

LEGAL BOUNDARIES OF AIR POLLUTION CONTROL—STATE AND LOCAL LEGISLATIVE PURPOSE AND TECHNIQUES

LAWRENCE W. POLLACK*

The Air Quality Act of 1967¹ has once again directed the nation's attention to the dangers of ever-increasing levels of air pollution. The new legislation, while increasing the role of the federal government, did not change the basic congressional findings of the 1963 Clean Air Act "that the prevention and control of air pollution at its source is the primary responsibility of States and local governments."²

One of the designated purposes for the passage of the 1963 act was:

to provide technical and financial assistance to State and local governments in connection with the development and execution of their air pollution prevention and control programs.³

States and local governments have been attempting to "prevent and control" air pollution for many years. As might be anticipated, the major industrial cities were the first to enact legislation on the subject.⁴ The recognizable increase in the problem and the increase in scientific knowledge about the problem have gradually led to the adoption of prevention and control legislation employing various and multiple techniques of regulation and enforcement. Among these techniques are limitations on the density and opacity of visible smoke, limitations on specific emissions, regulatory permits and requirements for installation and operation of equipment, limitations upon the kind and nature of fuels permitted, skill requirements and training for equipment operators, and the flat prohibition of certain industrial activities. These various techniques are directly related to the local function of "prevention and control of air pollution at its source."⁵

Enforcement of state and local statutes over the years has provided sufficient legal

* B.S.E. 1953, University of Pennsylvania; LL.B. 1956, New York University; LL.M. 1957, University of Michigan. Practicing attorney and Adjunct Assistant Professor of Law, New York University. Counsel, New York City Council Special Committee to Investigate Air Pollution, 1965; Special Counsel, New York City Council, 1966. Member of the New York bar.

¹ 81 Stat. 485 (1967).

² 42 U.S.C. § 1857(a)(3) (1964).

³ 42 U.S.C. § 1857(b)(3) (1964).

⁴ General smoke ordinances were adopted by Chicago in April 1881; Cincinnati in November 1881; St. Louis in 1893; City of Brooklyn in 1895; and New York City in 1898. Statutory limitations on the use of various coals date back at least to the years 1273 and 1306 in England. See Kennedy & Porter, *Air Pollution: Its Control and Abatement*, 8 VAND. L. REV. 854 (1955).

⁵ 42 U.S.C. § 1857(a)(3) (1964).

experience to permit definition of some of the legal boundaries confronting new legislative attempts to deal with a problem that has proved stubborn indeed.

The Air Quality Act of 1967 is a reflection of a relatively new legislative approach. This approach, an outgrowth of modern "systems analysis" and computer technology, has been developed and advocated by the U.S. Public Health Service as a program of "Air Resource Management."⁶ Since the Public Health Service is the most influential governmental organization in the field, its recommended legislation has had considerable influence upon new state and local legislation. The "Air Resource Management" concept was explained in a recent Public Health Service publication as follows:

The air is a matter of public business, calling for good management practices. The public must have knowledge of air quality, effects of air pollutants, and the types and qualities of pollutants put into the air. Armed with this knowledge, the public depends on its governmental organizations to establish air quality goals and standards, and to develop the program goals, air-use plans, and action programs needed to reach the desired air quality. *Simply stated, the public embarks on an air resource management program to assure sound community growth in which the air resources of the air pollution basin are put to optimum use.*⁷

A legislative purpose of "good management so that air resources are put to optimum use" contrasts sharply with the more traditional "public health and welfare" legislative purposes.⁸

The purpose of this article is to review the legal experiences encountered in the development of the various state and local legislative techniques, so that future legislative efforts can be judged and guided accordingly. Because recent New York City legislation employs most of the available legislative techniques, it is used throughout this article as an example of "source control" legislation.⁹ The ordinance provisions recommended by the Public Health Service are hereinafter used as a model of "Air Resource Management" legislation.¹⁰

⁶ *Hearings on S. 780 Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works*, 90th Cong., 1st Sess., pt. 2, at 958-77 (1967) [hereinafter cited as *Hearings on S. 780*]; LARSON, *Determining Reduced-Emission Goals Needed to Achieve Air Quality Goals—A Hypothetical Case*, 17 J. AIR POLL. CONTROL ASS'N 823-29 (1967).

⁷ A PROPOSAL FOR AN AIR RESOURCE MANAGEMENT PROGRAM, VOL. VIII, PHASE II PROJECT REPORT, ST. LOUIS METROPOLITAN AREA INTERSTATE AIR POLLUTION STUDY 3 (National Center for Air Pollution Control, May 1967) [hereinafter cited as PUBLIC HEALTH SERVICE MANAGEMENT PROGRAM]. (Emphasis added.)

⁸ N.Y. CITY ADMIN. CODE §892-1.0 (1963). See also 42 U.S.C. § 1857(a)(2) (1964).

⁹ New York City Local Law No. 14 of 1966, N.Y. CITY ADMIN. CODE §§ 892-1.0 *et seq.* (Supp. 1967). Local Law No. 14 of 1966 and the two New York City Council Special Committee Reports which were the basis for the law are reprinted in full in *Hearings on S. 780*, pt. 3, at 1482-1622 (1967). The New York City law is administered by the N.Y.C. Dep't of Air Pollution Control, an administrative agency headed by a Commissioner appointed by the Mayor. The Department promulgates regulations, hereinafter cited as "A.P.C. § ———."

¹⁰ PUBLIC HEALTH SERVICE MANAGEMENT PROGRAM 89-132.

I

THE POLICE POWER AND CONSTITUTIONAL LIMITATIONS

A. Background—The Law of Nuisance

Most of the early law involving air pollution was a part of the common law tort of "nuisance" and the confusion associated with that word has been carried forward regularly to modern air pollution control. Dean William Prosser has commented that "[t]here is perhaps no more impenetrable jungle in the entire law than that which surrounds the word 'nuisance.'"¹¹

While this paper cannot hope to clear a scholarly path through the "jungle," a summary of common law concepts of the law of nuisance is necessary to an analysis of air pollution control legislation.

The law of nuisance has been divided into "private nuisance" and "public nuisance" since ancient times.¹² Private nuisance is simply a traditional tort which lies for interference with a person's enjoyment of his property. The action is dependent upon proof of damage and a finding that the defendant's activity is "unreasonable." Since most private nuisance cases involving air pollution requested an injunction, the standard flexible powers of an equity court combined with the required determination of "reasonableness" to develop a judicial policy of balancing the harm to the plaintiff against any usefulness of the defendant's conduct. As explained in *Cogswell v. New York, New Haven & Hartford R.R.*:¹³

The compromises exacted by the necessities of the social state, and the fact that some inconvenience to others must by necessity often attend the ordinary use of property, without permitting which there could in many cases be no valuable use at all, have compelled the recognition, in all systems of jurisprudence, of the principle that each member of society must submit to annoyances consequent upon the ordinary and common use of property, provided such use is reasonable both as respects the owner of the property, and those immediately affected by the use, in view of time, place and other circumstances.

When the difficulties of proving damages from air pollution are balanced against the usual economic importance of the accused factory, the plaintiff's obstacles are obvious. The wide judicial discretion exercised in private nuisance cases has allowed pollution from fifty coke ovens to be classified as only a "petty annoyance" to a neighboring home owner and a conclusion that air pollution is "indispensable to progress."¹⁴

¹¹ W. PROSSER, *LAW OF TORTS* 592 (3d ed. 1964).

¹² 3 BLACKSTONE, *COMMENTARIES* 215 (16th ed. 1825). The law of nuisance and other remedies available to private citizens is exhaustively discussed in Juergensmeyer, *Control of Air Pollution Through the Assertion of Private Rights*, 1967 DUKE L.J. 1126.

¹³ 103 N.Y. 10, 13-14 (1886). The court held that even the careful maintenance of a railroad engine-house next to the plaintiff's house was beyond the line of reason, especially in view of an undisputed finding of fact that plaintiff's son had been made ill by smoke and dust.

¹⁴ *Bove v. Donner-Hanna Coke Corp.*, 142 Misc. 329, 254 N.Y.S. 403 (1931), *aff'd mem.*, 236 App.

The law of "public nuisance," however, involves damage to the *community* in the exercise of its common rights. Any such activity was a common law crime. The conducting of an offensive smelling business, for example, was among the early accepted species of public nuisance.¹⁵ Smoke, as distinguished from many other activities injurious to public health, was not considered to be a "nuisance *per se*,"¹⁶ and proof that a large number of persons actually suffered some impairment to their enjoyment of life was required for prosecution for the creation of a public nuisance.

The restrictions of the law of public nuisance caused by the damage proving requirements gave rise to two developments: courts began to find damage to the public by taking "judicial notice" that impure air was harmful, and legislatures declared dense smoke a public nuisance as a matter of law. Often, "judicial notice" of damage was used as a basis for upholding the legislation.¹⁷ Unless the nuisance statute is carefully drafted, however, actual proof of harm might still be required. The state of New Jersey did not surmount this hurdle until 1950.¹⁸

Modern health requirements and modern air pollution control are concerned with invisible and odorless gases such as carbon monoxide and sulfur dioxide, with minute particles invisible to the naked eye, and with the complex chemical reactions that create photochemical smog. For the most part, increasing pollution levels result from the combined atmospheric contribution of thousands of installations and automobiles. No single identifiable source may be large enough or visible enough to be held responsible for specific damage. As a result, the laws of public and private nuisance have little application in the routine enforcement of modern air pollution legislation.

In *Leone v. Paris*,¹⁹ the court enforced designated water pollution control standards although the defendant's pollution contribution alone did not prevent the water from being usable and the stream involved had not been classified as "polluted." The court held:

If there is a substantial threat to the community it need not be hoveringly current. . . . The indirect, impersonal specter of menace created here, without substance to most *at this instant in time*, is nevertheless real and escalating, to be stunningly present in due time.²⁰

Div. 37, 258 N.Y.S. 229 (1932). Some twenty years later, the City of Buffalo was still having air pollution difficulties with the same factory and, like the neighbor, having little success. See *People v. Savage*, 1 Misc. 2d 337, 148 N.Y.S.2d 191, *aff'd mem.*, 309 N.Y. 941, 32 N.E.2d 313 (1955).

¹⁵ 4 BLACKSTONE, COMMENTARIES 168 (16th ed. 1825).

¹⁶ See *Dep't of Health v. Philip & William Ebling Brewery Co.*, 38 Misc. 537, 78 N.Y.S. 13 (1902).

¹⁷ *City of Rochester v. Macauley-Fien Milling Co.*, 199 N.Y. 207 (1910); *State v. Tower*, 185 Mo. 79, 84 S.W. 10 (1904); *Bowers v. City of Indianapolis*, 169 Ind. 105, 81 N.E. 1097 (1907). Cf. *People v. New York Edison Co.*, 159 App. Div. 786, 144 N.Y.S. 707 (1913).

¹⁸ *Board of Health v. New York Central R.R.*, 4 N.J. 293, 72 A.2d 511 (1950); see *Cowan, Air Pollution Control in New Jersey*, 9 RUTGERS L. REV. 609 (1955).

¹⁹ 43 Misc. 2d 442, 251 N.Y.S.2d 277 (1964), *modified*, 25 App. Div. 2d 508, 261 N.Y.S.2d 656 (1965).

²⁰ *Id.* at 447, 251 N.Y.S.2d at 282-83. (Emphasis in original.)

The late Chief Judge Vanderbilt of New Jersey, directly contrasting the inadequacies of the law of public nuisance with the need for effective air pollution control, held:

The reason for a municipality making unlawful the emission of smoke is readily apparent. The issuance of dense smoke from a single chimney, in and of itself, may be altogether harmless and cause no inconvenience or damage to the public, but if smoke of like density issued from hundreds of chimneys, the contamination of the atmosphere would be substantial and the injury to the public considerable, yet for lack of the requisite elements of a public nuisance at common law, the municipality could obtain no relief by way of indictment. Ordinances making unlawful the emission of smoke are therefore obviously necessary and reasonable and a valid exercise of the local police power.²¹

The conclusion seems inescapable. Modern air pollution control legislation, based upon the need for protection of the public health, must be recognized as independent of the elements of common law nuisance. It is an exercise of legislative police powers and must be judged in accordance with the constitutional standards applicable to those powers. In 1960, the Supreme Court, referring to Detroit's air pollution law, declared:

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.²²

B. The Due Process Clause

Recognition that air pollution control legislation is within the proper framework of an exercise of the police power has become standard.²³ The police power is, of course, limited by the fifth and fourteenth amendments to the Constitution of the United States.²⁴ The question in any analysis of air pollution control legislation is whether the statute is within the limits imposed by the Constitution.

The leading case outlining the constitutional boundaries of air pollution control legislation is *Northwestern Laundry v. Des Moines*.²⁵ That 1916 case involved a

²¹ *Board of Health v. New York Central R.R.*, 10 N.J. 294, 306, 90 A.2d 729, 735 (1952).

²² *Huron Portland Cement Co. v. Detroit*, 362 U.S. 440, 442 (1960).

²³ *City of Rochester v. Macauley-Fien Milling Co.*, 199 N.Y. 207 (1910); *Consolidated Edison Co. v. Murtagh*, 280 App. Div. 221, 112 N.Y.S.2d 681 (1952); *People v. Bevevino*, 202 Misc. 723, 112 N.Y.S.2d 647 (1952); *People v. Tatje*, 203 Misc. 949, 121 N.Y.S.2d 147 (1953); *West Bronx Auto Paint Shop, Inc. v. City of New York*, 33 Misc. 2d 29, 223 N.Y.S.2d 984 (1961), *aff'd mem.*, 17 App. Div. 2d 772, 232 N.Y.S.2d 391 (1962), *modified*, 13 N.Y.2d 730, 241 N.Y.S.2d 861 (1963). *See also* *City of Utica v. Water Pollution Control Board*, 5 N.Y.2d 164, 156 N.E.2d 301, 182 N.Y.S.2d 584 (1959).

²⁴ "Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law. As long recognized, some values are enjoyed under an implied limitation and must yield to the police power. But obviously the implied limitation must have its limits, or the contract and due process clauses are gone." *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 413 (1922).

²⁵ 239 U.S. 486 (1916).

challenge to an ordinance similar in many respects to modern control legislation. The ordinance established smoke density limitations measured according to the Ringelmann Smoke Chart²⁶ and forbade remodeling of new construction without a permit. The standard of efficiency called for by the smoke limitations required, as a practical matter, the remodeling of almost all of the furnaces in operation at the time of the adoption of the ordinance. The law was challenged as violative of both the due process and equal protection clauses of the fourteenth amendment. The Supreme Court held:

So far as the Federal Constitution is concerned, we have no doubt the State may by itself or through authorized municipalities declare the emission of dense smoke in cities or populous neighborhoods a nuisance and subject to restraint as such; and that the harshness of such legislation, or its effect upon business interests, short of a merely arbitrary enactment, are not valid constitutional objections. 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.²⁷

Generally stated, the limitations imposed by the due process clause upon the legislative power to protect the public health are that the exercise of power must not be arbitrary and must not go beyond what is necessary to accomplish the legislative purpose.²⁸ Since the opposite of "arbitrary" is "reasonable," it has become common judicial practice to determine the constitutional inquiry on the basis of whether the legislation is "reasonable" or "unreasonable."²⁹ The use of that word in private nuisance cases as an indication of judicial flexibility³⁰ has led to confusion when the same word is used in a constitutional inquiry.³¹ Where there is a legitimate public purpose

²⁶ The Ringelmann Smoke Chart, published by the U.S. Bureau of Mines, is commonly established by statutes as the recognized smoke measurement guide. Its use has been sustained by the courts. See *People v. International Steel Corp.*, 102 Cal. App. 2d 935, 226 P.2d 587 (1951); *State v. Mundet Cork Corp.*, 8 N.J. 359, 86 A.2d 1, cert. denied, 344 U.S. 819 (1952); *People v. Plywood Mfr's of Cal.*, 137 Cal. App. 2d 859, 291 P.2d 587 (1955); *Sittner v. Seattle*, 62 Wash. 2d 834, 384 P.2d 859 (1963); *People v. Murray*, 174 Misc. 251, 19 N.Y.S.2d 902 (1940). For New York City regulations, see A.P.C. Reg. § 9.03.

²⁷ *Northwestern Laundry v. Des Moines*, 239 U.S. 486, 491-92 (1916).

²⁸ *Lawton v. Steele*, 152 U.S. 133 (1894); *Northwestern Laundry v. Des Moines*, 239 U.S. 486 (1916); *People v. Arlen Service Stations*, 284 N.Y. 340 (1940); *Sheafer v. Joseph Breen, Inc.*, 263 App. Div. 135, 31 N.Y.S.2d 543 (1941).

²⁹ *People v. New York Edison Co.*, 159 App. Div. 786, 144 N.Y.S. 707 (1913); *People v. Cunard White Star, Ltd.*, 280 N.Y. 413 (1939); *Health Dep't v. The Rector, etc. of Trinity Church*, 145 N.Y. 32 (1895).

³⁰ See cases cited in notes 13, 14 *supra*.

³¹ See *People v. New York Edison Co.*, 159 App. Div. 786, 144 N.Y.S. 707 (1913); *People v. Cunard White Star, Ltd.*, 280 N.Y. 413 (1939); *People v. Peterson*, 31 Misc. 2d 738, 226 N.Y.S.2d 1004 (1961); *People v. Oswald*, 1 Misc. 2d 726, 116 N.Y.S.2d 50 (1952); *People v. Savage*, 1 Misc. 2d 337, 148 N.Y.S.2d 191, *aff'd mem.*, 309 N.Y. 941, 132 N.E.2d 313 (1955); *People v. New York Central & H.R.R.*, 159 App. Div. 329, 144 N.Y.S. 699 (1913); *Dep't of Health v. Philip & William Ebling Brewery Co.*, 38 Misc. 537, 78 N.Y.S. 13 (1902) (cases applying a judicial "rule of reason") and *Dankner v. City of New York*, 20 Misc. 2d 557, 194 N.Y.S.2d 975 (1959); *Engelshar v. Jacobs*, 5 N.Y.2d 370, 157 N.E.2d 626, 184 N.Y.S.2d 640, cert. denied, 360 U.S. 902 (1959); *Health Dep't v. The Rector, etc. of Trinity*

and the legislation is related to its accomplishment, it is inappropriate for a court to "balance" the economic equities of the situation. Where the legislative purpose clearly is the protection of the public health, judicial restraint and the presumption of legislative constitutionality³² must be the guide. Police power legislation has been referred to as the governmental power that is the least limitable by the courts.³³

There can be no doubt that these general constitutional principles apply to air pollution control legislation. The New York Court of Appeals stated in *City of Rochester v. Macauley-Fien Milling Co.*:³⁴

The common council is thus the judge as to what ordinances it will pass for the safety and welfare of the inhabitants of the city and the protection and security of their property, and unless an ordinance passed by it is wholly arbitrary and unreasonable it should be upheld. The necessity and advisability of the ordinance is for the legislative power to determine. The presumption is in favor of the ordinance.

The Missouri Supreme Court, deciding the constitutionality of the St. Louis air pollution law in the case of *Ballentine v. Nester*,³⁵ relied upon an earlier case for the following principle:

"The methods, regulations, and restrictions to be imposed to attain, so far as may be, results consistent with the public welfare, are purely of legislative cognizance. The courts have no power to determine the merits of conflicting theories, nor to declare that a particular method of advancing and protecting the public is superior or likely to insure greater safety or better protection than others. The legislative determination of the methods, restrictions, and regulations is final, except when so arbitrary as to be violative of the constitutional rights of the citizens."³⁶

It can be concluded therefore that whether the constitutional inquiry is phrased in terms of "arbitrariness" or "reasonableness," every advantage should be given to the sustaining of the legislation as long as the statute is related to the control of air pollution for the public health.

C. The Equal Protection Clause

Police power legislation is also limited by the requirements of equal protection of the law. The Constitution precludes an arbitrary system of classification or dis-

Church, 145 N.Y. 32 (1895) (cases applying a "reasonable cost" element). These cases will be discussed in detail in subsequent sections of this paper.

³² *Wasmuth v. Allen*, 14 N.Y.2d 391, 200 N.E.2d 756, 252 N.Y.S.2d 65 (1964); *Sweeney v. Cannon*, 23 App. Div. 2d 1, 258 N.Y.S.2d 183 (1965); *People v. Bevevino*, 202 Misc. 723, 112 N.Y.S.2d 647 (1952).

³³ *Hadacheck v. Sebastian*, 239 U.S. 394, 410 (1915); *Engelshar v. Jacobs*, 5 N.Y.2d 370, 157 N.E.2d 626, 184 N.Y.S.2d 640, cert. denied, 360 U.S. 902 (1959).

³⁴ 199 N.Y. 207, 211 (1910).

³⁵ 350 Mo. 58, 164 S.W.2d 378 (1942).

³⁶ *Id.* at 70, 164 S.W.2d at 382, quoting *Nelson v. City of Minneapolis*, 112 Minn. 16, 18, 127 N.W. 445, 447 (1910). For similar conclusions see *State v. Chicago, M. & St. P. Ry.*, 114 Minn. 122, 130 N.W. 545 (1911); *Moses v. United States*, 16 App. D.C. 428 (1900); *Penn-Dixie Cement Corp. v. City of Kingsport*, 189 Tenn. 450, 225 S.W.2d 270 (1949); *Sittner v. Seattle*, 62 Wash. 2d 834, 384 P.2d 859 (1963).

crimination between persons of the same classification. Again, however, every effort will be made by the courts to uphold the legislation. As expressed in the leading case of *Heath & Milligan Co. v. Worst*:³⁷

We have declared many times, and illustrated the declaration, that classification must have relation to the purpose of the legislature. But logical appropriateness of the inclusion or exclusion of objects or persons is not required. A classification may not be merely arbitrary, but necessarily there must be great freedom of discretion, even though it results in "ill-advised, unequal and oppressive legislation." [Citation omitted.] And this necessarily on account of the complex problems which are presented to government. Evils must be met as they arise and according to the manner in which they arise. The right remedy may not always be apparent. Any interference, indeed, may be asserted to be evil, may result in evil. At any rate, exact wisdom and nice adaptation of remedies are not required by the Fourteenth Amendment, nor the crudeness nor the impolicy nor even the injustice of state laws redressed by it.

The cases allow extensive discretion in the establishment of classifications, and most questions of equal protection raised in challenging modern regulatory legislation are directed toward the definition of the established classifications.³⁸ Just as the decision in an antitrust case becomes predictable once the court has defined the outlines of a "relevant market," judicial definition of the limits of each classification will ultimately control the decision of whether the person affected falls within a certain class or whether all persons within the given class are treated equally. If the classification is interpreted as being very wide, *i.e.*, "all fuel burning equipment," a statute which treats coal burning equipment differently from oil burning equipment will be held to be discriminatory. If the classifications are interpreted as being separate and narrow, *i.e.*, "coal burning equipment" and "oil burning equipment," the law will invariably be found to provide for the required equal treatment within each classification.

Equal protection is accomplished when all of the same class are treated in a like manner. . . . That one class is treated differently than other classes can give rise to no complaint under the equal protection clause.³⁹

The complexities and variations involved in the prevention and control of diversified sources of air pollution requires, as a practical matter, the creation of numerous

³⁷ 207 U.S. 338, 354-55 (1907).

³⁸ See *Ballentine v. Nester*, 350 Mo. 58, 164 S.W.2d 398 (1942); *State v. Chicago, M. & St. P. Ry.*, 114 Minn. 122, 130 N.W. 545 (1911); *City of Rochester v. Macaulley-Fien Milling Co.*, 199 N.W. 207 (1910); *Sittner v. Seattle*, 62 Wash. 2d 834, 384 P.2d 859 (1963); 7 E. McQUILLAN, *MUNICIPAL CORPORATIONS* 476 (3d ed. 1949).

³⁹ *Engelshar v. Jacobs*, 5 N.Y.2d 370, 157 N.E.2d 626, 184 N.Y.S.2d 640, *cert. denied*, 360 U.S. 902 (1959); *People v. Arlen Service Stations*, 284 N.Y. 340 (1940); *Ballentine v. Nester*, 350 Mo. 58, 164 S.W.2d 378 (1942).

classifications and distinctions. Those classifications must be related to the designated purpose for the legislation.⁴⁰

II

LEGISLATIVE PURPOSE: PUBLIC HEALTH EMERGENCY VERSUS EFFICIENT MANAGEMENT OF RESOURCES

The "Findings and Purposes" section of the federal Act⁴¹ contains the foundation for difficult constitutional questions. While the questions have not yet been raised, the trend of new legislation toward "Air Resource Management" indicates that the problems are certain to be raised in the near future. The key congressional "finding" is cast in the following traditional public health terms:

(2) that the growth in the amount and complexity of air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare, including injury to agricultural crops and livestock, damage to and the deterioration of property, and hazards to air and ground transportation⁴²

The enumerated "purpose" clause is as follows:

(1) to protect and enhance the quality of the Nation's *air resources so as to promote* the public health and welfare and *the productive capacity of its population;*

(2) to initiate and accelerate a national research and development program *to achieve the prevention and control of air pollution;*

(3) to provide technical and financial assistance to State and local governments in connection with the development and execution of *their air pollution prevention and control programs . . .*⁴³

It is apparent that the legislative draftsmen had two separate and distinct purposes in mind; one being affirmative in concept—"to promote productive capacity"—and the other being negative in concept—"to prevent and control air pollution." These distinct purposes are now being reflected in new state and local legislation and it is fair to conclude that the trend is toward the affirmative purpose of promoting efficient "Air Resource Management." The city of Chicago is the leading city employing this concept.⁴⁴ New York City is the leading city which employs the "prevention and control" concept.⁴⁵ Since a comparison of the Chicago Municipal

⁴⁰ *City of Rochester v. Macauley-Fien Milling Co.*, 199 N.Y. 207 (1910); *Ballentine v. Nester*, 350 Mo. 58, 164 S.W.2d 378 (1942).

⁴¹ Air Quality Act of 1967, § 101, 81 Stat. 485.

⁴² Air Quality Act of 1967, § 101(a)(2), 81 Stat. 485.

⁴³ Air Quality Act of 1967, § 101(b)(1), (2), (3), 81 Stat. 485. (Emphasis added.)

⁴⁴ The entire Chicago program is set out in a series of papers reproduced in *Hearings on H.R. 9509 and S. 780 Before the House Comm. on Interstate and Foreign Commerce*, 90th Cong., 1st Sess. 631-831 (1967). The first paper is Stanley, *Air Resource Management in the Chicago Metropolitan Area—Planning for Clean Air*. The Chicago legislation (CHICAGO MUNICIPAL CODE ch. 17), with additional explanatory articles, is reproduced in *Hearings on S. 780*, pt. 3, at 1901-92 (1967).

⁴⁵ See note 9 *supra*, and accompanying text.

Code and the New York City Administrative Code reveals basic similarities, it is pertinent to ask if the distinction between "Air Resource Management" and "Air Pollution Control" is real or just another example of the mysterious language of government experts.⁴⁶ I believe that the distinction is real, although it may have its greatest meaning in legal consequences, rather than in the quality of the air.

Two interlocking legal problems are presented when legislative purpose is defined in terms of efficient management of air resources rather than elimination of a public health emergency. The first problem is related to the fundamental question of whether government can dictate or limit the use of private property in the name of "greater efficiency for the general good," without having to pay "just compensation" to the private owner.⁴⁷ At least one of the frequently used tests of whether police power regulations have gone so far as to be a compensable government "taking" is whether the legislation simply restrains conduct harmful to others or whether its purpose is positive enrichment of the public at the expense of private property.⁴⁸ It has been forcibly argued that legislation of the latter type requires compensation.⁴⁹ Coerced sharing for the economic benefit of the majority raises serious questions of an unconstitutional "taking."⁵⁰ The "promotion of productive capacity" and "efficient management of resources" indicates that the legislative purpose is collective action for the general *economic* good. Government action of that nature may be socially justified, but compensation may be required for the "donation" of the private property for the public good.⁵¹

The second legal problem is presented by judicially developed restrictions peculiar to the enforcement of zoning and planning legislation. The gradual shifting of the purpose of air pollution legislation from strict public health concepts is further indicated by the procedure of establishing air quality control regions and air quality

⁴⁶ The elements of an "Air Resource Management" program are: (a) a continuing air-quality monitoring system; (b) a current and continuing emission inventory; (c) air-quality goals and standards based on air-quality criteria; (d) a thorough knowledge and use of the conditions influencing the transport of air pollutants; (e) urban planning decisions based on air quality as well as other environmental factors; (f) air pollution control decisions and resulting ordinances based upon air-quality information and relationships between air quality and effects; and (g) air-use plans. PUBLIC HEALTH SERVICE MANAGEMENT PROGRAM 1-2. Local "prevention and control" legislation starts at item (f), although in fact it usually is based upon information developed from techniques equivalent to (a) through (d).

⁴⁷ Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law*, 80 HARV. L. REV. 1165 (1967).

⁴⁸ Sax, *Takings and the Police Power*, 74 YALE L.J. 36, 48 (1964). See *Mugler v. Kansas*, 123 U.S. 623, 669 (1887); *Miller v. Schoene*, 276 U.S. 272 (1928).

⁴⁹ Dunham, *A Legal and Economic Basis for City Planning*, 58 COLUM. L. REV. 650, 663-69 (1958). See *National Land & Inv. Co. v. Easttown Township*, 410 Pa. 504, 529, 215 A.2d 597, 610-11 (1966); *Morris County Land Improv. Co. v. Township of Parsippany-Troy Hills*, 40 N.J. 539, 555-56, 193 A.2d 232, 241-42 (1963).

⁵⁰ Michelman, *supra* note 47.

⁵¹ See authorities cited in note 49 *supra*. Various governmental levels have indirectly allowed for compensation, by providing for tax advantages for the person installing air pollution control equipment. A study of the subject is being conducted by federal agencies. *Hearings on H.R. 9509 and S. 780 Before the House Comm. on Interstate and Foreign Commerce*, 90th Cong., 1st Sess. 240 (1967).

standards for each region.⁵² This approach has been used to divide New York State into four regional classifications based upon land use: industrial, commercial, residential, and rural.⁵³ Different air quality standards, generally related to the possibility of practical accomplishment, are established for each regional classification. Thus, rural areas are required to have the cleanest air, and industrial areas are permitted to have dirtier air.⁵⁴ While such a classification system projects ultimate "air quality goals," only the minimum levels common to all regions can be related to public health. If it is not unhealthy to breathe a certain quality of air in an industrial region, there is no *health* justification for requiring a stricter standard in a commercial area.

It must be recognized, therefore, that "Air Resource Management" is essentially planning and zoning, and legislation based on that approach may be analyzed and interpreted on that basis. If that is the result, the legislation will be subjected to the problems created by pre-existing non-conforming uses,⁵⁵ variances for "practical difficulty" or "unnecessary hardship,"⁵⁶ and the rule that zoning statutes are to be strictly construed.⁵⁷

The Public Health Service's recommended legislation, in fact, provides that a variance may be granted upon a finding that "compliance with the regulation or order from which a variance is sought would produce serious hardship without a corresponding benefit or advantage to the people."⁵⁸ "Wide discretion in weighing

⁵² Air Quality Act of 1967, §§ 107, 108, 81 Stat. 490. The country has now been divided into eight "Atmospheric Areas." 33 Fed. Reg. 548 (Jan. 16, 1968).

⁵³ NEW YORK STATE AMBIENT AIR QUALITY OBJECTIVES—CLASSIFICATIONS SYSTEM (N.Y. State Dep't of Health, 1964).

⁵⁴ "Thus, it is illogical to attempt one over-all set of quality objectives to apply to the entire State.

It cannot be expected that the board can permit air in a clean area—for example, one used principally for high quality purposes such as recreation—to be degraded to a level that can be attainable in a highly populated and industrialized area. Nor would it be reasonable to expect a highly industrialized area to attain *economically* the level of air quality prevailing in the presently clean areas."

Id. at § 500.2(c). (Emphasis added.)

⁵⁵ *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926); *Jones v. City of Los Angeles*, 211 Cal. 304, 295 P. 14 (1930); *People v. Miller*, 304 N.Y. 105, 106 N.E.2d 34 (1952).

⁵⁶ See generally 2 C. RATHKOPF, *THE LAW OF ZONING AND PLANNING* ch. 45 (3d ed. 1957).

⁵⁷ 440 E. 102d Corp. v. Murdock, 285 N.Y. 298, 34 N.E.2d 329 (1941); *Toulouse v. Board of Zoning Adjustment*, 147 Me. 387, 87 A.2d 670 (1952); *Modern Builders v. City of Tulsa*, 197 Okla. 80, 168 P.2d 883 (1946). Public Health legislation will generally be liberally construed. See *West Bronx Auto Paint Shop, Inc. v. City of New York*, 33 Misc. 2d 29, 223 N.Y.S.2d 984, (1961), *aff'd mem.*, 17 App. Div. 2d 772, 232 N.Y.S.2d 391 (1962), *modified*, 13 N.Y.S.2d 730, 241 N.Y.S.2d 861 (1963). A distinction between the constitutional limits of legislative zoning power and police power was emphasized in the recent important case of *Udell v. Haas*, 21 N.Y.2d 463, 288 N.Y.S.2d 888 (1968). Recognizing the heavy presumption of constitutional validity that attaches to police power legislation, basically subjecting it only to a "reasonableness" test, the court held that the zoning power was more limited and that zoning laws not only must meet standards of reasonableness but they must also be consistent with land use policy and a "comprehensive plan" worked out for the community as a whole prior to the adoption of the zoning law.

⁵⁸ Proposed Regulation XVI(C), PUBLIC HEALTH SERVICE MANAGEMENT PROGRAM 116. The search for a "corresponding benefit or advantage to the people" would seem to invite the legal argument that the regulation requires the payment of "just compensation." See text accompanying notes 47-51 *supra*.

the equities involved in each case"⁵⁹ is recommended, with the only limit being that "no variance may permit or authorize the maintenance of a nuisance, or a danger to public health or safety."⁶⁰

Planning and zoning can be effective weapons for directing future land use and conduct. They are not effective to correct a situation that already exists.⁶¹ As a result, an announced legislative purpose of "Air Resource Management" may inhibit the imposition of new corrective measures upon activities previously considered to be lawful.

III

LEGISLATIVE TECHNIQUES: STATE AND LOCAL CONTROL LEGISLATION

A. Smoke and Other Emission Limitations⁶²

Most air pollution legislation has been directed toward limitations upon the density and opacity of smoke. Because of visibility, even where the control law is more extensive, most enforcement efforts have been directed against smoke.

The typical urban smoke control law simply limits the density, opacity, and length of time of smoke emission.⁶³ The limitations are often not further classified, and they apply to any equipment used in any operation. Such legislation has been sustained many times, and there is no question of its general constitutionality.⁶⁴

In addition to smoke limitations, modern legislation may contain specific limita-

⁵⁹ *Id.*

⁶⁰ Proposed Regulation XVI(D), *id.* The use of the terms "nuisance" and "weighing the equities" may cause the legislation to be subjected to some of the limitations developed in the common law private and public nuisance cases.

⁶¹ Dorn C. McGrath, Director of Metropolitan Area Analysis for the U.S. Dep't of Housing and Urban Development, has stated:

"Planning and zoning are fundamentally procedures employed by society to make the business of government, and primarily local units of government, more orderly in response to economic pressures of urban growth. Until enough people to constitute a critical mass of public opinion perceive the gravity of the air pollution problem, it is unlikely that needed remedial action will be taken. When this happens we must remember that neither planning nor zoning, especially zoning, is a very effective remedial procedure. Both can be very effective remedial procedures, however, provided that they have the backing of public commitment."

McGrath, *Planning and Zoning—Can They Be Made to Work for Clean Air?*, in PROCEEDINGS: THE THIRD NATIONAL CONFERENCE ON AIR POLLUTION 554-57 (Public Health Service Pub. No. 1649, 1967).

⁶² The Air Quality Act of 1967, § 211(a), 81 Stat. 503, directs the Secretary of the Department of Health, Education, and Welfare to submit a comprehensive report "on the need for and effect of national emission standards for stationary sources" within two years.

⁶³ See, e.g., A.P.C. Reg. § 9.03; CHICAGO MUNICIPAL CODE § 17-23 (1967); Cleveland, Ohio, Ordinance 428-A-62, § 4.0502; Los Angeles County Control District, Regulation IV, Rule 50. The Ringelmann Smoke Chart is used as a basis for measurement. See note 26 *supra*.

⁶⁴ *Northwestern Laundry v. Des Moines*, 239 U.S. 486 (1916); *City of Rochester v. Macauley-Fien Milling Co.*, 199 N.Y. 207 (1910). No distinction will be made if the limitations are promulgated as administrative regulations rather than legislation. *West Bronx Auto Paint Shop, Inc. v. City of New York*, 33 Misc. 2d 29, 223 N.Y.S.2d 934 (1961), *aff'd mem.*, 17 App. Div. 2d 772, 232 N.Y.S.2d 391 (1962), *modified*, 13 N.Y.2d 730, 241 N.Y.S.2d 861 (1963); *Consolidated Edison Co. v. Murtagh*, 280 App. Div. 221, 112 N.Y.S.2d 681 (1952).

tions on the emission of sulfur dioxide, particulate matter,⁶⁵ and certain visible contaminants, as well as more general prohibitions. The specific limitations (usually referred to as "emission standards") are detailed and technical and are established according to classifications based upon the general nature of the equipment used and its operating size.⁶⁶ Accordingly, the New York City sulfur dioxide emission standard applies to equipment used in a manufacturing process,⁶⁷ and the standards for particulate matter are established according to whether the equipment is refuse burning equipment, fuel burning equipment, or manufacturing process equipment, and according to the capacity rating and heat input of fuel burning equipment and the process weight per hour of the manufacturing equipment.⁶⁸ The basis for establishing various classifications determined by the nature and size of the equipment used is obvious, for it is one of the most direct ways of determining the characteristics and amount of pollution from an installation. Such classifications have been recognized as valid.⁶⁹

The establishment of emission standards is considered by many to represent the ideal legislative approach, as it theoretically leaves to the owner's discretion the precise type of equipment or fuel to be used. This is the general approach used by the federal government to limit emission from automobiles.⁷⁰

Many legislative and administrative bodies, however, have long recognized that the bare setting of emission standards was not sufficient, and that fuels and equipment should be directly regulated. In enacting Local Law 14,⁷¹ New York City recognized and followed this approach. Among the reasons cited were that there were too many smokestacks to permit constant observation for visible smoke violations, and that no practical scientific equipment was available which was capable of being placed and maintained in every smokestack to constantly record the amounts of invisible gases or particles being emitted.⁷² In any event, a strict emission standard has the indirect result of requiring a change in either equipment or fuel in order to meet the standard,⁷³ for the emission must depend upon what substance goes in and what is done to it.

Particularly in New York, the seeming uncertainty permitted by smoke emission

⁶⁵ Defined as "Any liquid, other than water, or any solid which is so finely divided as to be capable of becoming wind-blown or being suspended in air." See N.Y. CITY ADMIN. CODE § 892-2.0 (Supp. 1967).

⁶⁶ See A COMPILATION OF SELECTED AIR POLLUTION EMISSION CONTROL REGULATIONS AND ORDINANCES (Public Health Service Pub. No. A65-34, 1965).

⁶⁷ A.P.C. Reg. § 9.07.

⁶⁸ *Id.* § 9.09.

⁶⁹ *City of Rochester v. Macauley-Fien Milling Co.*, 199 N.Y. 207 (1910); *Ballentine v. Nester*, 350 Mo. 58, 164 S.W.2d 378 (1942).

⁷⁰ Air Quality Act of 1967, §§ 201-12, 81 Stat. 499. For the initial regulations, see 31 Fed. Reg. 5170 (1966).

⁷¹ See note 9 *supra*.

⁷² REPORT OF NEW YORK CITY COUNCIL COMMITTEE ON BUILDINGS ON INTRO. No. 49 (N.Y. City Record, at 2621).

⁷³ This obvious result was particularly recognized in *Huron Portland Cement Co. v. Detroit*, 362 U.S. 440 (1960), and *Northwestern Laundry v. Des Moines*, 239 U.S. 486 (1916).

standards alone has enabled some courts, engaged in determining "reasonableness" for due process purposes, to indulge in amateur engineering analyses and declare that the statute must be applied "reasonably" to avoid compelling an "impossible" or "impractical" result or punishment for an "unavoidable necessity." Stretching the concept of "reasonableness" beyond an inquiry into whether the exercise of the police power is arbitrary to whether application of the statute appears "fair" or "practical" in a particular case, is an abandonment of the principles of judicial restraint in favor of flexible private nuisance concepts.

The first of these "rule of reason" cases involved an early smoke control statute which forbade the emission of "any smoke or gas."⁷⁴ The extreme prohibition led the court into a simplified engineering analysis that took judicial notice of the "fact" that no fire could be burned without either smoke or gas. The analysis led to the conclusion that "[i]t cannot be supposed that the legislature intended to require the impossible, or to close every furnace in our city for the promotion of a better atmosphere."⁷⁵

If the court had been content with the relatively narrow issue of literal impossibility of compliance, the case would have been unimportant, as the statute was soon amended to prevent "dense smoke." The court, however, went further and expounded:

It appears further that there is not known any device that can accomplish the absolute combustion of smoke, and that the defendant has adopted a standard pattern of construction; nor does it appear that there is any better device, of tested standing in commercial use, that the defendant has omitted to avail itself of.⁷⁶

The court's general attitude can be observed from the following dicta, sure to bring a sad smile to the face of today's city dwellers:

We have been so accustomed until lately to the clear atmosphere of our city, as to regard the escape of smoke as constituting in itself a nuisance, forgetting that this is one of but few manufacturing centers where the pall of smoke is not accepted as a necessary incident.⁷⁷

The case was followed by *People v. New York Central & H.R.R. Co.*,⁷⁸ which dismissed a conviction for the issuance of dense smoke on the ground that the prosecution had shown no evidence of an excess of smoke over that "necessary" for operation and no evidence that any other method could produce less smoke.

In *People v. New York Edison Co.*,⁷⁹ the court acknowledged that smoke control was a proper area for restrictive legislation, but it held:

⁷⁴ *Dep't of Health v. Philip & William Ebling Brewing Co.*, 38 Misc. 537, 78 N.Y.S. 13 (1902). *But see Ex Parte Junqua*, 10 Cal. App. 602, 103 P. 159 (1909).

⁷⁵ 38 Misc. at 540, 78 N.Y.S. at 15.

⁷⁶ 38 Misc. at 538, 78 N.Y.S. at 14.

⁷⁷ 38 Misc. at 541, 78 N.Y.S. at 16.

⁷⁸ 159 App. Div. 329, 144 N.Y.S. 699 (1913).

⁷⁹ 159 App. Div. 786, 144 N.Y.S. 707 (1913).

The section should have a reasonable construction which would preclude a conviction for a mere accidental or occasional momentary discharge of dense smoke, but which would insure the prevention of a continuous discharge or a discharge at intervals of large volumes of smoke, such as is caused by the use of soft coal.⁸⁰

The suggestion of a defense of "impossibility" or "unavoidable momentary discharge" lay dormant from 1913 until the 1939 case of *People v. Cunard White Star, Ltd.*⁸¹ That case held the dense smoke emission statute to be an unreasonable obstruction to foreign commerce when applied to a steamship, unless "its scope is limited to prohibition of the discharge of smoke, avoidable by the use of modern appliances and of methods which are practicable."⁸²

The facts showed that the S.S. Queen Mary was equipped with modern appliances, but that dense smoke occurred when cold boilers were being started and when demands for steam fluctuated as the ship was entering or leaving port. The prosecution claimed that it was no defense that the steamship was constructed and operated so as to make continued violations a "necessary incident" to the defendant's business. The court answered as follows:

That might be true if construction or operation is improper or if change there were practical. Here, however, there is no suggestion that either operation or construction is not in conformity with the highest standards or that occasional emission of smoke, for a few minutes on the day a vessel enters or leaves port, could be avoided by change which would not unreasonably obstruct the operation of the steamship.⁸³

The key phrase, of course, is "change which would not unreasonably obstruct the operation." The dissent claimed that while the defendant's practice of firing the boilers was cheaper, dense smoke could be avoided by firing one boiler at a time.

In *People v. Murray*,⁸⁴ the defendant claimed that everything reasonably possible was being done to control smoke at its power plant and that occasional dense smoke was unavoidable, especially when tests of coal were being conducted.⁸⁵ The court found, however, that regular operations could be maintained without dense smoke; and as to the "unavoidable necessity" of boiler tests, it stated:

I cannot subscribe to this contention. If the generation of dense smoke by all the power and industrial plants in the City of New York when making tests of coal comes within the category of unavoidable smoke, then we are indeed giving legal sanction to a smoke condition which would be a menace to the health and welfare of the inhabitants of the city. In this situation, economy and efficiency should be subordinated to the general welfare. . . . It would seem reasonable to expect that coal tests could be made outside of New York City under conditions

⁸⁰ 159 App. Div. 795, 144 N.Y.S. at 714.

⁸¹ 280 N.Y. 413 (1939).

⁸² *Id.* at 417.

⁸³ *Id.* at 420.

⁸⁴ 174 Misc. 251, 19 N.Y.S.2d 902 (1940).

⁸⁵ Approximately twelve weeks per year were allegedly used for testing coal.

which duplicate those at defendant's plant. At any rate it rests with science to devise satisfactory and efficient methods of testing coal which do not affect the general health.⁸⁶

The court then went on to limit the "unavoidable" concept to instances not based upon economy or efficiency, but caused by specific reasons beyond the defendant's control.

In *People v. Long Island R.R.*,⁸⁷ a claim of "unavoidable discharge" was offered when a coal strike cut off the regular source of low volatile coal and the defendant used reserves of high volatile coal, causing dense smoke. The court rejected the defense on the ground that low volatile coal could be purchased elsewhere, and held that the defense only applied to a momentary discharge and not to a continuing situation.

A series of more recent New York cases indicates a possible swing back toward the theory that if the installation contains properly operated "modern" control equipment and smoke of a prohibited density nevertheless results, then its emission is "unavoidable" and safe from prosecution.⁸⁸

In *People v. Savage*,⁸⁹ the issue involved the huge Donner-Hanna coke plant in Buffalo. The court relied upon the claim of "unavoidable necessity" as interpreted by the *Cunard White Star* case and declared:

It appears from the evidence that the method of storing its coal supply and the precautions taken by the Donner-Hanna plant to eliminate or prevent dust from the coal pile are exceptional in the industry and greatly beyond what is done in most plants.

Also that all its coal and coke piles, ovens, cars, quenchers, buildings, structures, equipment and materials, and methods of care and operation is modern up-to-date and fully in accord with the best coke plants in the coke industry throughout the United States.

The testimony justifies a finding that there is no known method, device or apparatus known to the industry or employed in any other plant in the United States to eliminate or reduce smoke, dust and fumes, or to alleviate this condition, which is not employed and in use at the Donner-Hanna plant, and that its operation, methods and procedures are in accord with the best operational methods employed by the best plants in the industry.⁹⁰

The court held the Buffalo dense smoke statute unconstitutional when applied to the Donner-Hanna plant.

A defense that consists mainly of "My plant is as good or better than anyone

⁸⁶ 174 Misc. at 260-61, 19 N.Y.S. 2d at 910-11.

⁸⁷ 31 N.Y.S.2d 537 (1941).

⁸⁸ *People v. Oswald*, 1 Misc. 2d 726, 116 N.Y.S.2d 50 (1952); *People v. Savage*, 1 Misc. 2d 337, 148 N.Y.S.2d 191, *aff'd mem.*, 309 N.Y. 941, 132 N.E.2d 313 (1955); *People v. Peterson*, 31 Misc. 2d 738, 226 N.Y.S.2d 1004 (1961).

⁸⁹ 1 Misc. 2d 337, 148 N.Y.S.2d 191, *aff'd mem.*, 309 N.Y. 941, 132 N.E.2d 313 (1955). See note 14 *supra* and accompanying text.

⁹⁰ 1 Misc. 2d at 340, 148 N.Y.S.2d at 194.

else's plant" should be inadequate in the face of a flat prohibition in a public health statute. Certainly the engineering evaluation of equipment is more a function of the legislature than the courts. It is both conceivable and understandable for one city to require a standard which is stricter than other cities and to require its citizens to do better than those in cities that appear to care or need less.

*State v. Mundet Cork Corp.*⁹¹ did not reject the theory of "unavoidable necessity" but held that where laboratory experiments had indicated success, the scientific techniques must be actually attempted and have failed before a claim of "impossibility" or "unavoidable necessity" can be considered. Several cases have flatly rejected the defense of "unavoidable necessity."⁹² As explained in the early case of *Moses v. United States*:⁹³

The defendant offered evidence tending to show that they had attached to their furnace, at the time, the best known smoke-consuming appliance; but that neither it nor any other, then known, would prevent the emission of such smoke for a brief period upon each occasion that fire might be started, or the furnaces "cooled," or "raked down," provided that soft bituminous coal be the fuel consumed.

That there may be no smoke-consuming appliances that will under all circumstances, prevent the nuisance, is not a matter of relevance. The facts concerning them were presumably within the knowledge of Congress also when it took action; and no provision has been made for their use. The use of smokeless fuel instead may have been expressly contemplated.

Huron Portland Cement Co. v. Detroit,⁹⁴ involved a fact situation similar in many ways to that in the *Cunard White Star* case. The shipowner sought to enjoin enforcement of Detroit's smoke emission ordinance. The ship operated pursuant to a federal coast guard certificate which specified and approved the ship's equipment for use on navigable waters. The ship used hand-fired boilers, which, when cleaned, emitted smoke in violation of the Detroit ordinance. In order to meet Detroit's smoke standard, structural alterations were necessary and a different type of boiler had to be installed.

The court found the elimination of air pollution to be a valid purpose for the exercise of a police power determined by Congress to be the primary responsibility of state and local governments. It held that since the vessel was not unconditionally excluded from the Port of Detroit, there was no undue burden upon interstate commerce or federal pre-emption of the field. The defense of "unavoidable necessity"

⁹¹ *State v. Mundet Cork Corp.*, 8 N.J. 359, 86 A.2d 1, cert. denied, 344 U.S. 819 (1952).

⁹² *Moses v. United States*, 16 App. D.C. 428 (1900); *People v. Detroit White Lead Works*, 82 Mich. 471, 46 N.W. 735 (1890); *Ballentine v. Nester*, 350 Mo. 58, 164 S.W.2d (1942). The recent case of *Dep't of Health v. Owens-Corning Fiberglas Corp.*, 242 A.2d 21, 36 (N.J. Super. 1968) upholding recent New Jersey legislation, stated: "We hold that the doctrine of unavoidable necessity is not available to defendant and is not viable in the context of the Air Pollution Code."

⁹³ 16 App. Div. 428, 440 (1900).

⁹⁴ 362 U.S. 440 (1960).

was not even discussed, although the vessel's boilers had to be completely replaced. As expressed by the Michigan court in the same case: "All it costs is money."⁹⁵

Of course, legislation may itself allow a defense equivalent to "impossibility" or "unavoidable necessity." The Air Quality Act of 1967 establishes the following judicial standards in an abatement action:

The court, giving due consideration to the practicability of complying with such standards as may be applicable and to the physical and economic feasibility of securing abatement of any pollution proved, shall have jurisdiction to enter such judgment, and orders enforcing such judgment, as the public interest and the equities of the case may require.⁹⁶

The administrative enforcement proceedings of the New York State law permit similar defenses of "impossibility, impracticability or financial inability."⁹⁷

While the technique of controlling air pollution by emission standards alone may face the difficulties of an occasional defense of "impossibility" or "unavoidable necessity," the cases sustaining such defenses violate traditional principles of judicial restraint. In the absence of a legislative provision allowing such extremely flexible defenses, the courts should refrain from challenging the technical foundations for the legislative action. It would nevertheless appear desirable for legislation to combine emission standards with more particular equipment requirements so as to avoid judicial relaxation on the grounds that the equipment in use seems to be the best commercially available.

B. Operating Certificates as a Supervisory Technique: Regulation of Equipment

Perhaps the dominant technique of the 1966 New York City law is the regulation and supervision of equipment by the issuance of operating certificates. Under the previous law, most new construction required the filing of plans and a permit before installation and issuance of an operating certificate before operation.⁹⁸ Permit systems have been widely used to assure that new construction incorporates the best technical advances and there would appear to be little constitutional question as to the general use of this control technique.⁹⁹

The 1966 New York City law considerably extended the system, by requiring that much *existing* fuel burning equipment, most *existing* refuse burning equipment, all *existing* manufacturing processes emitting a sulfur compound, and certain portable equipment, obtain operating certificates in compliance with various time

⁹⁵ 355 Mich. 227, 234, 93 N.W.2d 888, 892 (1959).

⁹⁶ Air Quality Act of 1967, § 108(h), 81 Stat. 496.

⁹⁷ New York Public Health Law § 1282(3). The "hardship" variance provisions of the Public Health Service's recommended legislation would seem to allow the same type of defense. See text accompanying note 58 *supra*.

⁹⁸ N.Y. CITY ADMIN. CODE § 892-4.0 (Supp. 1967); A.P.C. Reg. §§ 5.11, 5.17. In many instances technical criteria detailing the minimum requirements for the granting of installation permits were issued. A.P.C. Reg. § 5.11(b).

⁹⁹ See *Northwestern Laundry v. Des Moines*, 239 U.S. 486 (1916).

deadlines.¹⁰⁰ In the case of existing fuel burning and refuse burning equipment, certain improvements are specifically required before an operating certificate will be issued, and in all cases, the equipment must incorporate the best advances in the art of air pollution control.

It is, of course, pertinent to examine the constitutionality of requiring lawfully operated equipment to be upgraded in order to continue to operate lawfully.

In the leading case of *Hadacheck v. Los Angeles*,¹⁰¹ the ordinance in question prohibited the operation of any brickyard within certain limits of Los Angeles. The defendant had begun brickmaking prior to enactment of the ordinance on land that had not then been a part of the city. The area later became predominantly residential and was annexed to the city. The ordinance was based upon the city's power to halt the emission of fumes, smoke, soot, steam and dust resulting from the brickmaking. Referring to the police power, the Supreme Court declared:

It is to be remembered that we are dealing with one of the most essential powers of government, one that is the least limitable. It may, indeed, seem harsh in its exercise, usually is on some individual, but the imperative necessity for its existence precludes any limitation upon it when not exerted arbitrarily. *A vested interest cannot be asserted against it because of conditions once obtaining.* [Citation omitted.] *To so hold would preclude development and fix a city forever in its primitive conditions. There must be progress, and if in its march private interests are in the way they must yield to the good of the community.*¹⁰²

In *Health Department v. The Rector etc. of Trinity Church*,¹⁰³ legislation required running water to be made available on each floor of a tenement house. The argument was made that the requirement could not legally apply to pre-existing buildings. The court rejected the argument and held:

Anyone in a crowded city who desires to erect a building is subject at every turn almost to the exactions of the law in regard to provisions for health, for safety from fire and for other purposes. He is not permitted to build of certain materials within certain districts because though the materials may be inexpensive they are inflammable, and he must build in a certain manner . . . in carrying out all these various acts the owner is subjected to an expense much greater than would have been necessary to have completed his building if not compelled to complete it in the manner, of the materials and under the circumstances prescribed by various acts of the legislature. . . . I do not see that the principle is substantially altered where the case is one of an existing building and it is to be subjected to certain alterations for the purpose of rendering it either less exposed to the danger from fires or its occupants more secure from disease.¹⁰⁴

¹⁰⁰ N.Y. CITY ADMIN. CODE §§ 892-4.2, 4.3 (modified and amended in 1968), 4.4, 4.5 (Supp. 1967).

¹⁰¹ 239 U.S. 394 (1915).

¹⁰² *Id.* at 410. (Emphasis added.) See also *People v. Detroit White Lead Works*, 82 Mich. 471, 46 N.W. 735 (1890).

¹⁰³ 145 N.Y. 32 (1895).

¹⁰⁴ *Id.* at 44-45.

The principle has been recently endorsed as follows:

It is clearly settled that "in no case does the owner of property acquire immunity against the exercise of the police power because he constructed it in full compliance with existing laws."¹⁰⁵

While it would therefore appear to be settled that a challenge to the "retroactive" provisions of the New York City law on the grounds of prior lawful operation would be unsuccessful, "Air Resource Management" legislation containing such provisions would be vulnerable to attack. This vulnerability exists because the latter is based upon planning to pre-existing, non-conforming uses which would seem to prevent "retroactive" correction or forced upgrading of equipment.¹⁰⁶

Naturally any required upgrading of equipment will result in an owner's expenditure of funds. Since the legislature can inquire into the matter of prospective costs, the usual rule is that questions of cost are left by the courts to legislative discretion.¹⁰⁷ Some cases have stated in dicta, however, that the cost of improvements required by legislation must be "reasonable." In the *Trinity Church* case, the court, after holding that the law applied to pre-existing buildings, proposed:

In both cases the object must be within some of the acknowledged purposes of the police power and such purpose must be possible of accomplishment *at some reasonable cost*, regard being had to all the surrounding circumstances.¹⁰⁸

This reference to "reasonable cost" has been recently repeated by the New York Court of Appeals.¹⁰⁹ Such references are another instance of confusing the use of the word "reasonable" in the due process test of arbitrariness, with its application in private nuisance cases.

In the case of *Adamec v. Post*,¹¹⁰ the New York Court of Appeals followed the retroactivity principle of the *Trinity Church* case, but went on to reject the "cost" challenge as follows:

The imposition of the cost of the required alterations as a condition of the continued use of antiquated buildings for multiple dwellings may cause hardship to the plaintiffs and other owners of "old law tenements" but, in a proper case, the Legislature has the power to enact provisions reasonably calculated to promote the common good even though the result be hardship to the individual. . . .

Certainly the proportion of cost of the alteration to the assessed or even market value of the old law tenement can be no criterion of whether the Legislature has acted reasonably in requiring the alteration. . . .

¹⁰⁵ *Engelshar v. Jacobs*, 5 N.Y.2d 370, 375, 157 N.E.2d 626, 628, 180 N.Y.S.2d 640, 643, *cert. denied*, 360 U.S. 902 (1959). See also *Dankner v. City of New York*, 20 Misc. 2d 557, 194 N.Y.S.2d 975 (1959).

¹⁰⁶ See cases cited note 55 *supra*.

¹⁰⁷ *Northwestern Laundry v. Des Moines*, 239 U.S. 486 (1916); *Sittner v. Seattle*, 62 Wash. 2d 834, 384 P.2d 859 (1963); *Huron Portland Cement Co. v. City of Detroit*, 362 U.S. 440 (1960).

¹⁰⁸ 145 N.Y. at 45. (Emphasis added.)

¹⁰⁹ *Engelshar v. Jacobs*, 5 N.Y.2d 370, 157 N.E.2d 626, 184 N.Y.S.2d 640, *cert. denied*, 360 U.S. 902 (1959).

¹¹⁰ 273 N.Y. 250 (1937).

Because the State has tolerated slum dwellings in the past it is not precluded from taking appropriate steps to end them in the future.¹¹¹

The only time that the cost of complying with public health legislation should be a factor for judicial consideration is when standards are so completely arbitrary and oppressive as to be a patent legislative disguise for requiring absolute termination of the basic activity.¹¹² The fact that economic hardship in a particular instance may cause a termination of activity will not sustain a constitutional challenge.¹¹³

When the question was recently raised by a municipality contesting a water pollution classification, the New York Court of Appeals declared:

Appellants contend that if the fiscal and economic aspects of water purification cannot properly be raised at the time of classification, then they can never influence a particular classification, since the municipality is legally bound to abide by the classification made, subject only to such deferment as the Board may allow. The obvious answer to this is that the Legislature well knew that a comprehensive water purification program would impose a financial burden upon the municipalities of the State, but determined, by enacting the Pollution Control Act, that the pressing need for water purification outweighed any financial hardships incident thereto.¹¹⁴

As long as the legislature studies the costs involved and does not expressly provide for the issue to be considered in a particular case, a reopening of the inquiry by a court would appear to be an unjustified interference with the legislative power.¹¹⁵

Requirements for operating certificates for existing equipment necessarily involve numerous classifications. These classifications must meet the constitutional requirements of the equal protection clause. Separate classifications are established in New York City for fuel burning equipment using residual fuel oil, fuel burning equipment using coal, refuse burning equipment and manufacturing equipment emitting sulfur compounds. Each of the classifications is based either on the use of the equipment, the fuel used in the equipment, or the nature of the emission.

The St. Louis ordinance challenged in *Ballentine v. Nester*,¹¹⁶ approached that city's smoke problem by regulating the kinds of coal that could be used and the types of furnaces in which certain coals could be burned. The court maintained:

We hold that as Section 5340, supra, classified coal to be used according to its ash, sulfur, and volatile contents, and the type of furnace in which these various classi-

¹¹¹ *Id.* at 259-60.

¹¹² *Lawton v. Steele*, 152 U.S. 133 (1894).

¹¹³ *Sittner v. Seattle*, 62 Wash. 2d 834, 384 P.2d 859 (1963). In *State v. Mundet Cork Corp.*, 8 N.J. 359, 86 A.2d 1, cert. denied, 344 U.S. 819 (1952), the court's inquiry was as to whether the expense of compliance was "insuperable."

¹¹⁴ *Town of Waterford v. Water Pollution Control Board*, 5 N.Y.2d 171, 180, 156 N.E.2d 427, 431, 182 N.Y.S.2d 785, 791 (1959).

¹¹⁵ See text accompanying notes 96, 97 *supra*. A court will, however, always have open to it the question of whether the legislation constitutes a "taking" without just compensation.

¹¹⁶ 350 Mo. 58, 164 S.W.2d 378 (1942).

fications of coal may be burned bears a reasonable relation to the dense smoke nuisance, the ordinance is not an arbitrary classification as it applies equally to all users of coal of the same classification.¹¹⁷

Accordingly, there would appear to be little chance of a successful challenge to operating certificate requirements such as those in New York City, on the basis of a denial of equal protection of the law.

C. Regulation of Fuels

Among the control techniques receiving the most attention are direct limitations upon the kind and nature of fuels permitted to be burned, even in otherwise correctly operated equipment.¹¹⁸

The first known direct limitations upon fuel use were, as might be expected, limitations on the use of various coals. In 1895, the then city of Brooklyn passed a statute which provided, in part:

No factory, engine-room or electrical station shall use what is known as soft coal for fuel in the furnaces of such factories, engine-room or electrical station within a radius of four miles of the city hall in the city of Brooklyn. . . .¹¹⁹

It was quickly concluded that the statute was a valid exercise of the police power, and a conviction for violation was upheld.¹²⁰ The statute was later held to prevent the use of a mixture containing only twenty per cent soft coal regardless of whether the mixture would burn without smoke.¹²¹

The main thrust of the pioneering St. Louis legislation consisted of direct limitations on the volatile matter, sulfur, and ash contents of coal, as well as limitations upon the type of equipment to be used. In *Ballentine v. Nester*, the constitutional challenge was based upon a claim that the statute was not a bona fide health regulation because it regulated the *manner* of burning, rather than the gases or particles emitted.¹²² In upholding the statute, the court declared:

There can be no doubt that under the above sections that the legislative department of the City of St. Louis has the power to abate the smoke nuisance in the city by any reasonable method. To accomplish that object, it enacted Section 5340, supra. This section sought to obtain that object by regulating the kind of coal that can be burned in that city. . . . The public policy or wisdom of a regulation in regard to the use of soft coal is for the legislature to determine and not the

¹¹⁷ *Id.* at 72, 164 S.W.2d at 383.

¹¹⁸ N.Y. CITY ADMIN. CODE § 893-1.0(2) (Supp. 1967); New York State Rules and Regulations, Title 10 (Health), Chapter IV, Subchapter A, Part 200 (effective April 18, 1968); Los Angeles County Air Pollution Control District, Regulation IV, Rules 62, 62.1; St. Louis, Mo., Ordinance 50163, § 11(a).

¹¹⁹ Ch. 322, Laws of 1895, City of Brooklyn, New York.

¹²⁰ *City of Brooklyn v. Nassau Electric R.R.*, 44 App. Div. 462, 61 N.Y. 33 (1899).

¹²¹ *City of New York v. H.W. Johns-Manville Co.*, 89 App. Div. 449, 85 N.Y.S. 757 (1903).

¹²² For proof of the versatility of the legal profession, see *Oswald v. Christy*, 112 N.Y.S.2d 913 (1952), where a challenge to an emission standard system was based upon the statute's failure to directly regulate the fuel and manner of burning.

courts. . . . The courts have no power to determine the merits of conflicting theories, nor to declare that a particular method of advancing and protecting the public is superior or likely to insure greater safety or better protection than others.¹²³

In *State v. Chicago, M. & St. Paul Ry.*,¹²⁴ the challenge was to a Minneapolis ordinance limiting the volatile content of coal used in certain types of engines. The limitation effectively prohibited the use of soft coal in those engines. The court upheld the statute and stated:

A legislative requirement that locomotives shall burn coal other than the kind that produces the smoke nuisance is directly and substantially related to the prevention of annoyance and discomfort incident to dense smoke. The public policy or wisdom of such a prohibition is for the Legislature to determine.

The courts cannot undertake to decide whether the means adopted by the Legislature are the only means, or even the best means, possible to attain the end sought. . . .

Counsel for defendant urges that careful firing in locomotives will prevent the nuisance. Existing conditions suggest strongly either that such is not the fact, or that careful firing cannot, in general practice, be obtained.¹²⁵

The 1966 New York City law prohibits the burning of soft coal for heating purposes and permits other uses of soft coal (primarily for the generation of steam and electricity) only if particulate control equipment of a certified ninety-nine per cent efficiency is installed.¹²⁶

In view of the many instances of judicial recognition of the relationship between bituminous coal and air pollution and the obvious basis for the separate classifications of soft coal used for space heating and soft coal used for other purposes, a constitutional challenge to New York's restrictions on the use of bituminous coal would appear to have little chance of success.

Another controversial provision of the New York City law established a new schedule of limitations upon the sulfur content of coal and residual fuel oil.¹²⁷ The limits resulted primarily from a study of serious health episodes in New York City and elsewhere.¹²⁸

Since both coal and oil vary in natural sulfur content, and since it is obvious that other fuels can be substituted for high sulfur fuel oil and high sulfur coal, the primary issue involved in the application of the sulfur limitations is economics. High sulfur residual fuel oil and high sulfur coal command the cheapest price

¹²³ 350 Mo. 58, 70, 164 S.W.2d 378, 382 (1942).

¹²⁴ 114 Minn. 122, 130 N.W. 545 (1911).

¹²⁵ *Id.* at 127-28, 130 N.W. at 547.

¹²⁶ N.Y. CITY ADMIN. CODE § 893-2.0 (Supp. 1967). Previous law limited the volatile content of coal used in mechanically fed equipment not equipped with a combustion controller. See *People v. Prince Jagendorf Greene, Inc.*, 7 N.Y.2d 42, 163 N.E.2d 323, N.Y.S.2d 498 (1959).

¹²⁷ N.Y. CITY ADMIN. CODE § 893-1.0(a) (Supp. 1967).

¹²⁸ Interim report of New York City Council Special Committee, in *Hearings on S. 780*, pt. 3, at 1500.

among today's commonly used fuels. Fuel oil can be further refined so as to reduce the sulfur content; the question is solely one of competition.¹²⁹

Some aspects of damage from sulfur were recognized in the following 1952 dicta:

Bituminous coal contains from one percent to two percent of sulfur, most of which is evolved in the gaseous form but some is found in the soot. Its sticky nature causes it to adhere tenuously to objects with which it comes into contact and since it usually contains free sulfuric acids, it has a destructive action upon stone, fabrics, metals and vegetation apart from the widespread dirt and discoloration which it causes. Aside from the damage it causes, it does in addition entail greatly increased expense in general maintenance, washing, cleaning and artificial lighting. These damages are further made visible when we note the contrast between gardens maintained in the city with those in the country.¹³⁰

The fact that many experiments are now being conducted for methods of removing sulfur dioxide from the stack¹³¹ led to a novel provision in the New York City law. It permits an exemption from the sulfur limitations for an operator whose equipment has control apparatus capable of continuously preventing the emission of sulfur dioxide greater than would be the result of the direct sulfur content limitations.¹³² Continuous monitoring equipment and other detailed safeguards are required. This alternative was established even though no existing method was considered economically feasible for commercial operation in this country. Systems for stack gas removal are in limited operation in England and Germany and detailed scientific and mechanical information is available. This exemption provision was obviously designed to stimulate industry into channeling research and development efforts toward new methods of air pollution control. There would seem to be no legal objection to this type of legislation since it is in the form of a permissive exemption, and the standards required are specifically described.

Despite the many technical advances that can be expected as attention to the problem of air pollution increases, the basic control technique of directly limiting the type or content of fuels will probably dominate for many years.

D. Regulation of Equipment Operators

The New York City law requires instruction for all operators of fuel burning equipment using residual oil and all operators of refuse burning equipment.¹³³ The completion of a course of instructions in air pollution control techniques is required and a certificate evidencing completion of the course is required to be posted adjacent to the equipment. The course of instruction may be maintained by educational insti-

¹²⁹ *Id.* at 1522-23.

¹³⁰ *People v. Consolidated Edison Co.*, 116 N.Y.S.2d 555, 560 (1952).

¹³¹ Interim report of the New York City Council Special Committee, in *Hearings on S. 780*, pt. 3, at 1523.

¹³² N.Y. CITY ADMIN. CODE §§ 893-1.0(b)-(c) (Supp. 1967).

¹³³ *Id.* § 896-1.0.

tutions, industry or labor organizations; but the course must be approved by the City's administering agency.

Since the competence and knowledge of operators of equipment directly related to air pollution affect the control of air pollution, the constitutionality of requiring a program of instruction appears certain. As stated in *Wasmuth v. Allen*:¹³⁴ "The imposition of a new requirement for the continued practice of a profession previously carried on without the need of such requirements does not violate the Constitution."

As other statutory provisions require the installation of new devices for residual oil burning equipment and refuse burning equipment, the requirement that operators receive instruction in the use and purpose of this equipment is related to the "continuing regulation and correction" envisaged by New York City's control program.¹³⁵

E. Direct Prohibition of Specific Activities

The complete prohibition of an activity detrimental to the public health has long been a standard legislative technique.¹³⁶ New York City, for example, has long-standing regulations banning such business activities as the burning of bones and the skinning of animals.¹³⁷

The direct abatement of a particular activity is subject to the same constitutional limitations as other air pollution control techniques.¹³⁸ The legislation may be general, such as a complete ban of all open burning activities,¹³⁹ or may have reference to a specific industry.¹⁴⁰ Legislative intention to flatly prohibit an activity should be clear and specific. An attempt to achieve the same object, by establishing performance standards not truly designed to be achieved, will inevitably involve a defense of "impossibility."¹⁴¹

F. Enforcement Techniques

The enforcement techniques utilized by state and local legislation are as varied as the methods of creating air pollution. Criminal sanctions are the most frequently used enforcement approach with violation of any provision of the law or regula-

¹³⁴ 14 N.Y.2d 391, 398, 200 N.E.2d 756, 759-60, 252 N.Y.S.2d 65, 70 (1964).

¹³⁵ *West Bronx Auto Paint Shop, Inc. v. City of New York*, 33 Misc. 2d 29, 223 N.Y.S.2d 984 (1961), *aff'd mem.*, 17 App. Div. 2d 772, 232 N.Y.S.2d 391 (1962), *modified*, 13 N.Y.2d 730, 241 N.Y.S.2d 861 (1963).

¹³⁶ See 3 BLACKSTONE, COMMENTARIES 215 (16th ed. 1825).

¹³⁷ N.Y. CITY HEALTH CODE § 135.21.

¹³⁸ *Lawton v. Steele*, 152 U.S. 133 (1894). See also *Hadacheck v. Los Angeles*, 239 U.S. 394 (1915).

¹³⁹ N.Y. CITY ADMIN. CODE § C19-148.0 (Supp. 1967); CHICAGO MUNICIPAL CODE §§ 17-30, 17-31 (1967); PUBLIC HEALTH SERVICE MANAGEMENT PROGRAM 99-100. Cf. *Pennsylvania v. Toth*, 189 Pa. Super. 552, 152 A.2d 284 (1959); *Shearing v. City of Rochester*, 51 Misc. 2d 436, 273 N.Y.S.2d 464 (1966).

¹⁴⁰ See *Highway 100 Auto Wreckers, Inc. v. City of West Allis*, 6 Wis. 2d 637, 96 N.W.2d 85 (1959) (burning of junked automobiles).

¹⁴¹ See text accompanying notes 74-90 *supra*.

tions being a misdemeanor or an offense for which criminal penalties may be imposed in a criminal court proceeding.¹⁴² While the time-honored method of abating a nuisance is the securing of a civil injunction, most legislatures have apparently determined that such a procedure is not fast enough for effective air pollution control.¹⁴³

Although criminal sanctions are used, criminal intent is not necessary for conviction. As described in *People v. Consolidated Edison Co.*:¹⁴⁴

In an action as the present one, good faith is no defense. The criminal intent of mens rea essential to a conviction in the case of true crimes need neither be alleged or proven with respect to violations of municipal ordinances which forbid the commission of certain acts as contrary to the general welfare and make them malum prohibitum. Proof or admission of the doing of the forbidden thing, regardless of intent, good faith or wilfulness, must bring a conviction.

Questions of evidence in air pollution control enforcement cases are no different than those presented in any other case.¹⁴⁵ The use of mechanical equipment to measure smoke only goes to the weight of the evidence, and electronic smoke indicator records may in one case be insufficient to overcome the observations of inspectors,¹⁴⁶ while in another case they may be sufficient.¹⁴⁷

In addition to usual enforcement procedure, summary powers to shut down offending equipment may be granted, primarily to deal with emergency situations.¹⁴⁸

Many statutes employ initial administrative enforcement techniques.¹⁴⁹ The use of a permit requirement system is the most typical administrative enforcement method. Final enforcement, of course, must rest with the courts in either criminal or civil injunctive proceedings.

CONCLUSION

The varied and technical nature of air pollution has caused legislatures to adopt multiple and varying legal techniques in an attempt to achieve realistic control. Experience has shown that most carefully drafted public health related control techniques are within the legal boundaries established by the U.S. Constitution.

¹⁴² N.Y. CITY ADMIN. CODE § 894-3.0 (Supp. 1967); CHICAGO MUNICIPAL CODE § 17-79 (1967); CAL. HEALTH & SAFETY CODE §§ 24253, 24277-82 (West 1967).

¹⁴³ For the Los Angeles, California experience, see Kennedy, *The Mechanics of Legislative and Regulatory Action*, in PROCEEDINGS: NATIONAL CONFERENCE ON AIR POLLUTION 306 (Public Health Service Pub. No. 1022, 1962). *But see* Leone v. Paris, 43 Misc. 2d 442, 251 N.Y.S.2d 277 (1964), *modified*, 24 App. Div. 2d 508, 261 N.Y.S.2d 656 (1965) (water pollution).

¹⁴⁴ 116 N.Y.S.2d 555, 560 (1952).

¹⁴⁵ *See* *People v. Prince Jagendorf Greene, Inc.*, 7 N.Y.2d 42, 163 N.E.2d 325, 194 N.Y.S.2d 498 (1959).

¹⁴⁶ *See, e.g.*, *People v. Murray*, 174 Misc. 250, 19 N.Y.S.2d 902 (1940).

¹⁴⁷ *See, e.g.*, *City of Chicago v. Butler Bros.*, 350 Ill. App. 550, 113 N.E.2d 210 (1953).

¹⁴⁸ *See* N.Y. CITY ADMIN. CODE § 892-6.0 (Supp. 1967); CHICAGO MUNICIPAL CODE §§ 17-75, 17-76 (1967).

¹⁴⁹ *E.g.*, N.Y. State Public Health Law § 1282; Air Quality Act of 1967, § 108, 81 Stat. 491.

The legal tools are available for the job that has to be done, although no one could honestly claim that effective air pollution control has been achieved. Modern and comprehensive state and local prevention and control statutes are relatively new, and their economically harsh effects have deterred dynamic enforcement. The frustrations incident to enforcement should not, however, cause a change of direction away from the present control techniques to the more remote aims of planning and zoning legislation. Centralized desires for efficient utilization and management of resources are tightly circumscribed by the protections of the free enterprise system guaranteed by the Constitution. The efficiencies of "cost-effectiveness analyses"¹⁵⁰ as interpreted by government, cannot be imposed upon private property without just compensation.

Air pollution is a current public health problem. The need for elimination of that problem *now* provides a sound constitutional basis for corrective legislation. The need for future land-use planning, no matter how genuine, should not be allowed to dominate the purposes and directions of state and local legislative efforts to prevent and control air pollution at its source.

¹⁵⁰ Air Quality Act of 1967, § 107(c), 81 Stat. 491.