

LOCAL GOVERNMENTS AND AIR POLLUTION

Over the past 25 years man has become increasingly concerned about his environment and the ways he can protect himself from the wastes he produces. This concern has manifested itself in action by government, industry, and individuals. There are at least two justifications for governmental involvement: (1) government is the only institution that can balance effectively the costs and benefits of fighting pollution; and (2) one of the primary responsibilities of government is to provide for its citizens' health and welfare which pollution affects. The following discussion presents reasons why local governments should be doing more to abate air pollution. It will review also what local governments can do toward effectively fighting air pollution and the problems they encounter in enacting and implementing their programs.

I. THE AIR POLLUTION CONTROL PROBLEM

For centuries man has been using the ambient air to discard his wastes without direct charge to the polluter. As the effects of air pollution were realized, man began placing restrictions on emissions and types of fuel. The increase in cost of production caused by such regulations cannot always be passed on to consumers because as prices increase substitutes become competitive. Thus, industry has resisted from the beginning attempts to regulate emissions. This resistance takes the form of potent lobbies which, combined with the competition among municipalities for industry, create a major problem for local governments when they desire to take action against air pollution. There are also legal, economical and political limitations on local action. It is clear that local governments cannot solve the air pollution problem alone. This does not mean, however, that they should abandon ship altogether. There is much that local governments can and must do before the air will cease to be a threat to human life and well being. Enforcement, monitoring, and public information campaigns are critical in the fight against air pollution and can be done best at the local level.

II. THE EFFECTS OF AIR POLLUTION

For 1969, it is estimated by the Environmental Protection Agency that 281.2 million tons of air pollutants were emitted into the ambient air of the United States.¹ Approximately 51.5 percent (by weight) was emitted by transportation sources and there is little that local governments can do about this major source. Stationary power sources accounted for 15.8 percent of the pollution, while industrial processes contributed 14.1 percent,

¹ ENVIRONMENTAL QUALITY, THE SECOND ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 212 (1971) [hereinafter cited as SECOND ANNUAL REPORT].

solid waste disposal sources accounted for 4.2 percent and miscellaneous sources produced 14.4 percent. Of the pollutants themselves, carbon monoxide, a poisonous gas, was most prevalent accounting for 54 percent. Particulates, sulfur oxides, and hydrocarbons made up about 13 percent each. Finally, nitrogen oxides accounted for 7 percent. Before discussing what local governments are doing to control these pollutants, their effects will be mentioned briefly.

A. *Health Effects*

Although air pollution affects man in many ways, the most important effect is on his health. Most air pollutants are detrimental to man's health in one way or another.² The most serious are sulfur oxides, lead, and carbon monoxide. Donora, Pennsylvania, a city with a population of 14,000, was the victim of a week-long smog in October 1948, which resulted in 20 persons dying, and almost 6,000 suffering aggravated illnesses.³ In December 1952, more than 4,000 persons died in London, England as a result of similar conditions,⁴ and an episode in New York City left 80 persons dead of sulfur oxides in November 1966.⁵

Lead, emitted as a particulate, is also an extremely hazardous air pollutant, as the residents of El Paso, Texas and other cities are learning.⁶ It is reported that in El Paso the American Smelting & Refining Co. has been emitting large quantities of lead from its stacks.⁷ It is inhaled directly or settles on the ground where some may be taken up by food grown on that land. Once in the human body, it causes lead poisoning which can result in paralysis, and brain and kidney damage.⁸ Once a major problem in paints, lead is now affecting man through the air he breathes. The major sources are industrial processes and vehicles.

The third killer in the atmosphere is carbon monoxide, which inactivates the body's hemoglobin. Motor vehicles are its primary source, but other pollutants, such as ozone, nitrogen dioxide, peroxyacyl nitrates, aldehydes, and acrolein make up what is commonly called smog, which is formed by the combination of nitrogen oxides and gaseous hydrocarbons under the influence of sunlight. Smog causes eye and lung irritations. A possible solution, though far from satisfactory, is to require everyone to wear a gas mask. Besides being somewhat ludicrous, this fails to solve the various economic effects discussed in the following section.

² *Id.* at 105.

³ H. STILL, *THE DIRTY ANIMAL* 137-38 (1967).

⁴ *Id.* at 135.

⁵ J. DAVIES III, *THE POLITICS OF POLLUTION* 119 (1970).

⁶ 2 *ENVIR. RBP. C.D.* 551 (1971).

⁷ *TIME*, Mar. 27, 1972, at 71.

⁸ R. Merliss, *Lead Poisoning*, 10 *TRAUMA* No. 3 65, 74-75 (Oct. 1968).

B. *Economic Effects*

Although the threat to human life standing alone should be enough to convince government that air pollution must be brought under control, another reason is that air pollution costs money. In fact, it is costing the American people more than \$16 billion annually, which is more than \$80 per person.⁹ Because of the difficulties in determining accurate costs, the \$16 billion figure is probably far below the actual costs. Besides the discomfort of being sick and the sorrow associated with death, both illness and death ultimately cost money. Presently, the cost associated with human mortality and morbidity resulting from air pollution is more than \$6 billion annually.¹⁰ The damage to materials and vegetation is assessed at more than \$4.9 billion annually, and property values are lowered \$5.2 billion annually.¹¹ Thus it will cost far less to control air pollution than to let it continue.¹²

Local governments can be most effective in controlling pollutants that originate at stationary power sources, industrial processes, or solid waste disposal plants located within their territorial limits. These sources account for 34 percent of the total problem. However, in attempting to control air pollution they will face numerous problems, some of which they will be unable to resolve, and will have to rely on higher levels of government.

III. ACTION BY LOCAL GOVERNMENT

Because the effects of air pollution originally were realized near the source, local governments were the early leaders in air pollution control. Beginning in the late 1960's, however, there was a trend toward consolidation of pollution control. This trend is commonly attributed to federal grant-in-aid programs, to recognition of the fact that air pollution is no longer a local problem to be dealt with solely by local governments, and to inaction by a majority of local governments. While this consolidation has had various affects on local programs, ranging from a complete removal of authority¹³ to expanding the existing authority,¹⁴ there remains a vital function for local government in most instances. Local governments are well suited for fighting air pollution, which fact apparently is recognized by higher government levels as evidenced by their reluctance to entirely

⁹ SECOND ANNUAL REPORT at 107.

¹⁰ *Id.* at 106.

¹¹ *Id.* at 107.

¹² *Id.* at 120.

¹³ See, e.g., ARK. STAT. ANN. § 82-1941 (Supp. 1969); R.I. GEN. LAWS ANN. § 23-25-19 (1968).

¹⁴ See, e.g., DEL. CODE ANN. tit. 7, § 6207 (Supp. 1970).

preempt responsibility.¹⁵ There are good reasons why local governments can play an important role in antipollution programs. These may be summarized as follows: (1) a local program can be better coordinated; (2) those localities that have established programs of pollution control have acquired special expertise in the problems of their area; (3) specific and detailed planning can best be developed at this level; and (4) the enforcement and follow-up programs are best assigned as a local function.¹⁶ Notwithstanding these reasons, most local governments have failed to take action to effectively curb pollution.¹⁷ Those that do attempt to control pollution continue to find themselves besieged with problems, both real and imaginary.

A. *Typical Local Code*

Local governments have been experimenting for many years to find a solution to the air pollution problem. The early regulations generally prohibited the emission of dense smoke as a public nuisance. While this method was free of cumbersome procedures, it contained certain shortcomings that limited its effectiveness.¹⁸ The modern trend is to regulate the specific causes and sources of air pollution. A study conducted in Kansas City showed that it is most beneficial to reduce air pollution most where it cost the least rather than to cut it proportionately at every source.

There are various means available to local governments to regulate the causes and control the sources of air pollution. Local pollution control codes generally create an agency for administering the code¹⁹ or designate an existing department to be responsible for administration.²⁰ If the ordinance does not create a new agency, it commonly delegates the authority to the health, building, public safety, or fire department. The advantages and disadvantages of these are discussed in the report of the hearings on the Air Quality Act.²¹

¹⁵ F. GRAD, G. RATHJENS, & A. ROSENTHAL, *ENVIRONMENTAL CONTROL: PRIORITIES, POLICIES, AND THE LAW* 102 (1971) [hereinafter cited as *ENVIRONMENTAL CONTROL*].

¹⁶ D. ROHRER, D. MONTGOMERY, M. MONTGOMERY, D. EATON, & M. ARNOLD, *THE ENVIRONMENTAL CRISIS* 193-94 (1970) [hereinafter cited as *ENVIRONMENTAL CRISIS*].

¹⁷ In a poll conducted by the International City Management Association during the second quarter of 1971, only 61 percent of the 60 cities with a population over 50,000 that responded had air and water pollution abatement ordinances of one type or another. J. Zimmerman, *The Municipal Stake in Environmental Protection*, 39 *MUN. YR. BK.* 105 (1972).

¹⁸ *SECOND ANNUAL REPORT* at 173. These "shortcomings" included problems due to proof of such elements as standard of care, damages and proximate cause, the burden of which is on the plaintiff. As for the availability of various defenses, and the lack of standing on the part of individual citizens to successfully sue on broad grounds of public nuisance, see Note, *Legal Aspects of Air Pollution Control in Ohio 1971: Critique and Proposals*, 40 *U. CIN. L. REV.* 511 (1971).

¹⁹ See, e.g., CHICAGO, ILL., CODE § 17-1.1 (1969).

²⁰ See, e.g., AKRON, OH., CODE § 755.01 (1965).

²¹ *Hearings on S. 780 Before the Subcomm. on Air and Water Pollution of the Sen. Comm. on Public Works*, 90th Cong., 1st Sess., pt. 3 at 1371-75 (1967).

One very important function for which local governments are clearly the best suited is that of monitoring—detecting the concentration of various pollutants in the ambient air on a permanent basis. Local governments have attempted several means of monitoring, but have been hampered by a lack of funds, a problem common with all local government action. Monitoring is a vital step in effective control of air pollution because it then allows a municipality to tailor its program to its specific needs. New York City has a network consisting of more than 38 stations by which it claims to be able to keep the air of the entire city under surveillance. Such systems enable the authorities to warn the public when pollution reaches dangerous levels. Elizabeth, New Jersey adopted an ordinance²² under which owners of fuel-burning equipment may be required to install an alarm which is designed to sound when smoke emissions exceed permitted levels. Also in New York City owners are required to install sulfur emission monitoring and recording devices.²³ Although the records from such devices may not be admissible as evidence in a criminal proceeding, they can be a powerful weapon in gaining public support.

Another common feature of local codes is the license to pollute—commonly called a variance.²⁴ This can easily become the weakest link in the code if the variance system is not closely controlled. The polluter, any person who causes the emission of pollutants into the ambient air, is required to obtain an operating certificate which is theoretically issued only if the emission source complies with established standards. The problem develops when a particular polluter claims he cannot conform and seeks special treatment. If the municipality gives in, it sets a dangerous precedent. On the other hand, if it refuses, pressure may be brought to slacken the standards, which would be equally devastating. Therefore, if a local government decides to incorporate a system of variances into its code, a decision also must be made to hold its ground.

Primarily, local governments are concerned with regulating four pollutants: smoke, particulates, sulfur oxides, and odors.²⁵ An attempt is also being made to control automobile emissions, but such action is still generally in the planning stage. The most common method of regulating the emission of smoke has been setting limits on permitted density in terms of the Ringelmann Chart.²⁶ Probably the most notable example of rela-

²² Elizabeth, N.J., Ordinance 401 (1969). See also NEW YORK, N.Y., ADM. CODE § 1403.2-11.19 (Supp. 1971).

²³ NEW YORK, N.Y., ADM. CODE § 1403.2-11.10 (Supp. 1971).

²⁴ See, e.g., NEW YORK, N.Y., ADM. CODE § 1403.2-311 (Supp. 1971); CHICAGO, ILL., CODE § 17-2.56 (1969).

²⁵ ENVIRONMENTAL CRISIS at 206.

²⁶ See, e.g., AKRON, OH., CODE § 755.08 (1965). Use of the Ringelmann Chart is criticized in D. Henz, *The Ringelmann Number as an Irrebuttable Presumption of Guilt—An Outdated Concept*, 12 CURRENT MUN. PROB. 377 (1971).

tive success with smoke control has been Pittsburgh.²⁷ Beginning in 1947 factories, homes, steamboats, and locomotives were required to burn smokeless fuels or install smoke-consuming devices. By 1952 visibility had improved by 77 percent and for that year alone it was estimated that \$25 million was saved through reduced cleaning bills. But, local governments realize that smoke is not their entire air pollution problem, and they have begun to experiment with other means of controlling air pollution. Not all programs have been successful because the enabling ordinances are rarely enforced.²⁸ Today many municipalities attempt to abate particulates by setting standards as a function of the heat produced.²⁹ The most effective control has been with respect to sulfur oxides. These are produced when fuel is burned which contains sulfur—primarily coal and fuel oil—and by industrial processes that use sulfur. Donora focused attention on sulfur oxides. The primary means of control has been a change to low sulfur fuel.³⁰ The successes that have been realized have not come easily. The American economy is based on energy and any regulation that may bring about capital expenditures and changes in fuel costs is met with great opposition.³¹ In Boston, for example, suppliers said they were unable to supply low sulfur fuel.³² However, when the city refused to yield, the fuel was delivered.

At present, most attempts by local government to regulate the pollution caused by motor vehicles are at the experimental or planning stage. For reasons discussed below, it is possible, albeit improbable, that any such regulation may be held invalid because of federal action already taken. The two major means considered are outlawing the sale of leaded gasoline³³ and curbing the use of private vehicles.³⁴ The latter solution is one which most Americans currently resent. As was noted above, automobile emissions are a major source of such poisonous pollutants as lead and carbon monoxide. While the problem caused by lead may, to some extent, be solved by banning the sale of leaded gasoline, the problem that is caused by carbon monoxide cannot be solved so easily. Any solution will require a fundamental change in Americans' attitude toward their private automobile, a result which the automobile industry is sure to resist.

Finally, some local codes provide emergency powers³⁵ and public in-

²⁷ H. STILL, *supra* note 3, at 163.

²⁸ SECOND ANNUAL REPORT at 42.

²⁹ NEW YORK, N.Y., ADM. CODE § 1403.2-9.09 (Supp. 1971); St. Paul, Minn., Ordinance 9275, May 10, 1969.

³⁰ See, e.g., NEW YORK, N.Y. ADM. CODE § 1403.2-1303 (Supp. 1971).

³¹ J. DAVIES III, *supra* note 5 at 116.

³² Address by Mrs. Suzanne Del Vecchio, N.I.M.L.O. Air and Water Pollution Panel reported in 34-B N.I.M.L.O. MUN. L. REV. 46, 51 (1971).

³³ NEW YORK, N.Y., ADM. CODE § 1403.2-13.11 (Supp. 1971).

³⁴ SECOND ANNUAL REPORT at 42.

³⁵ *Id.*

formation services.³⁶ The former are very much needed if future episodes such as those which occurred in Donora and London are to be avoided. Under such provisions, when atmospheric conditions attain certain prescribed levels, the city is empowered to order the curtailment or shutdown of polluters until the condition passes. Public information services are equally important since they may be the only viable means of combating a large corporation which, for one reason or another, appears to be immune to other action. This problem and others are examined in the following material.

B. *Legal Limitations*

Many municipalities believe that they need additional legal authority before effective action can be taken.³⁷ This belief stems from the fact that a municipal ordinance is valid only if the municipality has, either by enabling legislation or home rule, been granted power to enact such an ordinance. Municipalities historically have dealt with environmental problems under their police power. In the United States, the cases go back to 1884 when the Supreme Court of Illinois, in *Harmon v. Chicago*,³⁸ upheld an attempt by the city of Chicago to regulate the emission of smoke and soot. The city of Chicago had passed an ordinance in 1881 imposing a penalty on the

owner . . . of any boat or locomotive engine . . . and the proprietor, lessee and occupant of any building, who shall permit or allow dense smoke to issue or be emitted from the smokestack of any such boat or locomotive, or the chimney of any building, within the corporate limits³⁹

The court found that this ordinance was a local police regulation which the state of Illinois and the city of Chicago, by grant of authority from the state, had full power to enact. Following *Harmon*, several cases in the early part of the twentieth century dealt with the constitutionality of smoke and soot ordinances.

As is true of any ordinance, an ordinance designed to regulate and control air pollution must meet the due process requirements of the federal constitution; that is, it must be rationally related to the control of pollution and sufficiently clear to inform those subject to the ordinance what is expected of them. One of the earliest cases to contend with a challenge to an ordinance on due process grounds was *Northwestern Laundry v. Des Moines*.⁴⁰ The action was brought by Northwestern to enjoin the

³⁶ ENVIRONMENTAL CRISIS at 205.

³⁷ Forty percent of cities stated they needed additional legal authority. J. Zimmerman, *supra* note 17.

³⁸ 110 Ill. 400 (1884).

³⁹ *Id.* at 405.

⁴⁰ 239 U.S. 486 (1916).

enforcement of a city ordinance which provided that the emission of dense smoke in portions of Des Moines should be a public nuisance and prohibited the same. Northwestern argued that the ordinance was void because, *inter alia*, it was unreasonable. The Supreme Court rejected this argument, holding that the state may grant to municipalities the power to declare the emission of dense smoke to be a nuisance. Northwestern also argued that, since the ordinance's standard of efficiency would require the remodeling of practically all furnaces that were in existence at the time of its adoption, it made it economically unfeasible to continue business. To this argument the Court responded that

[s]o far as the Federal Constitution is concerned . . . the ordinance's effect upon business interests, short of a merely arbitrary enactment, [is] not [a] valid constitutional objection[s]. Nor is there any valid Federal constitutional objection in the fact that the regulation may require the discontinuance of the use of property or subject the occupant to large expense in complying with the terms of the law or ordinance.⁴¹

Although ordinances have not been struck down for interference with economic interest, several have been invalidated for failure to inform those to whom they were addressed of a proscribed standard of conduct.⁴²

Another objection commonly made to local government ordinances is that they deny equal protection in violation of the fourteenth amendment. This argument has been rejected invariably since 1916, so long as the ordinance in question applied equally to everyone coming within its terms.⁴³ Despite this early rejection, defendants have continued to argue a denial of equal protection, either because the ordinance excepts certain classes of polluters⁴⁴ or because the ordinance applies only to certain types of pollutants.⁴⁵ Such arguments have not been persuasive and a change in the Supreme Court's position is not foreseeable.

The federal limitation posing the greatest threat to local action is preemption. Because the federal constitution grants Congress the power to regulate interstate commerce, federal statutes with respect to air pollution may be found to occupy the field and preempt state and local action. Thus far, Congress has preempted control only over emissions from new motor vehicles⁴⁶ and over the setting of standards for various pollutants.⁴⁷

⁴¹ *Id.* at 491-92.

⁴² *Verona v. Shalit*, 92 N.J. Super. 65, 222 A.2d 145 (1966), *aff'd on other grounds*, 96 N.J. Super. 20, 232 A.2d 431 (1967).

⁴³ 239 U.S. 486.

⁴⁴ *Board of Health v. New York Central R.R.*, 4 N.J. 293, 72 A.2d 511 (1950).

⁴⁵ *Oriental Blvd. Co. v. Heller*, 27 N.Y.2d 212, 265 N.E.2d 72, 316 N.Y.S.2d 226 (1970), *appeal dismissed*, 401 U.S. 986 (1971).

⁴⁶ 42 U.S.C. §§ 1857f-1, 1857f-6a (1970).

⁴⁷ 42 U.S.C. § 1857c-7 (1970).

Further, the Court has never been anxious to find preemption. In *Savage v. Jones*⁴⁸ the Supreme Court held that:

The intent to supersede the exercise by the State of its police power as to matters not covered by the Federal legislation is not to be inferred from the mere fact that Congress has seen fit to circumscribe its regulation and to occupy a limited field. In other words, such intent is not to be implied unless the act of Congress fairly interpreted is in actual conflict with the law of the State.⁴⁹

The Supreme Court applied this principle in *Huron Portland Cement Co. v. Detroit*,⁵⁰ where the appellant challenged the application of Detroit's Smoke Abatement Code to ships owned by the appellant and operated in interstate commerce. The appellant argued that since the vessels and their equipment had been inspected, approved and licensed to operate in interstate commerce in accordance with a comprehensive system of regulation enacted by Congress, the city of Detroit could not legislate to impose additional or inconsistent standards. The Court found that:

The ordinance was enacted for the manifest purpose of promoting the health and welfare of the city's inhabitants. Legislation designed to free from pollution the very air that people breathe clearly falls within the exercise of even the most traditional concept of what is compendiously known as the police power.⁵¹

The Court concluded that, since the federal statutes were aimed at safety and the ordinance at pollution, there was no conflict and hence no preemption.

In *Huron*, the appellant also argued that even if the Court did not find preemption, the ordinance was void because it materially affected interstate commerce in matters where uniformity was necessary. The Court rejected this argument, finding that no impermissible burden on commerce had been shown.

As can be seen by the above discussion, there are virtually no federal limitations to local government action except concerning new motor vehicle emissions and standards at the present time. With respect to standards, Congress has not said that local standards cannot be more lenient than the federal standards, but the one prerequisite to obtaining federal money is that the local government attempt to attain federal standards. There are other factors that may persuade a municipality not to be more stringent than the federal standards. Both facets of the variation in standards will be discussed at greater length below. The states, on the other hand, can place, and do place in some instances, severe restrictions on local government action.

⁴⁸ 225 U.S. 501 (1912).

⁴⁹ *Id.* at 533.

⁵⁰ 362 U.S. 440 (1960).

⁵¹ *Id.* at 442.

A municipality generally receives its authority to act from one of two sources: enabling legislation or home rule provisions. If the source is the former, a municipality may be rendered powerless to adopt air pollution ordinances by the legislature's failure, or refusal, to grant such power. Even where the legislature has granted power to a municipality, such is more limited normally than that of the state. For example, in the matter of enforcement a state may have available both criminal and civil remedies, including equitable remedies. The local governments, on the other hand, may not be granted power to adopt any civil remedies, and the criminal remedies are often limited to misdemeanors.⁵² The absence of any equitable remedies can handicap seriously a municipality's efforts to abate pollution.⁵³

The other source of power for local action is a home rule provision either in the state constitution or by a state statute. This source of authority also contains restrictions on local activity. For example, the Ohio constitution provides:

Municipalities shall have authority to exercise all powers of local self-government and to adopt and enforce within their limits such local police, sanitary and other similar regulations, as are not in conflict with the general laws.⁵⁴

Under such a provision there are questions as to who is to decide, and what are, the "powers of local government." There is also a question as to when there is a "conflict with the general laws." Although the courts have frequently responded to the obvious intention to confer broad powers upon municipalities by interpreting the home rule provisions in their favor,⁵⁵ there remains a question as to whether a municipality may carry out particular activities. This is especially true when the state has already asserted a regulatory interest by enacting general legislation. Since most home rule provisions provide that there may not be a conflict between local ordinances and state law,⁵⁶ the existence of the question as to whether

⁵² ENVIRONMENTAL CONTROL at 156.

⁵³ See, e.g., 34-B N.I.M.L.O. MUN. L. REV. 46, 56-58 (1971) (the efforts of Minneapolis).

⁵⁴ OHIO CONST. art. XVIII, § 3.

⁵⁵ T. Sandlow, *The Limits of Municipal Power Under Home Rule*, 48 MINN. L. REV. 643, 661-85 (1964).

⁵⁶ See, e.g., OHIO CONST. art. XVIII, § 3. The Ohio General Assembly recently created an Environmental Protection Agency. Act of July 24, 1972, Am. Sub. S.B. No. 397, OHIO REV. CODE ANN. § 121.02(R) (Page Supp. 1971) Substitute S.B. No. 397 continues the policy of not preempting the authority of local governments in Ohio to take action against air pollution. In § 3704.11 it is stated that §§ 3704.01 to 3704.11

do not limit the authority a political subdivision of the state has to adopt and enforce ordinances or regulations relative to the prevention, control, and abatement of air pollution, except that every such local ordinance or regulation shall be consistent with Chapter 3704. of the Revised Code, and shall include emission standards and other regulations which are not less stringent than the emission standards and other regulations adopted pursuant to division (E) of section 3704.03

The only change made in § 3704.11 by S.B. No. 397 was a substitution of "Director of Environmental Protection" for "air pollution control board."

there is a conflict has the result that many local governments will "be restrained in exercising their law-making functions."⁵⁷ Since ordinances generally enjoy the same presumption of constitutionality as statutes, this hesitance is unjustified. It is more likely that such local lawmakers are attempting to pass the buck and thereby avoid political pressure.

While smoke control ordinances are ordinarily within the statutory or charter power of municipal corporations, there are instances where the state has denied power to the local government expressly⁵⁸ or where the court has held that a municipality has no power. The Supreme Court of Minnesota so held in *St. Paul v. Gilfillan*,⁵⁹ in which the city of St. Paul adopted an ordinance prohibiting the emission of dense smoke. The court held that the ordinance was void as an expansion, by the city itself, of its own police power. But *St. Paul* is an atypical case in the development of air pollution control. Most courts have recognized the problem to be solved and, in the absence of express denials of authority, have affirmed such ordinances as a proper exercise of the police power.⁶⁰ The ordinance is to be tested by its purpose; if the purpose is the safeguarding of public health and welfare, any regulation or restriction embodied therein, having a reasonable relationship to the hazard, is sustainable under the police power.

The more common approach is for the state to enact an air pollution code which grants local governments the power to adopt their own codes. Under such circumstances the Missouri supreme court has held, in *Balentine v. Nester*,⁶¹ that where a city has the power to enact an ordinance to regulate the dense smoke nuisance under state statutes, it is unnecessary to determine whether it has such power under its charter. However, even where there exists a state statute granting power to local governments, a particular local government may be unable to take effective action against its particular air pollution problem because many such statutes limit the authority granted. The Minnesota statute,⁶² for example, does not allow local standards that are more stringent than state standards. The better statutes, in theory though probably not in practice, are the ones which require local standards to be consistent with or more stringent than the state regulation.⁶³ Theoretically, such a statute enables a local govern-

⁵⁷ Note, *Home Rule and the New York Constitution*, 66 COLUM. L. REV. 1145, 1154 (1966).

⁵⁸ See, e.g., ARK. STAT. ANN. § 82-1941 (Supp. 1969); R.I. GEN. LAWS ANN. § 23-25-19 (1968).

⁵⁹ 36 Minn. 298, 31 N.W. 49 (1886).

⁶⁰ See, e.g., *State v. Mundet Cork Corp.*, 8 N.J. 359, 86 A.2d 1, cert. denied, 344 U.S. 819 (1952).

⁶¹ 350 Mo. 58, 164 S.W.2d 378 (1942).

⁶² MINN. STAT. ANN. § 116.07 (Supp. 1971).

⁶³ See, e.g., COLO. REV. STAT. ANN. § 66-29-6 (Supp. 1971); DEL. CODE ANN. tit. 7,

ment to deal specifically with its particular problem. This type of statute, however, leaves a local government free to ignore the problem and take no action. Finally, there are state statutes that, in effect, require local governments to enact air pollution regulations.⁶⁴ Under this type of statute, if the local government fails to act, the state may do so and charge the local government for its expenses. Because local governments suffer from lack of funds and other related problems, such statutes may be necessary to force local action.

Thus it appears that most local governments have sufficient legal authority to adopt and implement a pollution code to control air pollution from sources within their corporate limits. There are, however, various reasons why many municipalities have chosen not to engage in an concentrated effort to control air pollution. This failure to act raises the most significant limitation imposed on other local governments, namely that of limited territorial jurisdiction. This effect can be illustrated by use of the following hypothetical: Assume two neighboring communities located within the same state but different counties; city Alpha is dependent on major polluting industries for jobs and tax revenue, but has good topographical dispersion; city Omega is a cultural and commercial center without major polluters, but is located where its neighbor's effluvia accumulate in increasing quantities. In the hypothetical Alpha may not realize it has a pollution problem and, in a sense, it does not. With appropriate topography and wind patterns its industry's gases and particulate matter may bypass the city's corporate limits under all but the most unusual circumstances. Since Alpha's enforcement powers are limited to its corporate boundaries, its concerns are likewise limited. Absent complaints and local damage, why should Alpha be concerned about its pollution sources, especially when those same sources provide its wealth and security, and those salutary industry products may not seem politically compatible with an aggressive ecology program? Omega, on the other hand, has a pollution problem, Alpha's, and no means to solve it. No amount of local effort will cleanse or divert the airborne pollutants that both blow in from across the corporation line causing damage and sickness and comprise Omega's economic opportunities. The problem is still a local one. Alpha's gases are thinning out as the square of the distance from its stacks, but the municipal boundaries just do not happen to coincide with the pollution boundaries. Regardless of the source of power, all grants of power limit the municipality's authority to its corporate borders.⁶⁵ The local inspector of Omega, therefore, is stopped absolutely from enforcement when the source is outside Omega's corporate limits. Because mu-

§ 6207 (Supp. 1966); FLA. STAT. ANN. § 403.182 (Supp. 1971); OHIO REV. CODE ANN. § 3407.11 (Page Supp. 1971).

⁶⁴ See, e.g., ALASKA STAT. § 18-30-180 (1969).

⁶⁵ See, e.g., OHIO CONST. art. XVIII, § 3.

nicipalities have only limited extraterritorial powers, the comprehensiveness of Omega's local code is of no importance, since the polluter is not subject to its provisions. This problem becomes critical if the air pollution control inspector of the county cannot go into a municipality to serve violation notices. In one of his many books, Professor Frank Grad summarizes this problem in stating:

Since local governments have no extraterritorial powers and since state governments rarely intervene in local intergovernmental disputes—particularly where the dispute has its origins in the activities of a private operator—there is frequently no agency that is responsible for abatement.⁶⁶

The seriousness of this problem is demonstrated by his discussion of instances when "inventive owners of manufacturing establishments combined to incorporate industrial enclaves as cities or villages as a defensive measure against the imposition of pollution controls."⁶⁷ In Ohio, for instance, this could have a devastating effect since home rule powers are not imperative.⁶⁸

The remainder of this article will focus on factors which cause the particular local government, Alpha, to refrain from taking effective action to abate air pollution from sources within its corporate limits. Among these circumstances are procedural delays, funding, politics, structure within the hierarchy of government and composition of the board responsible for setting standards. The net result of these factors is that the local government fails to enact a code that is both comprehensive and viable. There are other factors confronting local governments over which they have little or no control that will affect the type of action taken. These include climate, amount of pollution and size of the municipality.

C. *Procedural Limitations*

The delays that are inherent in the enforcement procedures have been one hurdle in cleaning up the air regardless of the enforcer. A prime example of this is *United States v. Bishop Processing Co.*⁶⁹ This case, which was replete with conferences and hearings, stretched over more than a decade. The action was commenced in 1959 to bring relief to the communities in Delaware and Maryland affected by the air pollution stemming from the appellant's chicken-rendering plant. When little was accomplished by 1965, the states of Delaware and Maryland sought help from the United States Department of Health, Education and Welfare (HEW). As the result of a conference held in 1965, Bishop was required to take remedial action by the fall of 1966. After none was taken, the

⁶⁶ ENVIRONMENTAL CONTROL at 154.

⁶⁷ *Id.* at 121.

⁶⁸ *Shook v. Mahoning Valley Sanitary Dist.*, 120 Ohio St. 449, 166 N.E. 415 (1929).

⁶⁹ 423 F.2d 469 (4th Cir.), *cert. denied*, 398 U.S. 904 (1970).

Secretary of HEW called a public hearing that was held in March of 1967. The Secretary instructed Bishop to abate the pollution control systems. Again nothing was done by Bishop, who was willing to take advantage of every possible delay. The Secretary filed a complaint in 1968 in federal district court seeking to enjoin Bishop from discharging malodorous air pollutants. In October of that year, Bishop proposed a settlement of the case, and the dispute was settled in November. Bishop, however, continued to pollute and, in September 1969, a second complaint was filed. Finally, Bishop was ordered to cease polluting. This order was affirmed by the court of appeals and the Supreme Court denied certiorari.⁷⁰ Delays such as were present in this case are not necessary and can be avoided by proper drafting and planning of a code. For example, many municipalities require certain classes of polluters to obtain an operating permit, without which it is unlawful to operate.⁷¹ Such permits are only issued if the polluter demonstrates that its emissions will be within the prescribed standards. Provisions are also made for inspecting the facilities annually and for renewing the permits.

A second cause for delay has been the burden of proof which, in most instances, is on the municipality; it must establish beyond a reasonable doubt that the alleged violation occurred. This problem is also one that the municipality can do something about and many have. In Philadelphia, for example, the local code shifted the burden of proof to the polluter by approaching a strict liability standard.⁷² Cleveland did so by incorporating such a shift in the permit system. There, the applicant is required to convince the commissioner that it will not "create a condition of air pollution."⁷³

The third means of delay—removal—is one that the municipality can do nothing to correct.⁷⁴ When there is diversity of citizenship between the municipality and the polluter, and more than \$10,000 in controversy, the defendant may remove an action to federal court. This may result in further delays. This tactic, however, is only available if the municipality is seeking a civil remedy. Since, as was pointed out above, a city rarely has authority to seek a civil or equitable remedy, this problem is currently of little importance.

D. *Funding*

A more complex problem is that of funding. It is common knowledge that all governments are short of funds. The Environmental Protection

⁷⁰ 398 U.S. 904 (1970).

⁷¹ See, e.g., AKRON, OH, CODE § 755.08 (1965).

⁷² See 34-B N.I.M.L.O. MUN. L. REV. 46, 54 (1971).

⁷³ See ENVIRONMENTAL CRISIS at 209.

⁷⁴ See, e.g., 34-B N.I.M.L.O. MUN. L. REV. 46, 56-58 (1971) (the efforts of Minneapolis).

Agency estimated that more than \$200 million must be invested by 1976 in capital equipment for municipal incinerators to meet air quality standards,⁷⁵ and it is estimated that annualized operating, maintenance, and replacement costs of these facilities will amount to over \$100 million by 1976. Because polluted air cannot be collected beyond its sources or be transported to a treatment plant, expenditures by local governments for air pollution control are primarily for planning, enforcement and monitoring. By 1975, a cumulative total of more than \$23.7 billion will have to have been expended to control air pollution,⁷⁶ of which the public share is estimated to be \$1.6 billion.⁷⁷ Thus, even if cities are willing to take action, they must obtain money to do so. Although their "potential tax capacity is large . . . they encounter significant barriers in realizing that potential."⁷⁸ The financial ability of local governments is reviewed in *The Environmental Crisis*.⁷⁹ Local governments rely heavily upon property taxes for their income; they also rely upon the sale of bonds to finance a large part of their activities, but such debt is limited by state constitutional and statutory provisions almost everywhere. Local governments also may raise revenue by imposition of an income tax. *The Environmental Crisis* concludes:

There are serious questions whether localities should increase their taxes in view of the problem of inequitable assessment, economic disincentives, and industrial tax competition. . . . The localities should not bear a heavy financial burden in the fight against pollution; it should be borne by the states and the federal government, who are capable of bearing it.⁸⁰

Local governments have expressed a need for more financial aid,⁸¹ and the state and federal governments have responded to this need. The states have attempted to aid local governments in solving the problem of lack of money, and during 1971 states increased their financial support in fighting pollution.⁸²

Although the federal government has authorized grants to develop, establish or improve governmental air pollution control programs,⁸³ such grants are not available to municipalities acting alone.⁸⁴ Therefore, neither city Alpha nor city Omega in the hypothetical set out above could receive federal money to abate or monitor air pollution. Local govern-

⁷⁵ SECOND ANNUAL REPORT at 149.

⁷⁶ *Id.* at 113.

⁷⁷ *Id.* at 115.

⁷⁸ ENVIRONMENTAL CRISIS at 210.

⁷⁹ *Id.* 210-20.

⁸⁰ *Id.* 220.

⁸¹ Sixty-three percent reported a need for additional grants. J. Zimmerman, *supra* note 17.

⁸² SECOND ANNUAL REPORT at 39.

⁸³ 42 U.S.C. § 1857c (1970).

⁸⁴ 42 U.S.C. § 1857c(a)(1)(B) (1970).

ments can participate in these funds only if two or more such governments combine to form an air pollution control agency. Authorization for such a compact must be granted by the state. Thus if the state has not granted local governments the power to cooperate for the purpose of fighting air pollution, their only source of money will be the state. Several states have granted such power;⁸⁵ those that have not should. For those local programs that are eligible for federal funds, the amount they receive, though substantial, is dependent upon the purpose for which the money is to be used, but in any case is substantial. For planning, developing, establishing or improving a program, the federal share may amount to as much as two-thirds of the cost. For maintaining programs or for affecting national and secondary ambient air quality standards, the federal share may be as much as one-half. Factors which are considered in determining the amount of the grant are as follows:⁸⁶ (1) comments of appropriate state officials; (2) feasibility of the project; (3) necessity of the project; (4) estimated costs; and (5) probable accomplishments. To be considered for a grant, seven papers must accompany the application. There must be a description of the applicant's legal authority and responsibility for administering the program. The applicant must describe the administrative organization and the air pollution problem. Not only must the objective be stated, but also the program must be described in detail, giving the specific measures to be taken. The applicant also must describe action taken to establish a regional air pollution program. Finally, there must be certification that the workable program has been adopted by the applicant. Funds are also available for research and development.

E. *Competition for Industry*

There are reasons other than finances shortages and procedural delays for explaining why cities like Alpha do not desire to fight pollution. Even if Alpha and Omega could unite and thereby obtain federal money, Alpha may still refrain from such action because of the competitive nature of its industry.

One of the reasons most frequently advanced for explaining inaction on the part of local governments is the economy. It is argued that each local government is competing with other local governments to keep the industry it has attracted and to attract more industry. The goal of clean air is weighed against the fear of losing industrial ratables, and too often this results in little or no meaningful action to control air pollution. This explanation may be losing some of its credibility, since both state and local governments are beginning to seek more nonpolluting commercial enterprises in lieu of industries that pollute their air and water. As this

⁸⁵ See, e.g., N.C. GEN. STAT. § 143-215.3(a)(11)(c) (Supp. 1967).

⁸⁶ 42 U.S.C. § 1857c (1970).

trend gains momentum there will be less force behind the competition-for-industry explanation of inaction on the part of local governments.

Where competition for industry prevails, the weakness of the local code is often the provision for variances.⁸⁷ While this competition also exists among the states, at present it is more intense among local governments. Because industry means jobs and taxes, local governments stand to lose much more in the short run than do the states, which because of their size can more easily survive the ups and downs. This dependency may even result in municipalities offering licenses to pollute to induce industry to come or remain. In terms of the hypothetical, city Alpha will be willing to take no action against the pollution sources within its jurisdiction or to issue variances permitting such sources to go on polluting. This will give it an advantage in attracting or keeping industry over the city that earnestly applies its air pollution code, due to the high cost to industry of abating pollution.⁸⁸ Such a license may be decisive in a company's choice of locations. The result is that no municipality can have a stringent code unless all do. In Chicago, for example, there are two major polluters, United States Steel Company and Republic Steel Company. When the city removed the exemption for steel mills in 1963, four major firms, representing 90 percent of the steel industry in Chicago, applied for and received variances.⁸⁹ It is clear that until there are uniform requirements, such competition will persist and thereby render the local control of air pollution ineffective. Such uniformity and coordination can be brought about best by the state and federal governments.

F. *Lack of Unification*

The industry maintenance problem is emphasized by the lack of unification among the various levels and units of government. Some state statutes provide for regional cooperation.⁹⁰ Where there is no regional program in operation, there are often overlapping local and state codes. While such codes may in theory be consistent and complementary, frequently there is a question as to which agency is responsible for enforcement. As a result, each unit enforces its own code without adequate regard to efforts by higher levels of government.⁹¹ This all points to a major problem in the "lack of a unified policy and the disjunctiveness of regulatory and enforcement activities."⁹² The federal government has attempted to solve this problem by its regional approach.⁹³ The boundaries of the

⁸⁷ ENVIRONMENTAL CRISIS at 223-26.

⁸⁸ SECOND ANNUAL REPORT at 153.

⁸⁹ ENVIRONMENTAL CRISIS at 224-25.

⁹⁰ See, e.g., CONN. GEN. STAT. ANN. § 19-520a (Supp. 1971).

⁹¹ F. GRAD, PUBLIC HEALTH LAW MANUAL 20-22 (1970).

⁹² ENVIRONMENTAL CONTROL at 146.

⁹³ 42 U.S.C. § 1857c-2 (1970).

regions are based on population and industrial concentrations as well as on meteorological data and political boundaries. While they are not required to follow state lines, most of the regions do so conform.⁹⁴ Despite criticism, the regional approach remains the backbone of federal programs.⁹⁵

G. *Composition of the Board*

A further nonlegal limitation on local government action is the composition of the specific board which is given jurisdiction over the problem. The boards are often made up of representatives from industry, professionals with special knowledge relating to air pollution, labor groups and public groups.⁹⁶ While on the surface this might appear to be a representative cross section of any given community, in fact, the result is that industry generally dominates the board, since most of the professionals are not only employed by industry but also share its viewpoint. Likewise, the labor groups tend to support management because if standards become too strict, industry might cut back its work force to provide necessary funds, or as suggested above, it might move to a new location. Such domination may be justified where the industry is vital to the majority of the population in a given community, but such is not generally the fact.

IV. CONCLUSIONS AND RECOMMENDATIONS

Although air pollution is a national problem, it manifests itself differently in various locations. Thus there can be a sensible distinction between the agencies enforcing air pollution laws and those concerned with standard setting and financing. Federal and state involvement is necessary to assure the effectiveness of local programs.

Municipalities, because of their high concentrations of industry and vehicular traffic, experience the bulk of the air pollution problem. Factors such as size, industrial population, climate and topography require different programs in different municipalities and, therefore, local programs are important. However, there is much to be done at the local level before air pollution will be brought under control and future problems avoided. To begin, local governments need to give air pollution control a higher priority. If the municipalities themselves do not embark on a course of effective action, then more states may do as Alaska has done and take over pollution control, charging the municipalities for the expenses incurred in doing so. Such action is undesirable from the local government's viewpoint, since under such circumstances it would be unable to make use of federal funds. Thus it would be plunged deeper in debt. Local govern-

⁹⁴ 42 C.F.R. §§ 481.11-481.114 (1971).

⁹⁵ See, e.g., O'Fallon, *Deficiencies in the Air Quality Act of 1967*, 33 LAW & CONTEMP. PROB. 275 (1968); Note, *The Air Quality Act of 1967*, 54 IOWA L. REV. 115, 135-37 (1968).

⁹⁶ ENVIRONMENTAL CRISIS at 225.

ments, therefore, should enact and implement effective local air pollution codes. They should adopt programs which include public information activities, monitoring, emergency powers, short and long-range planning, and abatement and enforcement provisions. Each of these is vital to a successful program.

Local programs should continue to be financed by the state and federal governments. In states where local governments lack the power to unite against air polluters, the state legislature should enact enabling legislation. This would not only enable local governments to make use of available federal funds, but also aid in solving the problem of city Alpha's pollution affecting the residents of city Omega.

Because unlimited territorial jurisdiction appears to be necessary to control the effect of large corporate lobbying, the federal government should not only continue its present policy of setting standards, but also expand those standards to cover all pollutants. State and local governments, however, should be free to promulgate standards that are more stringent unless uniformity is required, as with mobile sources. This would leave such governments free to regulate pollutants which they find require more control within their borders. Not only should the entire responsibility for setting minimum standards be removed from the local level, but also any variances should be issued by the states or even the federal government. Under such a system, the local influence of a large corporation would be greatly reduced. This leaves enforcing, monitoring and informing to be done by local governments.

Informing the public is important in gaining support against air polluters and in applying pressure on these polluters to abate air pollution. Increasing individual awareness of the pollution problem may foster personal action. Refraining from idling automobiles unnecessarily, forming car pools and making use of mass transit systems will lessen the pollutants for which individuals are directly responsible.

Monitoring and keeping inventories of emissions are necessary to determine with specificity the air pollution in the community. These activities make it possible for the local government to tailor its program in terms of fuel restrictions and land use to its particular air pollution problem and to identify immediately the program's successes and failures. Monitoring also enables the local governments to warn its residents of possible episodes and to take preventive action to avoid such. Monitoring and keeping inventories is expensive; without federal and state aid it cannot be carried on. Local governments, therefore, should unite when possible under state law to meet the requirements of the federal grant-in-aid program. To avoid episodes, as occurred in Donora, London, and New York, a local government should provide its program with emergency powers. These powers should enable the authorities, when an emergency condition exists,

to order the curtailment or shutdown of pollution sources until the condition passes.

Another important element of a local program is planning—both short-range and long-range. Short-range planning should set the immediate goals to solve problems that presently require action. Long-range planning should be utilized to avoid future problems. This type of planning should provide land utilization and programs directed at the problem caused by motor vehicles.

Next, local governments should provide for abatement and enforcement. Abatement, in the form of fuel restrictions and traffic regulations, can be tailored to fit the needs of the immediate area. Enforcement can best be conducted by the local government, since it can observe the situation from day to day. Most local governments can take the above action without additional legal authority, with the possible exception of uniting to obtain federal moneys. Abatement and enforcement can be made more effective by granting local governments the power to seek equitable remedies.

The states, therefore, should confer power on municipalities to seek equitable relief. They should also preempt responsibility for the issuance of variances and ensure local governments the authority to combine together to fight pollution. If necessary they should enact legislation forcing local governments to take action against air pollution. Local governments must overcome the inertia that is currently resulting in inaction and enact air pollution codes which enable monitoring, information and enforcement, and which provide for emergencies. When this is accomplished, local governments will be very effective agents in the fight against air pollution.

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