted in incomplete combustion and of valuable and potentially recoverable resources, such as sulfur, wasted into the air is also difficult to estimate.

By comparison, the cost of controlling existing and new major industrial and municipal sources of particulate matter, sulfur oxides, hydrocarbons, and carbon monoxide in 100 metropolitan areas of the United States has been estimated at \$2.6 billion. By 1975, it will cost an additional \$1.9 billion for operation, maintenance, depreciation, and interest.

Man has reached this critical point not by a deliberate intent to pollute and desecrate, but rather by his single-minded pursuit of isolated, short-range objectives that seemed desirable and beneficial at the time. The road to this environmental crisis, like the road to hell, was paved with good intentions.

Americans are the victims of a point-of-view in relation to their environment that has long been obsolete. This viewpoint holds that man must conquer nature. Americans have clung to this vision with such tenacity that they now inherit the spoils of a three-hundred-year war against nature. Certainly, when our ancestors conceived the notion that the land and its resources were inexhaustible, their direct experience seemed to confirm their view. They could exploit this place and that resource and move on westward to the next place and next resource. This frontier attitude may have served America well as the nation expanded westward, and it probably accelerated and encouraged the economic and technological advances which followed. Today, however, there is no place left for the American frontiersman to move.

We are also at this crisis point because we have been sitting on the sidelines expecting technology to bring us an unmixed blessing of progress and prosperity. We set technology in motion and expect it to take care of us. It was not so much that we were immoral as that we were unconcerned—amoral, if you will—about the effects of our developing technology.

The first local efforts to reduce air pollution in the United States came at the end of the nineteenth century, when people in many communities were still enduring levels of smoke pollution that would be held intolerable today. Chicago and Cincinnati passed smoke-control ordinances in 1881, and by 1912 no fewer than 23 of the 28 American cities with a population over 200,000 had enacted similar ordinances. In the 1930's, 1940's, and 1950's, the public outcry against smoke pollution resulted in the enactment of new and improved legislation, the beginning of enforcement efforts, and visible improvement in the air of some industrial cities.

When the first federal air pollution research effort was authorized in 1955,¹ there were no state control programs at all. There was little concern about the environment in the scientific community, and the public, by and large, equated air pollution with coal smoke. As a result of early federal research, great strides were made toward understanding the causes, nature and impact of air pollution as a scientific and technical problem with deep social and political implications. What was needed, it was clear, was a rational program to control pollution, and the federal government tentatively began under the Clean Air Act² to provide financial assistance to new and already existing state and local control programs. This 1963 law also expanded federal research efforts and authorized direct federal action to abate interstate pollution that was essentially beyond the reach of individual states and cities. The latter actions have concentrated on improving state and local efforts.

Attention focused quickly upon the motor vehicle as a major source of pollution. The automobile is the source of around 60 percent of all man-made air pollution in 57 urban areas containing about 60 percent of the nation's population. In these

¹ Act of July 14, 1955, ch. 360, 69 Stat. 322.

² Clean Air Act, Pub. L. No. 88-206, 77 Stat. 392 (1963).

areas, the contribution of emissions from the automobile to the total pollution of the air ranges from 17.2 percent in industrialized Steubenville, Ohio, to 91.7 percent in urbanized Los Angeles. The automobile is the source of two-thirds of the carbon monoxide that is discharged into the air of the United States each year. It is responsible for more than half the hydrocarbon emissions and nearly half the nitrogen oxides. It is the chief source of lead and, in some cities, it is a significant source of undifferentiated particulate matter.

The need for direct federal regulation of automobile emissions is based on two circumstances: first, American automobiles are produced by a relatively small number of centralized corporations having a market that crosses state boundaries; and secondly, economic production to meet a wide variety of state requirements was regarded as unfeasible. As a result of a federal law passed in 1965,³ increasingly stringent control of emissions from new motor vehicles has been required since late 1967. Future controls may require the development of new kinds of engines and transportation systems in order to minimize the environmental impact of the private automobile.

The most recent legislation⁴ provides for the testing of production-line models as well as prototypes, and aims for production-line cars that are—as a minimum—90 percent cleaner than those prototypes certified as the base for production line cars that are now being produced in Detroit. Reductions of this magnitude, however, may not by themselves be adequate to achieve healthful air quality levels in our most congested urban areas. It may be necessary to reduce automotive emissions even further, particularly in urban areas.

When it became apparent that the air pollution often overreached the authority of state and local governments, the Clean Air Act was modified in 1967⁵ to provide support and technical assistance for the states to mount a systematic regional attack on the problem. Under this approach, the Federal government defined the effects of various concentrations of pollutants, and

³ Motor Vehicle Air Pollution Control Act, Pub. L. No. 89-272; 79 Stat. 992 (1965).

⁴ Clean Air Amendments of 1970 § 206, Pub. L. No. 91-604; 84 Stat. 1676.

⁵ Air Quality Act of 1967, Pub. L. No. 90-148; 81 Stat. 485 (1967).

identified regions that shared common air pollution problems. The effects of six classes of pollutants have been so defined and more than 100 regions have been designated. The state governments, after consulting with their citizens, began to adopt and plan for the implementation of air quality goals that would at least protect the health of their citizens in each of the regions. However, so great was popular interest in the effort to reduce pollution that the citizens in many regions pressed successfully for the adoption of goals that required the air to be even cleaner than was necessary for health alone.

In spite of these efforts since 1967, the problem was found to be growing worse at a rate that was outpacing efforts to control it, and, as a result, the Clean Air Act was amended again last year⁶ to provide a more rapid attack. Nationwide air quality goals are now being established by the federal government, first at a level intended to protect the public health and then at a level intended to protect soil, water, vegetation, animals, weather, visibility, and personal comfort and well-being against the effects of air pollution.

The states, with the advice of their citizens, will be developing comprehensive plans to achieve these goals within definite time periods. This implementation must begin at once. It must reflect the kind of social and political decisionmaking that is inherent in reforms of this magnitude. The first goals are to be met in most areas no later than mid-1975; the secondary goals are to be achieved as soon as is reasonably possible in each region, but no federal deadline has been established.

In their planning the states will have to consider such things as land-use projections, which heretofore have been left almost exclusively in the domain of city and county governments. There will be a need for detailed plans for emergency action, so that the health of citizens need no longer be endangered by the whimsical forces of nature and the inadequacy of past pollution control programming. State implementation plans must consider the need for regulation of pollution from motor vehicles in the hands of the public, together with fuel storage and handling. In some cases, there may very well be a need

⁶ Clean Air Amendments of 1970, Pub. L. No. 91-604; 84 Stat. 1676.

for the restriction of motor vehicle traffic, increased parking fees in downtown areas, road fees and franchise taxes designed to require more efficient use of our automobiles.

Legislative and other remedies may need to be devised. Great amounts of information will have to be amassed in short order. The need for states to reallocate resources may be substantial indeed; half of their air pollution control agencies have fewer than ten positions budgeted, and the overall vacancy rate for all state and local pollution-control agencies is 20 percent. Remedying this personnel problem will be impossible as long as state and local median salaries continue, as they do now, to fall 20 to 50 percent below the median paid by industry for the kinds of skills and levels of competence that are required for this work.

The new law⁷ also provides for the establishment this year of federal performance standards for new stationary sources of air pollution, reflecting the use of the best system of emission reduction that has been adequately demonstrated and for the establishment of federal emission limitations for hazardous pollutants that may cause or contribute to an increase in mortality or an increase in serious irreversible or incapacitating illness. New sources are those that are built after the date of any proposed standards, or modified in such a way as to emit any pollutant not previously emitted or cause an increase in present pollutants.

The states may be empowered by the new federal law amendments⁸ to administer these provisions too, if their clean-air officials have authority to review plans and specifications of new industrial facilities to prohibit the construction of those that fail to meet the national standards and, in case of hazardous pollutants, if the states can provide adequate and speedy enforcement procedures to safeguard public health. In order to assist the states to meet their responsibilities under this law, the federal government will be providing increased financial and technical assistance to them. And if they then fail, the federal government will be required to intervene, provide an implementation plan, and see that it is executed.

⁷ *Id.* §§ 111, 112.

⁸ *Id.* § 114(b)(1).

The new agency that President Nixon has established to attack the pollution problem—the Environmental Protection Agency⁹—is a separate entity, outside the Cabinet, but reporting directly to the President. It brings under one organization the federal programs dealing with air and water pollution, solid wastes, noise, pesticides, and radiation. The President has asked the Congress for 2.5 billion dollars next year to enable this agency, which includes the Air Pollution Control Office, to function effectively toward its objectives.

Furthermore, the President has also established the Council on Environmental Quality¹⁰ and the National Oceanographic and Atmospheric Administration,¹¹ thereby placing our nation in a much better position to meet the future environmental challenge which is not only to attend to what is urgent, but at the same time to foresee and respond to what is ahead. Too little is known, for example, about the additive and synergistic pollutants on human health, the climate, vegetation, animal life, and materials. Research is needed to develop “clean” new techniques of production and more effective, efficient means of disposing of waste products. Improved monitoring is required to determine the actual volume of pollution that people encounter in their daily lives. And further studies will be necessary to ascertain the optimum levels of pollution control. The United States government, often in cooperation with other governments and research institutions in other countries, is continuing to seek the answers to such questions.

⁹ Reorganization Plan No. 3 of 1970, 8 U.S. Cong. News 2996 (1970).

¹⁰ Exec. Order No. 11,472, 34 F.R. 8693 (1969).

¹¹ Reorganization Plan No. 4 of 1970, 8 U.S. Cong. News 3000 (1970).