A HISTORY OF FEDERAL AIR POLLUTION CONTROL

In a relatively short period of time, air pollution has become one of America's most pressing problems. More than one-half of the total population of the United States live on one-tenth of the land area and "by 1975 we can expect that three-fourths of the 235 million persons will be living on the same land area." This increase in density, accompanied by increases in population and rapid technological development, is certain to cause an unprecedented contamination of our atmosphere. As a result of these trends, "nearly two-thirds of the American nation [live] in areas with polluted air," and the percentage is increasing.²

The quality of man's environment has been shaped largely by the forces of urbanization and technology. Whether these forces are now within the control of man or the vagaries of nature may be long debated. However, the by-products of these forces, the poisoning of the air, must be controlled by man. Man's limitless ability to create is on a collision course with the restrictions of his environment.

The air we breathe is no longer "free," and its social costs will continue to increase. It seems paradoxical that man must pay dearly for the very air which sustains him. But pay he must, and the task of setting a price on such a valuable commodity has been and will continue to be a function of our legislatures.

This article delves into the legislative history of the Air Quality Act of 1967.³ This Act represents, to date, the culmination of federal legislation dealing with air pollution. Legislation aimed at clearing the air we breathe is in its early stages of evolution. Anti-pollution legislation has had to develop within a polluted atmosphere of another sort: an atmosphere clouded by property concepts, legal barriers, and preconceived political values.

A history of the Air Quality Act is particularly valuable, for only through such a study can one begin to understand the importance, as well as the glaring inadequacies, of federal pollution law.⁴

I. THE LAW OF NUISANCE — PRIVATE REMEDIES

The problem of contaminated air is not limited solely to the inhabitants of the twentieth century. Citizens of London, offended by smoke,

¹ Testimony of J. Gardner, Secretary of Dep't of Housing, Education & Welfare (HEW), Hearings on S.3112 and S.3400 Before the Subcomm. on Air and Water Pollution of the Senate Committee on Public Works, 89th Cong., 2nd Sess. at 17 (June 1966) [hereinafter cited as 1966 Hearings].

 $^{^2}$ E. Edelson and F. Warshofsky, Poison in the Air, 66 (1966).

³ 42 U.S.C.A. § 1857 et seq. (1967), amending 42 U.S.C. § 1857 et seq. (1955).

⁴ The history of air pollution control has been largely one of "non-legislation". However, despite the inadequacies, federal legislation had taken a first step in an area where there is surprisingly little cooperation from other levels of our society.

petitioned the government in 1306. In response, Edward I issued a royal proclamation "to prohibit artificers from using sea coal, as distinguished from charcoal, in their furnaces, and making use of sea coal a capital offense." In 1611 in William Alfred's Case,6 the court granted an injunction on a showing that the plaintiff's air had been corrupted by defendant's hog sty. In the 17th century a plan was devised "to move all industries to the leeward side of the city of London and plant sweet smelling and aromatic flowers and trees in the city."

At common law, it was not a personal right to breathe clean air, but a property right which was protected in a nuisance action.⁸ The courts, however, in protecting these property rights, have found themselves in a dilemma, for both the pollutee and the pollutor have the right to use their property as they wish.⁹

The emission of smoke and dust which menaces the health of the public¹⁰ or interferes with the quiet enjoyment of one's property¹¹ can be declared a public nuisance. However, for smoke to constitute a nuisance, there must be a perceptible injury; it must be more than a mere inconvenience.¹² This does not mean that impairment of health need always be shown for in certain circumstances serious discomfort and annoyance may constitute a nuisance.¹³ In a situation where several pollutors contribute to creating a nuisance there may be joint liability.¹⁴

It would appear from this analysis that the common law of nuisance would be an effective means with which to abate the pollution of the air. However, this is not the case. The position taken most frequently by the courts is what is commonly referred to as "balancing the equities." This theory was applied by the court in Madison v. Ducktown Sulphur, Copper & Iron Co. Ltd. Although the court recognized that pol-

⁵ State v. Mundet Cork Corp., 8 N.J. 359, 365, 86 A.2d 1, 4 (1962).

⁶ 77 Eng. Rep. 816 (K.B. 1611), construed in Juergensmeyer, Control of Pollution Through the Assertion of Private Rights. 1967 DUKE L.J. 1126, 1130 (1967), [hereinafter cited as Juergensmeyer].

⁷ Kennedy & Porter, Air Pollution: Its Control and Abatement, 8 VAND. L. REV. 854 (1955).

^{8&}quot;... A property owner has a right to have the air above his property free from infection and corruption." Juergensmeyer, supra, note 6, at 1130. See Berger, Air Pollution as a Private Nuisance, 24 WASH. AND LEE L. REV. 314 (1967) where the author states that "[m]onetary compensation for damage from air pollution is recoverable under the nebulous tort concept of private nuisance... on the theory that a right in the use and enjoyment of land has been invaded."

⁶ Id.; Roberts v. C.F. Adams & Son, 199 Okla. 369, 371, 184 P.2d 634, 637 (1947).

¹⁰ Penn-Dixie Cement Corp. v. Kingsport, 189 Tenn. 450, 225 S.W.2d 270 (1949).

¹¹ Hofstetter v. George M. Myers, Inc. 170 Kan. 564, 228 P.2d 522 (1951).

¹² Tuebner v. California-St. R.R. Co., 66 Cal. 171, 4 P. 1162 (1884).

¹³ Judson v. Los Angeles Suburban Gas Co., 157 Cal. 168, 106 P. 581 (1910); New Jersey v. Mundet Cork Corp., 8 N.J. 359, 86 A.2d 1 (1952).

¹⁴ Ingram v. Gridley, 100 Cal. App. 2d 815, 224 P.2d 798 (1950).

¹⁵ Juergensmeyer, supra, note 6, at 1134.

¹⁶ 113 Tenn. 331, 83 S.W. 658 (1904). But see, Halbert v. California Portland Cement Co., 161 Cal. 239, 118 P. 928 (1911).

lution destroyed complainant's regular crops, it refused to grant injunctive relief, a measure the court felt would "blot out two great mining and manufacturing enterprises, destroy half the taxable values of a county, and drive more than 10,000 people from their homes." 17

The use of nuisance law as a primary source of air pollution abatement is wholly ineffective. The *Ducktown* court, in balancing the equities "did not consider possible harm from the air pollution in question to thousands and even millions of citizens other than the immediate complainants"¹⁸

The many exceptions which block an effective nuisance suit present major difficulties from a pollution standpoint. The technicalities of the nuisance doctrine diminish the effectiveness in the pollution abatement area. The doctrine of "coming to the nuisance" which estops plaintiff from bringing suit when he acquires his property rights with knowledge of the nuisance, further diminishes the possibility of private nuisance actions. This doctrine is at direct odds with the realities of the pollution problem. Carried to its extreme, it would bar suit to anyone who moved into a city with a pollution problem. This is hardly a solution to the problem of urbanization and air pollution.

Although some courts have held that the exercise of the police power is not limited to regulating only those interferences which come within the common law definition of nuisance,²¹ others have more narrowly construed this power and have limited regulations to those areas which are in fact nuisances under the common law.²²

The law of nuisance appears to be too deeply rooted in property concepts and in the legal technicalities which are associated with property rights to be an effective instrument for controlling air pollution. The courts, "while paying lip service to the landowner's right to pollution-free air, have nevertheless recognized a right to do at least some polluting of the air."²³ The obstacles confronting an individual who

¹⁷ Madison v. Ducktown Sulphur, Copper, & Iron Co., Ltd., 113 Tenn. 331, 366, 83 S.W. 658, 666 (1904).

¹⁸ Juergensmeyer, supra, note 6, at 1134.

¹⁹ Id. at 1134-1136, where author feels that the private and public nuisance is a distinction of "kind rather than degree" and that it diminishes the possibility of private nuisance actions.

²⁰ Waschak v. Moffat, 379 Pa. 441, 109 A.2d 310 (1954); East St. Johns Shingle Co. v. Portland, 195 Ore. 505, 246 P.2d 554 (1952).

²¹ Ex parte Junqua, 10 Cal. App. 602, 103 P. 159 (1909).

²² Glucose Refining Co. v. Chicago, 138 F. 209 (N.D. III. 1905); State v. Chicago M. & St. P. Ry. Co., 114 Minn. 122, 130 N.W. 545 (1911).

²³ Juergensmeyer, supra, note 6, at 1131. Holman v. Athens Empire Laundry Co., 149 Ga. 345, 100 S.E. 207 (1919) illustrates this attitude:

[&]quot;Every person has the right to have the air diffused over his premises, whether located in the city or country, in its natural state and free from artificial impurities. (a) By air in its natural state and free from artificial impurities is meant pure air consistent with the locality and character of the community. (b) The pollution of the air, so far

intends to bring a nuisance action are often too overwhelming to ever hope for a largescale attack on air pollution in this manner.

It was in this context that the legislatures have been forced to act. Haunted by the restrictions of property law and by a politically orientated system which emphasizes technological progress, the Congress, out of necessity, has been forced to act.

II. FEDERAL RECOGNITION OF THE AIR POLLUTION PROBLEM

The Air Quality Act of 1967 has had a relatively short evolution. The first serious recognition of the magnitude of the problem came in 1955 with the enactment of a bill which provided "Research and Technical Assistance" for the control of air pollution.²⁴ The 1955 Act came in response to the growing awareness of the "dangers to public health and welfare, injury to agricultural crops, and livestock, damage to and deterioration of property..." from air pollution.²⁵ In addition the tragic "killer" smog, such as that which enveloped London in 1952, must have prompted Congressional action in the United States.²⁶ The realization that the pollution of the atmosphere was not only unsightly and uncomfortable but that under certain conditions it could be fatal, provided a warning which was heeded, at least to a small degree.²⁷

The Act of 1955 clearly declared that the primary responsibility for the control of air pollution rested with the states.²⁸ The role of the federal government was made advisory, providing technical service and financial aid to state and local governments. The authority at the federal level was vested in the Department of Health, Education, and Welfare (HEW).²⁹ The Surgeon General was authorized, under the supervision of HEW, to "propose or recommend research programs" in cooperation with state or local programs and to make available to the states the results of the research and investigation.³⁰

One of the major purposes of this legislation was to determine the causes and effects of the contamination of the air.³¹ This knowledge

as reasonably necessary to the enjoyment of life and indispensable to the progress of society, is not actionable."

²⁴ Air Pollution Control Act, ch. 360, 69 Stat. 322 (1955), as amended 42 U.S.C. § 1857 (1963) [hereinafter cited as Control Act of 1955.]

²⁵ Id.

²⁶ E. EDELSON AND F. WARSHOFSKY, POISONS IN THE AIR, 26 (1966). This pollution covered the city in a shroud and provided the worst smog in the city's history. Later studies found that 4,000 deaths were caused by the 5 days of heavy smog. *Id*.

²⁷ The British passed a Clean Air Act in 1956.

²⁸ Control Act of 1955, 42 U.S.C. § 1857 (1955).

²⁹ Id.

³⁰ Id. §§ 1857 la (a) & (b). In addition the Surgeon General could investigate a specific localized problem at the request of state or local governments. Id. § 1857b.

³¹ S. Rep. No. 339, 84th Cong., 1st Sess. (1955) in 1955 U.S. CODE CONG. AND AD. NEWS 2457.

then could not be obtained under the many uncoordinated programs at the local level. At that time much of the delay in discovering meaningful answers was due to the "insufficient exchange of data and limited know-how, facilities and funds." The Act appears to be an attempt to integrate the many local and state programs under the auspices of the Department of Health, Education, and Welfare and to give incentive to these slumping programs.

The original proposal provided for an advisory committee composed of representatives of the federal government, scientific circles, industry, and the public at large. Strong opposition by those who felt HEW could selectively consult with divergent groups resulted in the deletion of this provision in the final draft.³³ The debate over this issue, the emphasis on the primary responsibility of the states, and the Act viewed in its entirety suggest that Congress acted reluctantly.

The next major piece of legislation dealing with pollution control was the Clean Air Act of 1963.³⁴ This Act went far beyond the air pollution programs established under the Air Pollution Control Act of 1955. The 1955 Act was limited to research, technical assistance, and the dissemination of information to state and local programs. The Clean Air Act provided for a mechanism for enhancing federal responsibility in the effort to control air pollution while reaffirming Congress's intention that "the prevention and control of air pollution at the source is the primary responsibility of state and local governments." ³⁵

The Clean Air Act was for the most part a response to the growing awareness of the dangers which air pollution poses to health and property. President Kennedy's health message to Congress in February of 1963 stressed the overwhelming evidence "linking air pollution to aggravation of heart condition . . . and chronic respiratory diseases." At that time some 6,000 communities in the United States were affected by air pollution and the problem was not limited to the cities. In addition to costing some cities as much as 100 million dollars per year, losses of crops and livestock from air pollution were increasing rapidly. This damage to health

³² Id. at 2458.

³³ Id. at 2462-4.

³⁴ Clean Air Act, 77 Stat. 392 (1963), as amended 42 U.S.C.A. § 1857 et seq. (1967) [hereinafter cited 42 U.S.C. (1963)]. This is the next major piece of legislation but not the next in chronological order. In 1960 Congress passed the Motor Vehicle Discharge Act, 8 Pl. 86-493, 74 Stat. 162 (1960). This is discussed infra at note 80 and accompanying text.

^{35 42} U.S.C. § 1857 (a) (3) (1963). The 1955 Act recognized that the primary responsibility for air pollution control rested with the state. Control Act of 1955, *supra* note 28, and accompanying text. The 1963 Act recognizes that the control of air pollution "at its source" is the primary responsibility of the states. This small change appears to be a recognition of the interstate characteristics of much of the existing air pollution and an indication that increased federal participation is likely.

^{36 109} CONG. REC. 1942 (Feb. 7, 1963) (Message from the President of the United States).

and to the economy, a problem which costs an estimated \$65 per capita annually, was being met by expenditures of 10 cents per capita per year.³⁷

In response to this problem, the President recommended legislation authorizing the Department of Health, Education, and Welfare:

- (a) To engage in a more intensive research program permitting full investigation of the causes, effects, and control of air pollution;
- (b) To provide financial stimulation to States and local air pollution control agencies through project grants which will help them to initiate or improve their control programs;
- (c) To conduct studies on air pollution problems of interstate or nation-wide significance; and
- (d) To take action to abate interstate air pollution along the general lines of the existing water pollution control enforcement measures.³⁸

The President's message and the subsequent legislative proposals by Congress in 1963 were aimed at improving the inadequate state, local, and regional programs. In 1961 there were 34 local or regional programs with budgets of \$25,000 or more. Of the total expenditure of \$7,629,000, more than half was spent in seven California programs. The median per capita expenditure for all the programs was 10.8 cents.³⁹ The state and local control programs did not recognize the broader interstate implications of air pollution.

The 1955 Act authorized the Surgeon General, "upon the request of any State or local government," to conduct an investigation into a specific or localized pollution problem.⁴⁰

In addition to conducting such an investigation at the request of the affected state, the Clean Air Act of 1963 permits the Secretary to make an investigation at his own discretion if the pollution "affect[s] any community . . . in a State other than that in which the source of the matter causing or contributing to the pollution is located." In this way federal authority is extended by the 1963 Act to situations involving interstate air pollution. This extended federal authority is limited, however, by the fact that the solutions arrived at in the course of an investigation are merely advisory and the recommendations of HEW can be ignored by the local or regional control agencies.⁴²

The Secretary is required to initiate and maintain a program aimed at developing techniques for extracting sulfur from fuels.⁴³ When this pro-

³⁷ Id.

³⁸ Id.

³⁹ Staff HEW, Public Health Service Pub. No. 1549, at 7 (1966) [hereinafter cited HEW, State and Local Programs]. For a more detailed analysis of the state and local programs before and after the Clean Air Act of 1963, see notes 59-62 and accompanying text.

⁴⁰ Control Act of 1955, supra, note 30 and accompanying text.

⁴¹ 42 U.S.C. § 1857 b (a) (3) (1963).

⁴² Id. § 1857 b (a) (3) and (b) (1)

⁴³ Id. § 1857 b (a) (4)

vision was enacted, the extent to which the sulfur content contributed to the unfavorable effects of air pollution was not clearly established. However, the authorization for these sulfur-extracting programs was based "on the assumption that sulfur and its by-products resulting from the combination of fuels constitutes some of the major pollutants of the atmosphere."

The 1963 Act also provided for the development by HEW of air quality criteria.⁴⁵ These "[c]riteria are an expression of the scientific knowledge of the effect of various concentrations of pollutants depending on the intended use of a particular . . . mass of air."⁴⁶ They are considered as aids to the various control agencies, and it is not mandatory that the individual agencies adopt them.⁴⁷

In addition to the expansion of research and technical assistance programs, the Clean Air Act provides for grants to be made to state and local control agencies for the purpose of "developing, establishing, or improving" air pollution control programs.⁴⁸ These grants could be made to control agencies in amounts up to two-thirds the cost of such programs and in the case of interstate or regional control agencies, a grant of up to three-fourths of the cost is authorized.⁴⁹

The amount of a grant to be expended in any one state cannot exceed 12-1/2 per cent of the total grant funds available.⁵⁰ The total grant funds available is limited by a ceiling of 20 per cent of the total appropriation under the Act.⁵¹ The total appropriation authorized by the 1963 Act is \$25 million for fiscal year ending June 30, 1965, \$30 million for the year

⁴⁴ CONF. REP. No. 1003, 88th Cong., 1st Sess. (1963) in 1963 U.S. CODE CONG. AND AD. NEWS 1279, 1280 [hereinafter cited CONF. REP. No. 1003].

^{45 42} U.S.C. § 1857 b (c) (2) (1963).

⁴⁶ Bermingham, The Federal Government and Air and Water Pollution, 23 Bus. LAWYER 467, 468 (1968). For a more complete definition of "criteria," see infra note 117 and accompanying text.

^{47 42} U.S.C. § 1857 b (c) (3) (1963).

⁴⁸ Id. § 1857 c (a).

⁴⁹ Id. An "interstate" or "intermunicipal" air pollution control agency is defined by the 1963 Act, for the purpose of this section as:

⁽²⁾ An Agency established by two or more States and having substantial powers or duties pertaining to the prevention and control of air pollution: [or]

⁽⁴⁾ An agency of two or more municipalities located in the same States or in different States and having substantial powers or duties pertaining to the prevention and control of air pollution. Id. § 1857 h (b) (2) and (4).

⁵⁰ 42 U.S.C. § 1857 c (c) (1963). This section did not appear in the House bill but was inserted in a Senate amendment.

⁵¹ Id. § 1857 c (a). The Senate amendment struck out section 4 of H.R. 6518 as revised by the House and inserted this 20 per cent ceiling. CONF. REP. No. 1003, supra, note 44, at 1282. The House bill had limited the total available for grants under H.R. 6518 § 4 to \$5 million for each fiscal year. H.R. REP. No. 508, 88th Cong., 1st Sess. (1963) in 1963 U.S. CODE CONG. AND AD. NEWS 1260, 1265 [hereinafter cited H.R. REP. No. 508]. This \$5 million maximum is retained for the 1964 fiscal year only, 42 U.S.C. § 1857 1 (a) (1963), and the 20 per cent maximum applies thereafter.

ending June 30, 1966, and \$35 million for the year ending June 30, 1967.⁵²

Prior to the enactment of the Clean Air Act, funds for pollution control had also been available from the Public Health Service.⁵³ In order to "insure the effectiveness of the ceilings" provided in the Clean Air Act, Congress prohibited the use of additional Health Service funds to carry out pollution control.⁵⁴

These grants are to be allocated on the bases of population, financial need of the respective agencies, and the extent of the particular problem.⁵⁵ In order to assure adequate participation at the state, local, and regional levels, the Act also provides that

No agency shall receive any grant under this section during any fiscal year when its expenditures of non-Federal funds for air pollution programs will be less than its expenditures were for such programs during the preceding fiscal year.⁵⁶

The emphasis Congress has given this provision⁵⁷ reaffirms the alleged purpose of the Act as one aimed, not at usurping the state and local efforts, but at stimulating state and local agencies to develop and expand their control efforts.⁵⁸ Prior to the passage of the Clean Air Act, there were no more than seventeen states with budgets of \$5,000 per year or more for air pollution control.⁵⁹

In 1961, approximately only \$2 million was spent by these seventeen states for the control of air pollution. More than one-half of the state expenditures were made by California. Furthermore, prior to the enactment of the Clean Air Act, local and regional air pollution programs

^{52 42} U.S.C. § 1857 1 (b) (1963). The House had originally authorized \$20 million for fiscal 1965, \$30 million for fiscal 1966, and \$35 million for fiscal 1967. H.R. REP. No. 508, supra, note 51, at 1263. The Senate amended this provision, increasing the 1965 fiscal appropriation to \$25 million. The Senate adopted the House's 1966 and 1967 appropriations and added \$42 million for fiscal 1968, and \$50 million for fiscal 1969. The Conferees adopted the Senate scheme for fiscal 1965, 1966, and 1967, but limited the program to these three fiscal years in the belief that it could give both Houses of Congress the opportunity "to re-examine this program within a relatively short period of time . . . [allowing] Congress to provide necessary increase . . . for future years." Conf. Rep. No. 1003, supra, note 44 at 1285-86.

⁵³ These funds were obtained under §§ 301, 311, and 314 (c) of the Public Health Service Act, (42 U.S.C. § 241, 243 and 246 (c)). See H.R. REP. No. 508, supra, note 51, at 1263.

⁵⁴ 42 U.S.C § 1857 i (b) (1963). This section is not intended to restrict "appropriations under other provisions of law for activities which may be only peripherally concerned with air pollution." H.R REP. No. 508, *supra*, note 51, at 1264.

⁵⁵ 42 U.S.C. § 1857 c (b) (1963).

⁵⁶ Id.

⁵⁷ CONF. REP. No. 1003, supra, note 44, at 1282.

⁵⁸ 42 U.S.C. § 1857(a) (1963); See, H.R. RBP. No. 508, supra, note 51, at 1267. The House Committee discussed the contention that these federal grants would stifle local initiative, but concluded that the relatively modest amount appropriated for these grants would encourage rather than discourage local expenditure. Id. at 1266.

⁵⁹ HEW, State and Local Programs, supra, note 39, at 5.

were also meager and the most successful of these programs were also carried on in California.⁶⁰

The 1963 Act made grants available to a great number of new communities. The total number of local and regional programs grew from 85 in 1961 to over 130 in 1966. By 1965, at least 40 states had budgets of \$5,000 a year or more, and the median per capita expenditures for air pollution programs rose from 1.2 cents to 2.9 cents. During the 1965 and 1966 fiscal years, \$9.18 million in federal funds were appropriated for the program grants. In addition, 72 new state, local, or regional programs were created and 40 existing programs received additional grants for improvements. The expenditures of non-federal funds for pollution control increased by 46 per cent, 61 and the total federal and non-federal expenditures for state and local air pollution programs increased 65 per cent after the passage of the 1963 Act. 62

This federal policy of providing an incentive to slumping programs was also encouraged by a policy of supplementing the abatement powers of the states. The abatement procedure of the Clean Air Act is designed to deal with pollution "which endangers the health or welfare of any persons." In a situation in which either interstate or intrastate pollution is present, the Act provides for procedures by which the Secretary, at the request of proper state authorities, may call a conference of the control agencies which are affected by such pollution. Furthermore, the abatement provisions represent the greatest departure from the avowed principle of primary state responsibility. Although it does not represent an assertion of independent federal authority, the Act provides that HEW may, "after consultation with State official of all affected States," call a conference if there is reason to believe that air pollution is "endangering the health and welfare of persons in a State other than that in which the discharge or discharges occur."

⁶⁰ See text accompanying note 40, supra.

⁶¹ HEW, State and Local Programs, supra, note 39, at 4-7.

^{62 1966} Hearings, supra, note 1, at 261.

^{63 42} U.S.C. § 1857d(b) (1963).

⁶⁴ Id. § 1857d(a).

For understanding of the terminology "endanger the health and welfare," See, Bermingham, The Federal Government and Air and Water Pollution, 23 BUS. LAWYER 467, 484 (1968) where the author states that,

[&]quot;[a] Ithough these words ['endanger the health and welfare of any persons'] have not been judicially construed in context of these Acts, the government takes the position that it is not necessary, in order to put the abatement wheels in motion, to show the existence of actual harm or injury. 'The true injury it is said, 'in the light of the policy of the statute, is whether there is a reasonable apprehension on such danger. If this exists, the requirement is met'." [Edelman, The Law of Federal Air Pollution Control, J. AIR POLLUTION CONTROL ASS'N, 523, 524 (Oct. 1, 1966)].

^{65 42} U.S.C. § 1857d(c)(1)(A) (1963) establishes the procedure for the initiative of an interstate pollution conference, and 42 U.S.C. § 1857d(c)(1)(B) (1963) provides for procedures for a conference in the case of intrastate air pollution.

^{66 42} U.S.C. § 1857(c)(1)(C) (1963). The House bill was much bolder and permitted

After a conference, if the federal authorities feel that additional action is required, they may make recommendations, but must wait at least six months before any remedial action can be taken.⁶⁷ After that period of time has elapsed, the Secretary may call a public hearing if the state has not yet acted to correct the situation.⁶⁸ The hearing board may then make recommendations to HEW,⁶⁹ which in turn may send these recommendations to the affected parties, accompanied by notice specifying a reasonable time (a minimum of six months) to secure abatement of the specific problem.⁷⁰

If, after expiration of the time set by the Secretary, such abatement measures have not been voluntarily undertaken, the Secretary, in the case of interstate air pollution, may request the Attorney General to bring a suit on behalf of the United States to secure abatement.⁷¹ In a situation involving intrastate air pollution, HEW may give assistance or initiate a suit only upon the request of the Governor of that state.⁷²

The automobile was increasingly recognized as a principle source of air pollution.⁷³ The House committee advocated additional federal studies on the effect of motor vehicle exhaust emissions on human health and increased investigations with the purpose of ultimately devising safety standards for such discharge.⁷⁴ The Senate, throughout the formulation of the 1963 Act, was a proponent of greater efforts and additional research on the part of private industry to solve the problem of automotive exhaust.⁷⁵ The Senate version emerged from conference and the Clean Air Act of 1963 provided for federal encouragement of the automobile and fuel industries as well as a technical committee comprised of federal representation from HEW and an equal number of representatives from various concerned industries who were to act as a liason with the government.⁷⁶

the Secretary to call a conference in such an interstate pollution situation, completely at his own initiative. H.R. REP. NO. 508, *supra*, note 51, at 1266. The Senate Amendment to §5(c)1(c) of H.R. 6518 amended 42 U.S.C. § 1857d(c)1(c) (1963) which was incorporated into the final Act required the Secretary to consult with state officials in the affected areas before he could call such a conference. CONF. REP. NO. 1003, *supra*, note 44, at 1282.

The House bill [H.R. 6518 §5(f)] provided that in the case of interstate air pollution the Secretary was authorized to request that a suit be brought, but only after he received a certification from the Governor of each state involved stating that the health and welfare of its inhabitants was endangered. H.R. REP. No. 508, supra, note 51, at 1267. The Senate amendment revised this section so that certification by the Governor was not necessary. But see, note 66, supra, and the accompanying text, where the roles were reversed and the House was advocating greater federal independence of action.

^{67 42} U.S.C. § 1857d(d) (1963).

⁶⁸ Id. § 1857d(e)(1).

⁶⁹ Id. § 1857d(e)(2).

⁷⁰ Id. § 1857d(e)(3).

⁷¹ *Id.* § 1857d(f)(1).

^{72 42} U.S.C. § 1857d(f)(2) (1963).

⁷³ Pub. L. 86-493, 74 Stat. 162 (June 1960).

⁷⁴ H.R. REP. No. 508, supra, note 51, at 1265.

⁷⁵ CONF. REP. No. 1003, supra, note 44, at 1279.

^{76 42} U.S.C. § 1857e(a) (1963).

So that an example could be set, the 1963 Act required federal agencies and facilities to minimize air pollution in their own backyard. Federal departments or agencies having jurisdiction over any building, installation, or other property are required to comply with more demanding control regulations.⁷⁷ Before such federal department discharges any matter into the air, it must first obtain a permit, which will be issued only after an investigation of the plans and specifications of the installation assures HEW that there will not be any contamination of the air endangering the health or welfare of any persons.⁷⁸

As federal legislation with regard to air pollution has evolved, the often repeated allegiance to the principle of states rights has lost some of its significance. Nevertheless, at this stage of the evolution, the use of the phrase "primary responsibility of the states" represents something more than a mere payment of lipservice to the concept of states rights.

III. CONTROL OF AUTOMOBILE EXHAUST

Following the passage of the Clean Air Act of 1963, the focus of attention shifted primarily to the areas of automobile emission control and to more effective means of controlling air pollution at regional levels. The problem of contamination of the atmosphere from the discharge of motor vehicle exhaust received its first serious legislative recognition at the federal level in 1960.⁸⁰ At that time attention was focused on the need to determine the effect of such emissions on human health.

Earlier studies had indicated a positive relationship between automobile exhaust and smog,⁸¹ and by 1963 it was asserted that automobile exhaust was to blame for approximately 50 per cent of the national pollution problem.⁸² In some areas of the nation, motor vehicle emissions were responsible for 80 per cent of the smog causing hydrocarbons and 50 per cent of the smog causing oxides of nitrogen.⁸³ Estimates indicated that

⁷⁷ Id. § 1857f(a).

⁷⁸ Id. § 1857f(b).

⁷⁹ For instance, the House committee stated that the abatement procedure provided "a reasonable balance between the . . . rights of the States to control air pollution within their boundaries and the rights of States seriously affected by pollution from another State to have available a practical remedy." H.R. Rep. No. 508, supra, note 51, at 1267. However, the Senate amendment changed the House's procedures somewhat and it would seem inevitable that this "balance" was also shifted. The change in the House bill is demonstrated in 71, supra.

⁸⁰ Motor Vehicle Act, Pub. L. 86-493, 74 Stat. 162 (1960).

⁸¹ Motor Vehicles, Air Pollution & Health, A Report of the Surgeon General to the United States Congress, (June 1962). This report discussed a study in which 260 mice of a cancer resistant strain were exposed to the atmosphere of Los Angeles for a two-year period. Two percent developed lung tumors. Other studies showed adverse effects on animals exposed to small concentrations of oxides of nitrogen, a substance emitted from motor vehicle exhaust. Id. at 5.

⁸² Staff of Senate Subcomm. on Air and Water Pollution 88th Cong., 2nd Sess., Report "Steps Toward Clean Air," 3 (1964).

⁸³ Id. at 8. See, H.R. REP. No. 899, 89th Cong., 1st Sess. (1965) in 1965 U.S. CODE CONG. AND AD. NEWS 3608, 3611 [hereinafter cited H.R. REP. No. 899] where the committee ex-

unless effective controls were applied, motor vehicle emission would increase by 75 per cent in the period from 1965 to 1975 and would more than double by 1985.84

In 1965, there were more than 85 million motor vehicles in the United States, and this number was expected to increase at an alarming rate. A pressing need existed for the development of techniques designed to control air pollution resulting from automobile exhaust. It became increasingly obvious that the private sectors of the economy were not voluntarily going to control pollution. Long before the hearings on federal motor vehicle legislation were completed, the Special Senate Subcommittee on Air and Water Pollution, under the chairmanship of Senator Muskie, concluded that "nothing short of national action could bring the problem of automobile pollution under control."

In 1965 Congress enacted the Motor Vehicle Air Pollution Control Act.⁸⁷ This Act requires federal standards to be promulgated for controlling the emission of pollutants from certain new motor vehicles. The Congress generally felt that the high degree of automotive mobility made federal emission standards preferable to a great number of separate local and state regulations.⁸⁸ These emission standards were to be established on the basis of the "technological feasibility and economic costs" of controlling automotive emissions.⁸⁹ Once these regulations become effective,⁹⁰ a manufacturer of new motor vehicles or new motor engines is prohibited from selling or importing a non-comforming product into commerce.⁹¹

plains that "[e]very automobile gives off, in addition to carbon dioxide, numerous unburned hydrocarbons, oxides of nitrogen, and traces of other substances. As these by-products of the operation of the automobile become concentrated in the atmosphere, they are acted upon by sunlight, leading to the formation of ozone, (a highly poisonous variety of oxygen), and automotive smog, which has serious adverse effect upon the persons exposed to it."

⁸⁴ H.R. REP. No. 899, supra, note 83, at 3611.

⁸⁵ Id. at 3610.

⁸⁶ Statement by Sen. Muskie, Hearings on S.306 Before the Spec. Subcomm. on Air and Water Pollution of the Senate Subcomm. on Public Works, 89th Cong., 1st Sess., 3 (April 1965) [hereinafter cited as April 1965 Hearings].

^{87 42} U.S.C.A. § 1857f-1 (1965) amending 42 U.S.C. § 1857f (1963) [hereinafter cited as 42 U.S.C.A. § 1857f-1 (1965)].

⁸⁸ H.R. REP. No. 899, supra, note 83, at 3612.

^{89 42} U.S.C.A. § 1857f-1(a) (1965).

⁹⁰ Id. § 1857f-1(b) provides that the effective date shall be specified in the standards and that these regulations must allow industry a reasonable amount of time to comply with the standards. See, testimony of Harry Barr, chairman of Engineering Advisory Committee of the Auto. Manuf. Assoc., Hearings on ... S.306 Before the Subcomm. of Public Health and Welfare of the House Comm. on Interstate and Foreign Commerce, 89th Cong., 1st Sess., at 281 (June 1965) [hereinafter cited June 1965 Hearings] where it is advocated that in order for industry to comply with the standards, at least two years notice must be given.

^{91 42} U.S.C.A. § 1857f-2(a)(1) (1965). The U.S. District Courts are given jurisdiction to restrain the violation of this section. *Id.* § 1857f-3(a), (b). Any person who violates § 1857f-(1), (2), or (3) is subject to a fine of not more than \$1000 for each new non-conforming vehicle or motor vehicle engine. *Id.* § 1857f-4.

The automobile industry, although certainly preferring no standards at all,⁹² was in general agreement that if standards were inevitable, a national minimum standard would be preferable. This preference derives from the fear that 50 different states would develop 50 different control devices or, following the California pattern, that different control devices would be required within different areas of one state.⁹³

The automobile manufacturers also opposed the adoption of the stringent California emission standards at the national level.⁹⁴ For these reasons, the industry was less than enthusiastic in its support of the proposed legislation. Nothing appeared in the 1965 Act which would guarantee that federal standards would lead to the practice of applying uniform national standards; experience had shown that a state may retain its own regulations despite federal action.⁹⁵

The broad language of the 1965 Act with regard to federal emission standards reflects the realization that the law, under the present value system, is restricted by the technological progress of pollution control devices. The most stringent federal laws would lose much of their significance in the absence of engineering and scientific development which improves control systems.

The 1965 Act also amends the Clean Air Act by authorizing HEW to deal with air pollution which affects persons in a foreign country. When either the Secretary of State or the Secretary of HEW determines from a study of a duly constituted international agency that air pollution eminating from a municipality of the United States endangers the health or welfare of persons in a foreign country, the Secretary of HEW is authorized to call a conference with the control agency of the municipality from which the discharge originates, and the foreign country which is adversely affected. This provision applies only to foreign countries which provide the United States with the same rights with respect to air pollution control. The Clean Air Act of 1963 had been the first serious recognition

⁹² The objection of the Automobile Manuf. Assoc. was often couched in terms of the high cost of development, production, and maintenance of emission control devices. See Testimony of H. Barr, June 1965 Hearings, supra, note 90, at 280. This view was shared not only by automanufacturers, but also by other concerned persons who felt the cost of such programs outweighed the benefits. See, Testimony of Morton Sterling, Chief, Bureau of Air Pollution, Detroit, Before April 1965 Hearings, supra, note 86, at 154.

⁹³ Statement by Sen. Muskie in STAFF OF SENATE SUBCOMM. ON AIR AND WATER POLLU-TION, 88TH CONG., 2ND SESS., REPORT "STEPS TOWARD CLEAN AIR," 13 (1964).

⁹⁴ Statement of Mr. Delaney, witness for Auto. Manuf. Assoc. *Id.* at 13-14. California emission standards permit no more than 275 parts in a million of unburned hydrocarbons and no more than 1.5 per cent carbon monoxide. N.Y. Times, Aug. 11, 1966, at 1.

⁹⁵ See, Testimony H. Barr, June 1965 Hearings, supra, note 90, at 281: "[o]ur industry's experience is that states retain their regulations even in cases where Federal action has occurred, as in the application of regulations of the Interstate Commerce Commission pertaining to truck equipment."

^{96 42} U.S.C.A. § 1857d(c)(1)(D) (1965) amending 42 U.S.C. § 1857d(c)(1) (1963).

⁹⁷ Id.

of the interstate and national characteristics of air pollution and then with the 1965 Act, Congress had begun to realize the international implications of air pollution.

IV. AIR QUALITY ACT 1967

Despite federal efforts to control air pollution from 1955-1965, the dangerous contamination of our atmosphere continued, accompanied by a growth of the population and increased migration to the cities. In 1966 it was predicted that "during the lifetime of many living today, more than 90 per cent of Americans will be living in cities." Nothing had been done to halt the growth of industry and technology, and the onslaught of automobiles served only to worsen an air pollution problem which had already reached most serious proportions.

The state and local control agencies had been, for the most part, unsuccessful in their attempts to control air pollution despite the increased federal activity. Private sectors of the economy had not voluntarily undertaken effective control measures, and private industry was accused of doing "only what public pressure required it to do." Generally, air pollution control was considered by private pollutors to be economically unattractive. However, even when the economic disadvantages were removed, increased private pollution control development did not follow. 100

The need for expanded research and greater federal regulatory powers became increasingly evident. Estimates indicated that only 58 per cent of the urban population was served by some local pollution program. The inadequacies of control programs inevitably led to increased federal participation in the areas of air pollution control.

In January of 1967 President Johnson, in a message to Congress, recommended that the Department of HEW "designate those industries in interstate commerce that are nationally significant sources of air pollution [and] develop industry-wide emission levels" to control those industries which contribute heavily to air pollution. ¹⁰² In addition the President recommended that regional airshed pollution programs and regional air quality levels should be created. ¹⁰³

The Air Quality Act¹⁰⁴ signed by President Johnson on November 21, 1967, adopts the regional approach advocated by the President in his Jan-

⁹⁸ N.Y. Times, April 3, 1966, at 8.

⁹⁹ Statement of John W. Gardner, Sec. HEW, in N.Y. Times, Feb. 9, 1967, at 15.

¹⁰⁰ See, HEW, State and Local Programs, supra, note 39, at 2.

In those operations, for example, where recovery processes or other methods have been developed to make control profitable, the application of control has not routinely followed.

^{101 1966} Hearings, supra, note 1, at 270.

^{102 113} CONG. REC. 736 (1967) (air pollution message from President Johnson).

¹⁰³ Id at 734.

^{104 42} U.S.C.A. § 1857 et seq. (1967), formerly 77 Stat. 392 (1963).

uary message to Congress, with one notable omission. The original bill had, pursuant to the administrative proposal, established national uniform emission standards.¹⁰⁵ This was amended in subsequent Senate and House versions.

This deletion was alleged by some commentators to represent the greatest shortcoming of the 1967 Act, and the general impression appeared to be that the Senate and House had bowed to the heavy pressures from the coal and oil lobbies. What did emerge, apparently as a compromise with the administration, was a watered down "national emissions standards study" to determine the effect of national emissions standards on stationary sources and the cost of adopting such regulations. ¹⁰⁷

While the Clean Air Act of 1963 had as one of its principle objectives the stimulation of state and local control activity, the Air Quality Act of 1967 emphasizes air quality control at the regional levels. Certainly a reaffirmation of Congress's intention "that the prevention and control of air pollution at its source is the primary responsibility of States and local governments" appears in the 1967 Act, 108 but there can be no doubt that the federal government's role is increasing and that in some areas HEW will assume the "primary responsibility."

In April 1966, prior to the President's pollution message, the National Academy of Sciences reported that the nature of the geographic industrial concentrations make pollution control at the regional level the most feasible method. The 1967 Act gave the States the primary responsibility to apply control techniques, but within the air quality control regions designated by the Department of Health, Education, and Welfare.

The Act requires HEW to deliniate:

atmospheric areas of the Nation on the basis of those conditions, including, what not limited to climate, meteorology, and topography, which affect the interchange and diffusion of pollutants in the atmosphere.¹¹⁰

After consultation with state and local agencies, the Department is empowered to designate air quality control regions, including groups of communities requiring uniformity of control action.

¹⁰⁵ S. 780, 90th Cong., 1st Sess. (1967).

¹⁰⁶ N.Y. Times, July 19, 1967, at 1 and 18; N.Y. Times, July 20, 1967, at 36. But see, N.Y. Times, Aug. 31, 1967, at 32 where Sen. Muskie in a letter to the Editor took offense at the allegations in the July 19 and 20 editions. The Senator felt that the proposals of the President were rejected not because of industry pressure, but because recommendations provided for a minimum national standard rather than a uniform national standard. He also felt that on a limited budget, priority should be given to the most critical areas and that the Public Health Service had not yet made conclusive findings with respect to industrial emissions.

¹⁰⁷ Air Quality Act, 42 U.S.C.A. § 1857f-6d(a) (1967).

^{108 42} U.S.C.A. § 1857(a)(3) (1967) (corresponds to 42 U.S.C.A. § 1857 (1955)).

¹⁰⁹ Report of the National Academy of Sciences in the N.Y. Times, April 3, 1966, § E, at 8.
110 42 U.S.C.A. § 1857c-2(a)(1) (1967).

¹¹¹ Id. § 1857c-2(a)(2)

¹¹² H.R. REP. No. 728 (House Comm. on Interstate and Foreign Commerce), 90th Cong.,

HEW is then to establish air quality criteria which reflect urban-industrial concentrations and the latest scientific and technilogical knowledge. These guidelines are arrived at after consultation with appropriate advisory committees and Federal departments and agencies . . "114 The air quality criteria are of greater importance than they were under the provisions of legislation, for the criteria are, under the Air Quality Act, prerequisites for the development of air quality standards by the states. The states are still responsible for establishing the air quality standards within the control regions designated by HEW. The federal role is limited to assisting the states by creating air quality criteria and disseminating information on recommended control technology to keep the states abreast of the most recent technological and economic data. The air quality criteria established by HEW are descriptive:

They describe the effects that can be expected to occur whenever and wherever the ambient air level of a pollutant reaches or exceeds a specific figure for a specific time period. [On the other hand,] air quality standards are prescriptive — they prescribe pollutant levels that cannot legally be exceeded during a specific time period in a specific geographic area...¹¹⁷

Each state then has 90 days, subsequent to the establishment of federal control regions and criteria, to file with HEW a letter of their intention to adopt air quality standards. A state would then have 180 days to adopt these standards. If a state fails either to file such a letter of intent or to establish air quality standards, the Secretary is authorized, on his own initiative, to develop the air quality standards and recommend control techniques for their implimentation.¹¹⁹

In order to facilitate the establishment of these air quality standards in an interstate control region, payment of the total cost of the regional agency's program is authorized. 120

¹st Sess. (1967) in 1967 U.S. CODE CONG. AND AD. NEWS 1238, 1950 [hereinafter cited as H.R. REP. No. 728].

^{113 42} U.S.C.A. § 1857c-2(b) (1)-1 (3) (1967) amending 42 U.S.C.A. § 1857b(c) (1963).

^{114 42} U.S.C.A. § 1857c-2(b)(1) (1967) amending 42 U.S.C.A. § 1857b(c)(2) (1963). The 1967 Act now requires the Secretary to consult with these various advisory bodies. It would seem that this would diminish the Secretary's responsibilities, although the House committee has assured that the "Secretary will make the final determination on all questions involved in criteria development." H.R. REP. No. 728, supra, note 112, at 1950.

^{115 42} U.S.C.A. § 1857d(c)(1) (1967).

¹¹⁶ Id. § 1857c-2(c).

¹¹⁷ Statement by Dr. John Middleton, Director, National Center of Air Pollution Control in Hearings on S.780 Before the Subcomm. on Air and Water Pollution of the Senate Comm. On Public Works, 90th Cong., 1st Sess., pt. 3 at 1154 (1967) [hereinafter cited 1967 Hearings].

¹¹⁸ 42 U.S.C.A. § 1857d(c)(1) (1967).

¹¹⁰ Id. § 1857d(c)(2) These standards become effective within 6 months unless a timely request for a hearing is made by the state. Id. § 1857d(c)(3) or unless the state proceeds to establish their own standards within 6 months of the Secretary's action. (Id. § 1857d(c)(2)).

^{120 42} U.S.C.A. § 1857c-1(a) (1967).

Once these standards are established, the states are expected to comply with them. If the air quality of a particular region drops below the established air quality standards, a federal enforcement action may be initiated. The Act requires that 180 days notice be given before federal action is taken.¹²¹ At the expiration of the 180 days, with respect to interstate pollution which endangers the health and welfare, the Attorney General may, upon the request of HEW, bring a suit to abate the pollution.¹²² In the case of intrastate air pollution, such abatement action can be initiated only upon the request of the state involved.¹²³

The Act also provides a time-saving-clause to be utilized under special circumstances to abate air pollution. The 1967 Act, in addition to carrying over the time-consuming abatement procedures of the 1963 Act, provides a mechanism to deal with emergency situations. If there is a finding, based on sufficient evidence, that a particular pollution source presents "an imminent and substantial endangerment" to health, and the state or local authorities have not acted, the Secretary may request the Attorney General to immediately enjoin the emission. It is alleged that this procedure is not intended to deal with recurring pollution problems, but is intended to deal only with very unusual atmospheric inversions.

Improved abatement procedures were certainly a progressive step, but greater efforts on the part of state and local agencies were necessary if pollution was to be controlled. The Clean Air Act of 1963 has provided for the development of new state and local programs, but as late as 1966,

[0]f the nearly 600 counties with a population greater than 50,000, less than [90] had control programs, and most of these programs [were] far from adequate. Only three of the 50 largest cities — Los Angeles, Long Beach, and Akron — [were] spending more for the control of air pollution than the 40 cents per capita commonly agreed as an acceptable minimum, and the median per capita expenditures of all local and regional agencies [was] less than 20 cents.¹²⁷

¹²¹ Id. § 1857d(c)(4).

¹²² Id. § 1857d(c)(4)(i).

¹²³ Id. § 1857d(c)(4)(ii). Under §§ 1857d(c)(4)(i)&(ii), the court is advised to give consideration to the "feasibility of complying with such standards."

¹²⁴ See notes 66-72, supra. For corresponding section in the 1967 Act see 42 U.S.C.A. § 1857(d)-(i) (1967). § 1857(d) (2) of the 1967 Act renders a small change in the conference procedure. Notice must be placed in a newspaper at least 30 days prior to a conference instead of the three weeks and no newspaper requirement in the 1963 Act. § 1857d(c) (2) (1963). This change is obviously intended to provide all affected parties a greater opportunity to participate in the conference.

^{125 42} U.S.C.A. § 1857d(k) (1967) amending 42 U.S.C. § 1857d (1963). Senator Muskie, referring to this subsection on "imminent endangerment," conceded that the use of it was unlikely, but felt that this provision might provide a boost to greater cooperative efforts by state and local communities to clean up the air. He said, "[s]ometimes threats are as valuable as anything," N.Y. Times, July 13, 1967 at 30.

¹²⁸ See, H.R.REP. No. 728, supra, note 112, at 1954. This would seem to cover such situations as the London "killer' smog." See, note 26, supra, and accompanying text.

¹²⁷ HEW, State and Local Programs, supra, note 39, at 7.

The high costs of air pollution affects not only the urban dwellers, but are felt throughout the nation. In 1967 it was estimated that the contamination of the air was costing agriculture at least \$500 million per year. A series of tests conducted by the Department of Agriculture demonstrated that pollution was causing about \$325 million in damage to crops and \$175 million in depressed growth of livestock.¹²⁸

It is therefore not surprising that the Air Quality Act expanded the provisions for federal grants to air pollution planning and control programs. The Act expanded the existing grant provisions for the prevention and control of air pollution as well as authorizing new grants for the implementation of air quality standards. The Secretary is authorized to grant up to two-thirds of the cost of "planning, developing, establishing, or improving" air pollution programs and up to three-fourths the cost of regional air quality control programs. In addition the Act authorizes grants up to one-half the cost of maintaining local pollution programs and three-fifths of the cost of maintaining the regional air quality programs.

Consideration is given to the size of the population, the extent of the actual or potential problem, and the financial need of the agencies in the determination of the availability of these grant funds. The 1967 Act also carries over the requirement that the control agency, in order to qualify for a grant, must demonstrate that its present expenditures for pollution control will exceed those of preceding years. The 1967 Act, in addition to retaining many of the grant provisions of the Clean Air Act, requires that an interstate regional control agency, in order to obtain a grant, must assure HEW that it adequately represents the state, local, and interstate interests, and that it possesses the capability to develop a comprehensive air quality plan. The population of the grant provisions of the Clean Air Act, requires that an interstate regional control agency, in order to obtain a grant, must assure HEW that it adequately represents the state, local, and interstate interests, and that it possesses the capability to develop a comprehensive air quality plan.

The Clean Air Act limited a grant to one state to 12-1/2 per cent of the total grant funds available. Under the Air Quality Act, no state can

¹²⁸ N.Y. Times, Oct. 1, 1967, at 79.

^{129 42} U.S.C.A. § 1857c(a)(1) (1967), amending 42 U.S.C. § 1857c(a) (1963).

^{130 42} U.S.C.A. § 1857c(a) (1) (1967) (corresponds to 42 U.S.C. § 1857c(a) (1963)). The word "planning" did not appear in the 1963 Act. See, note 48, supra, and accompanying text.

^{131 42} U.S.C.A. § 1857c(a)1 (1967), amending 42 U.S.C. § 1857c(a) (1963). The 1963 Act did not provide for these additional maintenance grants. See note 50 and accompanying text. For definition of "regional program" for purpose of grant provision, See §§ 1857H(b)(2) and (b)(4) (1967) (corresponds to §§ 1857H(b)(2) and (b)(4) (1963) quoted note 49, supra).

 $^{^{132}}$ 42 U.S.C.A. § 1857c(b) (1967). This section was carried over from the 1963 Act, note 55 and accompanying text.

¹³³ Id. § 1857c(b). See note 56 and accompanying text.

¹³⁴ Id. § 1857c(a)(2) (1967), amending 42 U.S.C. § 1857c(a) (1963).

^{135 42} U.S.C.A. § 1857c(a)(3) (1967), amending 42 U.S.C. § 1857c(a) (1963).

^{136 42} U.S.C. § 1857c(c) (1963).

receive more than 10 per cent of the total funds appropriated.¹³⁷ This figure was changed to assure that all areas with air pollution problems would be able to receive financial assistance. By 1967 the magnitude of the problem had increased, and it was generally recognized that air pollution constituted a truly national problem.¹³⁸

Furthermore, the Air Quality Act of 1967 contains no maximum such as the ceiling of 20 per cent of the total appropriation which appeared in the 1963 Act.¹³⁹ It appears that any portion of the total appropriation provided by the Air Quality Act would be available to control agencies through these grants.¹⁴⁰

For the purpose of carrying out the provisions of the Air Quality Act, Congress appropriated \$74 million for fiscal 1968, \$95 million for fiscal 1969, and \$134.3 million for fiscal 1970.¹⁴¹ In addition, \$125 million is specifically earmarked for research to determine the role fuels play in the contamination of the air.¹⁴²

The 1967 Act establishes, in the Department of Health, Education, and Welfare, the "President's Air Quality Advisory Board" and advisory committees. The Board is composed of the Secretary, or his designee, who is to act as chairman, and 15 other members appointed by the President. These 15 members are to represent state, local, interstate, and private interests, but none are to be picked from the ranks of federal employees. The Secretary may also appoint such advisory committees as are

^{137 42} U.S.C.A. § 1857c(c) (1967). The Secretary is authorized to allocate the amount charged to each participating state in an interstate program. *Id*.

¹³⁸ H.R. REP. No. 728, *supra*, note 112, at 1962. Congress's broader outlook is supported by a study ranging 65 cities most severely affected by air pollution. This study demonstrates that air pollution is a nationwide problem. Among the hardest hit areas, New York City was ranked first, followed by Chicago, Philadelphia, Los Angeles, and Cleveland, in that order. N.Y. Times Aug. 4, 1967, at 1 and 34.

^{139 42} U.S.C. § 1857c(a) (1963).

¹⁴⁰ See, 42 U.S.C.A. § 1857c (1967).

There is no mention of this charge in either the House or Conference Report. See H.R. REP. No. 278, supra, note 112, and CONF. REP. No. 916, 90th Cong., 1st Sess. (1967) in 1967 U.S. CODE CONG. AND AD. NEWS 1987 [hereinafter cited CONF. REP. No. 916]. It appears that with the establishment of air quality criteria by HEW and air quality standards by the states, the increased burden on the control agencies will be lessened by the abandonment of the 20 per cent ceiling.

¹⁴¹ 42 U.S.C.A. § 18571 (1967).

^{142 42} U.S.C.A. § 1857b-1(c) (1967), amending 42 U.S.C. § 1857b (1963). The original Senate bill (S.780) authorized a total appropriation of \$700 million over a three-year period, 1968-70. The House amendment provided for a total authorization of \$428.3 million. H.R. REP. No. 728, supra, note 112. The conference substitutes adopted the same figures as the House, but revised the amount for each year. CONF. REP. No. 916, supra, note 140, at 1987. However, there is some confusion in the method of appropriation. § 18571 (see note 141 and accompanying text) and the appropriations themselves do not apply to § 1857b(d) relating to the construction of research centers, nor to § 1857 b-1 relating to fuel and vehicular research. The \$125 million is earmarked for § 1857b-1. However, § 1857b(d), added by the 1967 Act, authorizes the construction of research facilities and staffing and equipping them. But since this provision is excluded from § 18571 and there appears to be no other funds available, it is difficult to ascertain how these facilities are to be paid for.

^{143 42} U.S.C.A. § 1857e(a)(1) (1967).

deemed necessary.¹⁴⁴ The underlyying purpose of all these boards and committees is one of encouraging greater participation by all sectors of the society. It would be unrealistic to view this attempt to create a liason between private and public parties as one designed to provide HEW with greater scientific or technological knowledge. Rather, it is aimed at combatting the apathy of various interstate groups and to educate greater segments of society to the magnitude of the air pollution problem.¹⁴⁵

V. AIR QUALITY ACT — MOTOR VEHICLE EXHAUST CONTROL

Ten per cent of all the fuel purchased is never burned. Instead it escapes into the atmosphere in the form of vapor, primarily from the exhaust. More than seven billion gallons of gasoline is wasted into the atmosphere. In 1967 it was estimated that over 90 per cent of the contamination of the air over Los Angeles was caused by motor vehicle emissions. It

In 1966 HEW, pursuant to the Motor Vehicle Control Act of 1965, published standards regulating automobile exhaust emissions. These standards, which limited the amount of carbon monoxide and hydrocarbons from automobile exhaust, were to become effective for the 1968 cars and light trucks. These standards were generally not as stringent as the rigid California standards, and this was the cause of some difficulty.

The 1965 Act contained no specific provision concerning the pre-emption of state air pollution standards. The national motor vehicle standards published in 1966 forced Congress to deal with this question. The Air Quality Act provides for federal motor vehicle emission standards to supersede state emission regulations. ¹⁵⁰

At that time California was the only state that had adopted higher standards than those prescribed by HEW. The proponents of the California standards, despite severe opposition, ¹⁵¹ felt that not only did the

¹⁴⁴ Id. § 1857e(d).

¹⁴⁵ See H.R. REP. No. 827, supra, note 112, at 1963.

¹⁴⁶ N.Y. Times, April 10, 1966, § A, at 27; 1967 Hearings, pt. 1, supra, note 117, at 118.

^{147 1967} Hearings pt. 1, supra, note 117, at 101.

¹⁴⁸ N.Y. Times, March 30, 1966, at 20.

¹⁴⁹ For California standards, see N.Y. Times, Aug. 11, 1966, supra, note 94, at 20. The new federal standards permitted emissions up to 350 parts per million of hydrocarbons, and 2 per cent carbon monoxide for cars of more than 140 cubic inches of cylinder displacement. In cars between 50-100 cubic inches of cylinder displacement, emissions of up to 410 parts per million of hydrocarbons and 2.3 per cent carbon monoxide are permitted. N.Y. Times, March 30, 1966, supra, note 148, at 20.

^{150 42} U.S.C.A. § 1857-6a(a) (1967).

¹⁵¹ The opposition came from many different sources in addition to auto manufacturers. See, Statement of Dean Coston, Dep. under-Sec. HEW, 1967 Hearings pt. 1, supra, note 117, at 115. See e.g., Letter from William Macomber Jr., Assist. Sec. for Cong. Relations, Dept. of State, to Harley O. Staggers, Chairman, Comm. on Interstate and Foreign Commerce in H.R. REP. No. 728, supra, note 112, at 1983-84, where the Dep't. of State objected to a provision permitting

California situation warrant special attention, but that a policy of strict federal pre-emption was inconsistent with the principle that control of air pollution was the "primary responsibility of the States." The advocates of more stringent California standards emerged victorious, and the 1967 Act allows HEW to waive the pre-emption provision upon the finding that the specific state standards are more stringent than the federal standards and that there are "extraordinary and compelling conditions" to warrant waiver. 158

VI. CONCLUSION

Federal legislation with respect to air pollution control has gone through various stages in its evolution. However, air pollution is evolving at an even greater pace. As a result, increased federal action has not been successful in eliminating the problem of increased pollution of the atmosphere.

There are those who believe that since man cannot abruptly halt the forces which pollute the air, the problem will ultimately have to be solved by population control.¹⁵⁴ Any meaningful solutions to the pollution problem would first necessitate the deterioration of political and social barriers which have operated in the past to hinder progress.¹⁵⁵

Apparently, to many, the dangers do not warrant a cut-back in technological and industrial growth. Industrial expansion has long been one of society's primary values, and it would, at this time, be unrealistic to advocate a reduction of our seemingly limitless capacity to produce.

Perhaps increased federal and state activity combined with scientific improvement of control devices will ultimately solve the pollution problem. But, in any event, debate on an ultimate solution will be one of degree, rather than of substance, for a change in the present value system is inevitable if man is ever again to take a breath of fresh air.

Jeffrey Fromson

waiver of § 1857-6a(a) (1967) on the grounds that it would serve as a precedent for future waiver of federal pre-emption and that it might disrupt and effect foreign commerce, especially foreign auto imports and producers.

¹⁵² "Views of John Moss and L. Van Deerlin on S.780," in H.R. REP. No. 728, supra, note 112, at 1985.

^{153 42} U.S.C.A. § 1857-6a(b) (1967). The House Committee felt only California had demonstrated "compelling and extraordinary circumstances." H.R. REP. No. 728, supra, note 112, at 1956. However, it appears that the circumstances were really no more "extraordinary" in California than in other parts of the country. See, note 138, supra. The reason for the exception in the case of California stems from the powerful lobby which fought for stringent California standards and because California was the only state that required such stringent controls.

¹⁵⁴ Dr. J. Lodge in N.Y. Times, March 15, 1966, at 19.

¹⁵⁵ It is alleged that the "hard realities of politics" have delayed the amelioration of the growing air pollution problem. For example, about 90 per cent of all automobiles will not be covered by new car regulations. This 90 per cent consists of automobiles already bought and on the road when the 1968 models came out. This problem will have to be solved by attrition, for control regulations on these cars are too much of a "hot potato politically." N.Y. Times, May 1, 1966, at 1 and 82.