

THE CLEAN AIR AMENDMENTS OF 1970: BETTER AUTOMOTIVE IDEAS FROM CONGRESS

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INTRODUCTION

No subject of domestic concern has received more public attention in recent times than environmental air pollution.¹ Public concern

¹ In 1971, most major U.S. cities are afflicted with some degree of air pollution. At the present time air pollution is essentially an urban phenomenon, occurring when the capacity of the air to assimilate and dilute pollutants reaches saturation. Population and industrial growth, combined with increased dependence upon motor vehicles, have drastically increased the volume and variety of gaseous emissions contaminating the air. The five major classes of pollutants spewed into the atmosphere of the United States at the rate of over 200 million tons per year consist of: carbon monoxide, sulfur dioxide, hydrocarbons, nitrogen oxide and particulate matter. The Department of Health, Education and Welfare (HEW) reports that in 1968 some 102 million tons of carbon monoxide (CO) were emitted in the United States, half of all major pollutants emitted that year.

with air pollution has increased steadily since the first major air pollution "incident" in the Meuse Valley of Belgium in 1930, where smog claimed sixty-three lives and left six thousand ill.² Chemical analysis subsequent to the tragedy disclosed that the air at that time contained some thirty pollutants. The first shocking incident in the United States occurred in 1948 in Donora, Pennsylvania, where an air pollution crisis caused some twenty deaths and affected, in varying degrees of severity, some forty-two percent of the population.³ Over five thousand deaths were attributed to air pollution in London, England, as a result of three air pollution incidents between 1952 and 1962.⁴ Serious air pollution crises have become alarmingly frequent in recent years. In New York, in 1966, one hundred deaths were attributed to air pollution.⁵ Other incidents have occurred in Philadelphia, in 1966, and in St. Louis, in 1969.⁶

Recently, in Chicago, following a period of extremely concentrated pollution resulting from a sustained temperature inversion,⁷ three times more deaths from tracheal bronchitis were reported than

More than half of this CO was produced by automobiles. The following table illustrates emissions during the year 1968:

ESTIMATED NATIONWIDE EMISSIONS—1968*
[In millions of tons per year]

Source	Carbon monoxide	Particulates	Sulfur oxides	Hydrocarbons	Nitrogen oxides	Total
Transportation	63.8	1.2	0.8	16.6	8.1	90.5
Fuel Combustion in Stationary Sources	1.9	8.9	24.4	0.7	10.0	45.9
Industrial Processes	9.7	7.5	7.3	4.6	0.2	29.3
Solid Waste Disposal	7.8	1.1	0.1	1.6	0.6	11.2
Miscellaneous	16.9	9.6	0.6	8.5	1.7	37.3
Total	100.1	29.3	33.2	32.0	20.6	214.2

* Source: National Air Pollution Control Administration (NAPCA), a department of HEW, NAPCA Inventory of Air Pollution Emissions, 1970, 116 Cong. Rec. 16,101 (daily ed. Sept. 21, 1970).

² Newman, *Air Pollution, Current History*, vol. 59, no. 347, July, 1970 at 20 [hereinafter cited as Newman].

³ See Chass & Feldman, *Tears for John Doe*, 27 S. Cal. L. Rev. 349, 356 (1954).

⁴ Hearings on S. 3229, S. 3466, and S. 3546 Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 91st Cong., 2d Sess. 465 (1970) [hereinafter cited as 1970 Senate Hearings].

⁵ *Id.* at 1480.

⁶ *Id.*

⁷ A temperature inversion is a weather pattern in which an air mass remains stationary over a geographical region for a long period of time, trapping pollutants in the air. The air literally becomes stagnant and is not dissipated. The pollutants that pour into the air from the various sources continue to become more concentrated, and hazardous to health, until a wind blows the stagnant air mass away, or until a new air mass, bringing fresh air, moves in. Newman, *supra* note 2, at 20.

had been projected, and the death rate from this cause among children was increased by fifty percent.⁸ Health workers in the field of respiratory diseases are now generally agreed that air pollution causes serious health effects. One expert has commented:

Chronic respiratory disease is now the leading cause of disability among adults in all the industrial parts of northern Europe and is becoming increasingly prevalent in the United States Like chronic bronchitis, cancer, and many other types of pathological manifestations, the multifarious effects of environmental pollutants may not be detected until several decades after the initial exposure.⁹

The potentially lethal effects described in this comment are expected to become increasingly common in large cities, with ten thousand deaths in one crisis predicted for a major west coast city by 1980.¹⁰

A substantial volume of legislation, both federal and state, has been proposed to control this burgeoning menace.¹¹ To date, however, the legislative attempts to ameliorate the problem have proven inadequate, and the threat to the nation's health continues to grow at an alarming rate.¹² The Clean Air Amendments of 1970 represent the most recent federal attempt to deal with the problem.¹³ Compared with previous federal legislation, this Act is the toughest and most controversial anti-pollution law yet enacted by Congress. It has been de-

⁸ 1970 Senate Hearings, *supra* note 4, at 465. A Chicago scientist has estimated that a five-fold reduction in Chicago's average annual sulfur dioxide concentration would reduce the number of deaths from cancer by about 800 per year. *Id.* In March, 1970, HEW reported that in Chicago safe levels of air pollution are exceeded thirty percent of the time. *Id.* at 1025.

⁹ 116 Cong. Rec. 16,231 (daily ed. Sept. 22, 1970) (remarks of Senator Murphy), quoting from Rene Dubos, *Man, Medicine and Environment*.

¹⁰ 1970 Senate Hearings, *supra* note 4, at 1480.

¹¹ For a comprehensive analysis of state antipollution statutes, see generally Comment, *State Air Pollution Control Legislation*, 9 B.C. Ind. & Com. L. Rev. 712 (1968); Symposium on Air Pollution, 1968 Wash. U.L.Q. 203, 232-324 (1968). Concern over the deadly effects of air pollution has grown such that by the fall of 1970 more than 600 anti-pollution bills had been introduced in the 91st Congress. 49 Cong. Dig. 193 (1970). Of these, approximately 160 were anti-air pollution bills, including a large number directed toward establishing automobile emission standards. *Id.* at 224. This is doubtless the highest concentration of congressional attention ever devoted to a single issue in such a short period of time.

¹² There is an emerging pessimism among scientists to the effect that the air pollution problem is attaining such proportions that the nation may not be able to purify the air once it has been permeated by pollution. See Hill, *Air Pollution Grows Despite Rising Public Alarm*, N.Y. Times, Oct. 19, 1969, at 1, col. 3. At the dawn of this decade, the President cautioned the nation: "The 1970's absolutely must be the years when America pays its debt to the past by reclaiming the purity of its air, its waters, and our living environment. It is literally now or never." 116 Cong. Rec. 16,096 (daily ed. Sept. 21, 1970).

¹³ Pub. L. No. 91-604, 91st Cong., 2d Sess. (Dec. 31, 1970) [hereinafter cited as the Clean Air Amendments of 1970]. The Act is, in form, an amendment to the Air Quality Act of 1967, 42 U.S.C. §§ 1857-8571 (Supp. V, 1970).

scribed as "the toughest, most far-reaching environmental legislation ever enacted by Congress."¹⁴

This comment will examine the various important provisions of the 1970 Act and their effectiveness in controlling air pollution. Its specific focus will be upon the Act's controversial provisions imposing new and far-reaching controls upon motor vehicle air pollution.¹⁵ Finally, possible constitutional issues raised by the new motor vehicle provisions will be considered.

I. THE BACKGROUND OF THE 1970 ACT

A. *Previous Federal Air Pollution Legislation*

The federal air pollution control program began in 1955 with a law¹⁶ authorizing the Department of Health, Education and Welfare (HEW) to research the problem and to provide technical assistance to state, city and local governments in their anti-air pollution endeavors.¹⁷ In 1960, Congress authorized the Public Health Service to study the effects of motor vehicle pollution upon health, and ordered the Surgeon General to report to Congress within two years.¹⁸ Public pressure for action to combat the growing problem led to the enactment of the Clean Air Act of 1963.¹⁹ This Act continued federal funding of state air pollution control programs, but more importantly, it also provided for federal enforcement in cases concerning interstate pollution.²⁰ The Act also designated three specific areas for research: control of motor vehicle exhaust emissions,²¹ removal of sulfur from fuels,²² and development of

¹⁴ Boston Globe, Jan. 1, 1971, at 2, col. 1 (quoting Senator Muskie).

¹⁵ The National Society of Professional Engineers testified at the 1970 Senate Hearings that pollution resulting from internal combustion automobile engines "contributes about 64% of all air pollutants on a national average annual basis—80% in Washington, D.C. and 88% in Los Angeles." 1970 Senate Hearings, *supra* note 4, at 114.

¹⁶ Act of July 14, 1955, ch. 360, §§ 1-7, 69 Stat. 322, as amended, 42 U.S.C. §§ 1857-8571 (Supp. V, 1970).

¹⁷ When the first federal legislation was passed in 1955, there were no viable, on-going state anti-pollution programs in existence. There was little interest in the problem of air pollution on the part of the scientific community, and the public generally regarded "air pollution" as meaning dust and smoke. Smog was considered a problem unique to Los Angeles. By late August of 1970, however, concern with the problem had increased to the extent that there were 55 state and territorial programs and 144 local agencies in existence. By the end of 1970 it was expected that all states would have established air pollution control legislation. 116 Cong. Rec. 16,105 (daily ed. Sept. 21, 1970).

¹⁸ Act of June 8, 1960, Pub. L. No. 86-493, 74 Stat. 162. These early federal efforts were limited to researching the problem and to determining means of controlling the growing menace. The underlying rationale of these enactments was that state and local governments had the basic responsibility for dealing with the problem, and that the federal government would provide technical assistance to aid the states in whatever enforcement programs they might individually initiate.

¹⁹ 42 U.S.C. §§ 1857-8571 (1964).

²⁰ 42 U.S.C. § 1857d(c)(1)(A) (1964).

²¹ 42 U.S.C. § 1857e(a) (1964).

²² 42 U.S.C. § 1857b(a)(4) (1964).

air quality criteria.²³ The federal enforcement action was a three-step process: conference, hearing, and, if necessary, court proceedings.²⁴

In 1965, the Clean Air Act was amended to provide for tighter federal control of automotive emissions. All new 1968 and future model vehicles had to be designed or equipped so as to prevent or control pollution.²⁵ HEW was required to establish national standards for automobile exhaust emissions.²⁶ Pursuant to this authority, the Secretary of HEW established progressively stricter emission standards for each model year, beginning with 1968 model vehicles.²⁷ In 1966, the Act was again amended to authorize increased grants to state air pollution control agencies for maintenance of air pollution control programs, equipment and facilities.²⁸

B. *The Air Quality Act of 1967*

The Air Quality Act of 1967²⁹ signalled a major revision in the federal air pollution control program. It set in motion a new *regional* approach to establishing and enforcing federal-state air quality standards. In addition to authorizing added funds for regulatory control programs at the state and local levels,³⁰ the Act required the Secretary of HEW to designate regional "atmospheric areas" across the continental United States.³¹ Next, the Secretary had to designate "air quality control regions" within these atmospheric areas.³² These regions included groups of communities which shared common air pollution problems, irrespective of state boundaries. The Secretary was also required to promulgate air quality criteria for each region, based upon scientific studies and describing the harmful effects of a particular pollutant upon "health and welfare."³³ The Secretary was further required to issue

²³ 42 U.S.C. § 1857b(c) (1964).

²⁴ 42 U.S.C. § 1857d (1964).

²⁵ 42 U.S.C. §§ 1857f-1, 1857f-2(a)(1) (Supp. II, 1967).

²⁶ 42 U.S.C. § 1857f-1 (Supp. II, 1967).

²⁷ 116 Cong. Rec. 16,103 (daily ed. Sept. 21, 1970).

²⁸ 42 U.S.C. § 1857c (Supp. II, 1967).

²⁹ 42 U.S.C. § 1857-857l (Supp. V, 1970).

³⁰ 42 U.S.C. § 1857c (Supp. V, 1970).

³¹ 42 U.S.C. § 1857c-2(a) (Supp. V, 1970). An "atmospheric area" is a section of the country in which climate, meteorology and topography are essentially the same. These factors were chosen as determinative in identifying areas because they determine the capacity of the atmosphere to dilute assimilated pollutants. The Secretary of HEW divided the United States into eight such atmospheric areas.

³² *Id.* The Secretary was to have finished designating ninety such regions by the summer of 1970. But by July, 1970, he had designated only forty of them. 116 Cong. Rec. 16,104 (daily ed. Sept. 21, 1970).

³³ 42 U.S.C. § 1857c-2(b) (Supp. V, 1970). The Department of HEW first issued documents on air quality criteria and control methods for two pollutants, sulfur oxides and particulate matter, in February, 1969. In March, 1970, criteria and control documents were issued for three more pollutants: carbon monoxide, hydrocarbons and photochemical oxidants. Criteria for lead, nitrogen oxides, fluorides and polynuclear organic compounds are to be issued in 1971. In late 1970, HEW was continuing its study of thirty different pollutants to determine their potential effects upon health. Criteria

control technology documents, demonstrating the feasibility, costs and effectiveness of proposed pollution prevention and control techniques.³⁴ The states were then responsible for setting regional air quality standards to limit the levels of the pollutants described in the criteria issued by HEW.³⁵ After developing these standards, the states had to establish comprehensive plans for their implementation.³⁶ Given the time allowances established in the 1967 Act for adopting standards and implementing plans, the process could consume as much as a year and a half;³⁷ and the process of obtaining the Secretary's approval of the plans, required for federal funding, would necessarily consume even more time.³⁸ This entire time-consuming process had to be repeated each time HEW issued criteria and control techniques for a newly-evaluated pollutant. This inordinate waste of time marked one of the major weaknesses of the 1967 Act. As of July, 1970, only seventeen states had submitted standards to HEW, and only ten had their standards approved. More lamentably, however, no implementation plans had been approved by HEW as of September 21, 1970.³⁹ Primary responsibility for enforcement of the standards, once approved by HEW, continued to rest with state and local governments.⁴⁰ However, the Secretary of HEW was empowered to intervene to enforce state standards if the air pollution travelled interstate, and if the offending state was not adequately enforcing its standards.⁴¹ But if the pollution was only intrastate, the Secretary could not act unless requested to do so by the governor of the state.⁴² Provision was also made in the 1967 Act to research air pollution caused by fuel combustion. The Secretary of HEW had the authority to withdraw any fuel from interstate commerce if the manufacturer of the fuel or fuel additive failed to register a statement of its contents with the Secretary.⁴³

The Air Quality Act of 1967 continued federal grants to the states to assist them in developing programs for the inspection and testing of motor vehicle anti-pollution devices.⁴⁴ But the Act provided for federal preemption in the establishment of emission standards for pollutant emissions from *new* motor vehicles.⁴⁵ The states were precluded

documents were to be issued as each pollutant was fully evaluated. See generally 116 Cong. Rec. 16,103-104 (daily ed. Sept. 21, 1970).

³⁴ 42 U.S.C. § 1857c-2(c) (Supp. V, 1970).

³⁵ 42 U.S.C. § 1857d(c) (Supp. V, 1970).

³⁶ *Id.*

³⁷ See 42 U.S.C. § 1857d (Supp. V, 1970).

³⁸ *Id.*

³⁹ 116 Cong. Rec. 16,104 (daily ed. Sept. 21, 1970).

⁴⁰ 42 U.S.C. § 1857d(c) (Supp. V, 1970).

⁴¹ 42 U.S.C. § 1857d(c)(4)(i) (Supp. V, 1970).

⁴² 42 U.S.C. § 1857d(c)(4)(ii) (Supp. V, 1970).

⁴³ 42 U.S.C. § 1857f-6c (Supp. V, 1970).

⁴⁴ 42 U.S.C. § 1857f-6b (Supp. V, 1970).

⁴⁵ 42 U.S.C. § 1857f-6a(a) (Supp. V, 1970). By virtue of § 1857f-6a(b), of the 1967 Act, California was the only state authorized to set standards for *new* motor vehicles. National emission standards for new motor vehicles, applicable first to the 1968 models,

from setting emission standards for new vehicles on the theory that a multiplicity of state standards, differing from one state to another, would make it impossible for the automakers to meet all of them.⁴⁶ Nothing was said in the Act of standards for *old* motor vehicles, presumably leaving the states free to legislate their own standards. Despite the foregoing provisions, however, the 1967 Act, and its 1963 and 1955 predecessors, were generally criticized as being ineffectual in imposing meaningful controls upon air pollution.⁴⁷

C. *The Failings of the 1967 Act*

The criticisms leveled against the 1967 Act basically focused upon the following asserted shortcomings: (1) the cumbersome and time-consuming procedures required for the establishment of pollution standards;⁴⁸ (2) inadequate funding at the federal, state and local levels;⁴⁹ (3) a paucity of skilled personnel to enforce control measures, and the failure to provide for the training of such personnel in sufficient numbers;⁵⁰ (4) organizational problems at the federal level, where air

were promulgated by HEW on March 31, 1966. More stringent national standards for the 1970 model year were promulgated on June 4, 1968, and, on February 10, 1970, the Secretary of HEW published an advance notice of proposed rule making, indicating HEW's intent to adopt even more stringent standards for the 1973 and 1975 model years. 1970 Senate Hearings, *supra* note 4, at 1639. .

⁴⁶ Currie, *Motor Vehicle Air Pollution: State Authority and Federal Pre-emption*, 68 Mich. L. Rev. 1083, 1085 (1970) [hereinafter cited as Currie].

⁴⁷ Numerous writers have traced the development of air pollution control laws in the United States. For comprehensive analyses of both federal and state laws, and the relative impact of those laws, see Currie, *supra* note 46; O'Fallon, *Deficiencies in the Air Quality Act of 1967*, 33 Law & Contemp. Prob. 275 (1968); Symposium on Air Pollution, 1968 Wash. U.L.Q. 205, 232-324 (1968); Comment, *Air Pollution, Pre-emption, Local Problems and the Constitution—Some Pigeonholes and Hatracks*, 10 Ariz. L. Rev. 97, 104-06 (1968); Cassell, *The Health Effects of Air Pollution and Their Implications for Control*, 33 Law & Contemp. Prob. 197 (1968).

⁴⁸ See discussion on p. 576 *supra*.

⁴⁹ The 1967 Act authorized expenditures of up to \$394 million for a five-year research and development program for the control of sulfur oxide emissions from stationary sources—\$215 million to be spent between 1968 and 1970. Yet, in this three-year period, the estimated actual expenditures totalled only \$82 million—\$133 million below the authorized amount. Funds were provided also to stimulate research and development of required technology. This research and development effort has been severely underfunded. 116 Cong. Rec. 16,214 (daily ed. Sept. 22, 1970). State and local governments have been equally unwilling to spend the requisite amounts for air pollution control. For a state-by-state analysis of state expenditures, and federal assistance for the funding of state, local and regional air pollution control programs as of January 1, 1970, see 1970 Senate Hearings, *supra* note 4, at 443-46.

⁵⁰ In 1967, it was estimated that the staff of the National Air Pollution Control Administration (NAPCA) of HEW would have to increase to 1,900 in fiscal 1970 if the Air Quality Act of 1967 were to be adequately implemented. Yet, as of May 1, 1970, NAPCA had only 971 staff members. 116 Cong. Rec. 16,214 (daily ed. Sept. 22, 1970). The 1970 HEW report to the Congress, entitled "Manpower and Training Needs for Air Pollution Control," indicated that most state air pollution control agencies are also understaffed. Recruitment of competent personnel is difficult. The biggest problem is the low compensation paid by state and local agencies. Typical salaries fall 20% to 50% below the median paid by industry for comparable positions. The HEW Report

pollution had not been accorded high priority;⁵¹ and (5) failure on the part of the Department of HEW to perform its duties adequately under the 1967 Act.⁵² Perhaps most disappointing was HEW's failure to interpret properly the congressional intent underlying the new motor vehicle testing provision of the 1967 Act.⁵³ Under this provision the Department of HEW had the power to test new motor vehicles to assure their compliance with established national emission standards. The provision read as follows:

(a) Upon application of the manufacturer, the Secretary shall test, or require to be tested, *in such manner as he deems appropriate*, any new motor vehicle or new motor vehicle engine submitted by such manufacturer to determine whether such vehicle or engine conforms with the regulations prescribed under section 1857f-1 of this title. If such vehicle or engine conforms to such regulations the Secretary shall issue a certificate of conformity, upon such terms, and for such period not less than one year, as he may prescribe.

(b) Any new motor vehicle or any motor vehicle engine sold by such manufacturer which is in all material respects substantially the same construction as the test vehicle or engine for which a certificate has been issued under subsection (a), of this section, shall for the purposes of this chapter be deemed to be in conformity with the regulations issued under section 1857f-1 of this title.⁵⁴ (Emphasis added.)

However, the Department of HEW interpreted this provision to mean that it could test only a prototype of the vehicle or vehicle engine submitted by the manufacturer, and not, as the Congress intended, to test vehicles coming off the assembly line or to require any additional tests the Secretary deemed appropriate. Senator Muskie castigated the HEW representatives at the 1970 Hearings for their failure to exercise

estimates that by 1974 state and local agencies will need 8,000 additional personnel in order to implement the Federal Act adequately—an increase of 300% over the number currently employed in these programs. 116 Cong. Rec. 16,105 (daily ed. Sept. 21, 1970).

⁵¹ Indicative of this low priority status are the funding and manpower statistics set forth in notes 49 and 50 supra.

⁵² See note 32 supra. In addition to failing to designate the requisite ninety air quality regions by July, 1970, the Department of HEW failed to publish within a reasonable time criteria for the five identified pollutants, as required under the 1967 Act. See 42 U.S.C. § 1857c-2(b) (Supp. V, 1970); 1970 Senate Hearings, supra note 4, at 1188. In addition, the Secretary of HEW did not utilize the power granted to him under 42 U.S.C. § 1857f-6c to gather information regarding fuels and fuel additives. 1970 Senate Hearings, supra note 4, at 483, 1044. The Secretary assessed no penalties for violations of 42 U.S.C. § 1857f-2 (Supp. V, 1970), the "Prohibited Acts" Section of the 1967 Act. 1970 Senate Hearings, supra note 4, at 380. The penalty provided was a \$1,000 fine. See 42 U.S.C. § 1857f-4. (Supp. V, 1970). The only enforcement action taken by the Secretary, however, was the obtaining of a permanent injunction in 1969 to prevent the illegal importation of new motor vehicles. 1970 Senate Hearings, supra note 4, at 380.

⁵³ 42 U.S.C. § 1857f-5 (Supp. V, 1970).

⁵⁴ Id.

their full automobile inspection power.⁵⁵ The unfortunate consequence of HEW's narrow interpretation of its powers was that the testing of prototypes failed utterly in forcing the auto industry to comply with the national emission standards established under the 1965 and 1967 Acts.⁵⁶ A study of vehicles on the road conducted by HEW in November, 1969, showed that more than fifty percent of the vehicles tested failed to meet either the hydrocarbon or carbon monoxide standard, and that for one model vehicle, more than eighty percent of the vehicles tested failed one or more tests.⁵⁷ This discrepancy between the average emission rates of the prototypes submitted by the automakers, and the average emission rates of the vehicles in the hands of the public has created a deplorable situation. It is estimated that air quality in 1985 will be twenty-five percent higher in levels of hydrocarbons, thirteen percent higher in carbon monoxide, and twenty-five percent higher in oxidant concentrations than it would have been if HEW had not permitted this discrepancy in emission rates between 1968 and 1970.⁵⁸

The Air Quality Act of 1967 was clearly an inadequate and ineffective measure to cope with the growing pollution problem. In addition to the shortcomings noted, however, the Act also suffered from inadequate enforcement provisions. The federal government had no jurisdiction to abate pollution from stationary sources within a state unless such pollution endangered the health and welfare of citizens in another state, that is, unless it created an "interstate" problem. If the air pollution occurred solely within the boundaries of a single state, the federal government was powerless to intervene, unless the governor of such state requested federal enforcement assistance.⁵⁹ Apparently no governor had requested such aid since the passage of the 1967 Act.⁶⁰ Even where the federal government did have jurisdiction to act, the only court action which could be taken to check pollution from stationary sources was a proceeding for an injunction.⁶¹ The only remedy for

⁵⁵ Hearings on S. 3229, S. 3466, and S. 3546 Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 91st Cong., 2d Sess. 167-69, 362-64, 371-72, 1226 (1970) [hereinafter cited as 1970 Senate Hearings].

⁵⁶ See text accompanying note 27 *supra*.

⁵⁷ 1970 Senate Hearings, *supra* note 55, at 363.

⁵⁸ *Id.* at 372. The language in the 1970 Act's version of the auto inspection provision, and that of the Senate Committee Report and House-Senate Conference Report, clarify the inspection power to require assembly line testing of individual vehicles. Clean Air Amendments of 1970 § 206; S. Rep. No. 91-1196, 91st Cong., 2d Sess. 28 (1970); Conference Report, H.R. Rep. No. 91-1783, 91st Cong., 2d Sess. 50-51 (1970).

⁵⁹ 42 U.S.C. § 1857d(c)(4)(ii) (Supp. V, 1970).

⁶⁰ 1970 Senate Hearings, *supra* note 55, at 389. The states appear reluctant to request such assistance even in the face of strong citizen pressure to do so. For example, the citizens of West Virginia made numerous appeals to their Governor to request aid in abating pollution allegedly caused by Union Carbide Corporation, but their pleas were fruitless. See *West Virginians Appeal for Air Pollution Abatement*, N.Y. Times, Oct. 11, 1970, at 42, col. 1. The decision on the part of a state to refrain from taking action may well be influenced by political and economic pressure. See discussion on p. 580 *infra*.

⁶¹ 42 U.S.C. § 1857d(k) (Supp. V, 1970).

non-compliance was the court's contempt power, since the 1967 Act provided no fines for noncompliance by a *stationary source* polluter.⁶²

Placing the authority for establishing air quality standards with the states also weakened the 1967 Act. Few states had the expertise, manpower or funds essential for the development of realistic standards. In all, only ten states' standards had been approved by HEW as of late September, 1970, and no state implementation plan had been approved by HEW.⁶³ There was no authority for the states to enforce proposed standards until their implementation plans were approved.⁶⁴ Another weakness inherent in relegating the establishment of standards to the states derived from the fact that large industries in a state could bring to bear substantial political pressure against proposed standards. Given the importance of resident industries to a state's tax base, few state governments would gamble on the possibility that setting strict standards would result in valuable industries moving to another state.⁶⁵ Finally, the federal preemption of new motor vehicle emission standards precluded action by those states with severe automobile pollution problems.⁶⁶ Yet, as discussed above, federal (HEW) inspection and enforcement of *new* motor vehicle standards was a failure,⁶⁷ and the 1967 Act provided no federal enforcement power to help the states deal with the millions of used vehicles on the road—the most serious source of automobile air pollution. The combination, then, of cumbersome procedures for the control of air pollution, the absence of adequate funding, ineffective enforcement provisions, and the unwillingness on the part of the Department of HEW to utilize fully its powers of inspection, all contributed to the failure of the 1967 Act to stimulate any meaningful progress in abating the growing problem of air pollution.⁶⁸

II. THE CLEAN AIR AMENDMENTS OF 1970

With the enactment of the Clean Air Amendments of 1970, the Congress has again sought to provide the nation with its first truly effective anti-air pollution legislation. The 1970 Act is divided into four titles: Title I concerns air pollution caused by stationary sources; Title II concerns moving source, or vehicular, air pollution; Title III embodies a variety of "general" provisions, including a controversial "citizen suits" provision and a judicial review provision; Title IV con-

⁶² Id. Fines were provided only for violations of the motor vehicle emissions subchapter. See 42 U.S.C. § 1857f-4 (Supp. V, 1970).

⁶³ 116 Cong. Rec. 16,105 (daily ed. Sept. 21, 1970).

⁶⁴ 42 U.S.C. § 1857d(c) (Supp. V, 1970); 116 Cong. Rec. 16,105 (daily ed. Sept. 21, 1970).

⁶⁵ 1970 Senate Hearings, *supra* note 55, at 115.

⁶⁶ See Currie, *supra* note 46, at 1087.

⁶⁷ See discussion on pp. 577-79 *supra*.

⁶⁸ For additional insight into the ineffectiveness of the 1967 Act, see generally O'Fallon, Deficiencies in the Air Quality Act of 1967, 33 Law & Contemp. Prob. 275 (1968); Currie, *supra* note 46.

cerns initial federal research efforts into the worsening problem of noise pollution.

The most controversial provisions of the 1970 Act deal with the controls placed upon air pollution caused by motor vehicles; these provisions will be considered in detail in the succeeding discussion. However, the Act also includes numerous other far-reaching changes in the attack on air pollution. Although this comment is intended to focus primarily upon the provisions affecting motor vehicles, some of the other aspects of the Act warrant mention and will be discussed.

A. *The Underlying Philosophy of the Act*

The 1970 Act represents a radical departure in legislative approach to the problem of air pollution. Rather than following the past procedure of establishing air pollution standards commensurate with existing technological feasibility,⁶⁹ Congress has shifted to a policy which forces technology to catch up with the newly promulgated standards. This shift in legislative approach can be seen as emerging in the Senate Committee Report on the 1967 Act, and as attaining fruition in Senator Muskie's statement introducing the 1970 Act. The Committee Report on the 1967 Act cautioned that:

Considerations of technology and economic feasibility, while important in helping to develop alternative plans and schedules for achieving goals of air quality, should not be used to mitigate against protection of the public health and welfare.⁷⁰

The following excerpt from Senator Muskie's remarks introducing the Senate version of the Clean Air Amendments of 1970 crystallizes this rationale, and epitomizes the underlying philosophy of the 1970 Act:

The first responsibility of Congress is not the making of technological or economic judgments—or even to be limited by what is or appears to be technologically or economically feasible. Our responsibility is to establish what the public interest requires to protect the health of persons. This may mean that people and industries will be asked to do what seems to be impossible at the present time. But if health is to be protected, these challenges must be met.⁷¹

The 1970 Act could conceivably force automobile manufacturers, and other industries as well, either to reduce harmful emissions drastically, or to cease operating their plants.⁷² The essential thrust of the new

⁶⁹ 42 U.S.C. § 1857f-1(a) (Supp. V, 1970).

⁷⁰ 116 Cong. Rec. 16,091 (daily ed. Sept. 21, 1970).

⁷¹ *Id.*

⁷² Senator Muskie advised the Senate that:

Detroit has told the nation that Americans cannot live without the automobile.

This legislation would tell Detroit that if that is the case, they must make

Act is to establish 1975 deadlines for the adoption and enforcement of national air quality standards adequate to protect the public health and applicable to all industries. A newly created federal agency, the Environmental Protection Agency (EPA), has assumed from the Department of HEW all responsibilities and powers granted under the Clean Air Amendments of 1970.⁷³

B. Provisions Affecting Stationary Sources of Air Pollution

1. Research Programs and Funding

The 1970 Act continues the emphasis upon research and grants reflected in the 1967 Act,⁷⁴ which accelerated research relating to all types of combustible fuels, and to motor vehicles. The 1970 Act provides increased emphasis upon research programs designed to: (a) remove potential pollutants from fuels prior to combustion;⁷⁵ (b) develop improved methods of controlling emissions from the evaporation of fuels;⁷⁶ (c) improve knowledge of the effects of air pollution on health, and on all elements of the environment;⁷⁷ and (d) develop low emission

an automobile with which Americans can live.

Id. at 16,092.

⁷³ Clean Air Amendments of 1970 tit. IV, § 15; 116 Cong. Rec. 16,107 (daily ed. Sept. 21, 1970). This provision was offered as an amendment on the Senate floor. For discussion preceding its adoption by the Senate, see 116 Cong. Rec. 16,217 (daily ed. Sept. 22, 1970). The Reorganization Plan effecting this transfer of responsibilities and powers from HEW to the new Environmental Protection Agency became law on October 3, 1970. CCH Clean Air & Water News, No. 41, at 2 (Oct. 9, 1970). The new agency is charged with the administration and enforcement of all the federal anti-pollution programs. In September, 1970, there were an estimated 90 to 100 federal programs and agencies concerned with environmental pollution. 49 Cong. Dig. 198 (1970). Reorganization was clearly needed to coordinate efforts and eliminate needless multiplication of expenses. The Department of HEW had grown too large and had become too burdened with other programs to administer the fight on pollution effectively, as illustrated by its record under the 1967 Act. See discussion on pp. 577-79 *supra*. As a result of the Reorganization Plan, the EPA will absorb the Federal Water Quality Administration from the Department of the Interior; the National Air Pollution Control Administration (NAPCA) from the Department of HEW; the Pesticides Registration Authority from the Department of Agriculture; and numerous other smaller federal agencies. The Environmental Protection Agency is not to be confused with the other major federal pollution agency, the Council on Environmental Quality, an advisory board without enforcement powers which is primarily responsible for advising the President on environmental pollution policy matters. Boston Globe, Nov. 7, 1970, at 38, col. 2.

⁷⁴ Clean Air Amendments of 1970 §§ 103-05. The 1967 Act had authorized appropriations of \$170 million for the three-year period from 1968 through 1970. 42 U.S.C. § 1857b-1(c) (Supp. V, 1970). The 1970 Act authorizes \$350 million for research on air pollution in relation to fuels and low-emission alternatives to the existing internal combustion engine, and a total of \$1.1 billion to implement the Act for the three-year period from 1971 through 1973. Clean Air Amendments of 1970 §§ 103, 104, 212, 316, 403. Most of the funds authorized under the 1967 Act, however, were never expended. See the statistics in notes 49 and 50 *supra*.

⁷⁵ Id. § 104(a)(1)(B).

⁷⁶ Id. § 104(a)(1)(C).

⁷⁷ Id. § 103(f)(1)(A), (B). Section 103(f)(3) of the Act also authorizes the EPA to contract with private industry for research on the effects of air pollution, and provides \$15 million for such contracts.

alternatives to the internal combustion engine.⁷⁸ In addition, the Act authorizes funds for the development of methods to produce new or synthetic low-emission fuels for both stationary and moving fuel-burning needs.⁷⁹ Most importantly, the 1970 Act continues the policy, established in the 1967 Act, of authorizing the EPA Administrator to grant considerable federal assistance to the states to establish or improve regional air quality programs.⁸⁰

2. Air Quality Control Regions: Criteria, Standards and Goals

The 1970 Act retains the concept of federal "air quality control regions" as the geographical subdivisions of the air pollution control effort. The EPA Administrator is required to designate additional regions within ninety days after enactment of the Act.⁸¹ Once all the air quality control regions covering the continental United States are established, the Act requires that the Administrator publish in the Federal Register, within thirty days of enactment, additional air quality criteria and information on techniques for the control of newly evaluated pollutants.⁸² Section 108 requires the EPA Administrator to begin publishing lists of harmful pollutants within thirty days of the enactment of the Act, and requires him to issue air quality criteria for pollutants so listed within twelve months of the date of publication.⁸³ EPA reports on control techniques will be released to the states simultaneous to the publication of new air quality criteria.⁸⁴ The states can then develop programs to implement "ambient air quality" standards⁸⁵

⁷⁸ Id. §§ 104(a)(2)(B), (C), 212.

⁷⁹ Id. § 104(a)(1)(E).

⁸⁰ Section 105(a) of the Clean Air Amendments of 1970 authorizes the EPA Administrator to provide up to two-thirds of the costs of "planning, developing, establishing or improving" and up to one-half of the cost of maintaining state air quality control programs serving a single municipality; or up to 75% of planning costs and up to 60% of the maintenance costs for programs serving two or more municipalities. The amounts provided under the 1967 Act were 67% and 50%, respectively. 42 U.S.C. § 1857c(a)(1) (Supp. V, 1970). Under § 106 of the 1970 Act, the Administrator is authorized to provide one hundred percent of planning program costs for two years, and 75% of such costs thereafter, for the purpose of developing implementation plans for any *interstate* air quality control region comprised of several states. While the increased funds made available to the states to assist them in establishing and maintaining *intrastate* pollution control program is salutary, some less prosperous states will still have serious financial difficulties in establishing and operating viable pollution control programs. Such states should receive more, if not all, of the necessary funds from Congress. Illustrative of states which might be unable to establish an on-going pollution control program even with the aid authorized under the 1970 Act is the near-bankrupt state of New Hampshire. See Boston Globe, Nov. 26, 1970, at 3, col. 5.

⁸¹ Clean Air Amendments of 1970 § 107(c).

⁸² Id. § 108(a). See discussion in note 33 and accompanying text *supra*.

⁸³ Id. § 108(a)(2).

⁸⁴ Id. § 108(b).

⁸⁵ The Senate Committee Report accompanying the Senate version of the Act defined "ambient air quality" as follows:

Ambient air quality is sufficient to protect the health of [particularly sensitive citizens such as emphysematics] whenever there is an absence of adverse effect on the health . . . from exposure to the ambient air. An ambient

on a regional basis, if they have not already done so under the 1967 Act.⁸⁶ The EPA Administrator will also issue periodic reports on air pollutant control techniques to assist the states' control efforts.⁸⁷

An important change in the 1970 Act requires the EPA, and not each individual state, to establish "primary" and "secondary" national air quality standards covering those pollutants for which air quality criteria have been issued.⁸⁸ The states must then implement, as a minimum, the federally-designated national standards, although each state does have authority to promulgate stricter standards if it wishes to do so.⁸⁹ A major flaw in the 1967 Act derived from the fact that the states

air quality standard, therefore, should be the maximum permissible ambient air level of an air pollution agent or class of such agents (related to a period of time) which will protect the health of any group of the population.

S. Rep. No. 91-1196, 91st Cong., 2d Sess. 10 (1970). This decidedly general definition attempted to convey the basic premise that national standards must be such that the attainment and maintenance thereof would protect the health of all persons. The House-Senate Conference Committee, however, modified the Senate definition of an ambient air quality standard by dividing standards into "primary" and "secondary" standards. Clean Air Amendments of 1970 § 109(a). Primary standards are defined as those "requisite to protect the public health." Id. § 109(b)(1). Secondary standards are those "requisite to protect the public welfare." Id. § 109(b)(2). The Administrator is required to establish two standards for each pollutant, one based upon public health, the other upon public welfare, both of which the states must then implement in their control programs. The distinction between "public health" and "public welfare" is an economic one. Section 302(b) of the 1970 Act indicates that:

All language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility and climate damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.

Primary standards must be stringent enough to protect the health of even the most sensitive citizens, as indicated by the quotation from the Senate Committee Report *supra*. Secondary standards, it would appear, must be even more stringent in order to protect virtually everything other than public health. Presumably, one air quality standard for each pollutant, as stringent as technologically possible, would have been sufficient to protect both public health and public proprietary or other interests from the effects of air pollution. If the secondary standards were to be interpreted as being less stringent than the primary standards, and the Act were to be interpreted as allowing the states to enforce the secondary rather than the primary standards, then clearly public health considerations would be frustrated and rendered subservient to proprietary considerations. But if, as is more logical, the secondary standards are to be tougher than the primary standards, the result would be the recognition that standards adequate to protect health may be inadequate to protect everything else. For example, a pollutant such as particulate matter, complying with a "public health" standard, could continue to be extremely destructive to animals, or could adversely affect weather, visibility, personal comfort, etc. For this type of a pollutant, then, a stricter standard than one based upon public health would be needed. That secondary standards are meant to be stricter may also be inferred from the fact that the Act allows additional time for states to implement them. Section 110 of the Act, discussed *infra*, requires immediate implementation of primary standards, but requires that secondary standards be implemented only within "a reasonable time." § 110(a)(2)(A)(ii).

⁸⁶ See discussion on p. 576 *supra*.

⁸⁷ Clean Air Amendments of 1970 § 108(c), (d).

⁸⁸ Id. § 109(a).

⁸⁹ Id. § 116.

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were left to shift for themselves in promulgating air quality standards for each region. Lacking in expertise, manpower and funds, and pressured by the formidable political influence wielded by large tax-paying industries, the states were in no position to establish such standards. Consequently, few states had complied with the 1967 Act by the time the 1970 Act was passed.⁹⁰ Although the states now have the benefit of federally-established ambient air quality standards, they still remain primarily responsible for implementing and enforcing these standards within their borders.⁹¹

The 1970 Act also provides for "new source" performance standards, designed to insure that newly built stationary pollution sources will be designed, built, equipped, operated and maintained so as to reduce pollution emissions to a minimum.⁹² The 1970 Act recognizes that pollution agents and combinations of agents fall into three general categories:

1. those emitted from stationary or moving sources and which are detectable;⁹³
2. those designated as hazardous to the health of persons;⁹⁴ and
3. those pollutants which are not emitted in large quantities, which are not detectable with available technology, but which are a serious threat to health.⁹⁵

⁹⁰ See discussion on p. 580 *supra*. While it is lamentable, it is not surprising that only ten states' standards and no state implementation plans had been approved by HEW as of late September, 1970. In any event, the states should benefit greatly by being required to adopt, as a minimum, the federally promulgated air quality standards.

⁹¹ Clean Air Amendments of 1970 § 107(a).

⁹² Section 111 of the Clean Air Amendments of 1970 provides the EPA Administrator power to prohibit and to suspend construction and operation of new stationary sources of pollution, unless they comply with the pollution control standards promulgated by the EPA Administrator pursuant to § 111. New stationary sources expected to be subjected to the provisions of § 111 include: cement manufacturing, coal cleaning operations, coke by-product manufacturing, cotton ginning, ferroalloy plants, grain milling and handling operations, gray iron foundries, iron and steel operations, nitric acid manufacturing, nonferrous metallurgical operations, petroleum refining, phosphate manufacturing, phosphoric acid manufacturing, pulp and paper mill operations, rendering plants, sulfuric acid manufacturing, soap and detergent manufacturing, municipal incinerators and steam electric power plants. 116 Cong. Rec., 16,108 (daily ed. Sept. 21, 1970).

⁹³ Clean Air Amendments of 1970 §§ 108, 109.

⁹⁴ *Id.* § 112. This is a new section, devoted exclusively to emission standards for "hazardous air pollutants." Such a pollutant is one "to which no ambient air quality standard is applicable and which in the judgment of the Administrator may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness." *Id.* § 112(a)(1). In short, this refers to a type of pollutant so dangerous to health that the EPA Administrator, after appropriate procedures, may prohibit it entirely or severely restrict it. Pollutants expected to be subject to this section include asbestos, cadmium, mercury and beryllium. S. Rep. No. 96-1196, 91st Cong., 2d Sess. 20 (1970).

⁹⁵ Clean Air Amendments of 1970 § 112 sets forth the procedures to be followed to control those substances which may eventually be designated "hazardous agents," discussed in note 94 *supra*, or subject to the ambient air quality standards (as carbon

Enforcement of the standards set for categories (2) and (3) is vested in the EPA Administrator, although he may delegate this power to the states under certain circumstances.⁹⁶ Enforcement of the standards governing category (1) rests primarily with the states,⁹⁷ with intervention power reserved to the EPA Administrator for pollution originating from stationary sources;⁹⁸ and enforcement of the standards applicable to pollution emanating from new motor vehicles rests primarily with the Administrator.⁹⁹

3. *Implementation Plans and Enforcement*

a. *Plans.* The mere existence of air quality standards, or of specific pollution emission standards, whether national or regional, will have little effect on air quality without effective implementation through a strict control program. Accordingly, the implementation phase of the 1970 Act¹⁰⁰ is vital to attaining the air quality goals sought to be achieved through the Act. Section 110 of the 1970 Act outlines the procedures for the implementation of state control programs. First, the EPA Administrator must promulgate national primary and secondary ambient air quality standards for known pollutants.¹⁰¹ Within nine months thereafter, the state must submit its implementation plan to the EPA for approval.¹⁰² Before the state adopts an implementation plan, it must hold public hearings¹⁰³ so that the residents of the affected area may participate in setting air quality standards for their region.¹⁰⁴ Within four months of such submission, the Administrator shall approve or disapprove the implementation plan or each portion thereof.¹⁰⁵ The

monoxide now is), depending upon the criteria report for each such substance. Included as pollutants under this section are arsenic, chlorine gas, hydrogen chloride, copper, manganese, nickel, vanadium, zinc, barium, boron, chromium, selenium, pesticides and radioactive substances. S. Rep. No. 91-1196, 91st Cong., 2d Sess. 18 (1970).

⁹⁶ Clean Air Amendments of 1970 § 112(d)(1).

⁹⁷ *Id.* §§ 107, 110, 111.

⁹⁸ Sections 113 and 303 define the intervention powers of the Administrator. For a discussion of federal enforcement power regarding intrastate and interstate pollution from stationary sources see discussion on pp. 589-91 *infra*.

⁹⁹ Clean Air Amendments of 1970 §§ 202, 211(c)(4), 233. The general federal preemption provision contained in the 1967 Act was not changed by the Clean Air Amendments of 1970. See 42 U.S.C. § 1857f-6a (Supp. V, 1970).

¹⁰⁰ Clean Air Amendments of 1970 § 110.

¹⁰¹ *Id.* § 109.

¹⁰² *Id.* § 110(a)(1).

¹⁰³ *Id.*

¹⁰⁴ The 1970 Senate Hearings recognized the importance and the right of the public to be heard at each step of the pollution abatement process, from establishing air quality standards and emission levels for pollutants, to citizens' court action to compel their enforcement. See the discussion of the important new citizen suits provision under the 1970 Act on pp. 612-16 *infra*.

¹⁰⁵ Clean Air Amendments of 1970 § 110(a)(2). A plan submitted to the EPA by a state will not be approved by the Administrator unless it includes the following measures: provision to achieve air quality standards within three years from the date of implementation of the plan; specific emission standards for pollutants, and schedules of compliance; effective procedures to control pollution sources, including land use and

Administrator is required to *impose* an implementation plan, or a portion thereof, upon a state if: (1) the state fails to submit an implementation plan for any national ambient air quality primary or secondary standard within the time prescribed; or (2) the plan, or any part of it, submitted by the state is determined by the Administrator not to conform to federal requirements; or (3) the state fails, within sixty days after notification by the Administrator, to revise an implementation plan as required by section 110(a)(2)(H).¹⁰⁶ If the state failed to hold the required public hearings regarding the implementation plan, the Administrator shall provide an opportunity for a hearing within that state. Within six months after the date required for submission of the implementation plan, the Administrator shall design a plan for a state, unless the state has adopted and submitted a plan acceptable to the Administrator.¹⁰⁷ The state must then enforce this implementation plan according to the 1970 Act.

Provision is made for a state to obtain extensions of the timetable deadlines in connection with submitting implementation plans to the Administrator. At his discretion, the Administrator may grant a state an extension of up to eighteen months to submit a plan or portion thereof which implements a national *secondary* ambient air quality standard.¹⁰⁸ In addition, upon application of a governor of a state at the time of the submission of any plan implementing a national *primary* ambient air quality standard, the Administrator may extend by two years the period within which a state must achieve compliance with a primary standard.¹⁰⁹ It should be noted that a state may adopt air quality standards more stringent than those proposed by the EPA.¹¹⁰ If the state has adopted an implementation control program and *later* comes to the conclusion that a particular polluter will be unable to

air and surface transportation controls; a procedure for review, prior to construction or modification, of the location of new stationary sources of pollution; requirements for installation of monitoring equipment and periodic pollution reports by owners or operators of stationary sources of pollution; and provision for periodic pollution inspection and testing of motor vehicles. Id.

¹⁰⁶ Id. § 110(c).

¹⁰⁷ Id.

¹⁰⁸ Id. § 110(b).

¹⁰⁹ Id. § 110(c). Under this section compliance with primary standards is normally required within a three-year period. The two-year extension will be granted to the state if the Administrator determines that:

(A) One or more emission sources (or classes of moving sources) are unable to comply with the requirements of such plan which implement such primary standard because the necessary technology or other alternatives are not available or will not be available soon enough to permit compliance within such three year period, and

(B) the State has considered and applied as a part of its plan reasonably available alternative means of attaining such primary standard and has justifiably concluded that attainment of such primary standard within the three years cannot be achieved.

Id. § 110(e)(1).

¹¹⁰ Id. § 116.

achieve compliance at least with the federally-promulgated minimum standards within the three-year deadline established under Section 110,¹¹¹ the Act permits the governor of the state to petition the EPA Administrator for a one-year extension.¹¹² However, this extension may be granted only if the Administrator finds that:

1. Good faith efforts were made to comply with the requirements of the implementation plan;
2. The source of pollution is unable to comply with these requirements because the necessary technology or other alternative methods of control are not available or were not available for a sufficient period of time;
3. Available alternative operating procedures and interim control measures have served to reduce the impact of such source on the public health; and
4. That the continued operation of such source is essential to national security or to the public health or welfare.¹¹³

It was the intent of the Senate Committee that an extension should be granted only as a "last alternative."¹¹⁴ No provision is made for a renewal of the one-year extension.¹¹⁵ The decision of the Administrator is subject to judicial review by the U. S. Court of Appeals for the circuit which includes the state in question.¹¹⁶

Under the 1970 Act it is conceivable that some thirty-nine months could elapse before a state has a program to implement secondary (public welfare) standards,¹¹⁷ and some six years could elapse after

¹¹¹ *Id.* § 110(a)(2)(A)(i).

¹¹² Clean Air Amendments of 1970 § 110(f). Consequently, a state could first obtain a two-year extension of the three-year deadline for compliance with primary air quality standards, established under § 110(e), and then later could obtain still another one-year extension if a pollution source within the state has difficulty meeting the standards. Accordingly, a total of six years could elapse, following the EPA Administrator's acceptance of the state's plan, before the state would have to comply with its primary (public health) air quality standards.

¹¹³ *Id.* § 110(f)(1)(A), (B), (C), (D).

¹¹⁴ S. Rep. No. 91-1196, 91st Cong., 2d Sess. 15 (1970).

¹¹⁵ The Senate version of section 110, dealing with implementation of control programs by the states, had provided for renewable one-year extensions during which a state, or more precisely, polluters in the state, could have procrastinated to avoid compliance with the program, to the detriment of the health and welfare of residents of the state. The inclusion of the provision allowing unlimited renewable one-year extensions was a flaw in the Senate bill which the House-Senate Conference averted. But because a state can apply for a two-year extension of the three-year deadline at the time it submits its implementation plan (see note 109 *supra*), the states are already assured of a minimum five-year period during which compliance with federal air quality standards may be postponed. This delay period may be increased by an additional year if a given source of pollution within the state encounters difficulty in complying with federal requirements. See note 112 and accompanying text *supra*.

¹¹⁶ Clean Air Amendments of 1970 § 110(f)(2). The court has jurisdiction to affirm or set aside the Administrator's decision in whole or in part. *Id.*

¹¹⁷ A state has *nine* months after the Administrator promulgates primary and secondary national air quality standards to submit an implementation plan to the

acceptance of a state plan, before the state must achieve its primary (public health) standards.¹¹⁸ A major weakness of the 1967 Act—the incorporation of inordinately time-consuming procedures—does not appear to have been remedied in the 1970 Act. Successful enforcement of pollution laws depends upon the rapidity with which uncooperative polluters are enjoined or otherwise penalized. The pyramid of extensions permitted under the 1970 Act severely weakens its effectiveness. The time period for implementation of state plans should have been limited to twelve months at the maximum since the present provisions will only encourage procrastination through extensive procedural delay. The allowance of these procedural delays is a serious flaw in the 1970 Act.

b. *Enforcement.* Under the 1967 Act enforcement procedures were cumbersome and basically ineffective.¹¹⁹ As noted earlier, state and local governments did not adequately enforce the standards, and federal enforcement power was limited essentially to interstate problems.¹²⁰ As a result, no level of government implemented the Act to its full potential. Accordingly, important changes in the enforcement procedures were included in the 1970 Act. State and local governments retain primary responsibility and authority to enforce the air quality standards within their respective regions. But federal enforcement power has been expanded to insure that the states do their job.¹²¹ Eliminated are the 1967 Act's conference and hearing requirements before federal abatement proceedings could begin.¹²² Now the EPA Administrator can issue orders requiring abatement action by state

Administrator. Id. § 110(a)(1). The latter has *four* months within which to approve or disapprove the submitted plan. Id. § 110(a)(2). At his discretion, the Administrator may grant an *eighteen* month extension for the submission of a plan which implements a secondary air quality standard. Id. § 110(b). If the plan when finally submitted is not acceptable, the Administrator must give the state *two* months to revise the plan. Id. § 110(c)(3). If the state fails to revise the plan, the Administrator is then given another *six* months after the expiration of the final date of submission to impose a plan upon a state. Id. Thus, thirty-nine months could elapse before a state even has a control program to implement.

¹¹⁸ See note 112 *supra*.

¹¹⁹ Hearings on S. 3229, S. 3466, and S. 3546 Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 91st Cong., 2d Sess. 1234 (1970) [hereinafter cited as 1970 Senate Hearings]. The ineffectiveness of the procedures calling for a preliminary conference, then a public hearing, and finally resort to the courts is illustrated by the following example. The first air pollution enforcement action was instituted by the federal government in 1965 under the 1963 Act, against a chicken processing plant in Maryland. A conference was held in 1965, a public hearing in 1967. Suit was finally brought in the federal district court in 1969, and an appeal was taken to the U.S. Supreme Court. The plant was not finally shut down until May, 1970—5 years after the abatement action started. No other enforcement action has proceeded beyond the conference stage, and no enforcement action was ever taken under the 1967 Act. 116 Cong. Rec. 16,104 (daily ed. Sept. 21, 1970).

¹²⁰ See discussion on p. 579 *supra*.

¹²¹ Clean Air Amendments of 1970 § 113.

¹²² 42 U.S.C. § 1857d (Supp. V, 1970).

agencies,¹²³ or the Administrator may directly order the polluter in question to cease violation of an emission standard within thirty days.¹²⁴

Whenever the Administrator determines that any *person* is violating any requirement of a state's implementation plan, the Administrator shall notify both the violator and the state involved. If the violation extends beyond the thirtieth day from the date of his notification, the Administrator may issue an order requiring the violator to comply with the requirements of the plan, or he may bring a civil action for appropriate relief, including a permanent or temporary injunction.¹²⁵ If, on the other hand, the Administrator finds that violations are so widespread that they appear to result from the failure of a *state* to enforce its plan effectively, he shall first notify the state. If the failure extends beyond the thirtieth day of his notice, the Administrator shall give public notice of the situation so that interested citizen groups may also become involved. During the period beginning with such notice and ending when the state satisfies the Administrator that it will enforce its plan, the Administrator may enforce any requirement of a state's implementation plan with respect to any person by issuing an abatement order or by commencing a civil action for appropriate relief, including injunctive relief.¹²⁶

The Administrator may require stationary sources of pollution to install and maintain equipment to monitor levels of pollutant emissions,¹²⁷ and to furnish upon request reports and records showing compliance with the established air quality standards.¹²⁸ Under the

¹²³ Clean Air Amendments of 1970 § 113(a)(2).

¹²⁴ *Id.* § 113(a)(1).

¹²⁵ *Id.* § 113(a)(1), (b).

¹²⁶ *Id.* § 113(a)(2). Despite the fact that the Administrator is now able to order violators directly and to institute direct injunctive and criminal proceedings, the requirement that he must wait thirty days before he can affirmatively abate the violation represents a weakening of a more effective Senate version of more immediate federal enforcement powers. In the Senate version of the bill, H.R. 17255, 91st Cong., 2d Sess. (1970) [hereinafter cited as Senate Amendments of 1970], § 116 empowered the Administrator to require that a polluter cease his violation within 72 hours of the issuance of his order. Also, the language of the Senate version was mandatory. The language in § 113 of the Clean Air Amendments is merely discretionary. In discussing the Senate version, dealing with the powers of the Administrator to require abatement of pollution violations within 72 hours, the Senate Committee Report indicated that the judgment of the Administrator should not even be reviewable:

In view of the need for streamlined and expedited enforcement procedures, the committee intends that the judgment of the [Administrator] in this instance shall not be reviewable.

S. Rep. No. 91-1196, 91st Cong., 2d Sess. 22 (1970). Section 113 of the Act as enacted does not provide for immediate relief, and the Administrator's order is reviewable. See discussion of appeal provisions on pp. 591-93 *infra*. Clearly the 72-hour provision is preferable, as it would spare the public from an added month of harmful pollution before the polluter must cease. But although section 113 imposes a thirty-day bar to administrative action, emergency powers enabling the Administrator to act to obtain immediate abatement of serious violations of stationary or moving source emission standards are available to him under § 303 of the Clean Air Amendments of 1970.

¹²⁷ Clean Air Amendments of 1970 § 114(a)(1).

¹²⁸ *Id.*

1967 Act, sanctions for non-compliance with the Act's provisions were extremely weak. Upon conviction under the 1970 Act, polluters who knowingly violate any emission standard or standard of performance are to be fined \$25,000 per day of violation and may be imprisoned for one year. These penalties are doubled for conviction of a second offense.¹²⁹ Tampering with monitoring devices and failure to submit truthful records and reports of emission levels may be punished by a \$10,000 fine and six months in prison.¹³⁰ Finally, if the EPA Administrator and state and local agencies fail in their enforcement responsibilities, private citizens are granted the right to seek enforcement action under the important citizen suits provision of the Act.¹³¹

4. *Provisions for Appeal*¹³²

Judicial review is available to any person (including alleged polluters), agency, or private citizen wishing to challenge any promulgated standard, regulation, implementation plan, or other decision of the EPA Administrator relating to stationary sources of pollution.¹³³ For the purpose of national uniformity, the 1970 Act requires that judicial review of any federally promulgated air quality standard, prohibition, or emission standard must be sought in the U.S. Court of Appeals for the District of Columbia.¹³⁴ Review of a state implementation plan, including any emission requirement approved by the Administrator, may be had in the federal court of appeals for the circuit in which the state is located.¹³⁵ In either situation, the parties may seek review by the United States Supreme Court. The Administrator is given power to issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books and documents, and he may administer oaths.¹³⁶

The availability of judicial review for administratively developed

¹²⁹ Id. § 113(c)(1).

¹³⁰ Id. § 113(c)(2). The penalties provided under the 1970 Act are decidedly severe. Whether they are severe enough to deter violations, and whether the EPA Administrator will actually use them, remain to be seen. Under the 1967 Act the Secretary of HEW had no power to seek penalties against stationary source polluters. Although he did have the power to impose penalties in the case of moving sources of pollution under 42 U.S.C. § 1857f-4, this power was never exercised. 1970 Senate Hearings, *supra* note 119, at 380.

¹³¹ Clean Air Amendments of 1970 § 304. See discussion on pp. 612-16 *infra*.

¹³² Discussion of the provisions for judicial review will be limited here to review of administrative standards and decisions relating to *stationary source* pollution. Judicial review in the context of *automobile emission standards and decisions* will be discussed *infra*, at pp. 616-21.

¹³³ Clean Air Amendments of 1970 § 307(b)(1).

¹³⁴ Id.

¹³⁵ Id.

¹³⁶ Id. § 307(a)(1). Except for emission data which is available to the public, the Administrator shall consider documents submitted by alleged polluters confidential if the latter can satisfactorily demonstrate to the Administrator that, if made public, the information would divulge trade secrets or secret processes of the owner or operator. Id. Failure to produce subpoenaed information would lead to a contempt of court citation. Id.

and promulgated anti-pollution standards has been the subject of much recent litigation.¹³⁷ The courts have held that even in matters committed by statute to administrative discretion, "preclusion of judicial review is not lightly to be inferred, however; it requires a showing of clear evidence of legislative intent."¹³⁸ The test adopted by the courts to determine standing to request review of administrative acts is whether the person requesting relief will be "adversely affected by" the action in question.¹³⁹ In the area of environmental standards, the courts have granted standing to those being regulated as well as to those who seek "to protect the public interest in the proper administration of a regulatory system enacted for their benefit,"¹⁴⁰ because such standards clearly affect both the financial interests of the polluter and the health interests of the public. Any standard promulgated by the Administrator and any enforcement action taken by him may be subjected to judicial review at the instance of any interested person.¹⁴¹ However, such review must be sought within thirty days of the Administrator's action.¹⁴² Under the Senate version of the judicial review provision the filing of a petition for review would not have operated as a stay of compliance with the standard or decision in question, unless the person appealing could demonstrate a substantial likelihood of prevailing on the merits and that the interest of the public would not be harmed by the stay.¹⁴³ The Administrator's promulgations and decisions also enjoyed a rebuttable presumption of correctness.¹⁴⁴ The burden of persuasion thus rested upon the person seeking the review. The Clean Air Amendments of 1970, as finally enacted, are silent on both the stay of compliance and on the presumption of correctness. Section 110, however, does indicate that a governor may apply for and receive a one-year extension of compliance for a stationary source, if it can be demonstrated at a hear-

¹³⁷ See, e.g., *Environmental Defense Fund, Inc. v. Hardin*, 428 F.2d 1093 (D.C. Cir. 1970), involving standards for the pesticide DDT. (Plaintiff's brief for this case, and discussion thereon, are found in 1970 Senate Hearings, *supra* note 119, at 622-816); *Barlow v. Collins*, 397 U.S. 159 (1970), involving regulations for use of farmlands under the Food and Agriculture Act of 1965; *Abbott Laboratories v. Gardner*, 387 U.S. 136 (1967), involving regulations requiring the proper labeling of prescription drugs.

¹³⁸ *Environmental Defense Fund, Inc. v. Hardin*, 428 F.2d 1093, 1098 (D.C. Cir. 1970).

¹³⁹ *Environmental Defense Fund, Inc. v. Hardin*, 428 F.2d 1093, 1096 (D.C. Cir. 1970); *Barlow v. Collins*, 397 U.S. 159, 167 (1970); *Abbott Laboratories v. Gardner*, 387 U.S. 136, 140-41 (1967).

¹⁴⁰ *Environmental Defense Fund, Inc. v. Hardin*, 428 F.2d 1093, 1097 (D.C. Cir. 1970); S. Rep. No. 91-1196, 91st Cong., 2d Sess. 40-42 (1970).

¹⁴¹ Clean Air Amendments of 1970 § 307.

¹⁴² *Id.* It is important to note that if any interested person fails to appeal any action of the Administrator regarding the establishment of emission standards for pollutants, or the approval of state implementation plans, within thirty days of such action, the Administrator's action shall not be subject to judicial review in civil or criminal proceedings for enforcement. The person will in effect have waived his right to attack the fairness of emission standards or implementation plans if he does not appeal them within thirty days of their promulgation. *Id.* § 307(b)(1), (2).

¹⁴³ Senate Amendments of 1970, *supra* note 126, § 308.

¹⁴⁴ *Id.*

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ing before the Administrator that the polluter meets certain requirements.¹⁴⁶ The findings of the Administrator regarding the requirements "shall be sustained if based upon a fair evaluation of the entire record at such hearing."¹⁴⁶ It is not clear from the language of the 1970 Act, however, whether a polluter may appeal to the Administrator directly, without intervention by the governor, whether he may obtain a stay of compliance during his appeal, and where the burden of proof lies. It is to be hoped that the intent of the Senate version will be followed and that the filing of a petition appealing the Administrator's decision will not operate as a stay of compliance with the standard in question.

C. *The Provisions Governing Motor Vehicle Pollution*

The Report on the 1970 Act by the Senate Committee on Public Works indicated that continued reliance on only gradual reductions of automotive emissions would make achievement of the ambient air quality standards impossible within the deadlines established under Title I of the 1970 Act.¹⁴⁷ In order to achieve those standards, and to protect the public health, the emission standards originally projected by HEW under the 1967 Act for 1980 must now be met by 1975.¹⁴⁸ The

¹⁴⁵ The governor, on behalf of the stationary-source or moving-source polluter, in order to obtain a one-year extension, must demonstrate, prior to the date such source was required to begin compliance with the standard, that (a) good faith efforts were made to achieve compliance; (b) the technology was not available to permit compliance; (c) interim control measures will guard the public health; (d) the continued operation of such source is essential to national security or to the public health or welfare. Clean Air Amendments of 1970 § 110(f)(1).

¹⁴⁶ Id. § 110(f)(2)(B).

¹⁴⁷ S. Rep. No. 91-1196, 91st Cong., 2d Sess. 25-26 (1970).

¹⁴⁸ The following table illustrates the proposed automobile emission standards established by the Secretary of HEW pursuant to the 1967 Act as compared with the standards established by Congress in the 1970 Act. The figures represent the comparative emission levels of new motor vehicles for the four pollutants for which air quality criteria have been issued.

AUTO EMISSIONS*
[All figures in grams per mile]

	Hydro- carbons New Test	Carbon Mon- oxide New Test	Nitric Oxides Old Test	Partic- ulates Old Test
Uncontrolled [pre-1968 vehicles]	14.6	116.3	4.0	0.4
1970 standard [pursuant to 1967 Act]	2.9	37.0		
Proposed 1975 standard [pursuant to 1967 Act]	0.5	11.0	0.9	0.1
Proposed 1980 standard [pursuant to 1967 Act]	0.25	4.7	0.4	0.03
The standards required by the 1970 Act [90% reduction of 1970 standard]	0.29	3.7	0.4	0.04

* Source: 116 Cong. Rec. 16,113 (daily ed. Sept. 21, 1970).

In health effects these pollutants may cause cancer, headaches, dizziness, nausea, metabolic and respiratory diseases, and impairment of mental processes.

Studies show that exposure to 10 parts per million of carbon monoxide

Public Works Committee determined that the establishment of motor vehicle emission standards was a policy decision so vital to public health that it should be made by the full Congress rather than by an administrative agency.¹⁴⁹ Accordingly, in the 1970 Act, Congress established automotive emission standards.

1. *Establishment of the Standards*

a. *Prescription of the Standards.* Under the 1967 Act standards were set by the Department of HEW on the basis of economic and technological feasibility.¹⁵⁰ Under the 1970 Act, the standards are based upon the levels required to protect the public health; existing technology was not considered relevant.¹⁵¹ Title II of the Act authorizes the EPA Administrator to regulate sources of pollution which move in interstate commerce, or which are dangerous to the public health and welfare. More specifically, Section 202(a)(1) of the Act authorizes the EPA to set standards of emission for all known pollutants discharged by any class of new motor vehicles or new motor vehicle engines, except as provided in Section 202(b), discussed below. Such standards shall be applicable to the vehicles and engines for their useful life,¹⁵² and they must be based upon the degree of control necessary to protect the public health and welfare, whether such vehicles and engines are designed as complete systems or incorporate devices to prevent or control pollution.¹⁵³ Under another section of the Act the Administrator is also authorized to establish emission standards for aircraft and aircraft engines.¹⁵⁴ Any standards so prescribed for new motor vehicles and aircraft shall take effect after such a period as the Administrator finds necessary to permit the development and application of the requisite technology.¹⁵⁵

The heart of the Clean Air Amendments of 1970 is Section 202(b), which establishes the maximum levels of new motor vehicle emissions permissible by 1975 and 1976. This section requires that exhaust emissions of hydrocarbons (HC) and carbon monoxide (CO) from 1975 model year¹⁵⁶ passenger vehicles and engines be reduced to levels ninety

for approximately 8 hours may dull mental performance In heavy traffic situations, levels of 70, 80, or 100 parts per million are not uncommon for short periods.

116 Cong. Rec. 16,218 (daily ed. Sept. 22, 1970).

¹⁴⁹ 116 Cong. Rec. 16,218 (daily ed. Sept. 22, 1970).

¹⁵⁰ 42 U.S.C. § 1857f-1(a) (Supp. V, 1970).

¹⁵¹ 116 Cong. Rec. 16,091 (daily ed. Sept. 22, 1970).

¹⁵² "Useful life" for light duty vehicles and engines (passenger vehicles) is defined as being a period of use of five years or 50,000 miles (or the equivalent), whichever occurs first. For any other type of motor vehicle or engine the same definition applies, unless the Administrator determines that a period of use of greater duration is appropriate. Clean Air Amendments of 1970 § 202(d).

¹⁵³ Id. § 202(a)(1).

¹⁵⁴ Id. § 231.

¹⁵⁵ Id. §§ 202(a)(2), 231(b).

¹⁵⁶ The term "model year" is defined as the manufacturer's annual production period

percent *below* those established by the Secretary of HEW for 1970 model vehicles pursuant to the 1967 Act. Exhaust emissions of oxides of nitrogen (NOx) from 1976 model year vehicles and engines must also be reduced to levels ninety percent below the level of emissions of 1971 model vehicles.¹⁵⁷ The Administrator must report annually to Congress, beginning on July 1, 1971, with respect to the extent and progress of efforts being made to develop the technology necessary to achieve the 1975 and 1976 standards. He may also recommend additional congressional action necessary to achieve the purposes of the 1970 Act.¹⁵⁸ To assist the Administrator, the National Academy of Sciences will conduct a comprehensive study and investigation of the technological feasibility of meeting the automotive emission standards prescribed under section 202(b).¹⁵⁹ In the event that the automobile manufacturers cannot achieve compliance with the emission standards for HC and CO by 1975, and for NOx by 1976, provision is made for a single, one-year extension.¹⁶⁰

A great deal of controversy was engendered by the fact that specific hearings were not held by the Senate Subcommittee on Air and Water Pollution to determine whether the automakers would be able to comply with the 1975 emission standards. Instead, the Subcommittee used other evidence at its disposal to determine that the standards decided upon were both essential and achievable.¹⁶¹ In June, 1970, a

(as determined by the Administrator) which includes January 1 of the calendar year. If a manufacturer has no annual production period, the term "model year" will mean the calendar year. And, to assure that vehicles manufactured before the beginning of a model year were not manufactured for the purposes of circumventing compliance with the federal standards, the Administrator may prescribe regulations defining "model year" in a manner other than in the foregoing definition. Id. § 202(b)(3).

¹⁵⁷ See the table in note 148 *supra*. The automobile is presently the single greatest polluter in our society. Its emissions are responsible for an estimated 60% of the nation's air pollution. Moreover, the rate of increase in the number of motor vehicles on the road is *twice* that of the U.S. birth rate. The U.S. population increases by about 6,000 persons per day. Motor vehicles are increasing at the rate of 12,000 per day. 116 Cong. Rec. 16,109 (daily ed. Sept. 21, 1970). At present, there are over 100 million motor vehicles in use in the U.S. Id. at 16,093.

¹⁵⁸ Clean Air Amendments of 1970 § 202(b)(4).

¹⁵⁹ Id. § 202(c). The National Academy of Sciences is required to submit semi-annual reports to the Administrator and the Congress on the progress of its study. Id. § 202(c)(3). The Administrator will furnish to the Academy any information which the latter deems necessary to the study. Id. § 202(c)(4).

¹⁶⁰ Id. § 202(b)(5). Much controversy surrounded the question of the one-year extension and whether the Administrator's decision to grant or deny such an extension should be reviewable. See discussion on pp. 616-21 *infra*.

¹⁶¹ See generally 116 Cong. Rec. 16,093-097 (daily ed. Sept. 21, 1970) for the Senate floor debate on § 202(b). Senator Griffin of Michigan vigorously opposed the provision, the only Senator to do so. He accused the Subcommittee on Air and Water Pollution of playing "economic roulette" with millions of jobs. Senator Muskie, Chairman of the Subcommittee, responded that the Committee would rather play Russian roulette with the automakers than with the trapped inhabitants of urban America whose health was at stake. 116 Cong. Rec. 16,096. For the reasons persuading the Subcommittee to adopt the severe emission standards for 1975 model automobiles, and the arguments of

Department of HEW report¹⁶² concluded that the following ambient air quality standards must be attained to insure protection of the public health:

[Data reflected in parts per million (ppm)]¹⁶³

Carbon monoxide	9.00 ppm/8-hour average
Photochemical oxidants	0.06 ppm/1-hour average
Nitrogen dioxide	0.10 ppm/1-hour average

These prescribed safe levels of pollution are far below the levels currently experienced in cities such as Chicago and Los Angeles, where air pollution levels are among the most hazardous in the nation. In these cities the following pollution levels have been recorded:

Carbon monoxide . . .	44.00 ppm/8-hour average (Chicago)
Nitrogen dioxide . . .	0.69 ppm/1-hour average (Los Angeles) ¹⁶⁴

The serious problem of exhaust emissions from *used* vehicles continues to be ignored by the Congress in the 1970 Act. The Senate version of the 1970 amendments devoted an entire section of the Act¹⁶⁵ to this massive source of air pollution, but it failed to survive the compromising process of the House-Senate Conference Committee, and thus the Clean Air Amendments of 1970 are silent on used vehicles. The following is an analysis of the deleted section 211 of the Senate amendments. It is submitted that the decision by Congress to ignore the problem of used vehicles in the 1970 Act was alarmingly counter-productive. Former section 211, or a comparable provision, should be introduced promptly in the Ninety-Second Congress as an amendment to the 1970 Act.¹⁶⁶

the auto industry, see generally 1970 Senate Hearings, *supra* note 119, at 893-904, 1031-080, 1576-579, 1596, 1608-660; 116 Cong. Rec. 16,093-096 (daily ed. Sept. 21, 1970).

¹⁶² See generally 1970 Senate Hearings, *supra* note 119, at 1639-645, which reproduces the report in its entirety.

¹⁶³ *Id.* at 1643. See also the table in note 148 *supra*.

¹⁶⁴ S. Rep. No. 91-1196, 91st Cong., 2d Sess. 26 (1970).

¹⁶⁵ Senate Amendments of 1970, *supra* note 126, § 211. See also note 157 *supra*.

¹⁶⁶ Counsel for the Senate Subcommittee on Air and Water Pollution, Mr. Phillip T. Cummings, a draftsman of the Clean Air Amendments of 1970, explained the reasons which led the House-Senate Conference Committee to delete section 211 of the Senate bill from the final version of the 1970 Act. Essentially, the conferees determined that section 211, which provided for federal testing and certification of pollution-control devices for used vehicles, and not for emission standards for used vehicles, "... was not essential to the national air pollution control program;" that "... alternative methods to deal with pollution from used vehicles are already available to the states and cities. For example, cities can restrict the use of motor vehicles in downtown areas, and would be required to do so, if necessary, under Section 110 of the 1970 Amendments." 42 U.S.C. § 1857f-6a(c) (Supp. V, 1970). See note 192 *infra*. "And the states can legislate that owners install anti-air pollution devices on their used vehicles as one strategy in attaining ambient air quality standards." California has apparently already approved a device for the control of exhaust emissions from used motor vehicles. See note 168 *infra*. Apparently, the conferees also determined that the technology which

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Under the 1967 Act control of used motor vehicle air pollution was presumably left to the states.¹⁰⁷ Under the 1970 Act the states still retain the authority to control emissions from used vehicles, but section 211 would have established minimum federal standards of performance for air pollution control *devices or systems* to be installed on pre-1968 vehicles. Under this section, the Administrator would have certified those anti-pollution devices meeting EPA established standards, and once the devices were certified, the states could pass legislation requiring their installation.¹⁰⁸ The problem of implementing the federal standards of performance for such devices was left to the states because the Senate Committee on Public Works was unable to develop a feasible national system to deal with emissions from used vehicles.¹⁰⁹

At present there are over 100 million used vehicles on the highways which do virtually all of the serious polluting of the air.¹⁷⁰ These vehicles will live well beyond 1975, when the strict federal standards for new motor vehicles take effect. The anomalous result in 1975 will be that although the eight to nine million new vehicles sold that year¹⁷¹ will have to meet beneficially rigid national emission standards, some one hundred and forty million used vehicles already on the road¹⁷² will have to meet no minimum national standards. Given the difficulties experienced by the states in establishing air quality standards for stationary sources of pollution under the 1967 Act, it is not unlikely that they will encounter similar problems under the 1970 Act in promulgating and enforcing standards for used motor vehicles.¹⁷³ Accordingly, tighter

would justify the establishment of federal emission standards for used vehicles has not yet been proven effective enough to warrant the imposition of national standards on all owners of used vehicles. Letter from Mr. Phillip T. Cummings to the Boston College Industrial and Commercial Law Review, Feb. 16, 1971, on file in the Law Review office.

¹⁰⁷ See discussion on pp. 576-77 *supra*.

¹⁰⁸ California has already approved the first control device to meet standards for reducing exhaust emissions from used vehicles manufactured from 1955-1965. The device will be installed at a cost of about \$50 to the vehicle owner. Mandatory use of this system will follow once it is available on a mass basis. Wall Street Journal, Sept. 17, 1970, at 14, col. 2.

¹⁰⁹ S. Rep. No. 91-1196, 91st Cong., 2d Sess. 13 (1970).

¹⁷⁰ 116 Cong. Rec. 16,093 (daily ed. Sept. 21, 1970).

¹⁷¹ See *id.*

¹⁷² It is projected that by 1975, when the emission standards established for new motor vehicles by the Clean Air Amendments of 1970 take effect, an additional four to five generations of *new* automobiles will have been produced. See *id.*

¹⁷³ Under § 209 of the 1967 Act, 42 U.S.C. § 1857f-6a (Supp. V, 1970), the states are precluded from establishing emission standards for *new* vehicles. But this section is silent on state regulation of *used* motor vehicles and the writers have generally agreed that Congress intended to leave regulation of used vehicles to the states. See generally Currie, Motor Vehicle Air Pollution: State Authority and Federal Pre-emption, 68 Mich. L. Rev. 1083 (1970) [hereinafter cited as Currie]. Section 209 of the 1967 Act was not amended by the 1970 Act. Further, § 233 of the 1970 Act precludes the states from regulating emissions from aircraft. But because § 202 of the 1970 Act speaks only in terms of *new* motor vehicles and *new* motor vehicle engines, all classes of *used* motor vehicles including buses, trucks, taxicabs and numerous other types of vehicles which contribute substantially to air pollution, would apparently be regulated by the states. Only California has moved affirmatively to control pollution from used vehicles. If

controls should have been imposed upon this massive source of pollution by the 1970 Act. Minimum federal standards for used vehicles, binding upon the states, unless they desired even more severe controls, would have been preferable. The Congress used this approach in the provisions dealing with air pollution emanating from stationary sources,¹⁷⁴ and should also have applied it to the emission standards for used vehicles. The Congress also rejected two national plans which would have more effectively reduced air pollution from used vehicles. The first of these plans would have imposed a retroactive installation obligation upon the auto manufacturers, and the second would have established a federal subsidy program for installation of pollution-control devices on used vehicles.¹⁷⁵ The salutary effect of either of these plans would have been twofold: the public would not have had to bear the full brunt of financing technology which the automakers should have installed on the vehicles in the first place; and there would have been a greater likelihood that used motor vehicles would be equipped with pollution-control devices. It is lamentable that neither plan was adopted in some form, since used vehicles are the source of more than sixty percent of all air pollution.¹⁷⁶ The failure of Congress to deal more effectively with this problem may well eviscerate the effectiveness of the entire 1970 Act.

b. *State Standards and Federal Preemption.* Under the 1967 Act Congress preempted state legislative action¹⁷⁷ by enacting emission standards for *new* motor vehicles and *new* motor vehicle engines.¹⁷⁸ Only California was allowed an exemption from the federal preemption, and thus allowed to regulate emissions from new, as well as used, vehicles.¹⁷⁹

Congress does not amend the 1970 Act by reinstating a provision similar to the deleted § 211 of the Senate version of the Act, the states should follow California's lead. See also the discussion concerning federal preemption in the area of air pollution regulations at pp. 598-601 *infra*.

¹⁷⁴ Clean Air Amendments of 1970 §§ 110, 116. See discussion on pp. 586-89 *supra*.

¹⁷⁵ S. Rep. No. 91-1196, 91st Cong., 2d Sess. 13 (1970).

¹⁷⁶ 116 Cong. Rec. 16,109 (daily ed. Sept. 21, 1970).

¹⁷⁷ 42 U.S.C. § 1857f-6a(a) (Supp. V, 1970) provided:

No State or any political subdivision thereof shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this subchapter. No State shall require certification, inspection, or any other approval relating to the control of emissions from any new motor vehicle or new motor vehicle engine as condition precedent to the initial retail sale, titling (if any), or registration of such motor vehicle, motor vehicle engine, or equipment.

¹⁷⁸ Under the 1967 Act a "new motor vehicle" was defined as one for which equitable or legal title has never been transferred to an ultimate purchaser (first good faith purchaser for purposes other than resale); "new motor vehicle engine" was similarly defined. 42 U.S.C. § 1857f-7 (Supp. V, 1970).

¹⁷⁹ 42 U.S.C. § 1857f-6a(b) (Supp. V, 1970) provided:

The Secretary shall, after notice and opportunity for public hearing, waive application of this section to any state which has adopted standards (other than crankcase emission standards) for the control of emissions from new motor vehicles or new motor vehicle engines prior to March 30, 1966, unless he finds that such State does not require standards more stringent than applicable Federal standards to meet compelling and extraordinary conditions or that such

The federal emission standards issued for new vehicles were applicable only to automobiles manufactured during or after the 1968 model year.¹⁸⁰ This meant that used vehicles, those manufactured prior to 1968, were left to state regulation.¹⁸¹ The federal preemption under the 1967 Act was vigorously criticized as impeding effective control of automotive air pollution.¹⁸² The major criticisms of the preemption provision were as follows:

1. Some states suffered from more acute air pollution problems than other states and thus needed emission standards which were stricter than the federally promulgated standards. Such states were hamstrung in not being able to adopt more restrictive standards.¹⁸³
2. The 1967 Act did not require that the anti-pollution devices installed on new motor vehicles be inspected or maintained in proper operating order, despite the fact that the failure to maintain resulted in serious deterioration of their effectiveness.¹⁸⁴
3. The federally approved devices required to be installed on new vehicles, generally failed to reduce emissions of hydrocarbons, carbon monoxide and nitrogen oxide.¹⁸⁵
4. The federal standards ignored completely the problem of assisting state efforts to control used vehicle air pollution.¹⁸⁶

State standards and accompanying enforcement procedures are not consistent with section 1857f-1(a) of this title.

California was preferentially treated essentially because it pioneered efforts in automobile air pollution legislation antedating federal legislation. It was thus granted a "grandfather clause" in the 1967 Act. See Hearings on S. 3229, S. 3466, and S. 3546 Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 91st Cong., 2d Sess. 1583 (1970) [hereinafter cited as 1970 Senate Hearings]. See also Comment, 30 Ohio St. L. J. 516, 536 (1969). California retains its exemption from the federal standards under the 1970 Act.

¹⁸⁰ 31 Fed. Reg. 5171 (1966); 33 Fed. Reg. 8306 (1968).

¹⁸¹ The Senate Report on the 1967 Act indicated the intent of the Congress:

While there has been a great deal of concern expressed regarding control of new vehicles little attention has been paid to control of used vehicles, either their emission or their use Any significant advance in control of used vehicles would result in a corresponding reduction in air pollution. These are areas in which the States and local government can be most effective.

S. Rep. No. 403, 90th Cong., 1st Sess. 34 (1967).

¹⁸² See 1970 Senate Hearings, *supra* note 179, at 75-84, 1212, 1236, 1365, 1583-584; Currie, *supra* note 173 at 1102; Comment, Air Pollution, Pre-emption, Local Problems, and the Constitution—Some Pigeonholes and Hatracks, 10 Ariz. L. Rev. 97, 106 (1968). The U.S. Court of Appeals for the Second Circuit has recently given encouragement to a narrow reading of the preemption provision. See *Chrysler Corp. v. Tofany*, 419 F.2d 499, 511 (2d Cir. 1969).

¹⁸³ 1970 Senate Hearings, *supra* note 179, at 1212.

¹⁸⁴ Currie, *supra* note 173, at 1085.

¹⁸⁵ 1970 Senate Hearings, *supra* note 179, at 371-72. For a good discussion of the effects of these automotive pollutants upon health, see Currie, *supra* note 173, at 1084.

¹⁸⁶ See the quotation excerpted in note 181 *supra*. A bill to repeal the preemption

The 1970 Act continues the federal preemption as to new motor vehicles, and the preemption has been extended to include aircraft and aircraft engines as well as fuels. The Senate Committee Report indicated that retention of the preemption provision was "to prevent a multiplicity of state standards for emissions control systems on new motor vehicles as required by section 202, or the regulation of fuels as provided in section [211]."¹⁸⁷ The Committee also recognized, however, "that there may be unusual instances when the state would have to require a standard of emission control for a vehicle that would exceed the controls provided by this legislation."¹⁸⁸ Provision was therefore made in the Senate version of the 1970 Act for states other than California¹⁸⁹ to obtain an exception to the preemption provision, but only upon a showing that a more stringent standard was necessary and essential for the state to achieve the ambient air quality standards applicable to regions within its jurisdiction. The Committee had intended this waiver primarily to permit a variance to control emissions from commercial vehicles.¹⁹⁰ The House-Senate Conference rejected this waiver provision, however, and omitted entirely any amendment to the preemption provision of the 1967 Act. The states and communities retain the authority granted under the 1967 Act to regulate or restrict the use, operation or movement of any vehicle¹⁹¹ when necessary in order to achieve compliance with national ambient air quality standards and goals established under Title I of the 1970 Act.¹⁹²

At first blush, it would seem that the 1970 Act, in retaining the federal preemption provision, has perpetuated a problem which engendered the criticisms mentioned as having been leveled against the 1967 preemption section. Such would be the case if the federal emission standards were so inadequate that states might be expected to seek tougher standards in order to maintain or achieve desirable air quality in their respective regions. However, with increasingly more stringent federal emission standards being promulgated for the 1972, 1973 and 1974 new model vehicles,¹⁹³ and with federal emission standards for

provision of the 1967 Act was introduced in the House of Representatives by Congressman Mikva of Illinois. H.R. 16,013, 91st Cong., 2d Sess. (1970).

¹⁸⁷ S. Rep. No. 91-1196, 91st Cong., 2d Sess. 32 (1970).

¹⁸⁸ *Id.*

¹⁸⁹ Under the 1970 Act California retains its exemption; the provision of the 1967 Act so providing was left untouched in the 1970 Act.

¹⁹⁰ S. Rep. No. 91-1196, 91st Cong., 2d Sess. 32 (1970).

¹⁹¹ 42 U.S.C. § 1857f-6a(c) (Supp. V, 1970).

¹⁹² In other words, states and municipalities are free to restrict the use of motor vehicles in sections of a city at designated hours. This practice has become commonplace in the past year in cities as large as New York City (See *Boston Globe*, Oct. 13, 1970, at 12, col. 1) or as small as Malden, Mass. (*Id.* at 9, col. 1) which have begun to prohibit the operation of motor vehicles on certain streets at specific times. See also *Newsweek*, Jan. 4, 1971, at 42.

¹⁹³ Revised regulations, including improved test procedures which should reduce pollution from new vehicles in the 1972, 1973 and 1974 model years, were published in the *Federal Register* on November 10, 1970, by the Secretary of HEW. The regulations are designed to reduce emissions of exhaust hydrocarbons by 80% and of carbon

new 1975 vehicles being cut by ninety percent,¹⁹⁴ the likelihood that the states would desire even stricter emission standards for new vehicles seems remote. The need for state exceptions to the federal preemption provision of the 1967 Act will be precluded if the EPA Administrator promulgates emission standards for new motor vehicles as low as technologically possible between 1971 and 1975, when the lowest emission standards take effect. The issue of federal preemption of new motor vehicle standards should become academic in 1975, when the federal standards will be as stringent as any state could technologically and realistically want to adopt.

But there is some merit to the contention that between the years 1971 and 1975 all the states should, like California, be free to adopt emission standards which are more stringent than the federal standards. The constitutional requirement of equal protection of the laws¹⁹⁵ should afford the states grounds to test the privileged status accorded California. If the federal standards are appreciably more lenient than those California establishes for herself between 1971 and 1975, then the states may attack the constitutionality of the preemption provision, arguing that they should be equally entitled to adopt stricter standards.¹⁹⁶

2. Regulation of Fuels

Fuel combustion is the major cause of air pollution. Yet, definitive knowledge of the deleterious effects of fuels and additives is still meager.¹⁹⁷ The 1967 Act did not regulate fuels or their contents. Rather,

monoxide by 69%, as compared to average emissions from pre-1968 model vehicles. The improved test procedures will take into account typical urban driving patterns, will sample actual emissions through the entire test cycle, and will rely on more accurate testing instruments than were previously used. The new regulations also eliminate the practice of averaging the test results of all cars in an engine class, which in the past allowed high-emission vehicles to get by on the performance of their low-emission brothers. The new procedures will apply to 1972 and subsequent model year vehicles since the regulations took effect immediately and prototype testing of vehicles normally begins one year in advance of production. See generally CCH Clean Air and Water News, No. 46, at 2 (Nov. 13, 1970). These new regulations were promulgated under the 1967 Act, however, which the Secretary of HEW has interpreted as not allowing assembly line testing. See discussion on pp. 578-79 *supra*. Presumably, with enactment of the 1970 Act, HEW will amend these regulations to include provisions for assembly line testing of vehicles.

¹⁹⁴ Clean Air Amendments of 1970 § 202(b).

¹⁹⁵ U.S. Const. amend. XIV, § 1.

¹⁹⁶ See generally 1970 Senate Hearings, *supra* note 179, at 75, 84, 1195, 1212, 1236, 1365; Comment, Air Pollution, Pre-emption, Local Problems and the Constitution—Some Pigeonholes and Hatracks, 10 Ariz. L. Rev. 97, 101-03 (1968).

¹⁹⁷ The Subcommittee on Air and Water Pollution received numerous reports and testimony during the Senate Hearings, tending to establish the extreme health hazards posed by fuel additives such as sulfur and lead. Predictably, the manufacturers minimized the hazards; citizen groups and private societies maximized them. For the more informative reports, see 1970 Senate Hearings, *supra* note 179, at 102-09, 433-35, 539-72, 1064-080, 1113-177. The Department of HEW reported in mid-October, 1970, that lead poisoning "frequently causes sterility or early spontaneous abortion." This report was

provision was made only for (a) research on air pollution caused by fuel combustion¹⁹⁸ and (b) the registration with the Secretary of HEW of all additives in fuels.¹⁹⁹ The latter provision, however, was never enforced by the Secretary.²⁰⁰ A sufficient base of scientific and technical information is now available to indicate that certain fuel additives are potentially perilous to human health. This is particularly true of lead additives, which both contaminate the environment and deteriorate devices installed on motor vehicles to control the emissions of other pollutants.²⁰¹ The 1970 Act continues the requirement that fuels and fuel additives be registered with the EPA Administrator.²⁰² But more importantly, authority is now given the EPA Administrator to regulate the actual sale and use of fuels.²⁰³ The procedure is as follows: the EPA Administrator will designate fuels acceptable for use in vehicles. Once designated, the fuel must be registered with the EPA before it can be sold. If such fuel has not been registered, the Administrator will prevent its being introduced into commerce.²⁰⁴ The EPA Administrator may either prohibit entirely or regulate the sale of any fuel which, when evaporated or burned, endangers the public health or impedes achievement of effective emission control.²⁰⁵ But in so doing, the Administrator

based on research conducted by the medical staff at the University of Alabama which found that mothers who drank lead-contaminated moonshine whiskey manufactured by persons using automobile radiators in stills gave birth to deformed babies. The study also indicated the rising death rates caused by lead poisoning among ghetto children who ate flakings of lead-based paint from the walls of slums dwellings. CCH Clean Air and Water News, No. 43, at 3 (Oct. 22, 1970).

¹⁹⁸ 42 U.S.C. § 1857b-1 (Supp. V, 1970).

¹⁹⁹ 42 U.S.C. § 1857f-6c(a) (Supp. V, 1970).

²⁰⁰ 1970 Senate Hearings, *supra* note 179, at 483, 1044.

²⁰¹ For an excellent treatment of the effects of lead and other fuel additives on environment and health, see generally 1970 Senate Hearings, *supra* note 179, at 93-95, 102-09 (the effect of lead pollution on climate and weather patterns); 433-35 (HEW position on the effects of lead on health); 1016-020 (effects of lead on auto pollution devices); 1175-177 (effects of lead on environment); 504-05 (arguments in favor of retaining lead as a gasoline additive).

²⁰² Clean Air Amendments of 1970 § 211(a).

²⁰³ *Id.* § 211(c). This subsection also provides for federal preemption in the area of regulation of fuel and fuel additives. California is exempted from this preemption under § 211(c)(4)(B). In early November, 1970, the federal government ordered the use of unleaded and low lead content gasoline of a maximum of 0.5 grams of lead per gallon in government-operated vehicles. The order will result in an annual consumption of roughly 270 million gallons of low- or non-lead fuel in such vehicles, and the removal of 600 tons of metallic lead annually from such gasoline. Each gallon of regular gasoline presently contains about 2.4 grams of lead. About 600,000 vehicles nationwide were affected by the order. This government action was designed to encourage the development of refinery and distribution capabilities for the marketing of lead-free gasolines. The government is also engaged in a program to convert vehicles to the use of natural gas, which is 90% pollution free. CCH Clean Air and Water News, No. 45, at 4-5 (Nov. 6, 1970).

²⁰⁴ Clean Air Amendments of 1970 § 211(a). Violation of the registration provisions of § 211 subjects the fuel manufacturer to a "civil penalty" of \$10,000 per day of violation. *Id.* § 211(d). This penalty accrues to the United States government but is only recoverable in a civil suit.

²⁰⁵ *Id.* § 211(c)(1). The Senate Committee observed two reasons for regulating

must find that such a prohibition or control will not result in the use of any other fuel that would produce equal or greater hazards to the public health or welfare.²⁰⁶ No fuel or fuel additive may be controlled or prohibited by the Administrator until he has considered all relevant medical, scientific, technological and economic factors.²⁰⁷ On request of a manufacturer of motor vehicles, motor vehicle engines, fuels or fuel additives, the Administrator will hold a public hearing and publish the results thereof at the time he promulgates final regulations.²⁰⁸ Despite the federal preemption in the area of fuel regulation, with the exception of California, a state may control or prohibit the use of a fuel or fuel additive in motor vehicles only if an applicable implementation plan under section 110 so provides and if the Administrator approves the plan.²⁰⁹ The Administrator may approve such a provision in an implementation plan only if he finds that the state control or prohibition is necessary to achieve the national primary or secondary ambient air quality standards which the plan implements.²¹⁰

3. *Alternatives to the Internal Combustion Engine*

Based upon present trends, it is possible that by 1980 the increase in the number of vehicles in densely populated areas will begin to outstrip technological capabilities for reducing pollution from the internal combustion engine. If by 1975 the automobile industry is unsuccessful in modifying the internal combustion engine to meet prescribed emission standards, and unless motor vehicles with an alternative, low-pollution power source are available, vehicle-caused pollution will continue to menace the nation's health. Accordingly, the 1970 Act authorizes the EPA Administrator to establish special emission standards for research and development purposes, and to encourage and promote the development of low-emission vehicles.²¹¹ The research conducted pursuant to this provision will also provide the EPA Administrator with additional information as to whether the technology is in fact available to meet the 1975 new vehicle emission standards set forth in Section 202(b) of the Act. More importantly, however, the 1970 Act provides increased emphasis on efforts to develop low-emission alternatives to the internal combustion engine.²¹² Section 104 of the Act authorizes expenditures of \$350 million dollars from 1971 through 1973 for the

the sale of a fuel. First, the combustion or evaporation of such fuel from any engine may present a direct hazard to health. Second, the fuel may have an adverse effect on the general welfare, or on an emission control system or device. Since the nature of the "general welfare" is less well defined than the concept of "public health," the EPA is required to hold public hearings on any proposed prohibition or control predicated upon the "general welfare." See S. Rep. No. 91-1196, 91st Cong., 2d Sess. 33-34 (1970).

²⁰⁶ Clean Air Amendments of 1970 § 211(c)(2)(C).

²⁰⁷ Id. § 211(c)(2)(A).

²⁰⁸ Id. § 211(c)(2)(B).

²⁰⁹ Id. § 211(c)(4)(C).

²¹⁰ Id.

²¹¹ Id. § 212.

²¹² Id. § 104(a)(2)(B), (C).

purpose of developing such alternatives and for fuel research.²¹³ Two important features of this provision are that amounts appropriated will remain available until expended, and that a legal basis is provided for supporting demonstration projects involving the construction and installation of pollution control equipment in profit-making facilities in order to gain maximum benefit from expertise in the practical application of technology.²¹⁴ The National Air Pollution Control Administration developed a six-year plan, designed to run from 1970 to 1975, for the development of alternatives to the internal combustion engine, including both the control of emissions from conventional motor vehicles, and the development of unconventional low-pollution vehicles.²¹⁵ The appropriations made in the 1970 Act will continue the important research for alternatives.

For the purpose of developing low-emission vehicles, Section 212 of the 1970 Act establishes a "Low-Emission Vehicle Certification Board"²¹⁶ which is empowered to certify, in accordance with prescribed procedures, those vehicles which are "low-emission" and which are thus suitable to replace high-emission vehicles presently being used by federal agencies.²¹⁷ Any party may submit a vehicle for certification—private persons as well as the large automakers. Once certified, low-emission vehicles will be purchased or leased by the federal government at procurement costs of up to one hundred and fifty percent of the retail price of the least expensive model vehicles for which they are certified replacements.²¹⁸ Moreover, in order to encourage industry and private parties to develop "inherently low-polluting propulsion technology," the Board, at its discretion, may raise the price the federal government will pay to two hundred percent of the retail price of the replacements, if the Board determines that the certified low-emission vehicle is powered by "an inherently low-polluting propulsion system."²¹⁹ Section 212 of the 1970 Act authorizes funds in addition to those authorized under Section 104²²⁰ for the purpose of encouraging the development of alternatives to the internal combustion engine.

²¹³ Spending for research relating to fuels and vehicles is authorized at \$75 million for fiscal 1971, \$125 million for fiscal 1972, and \$150 million for fiscal 1973. *Id.* § 104(c).

²¹⁴ S. Rep. No. 91-1196, 91st Cong., 2d Sess. 4 (1970).

²¹⁵ *Id.* at 5.

²¹⁶ The Board is to be composed of the Administrator or his designee, the Secretary of Transportation or his designee, the Chairman of the Council on Environmental Quality or his designee, the Director of the National Highway Safety Bureau in the Department of Transportation, the Administrator of General Services, and two members appointed by the President. The President will appoint the Board Chairman. Clean Air Amendments of 1970 § 212(b).

²¹⁷ *Id.* § 212(d). In making its determination the Board must consider numerous criteria: safety of the vehicle, performance characteristics, reliability, potential, serviceability, fuel availability, noise level and maintenance costs as compared with the class or model of motor vehicle it may replace. *Id.*

²¹⁸ *Id.* § 212(e).

²¹⁹ *Id.*

²²⁰ Section 212 authorizes \$55 million for the fiscal three-year period 1971-73. This

It appears, however, that the automobile industry has chosen to attempt to clean up the internal combustion engine rather than to develop an alternative propulsion system.²²¹ Senator Muskie indicated during the Senate Committee Hearings that during his seven years on the Committee the automobile industry has shown no sense of urgency with respect to developing alternatives to the internal combustion engine.²²² Only General Motors has recently indicated a serious financial commitment to invest in a propulsion system other than the conventional internal combustion engine by purchasing the rights to the Wankel rotary engine.²²³ No one knows for certain whether the automobile industry can achieve the 1975 standards with the internal combustion engine. If the industry can, it has indicated precisely the contrary.²²⁴ But the urgency of the situation requires that the industry and the federal government move with all haste to develop alternatives by 1975 in the event that the 1975 standards cannot be met with the internal combustion engine.²²⁵ It must be kept clearly in mind that the 1975

amount is in addition to the \$350 million authorized under § 104 for purposes of research and development of low-polluting vehicles and fuels.

²²¹ See generally 1970 Senate Hearings, *supra* note 179, at 1012, 1024-027 (Ford Motor Company indicates that it will not abandon the internal combustion engine), 1062 (General Motors takes the same position). By way of contrast, see *id.* at 197, 360-62 (efforts by HEW to stimulate and federally finance development of alternatives), 904 (Department of Transportation efforts), 1222 (Senator Muskie urging development of alternatives). The Subcommittee heard testimony during the Hearings to the effect that General Motors spends \$250 million annually on advertising; that it annually grosses \$24 billion; and that it spends only \$15 million on research and development. *Id.* at 1222.

²²² *Id.*

²²³ General Motors, in November, 1970, paid \$50 million to buy the rights to this small German rotary, as opposed to piston engine. The engine, developed in 1954 by Felix Wankel, is essentially a variant of the internal combustion engine, but GM seems to be confident that it can be refined sufficiently to meet the 1975 emission standards. The automakers seem to have ruled out turbines, steam engines and battery powered models as either too costly or impractical. In the Wankel engine, gasoline is burned, the energy produced is harnessed to turn a shaft which drives the wheels. But the energy in the Wankel engine is captured more directly than in a piston engine. Instead of first creating an up-and-down motion and then converting that to a rotating motion, the Wankel burns its fuel in unusual oblong chambers forcing a triangular rotor to turn in a circular motion. The triangular rotor is attached directly to the drive shaft, which powers the wheels. Auto engineers indicate that about 90% of the pollution caused by the piston engine occurs during the first few minutes or miles of operation. The problem is that the engine is still cold, and even effective pollution-control devices have trouble cleaning the exhaust if the engine is not hot enough. The Wankel engine heats up almost instantly, thus allowing the cleaning device to burn off harmful fumes. The Wankel seems to provide numerous appealing features ranging from low costs to adequate power. Most important, however, is the observation by University of Michigan researchers that with the help of relatively unsophisticated devices, the Wankel has already come "very close" to meeting the 1975 standards required by the Clean Air Amendments of 1970. With GM's resources behind it, the Wankel could very possibly be developed to meet the 1975 emission standards. *Wall Street Journal*, Nov. 19, 1970, at 1, col. 1.

²²⁴ "Detroit Fights Back," *Newsweek*, Nov. 30, 1970, at 81.

²²⁵ A group of students from Wayne State University in Detroit recently but-

standards are based upon pollution levels vital to the protection of public health, and are not merely a frivolous attempt to harass the automobile industry or to inconvenience the driving public. With this in mind, it would seem that if by 1975 the internal combustion engine cannot be redesigned to comply with the standards required under the 1970 Act, the availability of an alternative power source will be essential. Initiation of timely action now, directed toward the development of such an alternative, would seem a far more prudent application of the limited time and resources available than deferral of such a quest until 1975, when pollution levels may well be critical, and the search for alternatives desperate. Simultaneously, during the period from 1971 to 1975, federal funds should be diverted from the construction of additional highways in order to subsidize major expansion of local mass transit systems. A reduced dependence upon the automobile, developed through the increased availability of convenient public transportation, would contribute considerably to abating vehicular air pollution.²²⁶

Apparently, the automobile industry has chosen to gamble on the internal combustion engine. But in so choosing, it should not be permitted to gamble with the health of the nation. If the industry loses its gamble, it is clear that the internal combustion engine must be outlawed within a specified time.²²⁷ A bill to ban the internal combustion engine in California, a state with long and frustrating experience in combating automotive air pollution, was narrowly defeated in 1969.²²⁸ A similar provision was offered as an amendment to an early version of the 1970 Act,²²⁹ but was not included in the final version. Such proposals would have seemed too drastic several years ago, and while they are still impractical, the near passage of the California bill has put the automobile industry on notice that the nation intends to secure clean air.²³⁰ Accordingly, the inclusion of federal financial support for re-

tressed hopes for attainment of the 1975 standards by winning the 1970 Clean Air "race" in a vehicle powered by a modified internal combustion engine. They drove a Ford vehicle equipped with two platinum catalytic mufflers for the control of hydrocarbons and carbon monoxide; and two additional catalytic mufflers for control of nitrogen oxides. The vehicle was equipped with an exhaust gas recirculation system, electric fuel pump, insulated fuel lines and a temperature-sensing carburetor; it burned lead-free gasoline. To win the cross-country "race" from Massachusetts to California, a vehicle had to perform well, be practical, relatively low in cost, capable of mass production, and low in pollutant emissions. Emissions from the Wayne State vehicle were well below the 1975 standards set by the 1970 Act. 1970 Senate Hearings, *supra* note 179, at 1656-658; New Republic, Oct. 3, 1970, at 8. Subsequently, the National Air Pollution Control Administration (NAPCA) invited the Wayne State group to test their vehicle at federal laboratories under the Federal Clean Car Incentive Program to see how viable an alternative it might be to motor vehicles presently used by the public. CCH Clean Air and Water News, No. 41, at 13 (Oct. 9, 1970).

²²⁶ 1970 Senate Hearings, *supra* note 179, at 899, 1193, 1227-228.

²²⁷ See 1970 Senate Hearings, *supra* note 179, at 851, 1366, 1656-659.

²²⁸ Cal. S. Bill 778, 1969 Reg. Sess.; 1970 Senate Hearings, *supra* note 179, at 1366.

²²⁹ Amendment No. 815 to S. 3229, 91st Cong., 2d Sess. (1970).

²³⁰ On prohibiting the sale of the internal combustion engine, or of vehicles with excessive horsepower, see Currie, Motor Vehicle Air Pollution: State Authority and

search to develop alternatives to the internal combustion engine is as important a provision as can be found in the entire 1970 Act.

4. *Enforcement of the Standards*

a. *Federal Enforcement Power.* Two major weaknesses of the 1967 Act were lack of adequate pollution prevention measures and lack of strong enforcement sanctions. The 1970 Act has strengthened both. The federal government will play its role in enforcing the tough 1975 standards through the provisions authorizing the EPA Administrator to test motor vehicles on the assembly line to assure that they meet the standards.²³¹ As noted earlier, the testing procedure used by HEW under the 1967 Act was both a misinterpretation of the power HEW had been granted and a failure to enforce adequately the federal standards for new vehicles.²³² Section 206(c) of the 1970 Act makes clear that the EPA Administrator has the authority to test vehicles on the production line, and is not restricted to testing mere prototype models submitted by the manufacturers.²³³ If the EPA Administrator finds that assembly-line vehicles are not meeting the standards for which the EPA had granted certification, he may revoke certification and withhold it until satisfied that compliance with the standard will be achieved.²³⁴ The manufacturer will not be permitted to distribute already manufactured vehicles to dealers during the period of suspension or revocation.²³⁵ Hopefully, further production would also be banned until certification is reinstated. Otherwise, the non-conforming vehicles could enter the stream of commerce, to the detriment of the public health. After the EPA Administrator notifies the manufacturer of suspension or revocation of certification, the latter may obtain, upon request, a public hearing to appeal the suspension. The appeal, however, will not stay the suspension.²³⁶ The EPA Administrator's final decision is subject to review by the U.S. Court of Appeals for the circuit in which the manufacturer resides or has his principal place of business.²³⁷ The Administrator is also required to publish, in a non-techni-

Federal Pre-emption, 68 Mich. L. Rev. 1083, 1100-101 (1970) [hereinafter cited as Currie].

²³¹ Clean Air Amendments of 1970 § 206.

²³² See discussion on pp. 578-79 *supra*.

²³³ To enforce the automobile standards promulgated in the 1970 Act, the EPA inspectors are authorized "to enter, at reasonable times, any plant or other establishment of such manufacturer, for the purpose of conducting tests of vehicles or engines in the hands of the manufacturer," or to inspect "records, files, papers, processes, controls and facilities used by such manufacturer in conducting tests under regulations of the Administrator." Clean Air Amendments of 1970 § 206(c). See S. Rep. No. 91-1196, 91st Cong., 2d Sess. 28 (1970). The Administrator may request the assistance of qualified independent laboratories in testing vehicles. Clean Air Amendments of 1970 § 206(a)(2).

²³⁴ Clean Air Amendments of 1970 § 206(b)(2).

²³⁵ *Id.* § 206(b)(2)(A). Under § 203(a)(1) of the 1970 Act, vehicles without the Administrator's certification may not be introduced into commerce, subject to the penalties prescribed in § 205.

²³⁶ *Id.* § 206(b)(2)(B)(i).

²³⁷ *Id.* § 206(b)(2)(B)(ii).

cal manner, the comparative performance of the new motor vehicles tested in meeting the standards prescribed under section 202. In this manner, at the beginning of each model year commencing with 1971, the prospective ultimate purchasers of new motor vehicles can be guided in purchasing new vehicles which meet the federal pollution emission standards.²³⁸

Every manufacturer at time of delivery must warrant to the ultimate purchaser and each subsequent purchaser that the motor vehicle or engine conforms to EPA standards.²³⁹ The manufacturer must warrant that each vehicle will comply with EPA emission standards for at least five years or 50,000 miles.²⁴⁰ This obligation rests solely with the manufacturer, and cannot be shifted by the latter to dealers.²⁴¹ In addition, all advertising circulated by the manufacturers must contain a statement specifying the actual cost to the manufacturer of included emission control devices or systems, including installation costs.²⁴² If the manufacturer finds defects in the system within the five-year or 50,000 mile warranty period, it must notify the purchaser or subsequent purchasers and repairs must be made by the manufacturer at no cost to purchaser or dealer.²⁴³ If the EPA Administrator determines that a category of vehicles on the road is failing to conform to standards, he must immediately notify the manufacturer and require the manufacturer to submit a plan for remedying the nonconformity, but the Administrator must hold a public hearing to review his determination if the manufacturer so requests.²⁴⁴ Unless, as a result of the hearing, he withdraws his determination of nonconformity, the Administrator shall order the manufacturer within sixty days to notify the purchaser of the nonconformity.²⁴⁵ As a condition precedent to the manufacturer's absorbing the cost of repairs, the ultimate purchaser and subsequent purchasers will have to demonstrate that the

²³⁸ Id. § 206(e).

²³⁹ The warranty must provide that the vehicle or engine is:

. . . (1) designed, built, and equipped so as to conform at the time of sale with applicable regulations under section 202, and (2) free from defects in materials and workmanship which cause such vehicle or engine to fail to conform with applicable regulations for its useful life

Id. § 207(a). Useful life is defined under § 202(d) as being five years or 50,000 miles, whichever occurs first.

²⁴⁰ Id. § 202(d).

²⁴¹ Id. § 207(d).

²⁴² Id. § 207(e). During the Senate Hearings the Committee heard evidence that in 1965 an automobile manufacturer declared a \$25 increase in automobile prices for reasons wholly related to an alleged new anti-pollution device; it was later disclosed that the actual cost of the device to the manufacturer was only \$5. Hearings on S. 3229, S. 3466, and S. 3546 Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 91st Cong., 2d Sess. 1224 (1970) [hereinafter cited as 1970 Senate Hearings]. See generally *id.* at 1580, 1605. It was suggested at the Senate Hearings, however, that this disclosure requirement may violate the Sherman Anti-Trust Act. *Id.* at 1605.

²⁴³ Clean Air Amendments of 1970 § 207(d).

²⁴⁴ Id. § 207(c)(1).

²⁴⁵ *Id.*

manufacturer's maintenance requirements have been observed.²⁴⁶ Assuming that it takes another several months before the offending vehicles are finally corrected by the manufacturer, the above procedures could take up to six months or more, from EPA inspection and discovery of the defect to repair by the manufacturer. Effectively then, a class of vehicles which the manufacturer has guaranteed will comply with emission standards for five years or 50,000 miles could contaminate the air for months. With the public health at stake, this time-consuming process should be reduced to no more than one month: two weeks during which public hearings are held; one week for the manufacturer to notify the purchaser; and one week to effect repairs of the defect. At stake are months of poisonous atmospheric pollution resulting from unnecessary procedural delays.

The original warranty provision proposed for pollution-control devices called for guaranteed compliance with emission standards for ten years or 100,000 miles. Congress yielded to manufacturer pressure, however, and reduced these figures by one-half to five years or 50,000 miles. A further concession exacted by the industry during the Senate-House Conference Committee proceedings has virtually eviscerated this provision, however. The Committee agreed that the provision would be retained, but stipulated that it would not come into effect until the EPA decides that an adequate system exists for testing and inspecting the pollution-control devices.²⁴⁷ Lamentably, no deadline was established by which the EPA Administrator must make this determination.

Assuming that the warranty provision does ultimately come into effect, the 50,000 mile period can be assumed to last for approximately four to five years of average driving. Salesmen, however, can accumulate mileage of this magnitude in a little over one year. It is thus also regrettable that Congress decided to shift the responsibility for maintaining air pollution-control devices from the manufacturer to the purchaser after only 50,000 miles. If the purchaser is to pay what doubtless will be greatly increased purchase prices for non-polluting vehicles,²⁴⁸ he should be guaranteed the full benefit of the bargain for the life of the vehicle. The limited warranty of compliance provision thus stands as one of the least desirable features of the 1970 Act.²⁴⁹

b. *State Enforcement Powers.* Under the 1970 Act the federal government is fully responsible for enforcing the emission standards for *new* motor vehicles. But, as noted earlier, the states are authorized

²⁴⁶ Id. § 207(b)(2).

²⁴⁷ Id. § 207(b). See Wall Street Journal, Dec. 17, 1970, at 3, col. 2.

²⁴⁸ The anti-pollution devices could add as much as \$300 to the cost of each automobile. Wall Street Journal, Nov. 19, 1970, at 1, col. 1.

²⁴⁹ Many courts still require that there be privity of contract between the manufacturer and purchaser before holding the manufacturer responsible under a warranty. In these jurisdictions, confusion may result as to what rights a second or third purchaser has with respect to the warranty, despite the provision in § 207(b) that "the warranty under such regulations shall run to the ultimate purchaser and each subsequent purchaser . . ." For discussion of the issues raised by the warranty provision, see generally 1970 Senate Hearings, *supra* note 242, at 139, 1013-015, 1573, 1591, 1622-623, 1667.

to enforce their own emission standards for used vehicles.²⁵⁰ Under Section 210 of the 1970 Act the Administrator is authorized to make grants to state agencies totalling up to two-thirds of the cost of developing and maintaining effective vehicle emission inspection, testing and control programs. Before a state implementation plan is approved by the Administrator, the plan must provide for periodic inspection and testing of motor vehicles to enforce compliance with applicable emission standards.²⁵¹ Neither section 210 (the provision authorizing grants to state programs) nor section 110 (the provision governing state implementation plans), indicates whether state inspection programs are restricted to inspecting only *used* vehicles and not *new* vehicles. Both sections refer only to "motor vehicles." Although it is clear from sections 202 and 209 that states cannot *establish* emission standards for new vehicles, it appears that Congress intended that the states *enforce* the federal standards for new vehicles in their inspection programs, in addition to enforcing their own standards for used vehicles. But, except for the financial assistance provided in section 210, the states will receive no other federal assistance in dealing with the problem of used-vehicle exhaust pollution.²⁵² This means that the states are free to impose their own controls upon used vehicles registered within their boundaries, as California has done.²⁵³ The states may choose to legislate that all used vehicles be fitted with emission-control devices in order to achieve compliance with the state emission standards for used vehicles.

By inference, a "new" motor vehicle becomes "used," and subject to state control under section 209, when the vehicle has been driven for five years or 50,000 miles. A different interpretation would have the states intervening during the federally required warranty period. States are thus precluded from regulating "new" vehicles which have been driven up to 50,000 miles. Unless state emission standards for used vehicles are as stringent as the federal standards for new vehicles, the variance between the state and federal standards will result in automobile pollution levels higher than ought to be allowed. Undoubtedly, some states will adopt emission standards for *used* vehicles more lenient than the federal standards for *new* vehicles. To that extent, some regions will be permitting higher levels of automotive air pollution than other regions. This, in turn, could mean that the federally promulgated air quality standards and goals established under Title I of the 1970 Act will take longer to achieve, to the detriment of the public health. Although state cooperation in combating automobile pollution is both necessary and wise, it would appear that if the individual states are to shoulder the burden of controlling the real source of automotive air pollution—the used vehicle—they should be

²⁵⁰ See discussion on pp. 596-601 *supra*.

²⁵¹ Clean Air Amendments of 1970 § 110(a)(2)(G).

²⁵² See discussion on pp. 596-601 *supra*.

²⁵³ See note 168 *supra*.

federally assisted with minimum federal standards for federally tested devices or systems for *used* vehicles as stringent as those for *new* vehicles. States should then be permitted to establish their own emission standards for used vehicles, based upon strict federal standards as a minimum, but more stringent if the state desires.

The implementation plan requirement set forth in Section 110 of the 1970 Act specifically requires that each Air Quality Control Region develop inspection and testing programs for motor vehicles. Under section 210 the EPA Administrator is authorized to make grants to the states totalling two-thirds of the costs of "developing and maintaining effective vehicle emission devices and systems inspection and emission testing and control programs." But under a similar provision in the 1967 Act,²⁵⁴ not one state applied for the two-thirds grant for developing an inspection program, and only New Jersey, under other provisions of the 1967 Act, applied for and received a demonstration grant to support the development of emission testing procedures suitable for inspection programs.²⁵⁵ Clearly, the states must move quickly to implement inspection and enforcement programs to control growing air pollution from used vehicles. The problem is that some states do not yet even have an agency formed to qualify for a federal grant, and some of those which have agencies lack the expertise either to test control devices or to establish emission standards for used vehicles. Some states will have difficulty in affording even the one-third of the total cost of implementing an enforcement program.²⁵⁶ Such states should be granted additional federal expertise and financial assistance, as needed. There are presently over one hundred million used motor vehicles on the highways, and this number increases at a rate of eight to nine million annually.²⁵⁷ Only a small percentage of these, those built after 1968, have any controls at all, and these controls have proved highly ineffective.²⁵⁸ Used vehicles continue to endanger health; and at present neither federal nor state governments, except California, have begun to deal effectively, or at all, with this problem.

5. Sanctions for Non-Compliance

a. *Injunctions.* Under Section 204 of the 1967 Act, which was unchanged by the 1970 Act, the district courts of the United States are given jurisdiction to enjoin any violations of automobile emission standards. According to this section, only the federal government can bring an action to enjoin violations.²⁵⁹ Only one such action was ever initiated under the 1967 Act, a proceeding to obtain a permanent injunction against the illegal importation of new motor vehicles.²⁶⁰

²⁵⁴ 42 U.S.C. § 1857f-6b (Supp. V, 1970).

²⁵⁵ 1970 Senate Hearings, *supra* note 242, at 379-80.

²⁵⁶ See note 80 *supra*.

²⁵⁷ 116 Cong. Rec. 16,093 (daily ed. Sept. 21, 1970).

²⁵⁸ See discussion on pp. 578-79 *supra*.

²⁵⁹ 42 U.S.C. § 1857f-3 (Supp. V, 1970).

²⁶⁰ 1970 Senate Hearings, *supra* note 242, at 380. For a comprehensive treatment of

b. *Penalties.* Any person²⁶¹ who violates any of the automobile pollution provisions of the 1970 Act will be subject to a civil penalty of \$10,000 for each violation.²⁶² Each motor vehicle or engine failing to comply with the standards will constitute a separate offense.²⁶³ The penalty has been increased from \$1,000 under the 1967 Act to \$10,000 under the 1970 Act.²⁶⁴ Although desirable, it is questionable whether such an increase is meaningful, especially in view of the fact that no penalties were levied at \$1,000 under the 1967 Act. The most effective penalty would be prohibition by the EPA Administrator and the states of the sale or other introduction into commerce of any product which causes air pollution, if that product fails to comply with the established standards. Manufacturers would respond more quickly to the possibility of losing their market completely. The EPA Administrator is authorized to withdraw approval of new vehicles if testing demonstrates that they fail to comply, or fail to continue to comply, with the federal emission standards. Revocation of such approval should be accompanied by an order prohibiting the introduction of such vehicle or device into commerce. This provision, if fully implemented, would provide the most effective sanction. Monetary penalties are unsatisfactory because by the time such penalties are imposed, the pollution damage has already been done. Arguably, the purpose of adequate sanctions is the deterrence of air pollution practices, and not the raising of revenue. Prohibition of the entry of the offending vehicles into the stream of commerce is clearly the more effective deterrent.

c. *Citizen Suits.* Throughout the 1970 Act Congress has carefully preserved the right of the public to participate at each step of the air pollution abatement process:²⁶⁵ at the establishment of standards

the use of injunctions in air pollution enforcement see Comment, *Equity and the Eco-System: Can Injunctions Clear the Air?*, 68 Mich. L. Rev. 1254 (1970).

²⁶¹ "Person" is defined in the 1967 Act as including "an individual, corporation, partnership, association, State, municipality, and political subdivision of a State." 42 U.S.C. 1857h(e) (Supp. V, 1970). Thus, under § 205 of the 1970 Act, the penalty provision, a manufacturer or importer of a non-complying motor vehicle is subject to the \$10,000 civil penalty. But under § 203(a)(6) of the 1970 Act, "importer" includes private persons as well, so that any person or private citizen who imports a foreign vehicle which does not comply with federal emission standards is also subject to a civil penalty of \$10,000.

²⁶² Clean Air Amendments of 1970 § 205.

²⁶³ *Id.*

²⁶⁴ The Secretary of HEW did not levy any fines under the 1967 Act, despite the fact that in some cases up to 80% of the vehicles tested from the road were failing to comply with the emission standards issued for the prototypes. 1970 Senate Hearings, *supra* note 242, at 363, 380.

²⁶⁵ During the Senate Hearings, Senator Muskie observed: "I know one of the things industries don't like is this public participation. I like to give it the blessing of national legislation by writing it into the law." 1970 Senate Hearings, *supra* note 242, at 152. Since government agencies lack the adequate personnel, both in numbers and in experience, to control air pollution effectively, private citizen suits can be a great aid to controlling the problem.

stage;²⁶⁶ at the implementation of control programs stage;²⁶⁷ and at the enforcement stage.²⁶⁸ In another controversial provision of the 1970 Act, the Congress has authorized private citizens to bring suits on their own behalf in the U.S. district courts to force compliance with air quality and emission standards and regulations.²⁶⁹ The Department of HEW and other federal agencies encouraged private and class actions to aid their enforcement efforts under the 1967 Act.²⁷⁰ Both the Senate Hearings and the Senate Committee Report make it clear that citizen suits under the 1970 Act are limited to actions for injunctive relief, and that damages for injury to person or property are not recoverable under the citizen suits provision.²⁷¹ Provision is made for actions against the polluter or government agencies (including the EPA) or both.²⁷²

The significant elements of this important provision include the following:

1. The federal district courts have original jurisdiction to enforce air pollution laws regardless of the financial amount in controversy or the citizenship of the parties involved.²⁷³
2. Civil actions to require enforcement of the pollution laws may be brought by one or more persons on their own behalf against any person, governmental agency, or the EPA Administrator to compel enforcement of the standards, orders or duties established under the 1970 Act. Including governmental agencies within the class of persons to be sued indicates that neither the agencies nor the EPA Administrator can invoke the doctrine of sovereign immunity, often a fatal impediment to compelling governmental

²⁶⁶ Clean Air Amendments of 1970 §§ 109(a)(1).

²⁶⁷ *Id.* § 110(a)(1).

²⁶⁸ *Id.* § 304.

²⁶⁹ *Id.*

²⁷⁰ In June of 1969, at the annual meeting of the Air Pollution Control Association in New York, ranking officials of the National Air Pollution Control Administration (NAPCA) of the Department of HEW openly encouraged such suits. 1970 Senate Hearings, *supra* note 242, at 817.

²⁷¹ 1970 Senate Hearings, *supra* note 242, at 818; S. Rep. No. 91-1196, 91st Cong., 2d Sess. 38 (1970).

²⁷² Clean Air Amendments of 1970 § 304(a).

²⁷³ "Amount in controversy" appears to have little meaning in air pollution suits. The "amount of damage" to the public health and welfare is not susceptible to easy measurement. Also, absent the citizenship provision in § 304 of the 1970 Act, a local polluter of the same residence or citizenship as the plaintiffs would not be amenable to suit in the federal district courts. The elimination of diversity and jurisdictional amount considerations circumvents any barriers to federal jurisdiction which may result from the Supreme Court decision in *Snyder v. Harris*, 394 U.S. 332 (1969), which held that in a class action, separate and distinct claims may not be aggregated to provide the \$10,000 jurisdictional amount required by Fed. R. Civ. P. 23.

- agencies to act. Section 304 does not, however, provide for class actions.²⁷⁴
3. Prior notice of the suit must be served upon (a) the EPA Administrator; (b) the state agency involved; and (c) the alleged violator.²⁷⁵
 4. The courts may award costs of litigation, including reasonable attorney and expert witness fees, to either party.²⁷⁶

The citizen suits provision unfortunately lacks a number of important elements which should have been included. Most significant among these omissions was the failure to provide for recovery of damages by plaintiffs. Relief is restricted to court orders requiring compliance with the established standards. This means that a plaintiff may not be awarded financial relief for injury done to his property or

²⁷⁴ The original Senate Committee version of § 304 did include class actions as well as citizen suits but the Committee decided to avoid the confusion and technicalities of class actions enforcing air pollution laws and so eliminated them. 1970 Senate Hearings, *supra* note 242, at 622. The provision is now drawn to avoid problems raised by the class action provision of Federal Rule of Civil Procedure 23. Traditional class actions under Federal Rule 23 involve (a) identification of the class of persons whose interests have been damaged; (b) identification of amount of total damage done to determine if there is jurisdiction in the federal court; and (c) allocation of any damages recovered. None of these issues pertains to the citizen suit provision. No jurisdictional amount is required under § 304 and no provision is made for the recovery of property or personal damages. S. Rep. No. 91-1196, 91st Cong., 2d Sess. 38 (1970). Provision is made, however, under § 304(e) of the Act, to preserve the rights of persons as a class or as individuals under any statute or common law to seek enforcement or any other relief. Thus, class actions are still available in suits predicated upon common law theories such as nuisance, and Congress made it clear that it is not preempting the field. For discussion of the question of class actions in pollution suits, see Comment, *Equity and the Eco-system: Can Injunctions Clear the Air?*, 68 Mich. L. Rev. 1254, 1272-274 (1970).

²⁷⁵ Suit cannot be filed until the Administrator has had sixty days, after receipt of notice, within which to institute enforcement proceedings to abate the alleged violation. In addition, if the Administrator or state has commenced and is diligently prosecuting a civil action in a federal or state court, no citizen suit may be filed. Any person may, however, intervene in such an action in federal court, as a matter of right. Clean Air Amendments of 1970 § 304(b). An exception to these requirements permits the filing of a citizen suit immediately after notice has been given, if the alleged violation involves emissions of "hazardous pollutants" under §§ 112(c)(1)(B) or 113(a). If not already a party to the action, the Administrator may intervene as a matter of right in any citizen suit. If abatement proceedings are not begun within 60 days following notice, or if the citizen believes that enforcement efforts initiated by the agency are inadequate, the citizen could then file his action. Because federal facilities generate considerable air pollution, provision is also made for suits by citizens against the government. Clean Air Amendments of 1970 §§ 118, 304.

²⁷⁶ *Id.* § 304(d). This provision eliminates potential financial barriers to citizen groups with limited resources who may wish to initiate abatement actions against comparatively wealthy industrial polluters. It has been estimated that the costs of bringing such actions can amount to as much as \$500,000. 1970 Senate Hearings, *supra* note 242, at 1199. On the other hand, the provision also discourages frivolous suits, or suits of harassment, since a court can award court costs, attorney fees and expert witness fees to the alleged polluter, should the plaintiff lose. But under § 304(d) the court may, if an injunction is sought, require the filing of a bond or equivalent security in accordance with the Federal Rules of Civil Procedure.

person; nor does section 304 permit the awarding of "clean-up costs" following a destructive pollution violation. It is submitted that the failure to allow recovery of damages under section 304 weakens the citizen suits provision. Ideally, both injunctive relief and private damages should be available both to deter prospective polluters and to provide a broad range of available sanctions.²⁷⁷ Under the 1970 Act the plaintiff no longer has to prove that the emissions in question are of such a magnitude as to constitute a nuisance in the technical, legal sense in order to obtain injunctive relief.²⁷⁸ Now, he need only show a violation of the emission standards, a considerably easier task.²⁷⁹ Further, the mere compliance with federal standards should not preclude the recovery of damages by an injured plaintiff. Compliance under certain circumstances may, nonetheless, constitute negligence, and such situations should be subject to jury appraisal to determine whether the person responsible for "legal," but nonetheless damaging, emissions has acted reasonably under the circumstances.²⁸⁰

It became evident during the Senate Hearings that government

²⁷⁷ It was suggested during the Senate Hearings that the *in terrorem* effect of potential private damage actions would cause industries to initiate preventive measures against pollution. 1970 Senate Hearings, *supra* note 242, at 826. The allowance of recovery of private damages alone, however, without an accompanying abatement order could frustrate the purpose of the anti-air pollution statutes. *Id.* at 853. Illustrative of such a result is the recent decision by the New York Court of Appeals in *Boomer v. Atlantic Cement Co., Inc.*, 26 N.Y.2d 219, 257 N.E.2d 870 (1970), which instructed the trial court to grant an injunction against a polluting cement company. The court expressly stated, however, that if the company paid "permanent damages" to the plaintiff, the injunction was to be vacated, thus permitting the cement plant to continue polluting the air. The General Counsel of the Environmental Defense Fund, in a letter to Senator Muskie, observed with respect to the *Boomer* case, "... the allowance of damages—especially permanent damages—without also requiring abatement of the polluting activity tends to assure the perpetuation, instead of the abatement, of pollution." 1970 Senate Hearings, *supra* note 242, at 853. For further discussion on the question of allowing recovery of private damages under the 1970 Act, see generally *Id.* at 623, 818, 826, 853, 1182-183.

²⁷⁸ *Id.* at 623.

²⁷⁹ Clean Air Amendments of 1970 § 304(a)(1). With the aid of §§ 114(c) and 208(b), which require that the polluter keep records and reports, which are available to the public, to demonstrate compliance with the standards, proof of violation of standards will be facilitated. The question thus will be one of *fact* as to whether there has been compliance, and not one of *law* to establish whether pollution did or did not exist. But there may be a Fifth Amendment problem, with respect to §§ 114(c) and 208(b) of the Act, on the issue of self-incrimination. This question has never been tested in the courts, despite the fact that the 1967 Act contained a provision similarly requiring the maintenance of discoverable records and reports. 42 U.S.C. § 1857f-6 (Supp. V, 1970).

²⁸⁰ 1970 Senate Hearings, *supra* note 242, at 826, 833-34, 839. For a probing discussion which elaborates upon the questions presented by the citizen suits provision, see the memorandum submitted to the Senate Subcommittee on Air and Water Pollution, 1970 Senate Hearings, *supra* note 242, at 1585-590. See generally *id.* at 816-61. The automobile manufacturers were against the citizen suits provision for obvious reasons. For the major criticisms of this provision by its opponents, see generally *id.* at 1606, 1625. See also the Senate floor debate on the provision. 116 Cong. Rec. 16,113-116 (daily ed. Sept. 21, 1970).

agencies had been dilatory in seeking enforcement under the 1967 Act. A major defense of those agencies, including the Department of HEW,²⁸¹ had been that they lacked adequate funds and staff to police and regulate effectively the industries involved. Citizen suits will complement the enforcement power of the government agencies. There is ample precedent for private action as a supplement to enforcement of federal regulatory statutes. The fields of antitrust litigation and securities frauds afford two examples. In both of these areas, Congress and the courts have relied upon private suits to aid enforcement, due to the fact that both the Department of Justice and the Securities Exchange Commission are understaffed and unable to bring all the suits necessary to enforce the regulatory laws.²⁸² The enforcement of air pollution laws will benefit no less from private citizen actions.

6. *Provisions for Appeal*²⁸³

In the event that the automobile industry cannot sufficiently improve the internal combustion engine to meet the 1975 emission standards, Congress has provided a "realistic escape hatch":²⁸⁴ the industry may petition the EPA Administrator for a one-year extension of the 1975 deadline.²⁸⁵ The procedure for obtaining the extension is as follows: the manufacturer must petition the EPA Administrator at any time after January 1, 1972, for a suspension of the emission standard regulating carbon monoxide and hydrocarbons; and after January 1, 1973, for a suspension of the nitrogen oxide standard.²⁸⁶ The EPA Administrator must then hold a public hearing on the request, and may permit interested citizens to intervene.²⁸⁷ The filing of an appeal should

²⁸¹ See discussion on pp. 577-78 *supra*.

²⁸² See *J. I. Case Co. v. Borak*, 377 U.S. 426, 430-33 (1964), in which the Supreme Court found it necessary to "read in" a private cause of action to enforce proxy rules because the Court reasoned that (1) private enforcement of the proxy rules provides a necessary supplement to Commission action; and (2) as in antitrust treble damages litigation, the possibility of civil damages or injunctive relief serves as an effective weapon in the enforcement of proxy requirements. See *Perma Life Mufflers, Inc. v. International Parts Corp.*, 392 U.S. 134 (1968), in which the Court referred to private suits as "a bulwark of antitrust enforcement." 1970 Senate Hearings, *supra* note 242, at 1482-484.

²⁸³ The appeal procedures under the stationary-source provisions (Title I) of the Clean Air Amendments of 1970, are discussed *supra* at pp. 591-93.

²⁸⁴ 116 Cong. Rec. 16,224 (daily ed. Sept. 22, 1970).

²⁸⁵ Clean Air Amendments of 1970 § 202(b)(5).

²⁸⁶ Senator Muskie explained the rationale of this timetable:

We wanted the provision for appeal to be made available late enough in this 5-year time frame so that the industry would make, and be forced to make, a good faith effort toward achieving the objectives of the bill before resorting to the courts. At the time, we wanted to provide that there would be sufficient time to resolve the appeal and to get a decision so that the industry could then respond to that decision in its production schedules.

116 Cong. Rec. 16,227 (daily ed. Sept. 22, 1970). In this manner, Congress has provided the automobile industry three years "lead time" in order to plan production schedules, model changes, etc.

²⁸⁷ Clean Air Amendments of 1970 § 202(b)(5)(D).

not stay the industry's responsibility of complying with the standards. The Administrator must act upon the petition within sixty days from receipt.²⁸⁸ He is authorized to grant the extension only upon a finding that:

1. The extension is "essential to the public interest or the public health and welfare of the United States;"²⁸⁹
2. The manufacturers have made a good faith effort to meet the deadline;²⁹⁰
3. The manufacturers have established that effective technology was not available in time to achieve compliance;²⁹¹ and
4. The study and investigation of the National Academy of Sciences has not indicated that technology, processes, or other alternatives are available to meet the standards.²⁹²

If the Administrator grants the one-year extension, he must also promulgate interim emission standards which reflect the greatest degree of control achievable under the technology existing at that time.²⁹³ The Senate version of section 202 had provided that the Administrator's

²⁸⁸ Id.

²⁸⁹ Id. This section distinguishes between the "public interest" and the "public health and welfare" thus raising interesting questions concerning what precisely is encompassed by the term "public interest" if "health and welfare" are not. For example, if it appeared that the economy of the United States would suffer severely as a result of sanctions imposed for failure to meet the 1975 standards, thus at least arguably harming the public interest, is it possible that in this circumstance, the Administrator could grant an extension, notwithstanding the mandate of the Act that he do everything possible to protect the "health and general welfare of the public"? This provision in effect may allow the Administrator to base his decision upon economic and technological, rather than health, considerations—precisely contrary to the salubrious intent of Title II of the Act. In this connection it should be noted that nowhere in the 1970 Act is the term "public interest" defined.

²⁹⁰ Id.

²⁹¹ Id.

²⁹² Id. This provision could be the most important of the findings the Administrator must make. In considering a petition for extension of the deadline, the Administrator must take into account not simply the technology developed by the automobile manufacturers themselves, but technology developed by *any* engineering concern, if it has proved effective in tests. See N.Y. Times, Dec. 17, 1970, at 1, col. 7; at 56, col. 1-2. See also discussion concerning development of low-emission alternatives to the internal combustion engine, pp. 604-06 *supra*.

²⁹³ Clean Air Amendments of 1970 § 202(b)(5)(C). The Nixon Administration, yielding to bitter opposition by the auto industry, attempted to pressure the House-Senate Conference Committee into eliminating the 1975 and 1976 deadlines by which the automakers must achieve compliance with the exhaust emission standards. Secretary of HEW Elliot Richardson wrote to the Senate-House Conference Committee six weeks after the Conference had already accepted the deadlines, and indicated that the Administration desired that the 1975 date be changed to a "hopeful target" but not a deadline, and that the EPA Administrator be given authority to grant an unlimited series of one-year extensions. Fortunately, the conferees rejected the President's proposal, and decided that after the first one-year administrative extension only Congress could grant further relief. N.Y. Times, Dec. 17, 1970, at 1, col. 7; Wall Street Journal, Dec. 17, 1970, at 3, col. 2.

decision granting or denying the one, one-year extension could be appealed to the U.S. Court of Appeals for the District of Columbia and then to the United States Supreme Court if certiorari were granted. But the House-Senate Conference Committee deleted the provision for judicial review of the Administrator's decision. This means that under the Act as passed, environmental citizen groups are not expressly granted standing to obtain federal court review of the decision granting the extension. Similarly, in the unlikely event that the Administrator denies the one-year extension, the automobile industry is also not expressly accorded standing to seek judicial review of that decision. It is possible, however, that either group might be able to obtain review under the provisions of the Administrative Procedure Act.²⁹⁴

Much Senate debate surrounded the question of who should have the power to review the Administrator's decision.²⁹⁵ It was recognized that "... this may be the biggest industrial judgment that has been made in the United States in this century."²⁹⁶ This recognition was combined with the admission that congressional enactment of specific standards into law is itself without precedent.²⁹⁷ The urgency of the air pollution problem was cited as the reason for the Congress so acting. But the debate was most heated as the Senate considered an amendment, ultimately defeated, which would have substituted congressional review for judicial review.²⁹⁸ Actually, Congress considered all three branches of the government for possible powers of review: (1) administrative review, by the executive branch (*i.e.*, the Administrator's decision would be final with no further review); (2) Congressional review; and (3) judicial review.²⁹⁹

The major arguments against judicial review, and in favor of congressional review, centered upon contentions that:

1. The Congress made this difficult policy decision concerning the automobile industry, and the Congress should take responsibility for reviewing its propriety.³⁰⁰
2. If Congress were to make the decision as to the one-year extension it could act within sixty days—thus avoiding delays of up to two years if the matter were litigated in the courts.³⁰¹
3. Congress was leaving too many policy decisions to the judiciary.³⁰²

²⁹⁴ 5 U.S.C. §§ 701-06 (Supp. V, 1970).

²⁹⁵ For the Senate floor debate on the question of judicial review of the granting or denial of a one-year extension see generally 116 Cong. Rec. 16,218-228 (daily ed. Sept. 22, 1970).

²⁹⁶ *Id.* at 16,225.

²⁹⁷ *Id.* at 16,220.

²⁹⁸ See generally *Id.* at 16,218-228.

²⁹⁹ *Id.* at 16,224.

³⁰⁰ *Id.* at 16,220.

³⁰¹ *Id.* at 16,219.

³⁰² *Id.* at 16,218.

4. Although the judiciary is less susceptible to political and economic pressures, it is pressured by an increasing backlog of cases and should be spared a difficult and time-consuming decision such as the one concerning the one-year extension.⁸⁰³
5. The question of granting or denying the extension is a question of fact involving complex technological considerations. The courts are ill-equipped to deal with the difficult technical questions presented. If Congress had the power to review, it would have the full benefit of all the scientific background developed by federal agencies expert in the technological questions presented.⁸⁰⁴

The arguments made in favor of judicial review, on the other hand, were considerably more compelling:

1. If the industry is not able to achieve compliance with the emission standards, the question will be one of *fact*: whether the automobile industry has put forth good faith efforts to meet the emission standards, and whether it was possible within the state of the art to produce a complying vehicle. Questions of fact would best be tried by the judiciary, rather than by 535 legislators.⁸⁰⁵
2. The court has the power of subpoena, of discovery and of calling expert witnesses.⁸⁰⁶
3. The emotion and pressure if the industry has *not* produced a complying vehicle could be extraordinary. The courts are by design and tradition less subject to political and emotional pressure than the Congress.⁸⁰⁷
4. There has traditionally been a right to judicial review of administrative decisions in the area of pollution control.⁸⁰⁸
5. Without provision for judicial review, the industry would have a clear argument of denial of due process. The courts would most likely grant judicial review anyway, and the review would not be limited to the statutory jurisdiction for review of the one-year extension.⁸⁰⁹

⁸⁰³ Id.

⁸⁰⁴ Id. at 16,220.

⁸⁰⁵ Id. at 16,225.

⁸⁰⁶ Id. Under § 307 of the Act the EPA Administrator is given these same powers.

⁸⁰⁷ In the course of the Senate debate on judicial review, Senator Baker argued: The court in the sanctity of its judicial undertakings in the calm, cool, deliberations of its fact-finding function, in its detachment from the immediate pressures, is best suited to undertake this task than 535 legislators are, 435 of them standing for election in twelve months and one-third of the Senate standing for election in 1976, to say nothing of the pressure and heat and the confrontation of a political campaign for President in 1976. The Congress is probably the least likely place to have clear, calm determination of that fact issue. 116 Cong. Rec. 16,225 (daily ed. Sept. 22, 1970).

⁸⁰⁸ Id. at 16,226.

⁸⁰⁹ Id.

There was little support in the Senate for leaving the decision concerning the one-year extension solely in the hands of the Administrator, without review by either the judiciary or the Congress; the reasons for the elimination of the judicial review provision were not made clear by the House-Senate Conference Report,⁸¹⁰ which is silent on this point. It is submitted that the elimination of the provision allowing for judicial review of the Administrator's decision was unwise. The public should be entitled to be heard in the courts regarding a matter so important to its health.

Clearly the decision of the Administrator should be subject to review, and the best forum for such review is the federal courts, for the reasons indicated above.⁸¹¹ Recent cases suggest that even in matters committed by statute to administrative discretion, it may nonetheless be possible to obtain judicial review.⁸¹² Indeed, in one recent case the court commented that preclusion of judicial review "is not lightly to be inferred . . . it requires a showing of clear evidence of legislative intent."⁸¹³ The courts have granted standing to obtain such review to those being regulated as well as to persons who seek "to protect the public interest in the proper administration of a regulatory system enacted for their benefit."⁸¹⁴ The Senate Committee Report accompanying the Senate version of the 1970 Act clearly indicated that "precluding review does not appear to be warranted or desirable,"⁸¹⁵ and for this reason the Senate Committee included judicial review in its version of the bill. It would seem that, notwithstanding the deletion of the judicial review provision from the final version of the 1970 Act, judicial review with respect to the granting or denial of the one-year extension should still be available, since Congress did not substitute a specific provision evidencing a "clear legislative intent" to preclude such judicial review.

If the automobile industry still has not achieved conformity with the federal standards even after the one-year extension, the automobile manufacturers would have to petition the Congress for relief from the emission standards established under section 202(b).⁸¹⁶ If the Congress refuses to grant relief, the automakers would presumably resort to the courts to attack the constitutionality of the section 202(b) emission

⁸¹⁰ Conference Report to Accompany H.R. 17255, H.R. Rep. No. 91-1783, 91st Cong., 2d Sess. (1970).

⁸¹¹ See the reasons enumerated on pp. 618-19 *supra*. See also the discussion of the judicial review provisions in the portion of the 1970 Act dealing with stationary-source polluters, pp. 591-93 *supra*.

⁸¹² See the cases cited in note 139 *supra*.

⁸¹³ *Environmental Defense Fund, Inc. v. Hardin*, 428 F.2d 1093, 1098 (D.C. Cir. 1970).

⁸¹⁴ *Id.* at 1097.

⁸¹⁵ S. Rep. No. 91-1196, 91st Cong., 2d Sess. 40 (1970).

⁸¹⁶ 116 Cong. Rec. 16,226 (daily ed. Sept. 22, 1970).

standards.³¹⁷ If the automobile industry appeals to Congress for relief, the latter could act in any of several ways:

1. Congress could order the internal combustion engine off the market and require the use of an alternative propulsion system, notwithstanding questions of impracticality or economy.³¹⁸
2. Congress could relax the section 202(b) emission standards and adjust them to comport with the state of the art or technology in 1975.
3. Congress could impose strict horsepower limitations upon vehicles—perhaps designating a maximum of 120 horsepower on non-commercial new vehicles, or similar limitations on the various classes of new motor vehicles. Lower horsepower means lower octane gasoline, less combustion of gasoline and less automotive air pollution.³¹⁹
4. Congress could reduce the number of vehicles on the highways through the commerce power—by legislating a “one vehicle to one family” standard or similar measures, while concurrently providing for massive expansion of public transportation systems.

All of the foregoing, with the exception of the second, calling for a readjustment of the emission standards to comport with available technology, may give rise to constitutional challenges by either the automobile industry or the motoring public.³²⁰ But some action will have to be taken by 1975 or 1976, if the automobile industry loses its gamble with modifying the internal combustion engine to meet the prescribed emission standards, and if the nation's health is to be protected.

III. THE CONSTITUTIONALITY OF THE AUTOMOBILE POLLUTION EMISSION STANDARDS

A. *The Economic Issues Raised*

The philosophy of the Clean Air Amendments of 1970 has been made clear: industry protestations of technological impossibility or unfeasibility are no longer sufficient to avoid tough anti-air pollution standards and deadlines.³²¹ In reporting to the Congress on the 1967

³¹⁷ See discussion on pp. 624 et seq. *infra*, concerning the constitutional issues raised by § 202(b) of the Act.

³¹⁸ See Currie, *Motor Vehicle Air Pollution: State Authority and Federal Pre-emption*, 68 Mich. L. Rev. 1083, 1100-101 (1970).

³¹⁹ *Id.* at 1101; Hearings on S. 3229, S. 3466, and S. 3546 Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 91st Cong., 2d Sess. 120-21, 887, 893 (1970) [hereinafter cited as 1970 Senate Hearings].

³²⁰ See discussion on pp. 624 et seq. *infra*.

³²¹ During Senate floor debate on the 1970 Act, Senator Muskie discounted industry pessimism regarding ability to meet the proposed standards:

[T]he attitude of the industry prior to the time it was required to conform to

Act, the Senate Committee on Public Works enunciated the rationale underlying tough air pollution laws, economic considerations notwithstanding:

The Committee recognizes the potential economic impact, and therefore economic risk, associated with major social legislative measures of this type. But this risk was assumed when the Congress enacted social security, fair labor standards, and a host of other legislation designed to protect the public welfare. Such a risk must again be assumed if the nation's air resources are to be conserved and enhanced to the point that generations yet to come will be able to breathe without fear of impairment of health.³²²

But the 1967 Act turned out to be no risk at all.³²³ The 1970 Act, however, if properly implemented, could bear out the rationale of the foregoing statement, and economic repercussions could be felt around the world if the automobile industry cannot produce a complying vehicle by 1976.

As the only major opponent to the 1975 automobile emission standards, Senator Griffin of Michigan, argued the automakers' economic response to the tight controls:

1. The availability of automotive transportation is a basic factor in the personal economy and way of life of the very people sought to be protected. The manufacture, sale, and servicing of motor vehicles is a vital industry in the U.S. economy.³²⁴
2. This vital industry is to be required by statute to meet standards which cannot be met with existing technology. Further, these standards were established by the Committee without benefit of hearings as to whether they could be met.³²⁵
3. Over 800,000 Americans are directly dependent upon the auto industry for their livelihoods; more than 14 million jobs are dependent upon its products—28 percent of all non-farm employment in the United States.³²⁶

the California standards was the same as it is in this case. They said it could not be done. But, it was done

. . . . Since the late 1940's, a quarter of a century ago, the industry has been occupied with this problem by its own statements. It has been developing technology. Every time it is pressed to apply technology it pleads for time. It says it is not possible. It said this to California in 1964. It said this to us in the hearings in 1964 and in 1965. It says it again now.

116 Cong. Rec. 16,228 (daily ed. Sept. 22, 1970).

³²² 116 Cong. Rec. 16,092 (daily ed. Sept. 21, 1970).

³²³ See discussion on pp. 577-80 *supra*.

³²⁴ 116 Cong. Rec. 16,220 (daily ed. Sept. 22, 1970).

³²⁵ *Id.*

³²⁶ *Id.* at 16,220-221.

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4. Automobiles and trucks generate 10 percent of all taxes collected by federal, state, and local governments combined—16 percent of the gross national product. Even a slight dip in auto sales sends shock waves through the financial community.⁸²⁷
5. The Act demands that the industry make within 18 to 30 months a technological breakthrough which has withstood more than 15 years of research.⁸²⁸
6. "In short . . . this bill holds a gun at the head of the American automobile industry in a very dangerous game of economic roulette."⁸²⁹

The industry's prophecies of economic doom are without merit. Congress has mandated that the automobile's endangerment of the public health must be terminated. Various procedural safeguards in the 1970 Act guarantee that if the industry makes a good faith effort, but cannot technologically comply with the standards established in the Act, it can seek relief from Congress or the judiciary.⁸³⁰ But it must try, for the sake of everyone's health, to improve an instrumentality clearly dangerous to the public health. It seems incongruous for the automobile industry to argue economics versus health, when the nation's economy ultimately depends upon the health, and the existence, of the buying public. The problem of air pollution has assumed such an urgency that no economic argument should stand as an obstacle to purifying our air.

In measuring the congressional power to protect the health and welfare of the public, former Department of HEW Secretary Arthur S. Flemming cautioned:

[T]here is one thing that a responsible government cannot do. It cannot fail to place at the top of its list of priorities the health of all the people even though by so doing, it may be or may appear to be acting against the economic interests of a segment of our society.⁸³¹

⁸²⁷ Id. at 16,221.

⁸²⁸ Id.

⁸²⁹ Id. For an elaboration of the automobile industry's economic arguments, see 1970 Senate Hearings, *supra* note 319, at 1608-610, 1626.

⁸³⁰ In an exchange with Senator Griffin on the Senate floor, Senator Muskie commented:

The deadline is based not, . . . on economic and technological feasibility, but on considerations of public health. We think, on the basis of the exposure we have had to this problem, that this is a necessary and reasonable standard to impose upon the industry. If the industry cannot meet it, they can come back [to the Congress].

⁸³¹ 116 Cong. Rec. 16,095 (daily ed. Sept. 21, 1970).

⁸³¹ 1970 Senate Hearings, *supra* note 319, at 639-40. In discussing the congressional power to act in the interest of the health and safety of the people, Justice Frankfurter's remarks on the Food and Drug Act of 1906 are equally applicable to the Clean Air Amendments of 1970:

The Food and Drugs Act of 1906 was an exertion by Congress of its power to

The overriding objective sought to be accomplished by Congress throughout the 1970 Act is the protection of the health of the consuming public. The public health must be considered *ab initio*, for "the economic viability of a dead community would not mean much."⁸³²

B. *The Legal Issues Raised*

The Administrator of the EPA is authorized to withhold certification of new motor vehicles which fail to comply with federally established emission standards, and to prohibit their entry into commerce until they comply.⁸³³ If the internal combustion engine is not modified to comply with the standards set for 1975, those standards could operate to prohibit its further use. Strictly speaking, the prohibition of the further entry into commerce, or the sale or use of internal combustion engines is more than an emission regulation. It is arguably a regulation of the sale of engines and, concomitantly, of the sale of motor vehicles themselves.⁸³⁴ If the Administrator must, in fact, find it necessary to use the drastic tool of total exclusion of the internal combustion engine, two questions arise: (1) upon what power can Congress sustain the constitutionality of section 202(b), the emission standards provision, and (2) to what constitutional attacks from the automobile industry is this provision susceptible?

The congressional power to control automobile air pollution arises out of the commerce clause.⁸³⁵ Because the automobile is engaged in interstate transportation, is using interstate highways, and causes air pollution which, arguably, is itself moving in "interstate commerce,"⁸³⁶

keep impure and adulterated food and drugs out of the channels of commerce. By the Act of 1938 Congress extended the range of its control over illicit and noxious articles and stiffened the penalties for disobedience. The purposes of this legislation thus touch phases of the lives and health of people which, in the circumstances of modern industrialism, are largely beyond self-protection. Regard for these purposes should infuse construction of the legislation if it is to be treated as a working instrument of government and not merely as a collection of English words.

United States v. Dotterweich, 320 U.S. 277, 280 (1943). See brief for petitioners, Environmental Defense Fund, Inc. v. Finch, 1970 Senate Hearings, *supra* note 319, at 639-40.

⁸³² 1970 Senate Hearings, *supra* note 319, at 1025.

⁸³³ Clean Air Amendments of 1970 § 206.

⁸³⁴ Currie, Motor Vehicle Air Pollution: State Authority and Federal Pre-emption, 68 Mich. L. Rev. 1083, 1100 (1970).

⁸³⁵ U.S. Const. art. I, § 8, cl. 3. The extent of congressional power to regulate commerce among the states was defined by Chief Justice Marshall in the landmark case Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1, 196 (1824):

It is the power to regulate; that is to prescribe the role by which commerce is to be governed. This power, like all others vested in Congress, is complete in itself, may be exercised to its utmost extent and acknowledges no limitations other than are prescribed in the Constitution . . . It is no objection to the assertion of the power to regulate interstate commerce that its exercise is attended by the same incidents which attend the exercise of the police power of the states.

⁸³⁶ See Edelman, Federal Air and Water Control: The Application of the Commerce Power to Abate Interstate and Intrastate Pollution, 33 Geo. Wash. L. Rev. 1067, 1071 (1965); Comment, The Federal Air Pollution Program, 1968 Wash. U. L.Q. 283, 319-21

automobile pollution was considered to be properly within the ambit of congressional regulatory power. In *United States v. Bishop Processing Co.*,⁸³⁷ a federal district court recently held that the 1967 Clean Air Act represented a constitutional exercise of the congressional commerce power since the movement of air pollution across state lines constituted interstate commerce subject to regulation by Congress.⁸³⁸ The court found that an economic relationship exists between the Clean Air Act's regulation of interstate air pollution and the protection of commerce since "malodorous pollution which 'adversely affects business conditions and property values and impedes industrial development' would clearly interfere with interstate commerce."⁸³⁹ It has long been held that the power to regulate commerce includes the power to prohibit it entirely.⁸⁴⁰ The United States Supreme Court has held that Congress can "regulate interstate commerce to the extent of forbidding and punishing the use of such commerce as an agency to promote . . . the spread of any evil or harm to the people of other States from the state of origin."⁸⁴¹ The regulation of air pollution, which has been medically shown to be deleterious, if not destructive, to health, is clearly within the commerce power of Congress.

But the principal issue which could confront the United States Supreme Court sometime in 1975 or 1976 is whether the Congress has exceeded its commerce power in enacting Section 202(b), the automobile emission standards provision of the 1970 Act. In past cases involving control of pollution, the Court has dealt only with suits requiring local businesses, not an entire industry, to comply with *existing*, and not *future* technology. However, Section 202(b) of the 1970 Act requires that the entire automobile industry comply with technology which does not presently exist. As a result, the Supreme

(1968); *Powell v. U.S. Cartridge Co.*, 339 U.S. 497, 512 (1949); *United States v. Bishop Processing Co.*, 287 F. Supp. 624, 630 (1968).

⁸³⁷ 287 F. Supp. 624, 630 (1968).

⁸³⁸ *Id.* at 630.

⁸³⁹ *Id.* at 631.

⁸⁴⁰ *United States v. Darby*, 312 U.S. 100, 114 (1941). The Court observed that: Congress, following its own conception of public policy concerning the restrictions which may appropriately be imposed on interstate commerce, is free to exclude from the commerce articles whose use in the states for which they are destined it may conceive to be injurious to the public health, morals or welfare

⁸⁴¹ *Brooks v. United States*, 267 U.S. 432, 436 (1925). See also *American Power and Light Co. v. S.E.C.*, 329 U.S. 90, 99 (1946); *North American Co. v. S.E.C.*, 327 U.S. 686, 705 (1945). In the latter case, the Court reiterated "the well settled principle that Congress may impose relevant conditions and requirements on those who use the channels of interstate commerce in order that those channels will not become the means of promoting or spreading evil, whether of a physical, moral, or economic nature." 327 U.S. at 705. Thus, the Supreme Court has upheld the application of the commerce power to the interstate transportation of lottery tickets, *Champion v. Ames*, 188 U.S. 321 (1903); stolen cars, *Brooks v. United States*, 267 U.S. 432 (1925); kidnapped persons, *Gooch v. United States*, 297 U.S. 124 (1936); prostitution, *Caminetti v. United States*, 242 U.S. 470 (1917); *Hoke v. United States*, 227 U.S. 308 (1913); and to racial discrimination, *Heart of Atlanta Motel, Inc. v. United States* 379 U.S. 241 (1964).

Court could be expected to be reluctant to enforce an "impossible" standard, if the automobile industry can successfully demonstrate that it was willing and technologically able to meet the standards originally projected for 1975 by the Secretary of HEW under the 1967 Act,³⁴² but that it absolutely cannot develop the technology necessary to meet the standards set under the 1970 Act for 1975. If Congress compelled the auto industry to cease use of the internal combustion engine, would such action be too "drastic" and unreasonable?³⁴³ The Court has never before had to render a decision with economic repercussions as massive as are possible in this case.³⁴⁴ Thus, the auto industry might be expected to attack the 1970 Act on the grounds that Congress, in enacting such stringent standards, exceeded its commerce power. The automakers could proffer several constitutional arguments, predicated upon both conventional notions of due process and the doctrine of "inverse condemnation."

1. *Due Process*

Industry arguments that Congress violated the Fifth Amendment requirement of due process in enacting section 202(b) might focus upon either of the following contentions: (a) that the *procedure* followed by Congress in enacting this provision violated legislative or law-making due process; and (b) that the provision *itself* is violative of due process, because the emission standards are impossible of achievement within the prescribed time limit. The jurisdiction of the United States Supreme Court to adjudicate the question of congressional legislative due process was reiterated in the recent case of *Powell v. McCormack*.³⁴⁵ In that case the Court declared:

Especially is it competent and proper for [the Supreme Court] to consider whether [congressional] proceedings are in conformity with the Constitution and laws, because, living under a written constitution, no branch or department of the

³⁴² See note 148 *supra* for a table comparing the standards originally projected by HEW for 1975 with the standards Congress established in § 202(b) of the 1970 Act.

³⁴³ In a recent New York Court of Appeals ruling, the court awarded damages but refused to issue an injunction absolutely prohibiting operation since immediate shutdown was "too drastic," and development of abatement techniques required total industry effort over an indeterminate period of time. See *Boomer v. Atlantic Cement Co. Inc.*, 26 N.Y.2d 219, 257 N.E.2d 870, 873 (1970). Arguably, however, the auto industry has had more than the 1970 to 1973 period to develop its techniques; it was told by Congress to begin in 1964. The period from 1964 to 1975 seems sufficient. See 116 Cong. Rec. 16,095 (daily ed. Sept. 21, 1970).

³⁴⁴ During both the Senate Hearings and the Senate floor debate on the 1970 Act, advocates of the auto industry maintained that the allegedly minimal advantages to be gained through the Act were far outweighed by the economic impact which would be suffered by the auto industry and the nation. 1970 Senate Hearings, *supra* note 319, at 1031, 1615. 116 Cong. Rec. 16,221 (daily ed. Sept. 22, 1970). By way of contrast, see Jackson, Foreword: Environmental Quality, the Courts, and the Congress, 68 Mich. L. Rev. 1073 (1970), in which the author argues that economic arguments should not be given much weight as regards *stationary* sources of pollution.

³⁴⁵ 395 U.S. 486 (1969).

government is supreme; and it is the province and duty of the judicial department to determine . . . whether the powers of any branch of the government, and even those of the legislature in the enactment of laws, have been exercised in conformity to the Constitution; and if they have not, to treat their acts as null and void.⁸⁴⁶

For Congress to establish precise standards without first holding hearings to ascertain whether such standards are achievable is reportedly without precedent.⁸⁴⁷ No administrative agency may set standards or regulations without first holding public hearings at which all interested parties, including those to be regulated, may testify. In fact, the 1970 Act requires that every other standard or regulation which the EPA Administrator must establish may be formulated only after public hearings have been held. Nonetheless, a due process argument based upon the failure of Congress to hold hearings on section 202(b) should fail. Congress determined that it was able to infer from all of the testimony held during both the lengthy 1970 Hearings, and the 1967 Hearings, that the standards established under section 202(b) were realistic and achievable. The Senate Committee reported that specific hearings on this provision were not necessary;⁸⁴⁸ that the urgency of the air pollution problem required that technology be pushed forward by such emission requirements.⁸⁴⁹

There is a strong presumption in favor of the validity of a congressional enactment, and the burden of proving its unconstitutionality is an extremely formidable one.⁸⁵⁰ The burden would be upon the automakers to establish that facts sufficient to justify the strict emission standards did not exist.⁸⁵¹ This effectively means proving that: (a) if the Senate Committee had held hearings, the facts needed to justify the strict emission standards would not have been found; (b) the 202(b) standards are more severe than the air pollution problem requires; and (c) the 202(b) standards are impossible to achieve within the allotted time period. The thrust of proving the foregoing would be the contention that in legislating without giving the industry a chance to be heard, Congress acted arbitrarily and went beyond necessary and reasonable bounds to accomplish its objective of controlling air pollution. But when the legislative purpose intended is the protection of the public health and welfare, and Congress bases its action upon what it considers to be quantitatively sufficient proof that such strict standards are urgently needed, the presumption of the constitutionality of legislation should

⁸⁴⁶ *Id.* at 506, quoting *Kilbourn v. Thompson*, 103 U.S. 168, 199 (1881).

⁸⁴⁷ 116 Cong. Rec. 16,220 (daily ed. Sept. 22, 1970).

⁸⁴⁸ 116 Cong. Rec. 16,095 (daily ed. Sept. 21, 1970).

⁸⁴⁹ *Id.*

⁸⁵⁰ *Department of Health v. Owens-Corning Fiberglas Corp.*, 100 N.J. Super. 366, 382, 242 A.2d 21, 29 (1968).

⁸⁵¹ See *Consolidation Coal Co. v. Kandle*, 105 N.J. Super. 104, 114, 251 A.2d 295, 300 (1969).

prevail, absent a showing of clear congressional error.³⁵² Congress has complete power to determine the procedure through which it will find facts, and to enact necessary laws based upon its findings. It is submitted that an attack on the 1970 Act based upon congressional violation of law-making due process must fail.

The second foreseeable due process attack on section 202(b) would be predicated upon the argument that even if Congress did not violate law-making due process, the emission standards themselves are arbitrary, unreasonable, and lack a rational relationship to the purpose intended.³⁵³ Clearly, the legislative purpose inherent in the automobile provisions of the 1970 Act is the protection of the public health. Congress has determined that urgency requires the severe emission standards established in section 202(b). The burden is again upon the automakers to rebut the strong presumption of constitutionality inhering in the Act and to prove that Section 202(b) is unreasonable and inappropriate.³⁵⁴ State courts have generally tended to uphold the constitutionality of statutes designed to protect the public health, and have been unwilling to disturb legislative determinations unless they are clearly arbitrary.³⁵⁵ The rationale in these cases is sound: if the

³⁵² One writer has indicated that congressional findings should rarely, if ever, be disturbed on procedural grounds:

A legislature is theoretically competent to dispose of matters coming before it without according procedural formalities to affected interests. It is vested with full discretion and final authority subject to constitutional limitations An elaborate process of committee investigations, hearings and reports has been developed for this purpose [law-making]. The extent to which this procedure shall be used in particular instances, however, and the degree of participation which shall be permitted to those concerned remain wholly within legislative control.

Fuchs, *Procedure in Administrative Rule-making*, 52 *Harv. L. Rev.* 259, 273-74 (1938). See also Bonfield, *Public Participation in Federal Rule-Making Relating to Public Property, Loans, Grants, Benefits or Contracts*, 118 *U. Pa. L. Rev.* 540 (1970); Daddario, *Technology Assessment Legislation*, 7 *Harv. J. Legis.* 507 (1970).

³⁵³ See *Northwestern Laundry v. City of Des Moines*, 239 U.S. 486 (1916); *Sheaffer v. Joseph Breen, Inc.*, 263 App. Div. 135, 31 N.Y.S.2d 543 (1941); *United States v. Bishop Processing Co.*, 287 F. Supp. 624 (1968); *Consolidation Coal Co. v. Kandle*, 251 A.2d 295, 105 N.J. Super. 104 (1969).

³⁵⁴ See *United States v. Bishop Processing Co.*, 287 F. Supp. 624, 630-31 (1968):

A court's review of such a Congressional finding is limited. The only questions are whether Congress had a rational basis for finding that air pollution affects commerce, and if it had such a basis, whether the means selected to eliminate the evil are reasonable and appropriate.

³⁵⁵ See, e.g., *Ballentine v. Nester*, 350 Mo. 58, 70, 164 S.W.2d 378, 382 (1942), in which the Missouri Supreme Court summarizes the majority view on the constitutionality of air pollution legislation by quoting from an earlier case, *Nelson v. City of Minneapolis*, 112 Minn. 16, 19, 127 N.W. 445, 447 (1910):

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

statute is designed to protect the public health, and if the means selected are reasonably calculated to reduce air pollution, then the statute should be sustained even if it results in great expense to the person being regulated,⁸⁵⁶ or even if it causes an industry to cease operations entirely.⁸⁵⁷

To bolster its argument that section 202(b) is violative of due process because it is arbitrary and unreasonable, the auto industry might advance the "unavoidable necessity" argument.⁸⁵⁸ The basic thrust of this argument would be economic: that since no known equipment exists which can solve the automobile pollution situation, and since the automobile is such a vital factor in the economy, the necessity of fluid transportation far outweighs the unavoidable result, that is, emission pollution.⁸⁵⁹ A minority of cases has held that a business cannot be required to meet any standard higher than technology permits, and that shutting down a business entirely when technology is not available is "too drastic."⁸⁶⁰ But it is submitted that this argument should also fail. Section 202(b) compels not the shutdown of the automobile industry, but rather the use of alternative propulsion systems, now

is final, except when so arbitrary as to be violative of the constitutional rights of the citizens.

⁸⁵⁶ *Northwestern Laundry v. City of Des Moines*, 239 U.S. 486, 492 (1916):

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.

⁸⁵⁷ *Department of Health v. Owens-Corning Fiberglas Corp.*, 100 N.J. Super. 366, 394, 242 A.2d 21, 35 (1968). But see *People v. Cunard White Star, Ltd.*, 280 N.Y. 413, 21 N.E.2d 489 (1939), in which the court held that a regulation of smoke is valid only if it is limited to prohibiting discharge of smoke avoidable by use of modern and practicable methods; that if it were impossible to avoid smoke, then the ordinance was clearly unreasonable, and an undue burden on interstate commerce exceeding the power of the state; *People v. Atchison, Topeka & Santa Fe Ry. Co.*, 268 Cal. App.2d 501, 74 Cal. Rptr. 222 (1968), which held that a state statute placed an undue and unreasonable burden on railroad operations because the technology did not exist which could cure the defect in question, the emission of great quantities of smoke by locomotives. The court in that case distinguished *Huron Portland Cement Co. v. Detroit*, 362 U.S. 440 (1960) in which the Supreme Court upheld a city smoke-abatement ordinance, because in *Huron*, technology to control the emission of smoke was available. It should be remembered, however, the *Cunard* and *Atchison* cases involved state statutes, in which the police power was held to conflict with the power of Congress to regulate interstate commerce. There would not be such a conflict in a suit brought by the automakers attacking the emission standards under the 1970 Act. The issue there would be whether Congress itself has the power to regulate, i.e., prohibit, the use of a type of engine which is clearly injurious to the public health, and not a conflict between federal and state regulatory powers. It is also important to recognize that in 1939, when *Cunard* was decided, air pollution was not a serious threat to health; and that the *Atchison* case dealt with the railroad industry which was rapidly dying. The automakers have alternatives at their disposal which were not available to the railroad industry.

⁸⁵⁸ See *Department of Health v. Owens-Corning Fiberglas Corp.*, 100 N.J. Super. 366, 242 A.2d 21 (1968).

⁸⁵⁹ See, e.g., *People v. Atchison, Topeka & Santa Fe Ry. Co.*, 268 Cal. App.2d 501, 74 Cal. Rptr. 222 (1968).

⁸⁶⁰ *Boomer v. Atlantic Cement Co.*, 26 N.Y.2d 219, 257 N.E.2d 870 (1970).

known to exist,⁸⁶¹ if the internal combustion engine cannot be purified by 1975. Historically, the courts have rejected economic arguments when dealing with air pollution legislation. Courts have enjoined stationary-source polluters even where it appeared that such an injunction would result in a total shutdown of the business. Such a decision was recently passed down by the New Jersey Superior Court:

The applicability of the [unavoidable necessity] doctrine turns upon the reasonableness of the statute or regulation under review and of the proscription imposed. Assuredly, it is not unreasonable for the State, in the interest of the public health and welfare, to seek to control air pollution. Even if this means the shutting down of an operation harmful to health or unreasonably interfering with life or property, the statute must prevail.⁸⁶²

The touchstone of the due process determination is whether the statute or provision in question is arbitrary or unreasonable. Even here the Supreme Court has been reluctant to interfere with legislative findings. In *Sproles v. Binford*,⁸⁶³ the Supreme Court stated that "debatable questions as to reasonableness are not for the courts but for the legislature." But if the Court must determine whether a law is arbitrary or unreasonable, what guidelines will it follow? The Court has stated that it will look to the nature of the menace against which the law operates, the availability and effectiveness of other, less drastic protective steps, and the loss suffered by the imposition of the statute.⁸⁶⁴ It must be concluded that section 202(b) is neither arbitrary nor unreasonable, in view of the fact that without such strict emission standards, the objective of Congress to protect the public health would be frustrated.

2. Inverse Condemnation⁸⁶⁵

The Fifth Amendment declares that the federal government may not take private property for public use without just compensation. If

⁸⁶¹ Student groups and private and government researchers demonstrated in 1970 that alternatives such as electric and steam propulsion systems already exist, and that, although at present they are still short of economic practicality, these systems *could* be developed by the automakers so that mass production could become a reality. In addition, two vehicles propelled by the internal combustion engine, but using different types of fuels, did achieve the strict 1975 emission standards. See 1970 Senate Hearings, *supra* note 319, at 1656-657. But the automakers have chosen to gamble on a modification of the internal combustion engine. See note 197 *supra*.

⁸⁶² *Department of Health v. Owens-Corning Fiberglas Corp.*, 242 A.2d 21, 35, 100 N.J. Super. 366, 393-94 (1968); *Oriental Boulevard Co. v. Heller*, 58 Misc.2d 920, 297 N.Y.S.2d 431 (1969).

⁸⁶³ 386 U.S. 374, 388 (1932); *Brotherhood of Locomotive Firemen & Enginemen v. Chicago, R.I. & P.R. Co.*, 393 U.S. 129, 139 (1968).

⁸⁶⁴ *Goldblatt v. Hempstead*, 369 U.S. 590, 594 (1961).

⁸⁶⁵ Inverse condemnation is the popular description of a cause of action against a governmental defendant to recover the value of property which has

Congress prohibits the automobile industry from further use of the internal combustion engine the question arises whether such action would qualify as a "taking" in the constitutional sense. The automobile industry might argue that the emission standards in section 202(b) are not regulatory but are completely prohibitory; and that the prohibition of the further use of the internal combustion engine amounts to a confiscation of property without just compensation. This argument would embody the theory of "inverse condemnation" which has been used by industry in the past to attack governmental statutes and regulations.⁸⁶⁶ The Supreme Court has previously had occasion to review governmental actions which resulted in considerable economic losses to private property owners, and has generally held that federal or state governments are not obligated to compensate the owners for these losses.⁸⁶⁷ When a government has had to pay compensation, the rationale has been that the government should be barred "from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole."⁸⁶⁸ The traditional "burden" which the public has been asked to share in these cases has been an economic one, so that the private property owner would not unjustly be deprived of his assets. The central issue in the "taking" cases has been the determination by the court of whether the action taken by the government was a compensable taking or merely a "consequential destruction" and hence not compensable. In *Armstrong v. United States*,⁸⁶⁹ the Court discussed the difficulty of making such a determination:

been taken in fact by the governmental defendant, even though no formal exercise of the power of eminent domain has been attempted by the taking agency.

Thornburg v. Port of Portland, 233 Ore. 178, 180, 376 P.2d 100, 101 (1962).

⁸⁶⁶ The courts have held that the deprivation of the former owner rather than the accretion of a right or interest to the sovereign constitutes the taking. Governmental action short of acquisition of title or occupancy has been held, if its effects are so complete as to deprive the owner of all or most of his interest in the subject matter, to amount to a taking.

United States v. General Motors Corp., 323 U.S. 373, 378 (1944). See generally Symposium, *Inverse Condemnation: Unintended Physical Damage*, 20 *Hastings L.J.* 431 (1969); Van Alstyne, *Statutory Modification of Inverse Condemnation: Deliberately Inflicted Injury or Destruction*, 20 *Stan. L. Rev.* 617 (1968); Sax, *Takings and the Police Power*, 74 *Yale L.J.* 36, (1964); Mandelker, *Inverse Condemnation: The Constitutional Limits of Public Responsibility*, 1966 *Wis. L. Rev.* 3 (1966).

⁸⁶⁷ In *United States v. Caltex (Phillipines), Inc.*, 344 U.S. 149, 154 (1952), the Supreme Court held that "in times of imminent peril . . . the sovereign could, with immunity, destroy the property of a few that the property of many and the lives of many more could be saved."

⁸⁶⁸ *Armstrong v. United States*, 364 U.S. 40, 49 (1960). In *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 413 (1922), the Supreme Court expressed a similar view:

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.

⁸⁶⁹ 364 U.S. 40 (1960).

It is true that not every destruction or injury to property by governmental action has been held to be a "taking" in the constitutional sense. This [cited] case and many others reveal the difficulty of trying to draw the line between what destructions of property by lawful governmental actions are compensable "taking" and what destructions are "consequential" and therefore not compensable.⁸⁷⁰

The result, decisionally, has been a lack of order and an ad hoc treatment of confiscation cases.⁸⁷¹ In *United States v. Caltex (Phillipines), Inc.*, the Supreme Court stated that "[n]o rigid rules can be laid down to distinguish compensable losses from non-compensable losses."⁸⁷² Generally the courts have permitted the governmental use of police power, without imposing liability to compensate, in situations where the public necessity demands that an impending peril be immediately averted.⁸⁷³ In such cases, the urgency of the situation constitutes full justification for the measures taken to abate the menacing condition.⁸⁷⁴ At common law, courts generally upheld the validity of such uncompensated abatement actions as incident to the police power to eliminate "public nuisances" or situations deemed inimical to the public welfare.⁸⁷⁵ By statute, the federal and state governments now authorize the seizure, forfeiture, or outright destruction of private property as necessary to enforce legislatively determined regulatory policies.⁸⁷⁶ The use of uncompensated confiscation or destruction of private property as a means of enforcing regulatory policies has been sustained repeatedly as being within constitutional limitations.⁸⁷⁷ The power to enact the underlying regulatory policy has been held to include the power to enforce that policy by all rational means available, including the destruction of property rights. In *Mugler v. Kansas*,⁸⁷⁸ an early case dealing with a state statute prohibiting the manufacture and sale of intoxicating liquors within state boundaries, the Supreme Court held that:

A prohibition simply upon the use of property for purposes that are declared, by valid legislation, to be injurious to the health, morals, or safety of the community, cannot, in any just

⁸⁷⁰ Id. at 48.

⁸⁷¹ See Dunham, *Griggs v. Allegheny County in Perspective: Thirty Years of Supreme Court Expropriation Law*, 1962 Sup. Ct. Rev. 63 (1962).

⁸⁷² 344 U.S. 149, 156 (1952).

⁸⁷³ See, e.g., *House v. Los Angeles County Flood Control Dist.*, 25 Cal.2d 384, 391, 153 P.2d 950, 953 (1944).

⁸⁷⁴ Id. The court includes in such situations the destruction of diseased animals, rotten fruit, and infected trees, where life or health is jeopardized.

⁸⁷⁵ *Miller v. Schoene*, 276 U.S. 272 (1928).

⁸⁷⁶ For a discussion of federal statutes of this type, see Note, *Forfeiture of Property Used in Illegal Acts*, 38 Notre Dame Lawyer 727 (1963).

⁸⁷⁷ See *Samuels v. McCurdy*, 267 U.S. 188 (1925); *Van Oster v. Kansas*, 272 U.S. 465 (1926); *J.W. Goldsmith Jr.-Grant Co. v. United States*, 254 U.S. 505 (1921).

⁸⁷⁸ 123 U.S. 623 (1887).

sense, be deemed a taking or an appropriation of property for the public benefit. . . . The power which the States have of prohibiting such use by individuals of their property as will be prejudicial to the health, the morals or the safety of the public, . . . cannot be burdened with the condition that the State must compensate such individual owners for the pecuniary losses they may sustain, by reason of their not being permitted, by a noxious use of their property, to inflict injury upon the community.⁸⁷⁹

The weaknesses in advancing the argument that section 202(b) results in a "taking for public use," which is therefore compensable, are several. Initially, the automobile industry must establish that federal prohibition of *a type* of engine, not *all types* of engines, qualifies as a "destruction" of property, or a "taking" of property for public "use." Serious doubt exists as to whether such federal regulation is a confiscation at all. The Congress, in section 202(b), has legislated strict controls in order that the public not be denied one of its most basic natural rights, the right to breathe healthful, clean air. If there exists an infringement of property rights, or a potential destruction of values, it would appear that the *automobile industry*, absent the necessary federal controls placed on the air pollution it causes, would be the party doing the confiscating. Automotive air pollution unquestionably "takes" clean air from the public. If prohibiting the use of a type of engine, as opposed to shutting down the automobile industry, were to be considered a "taking for public use," the concept of "use" would assume a meaning certainly not intended by the framers of the Constitution. To reach such a result, the term "use" would have to be interpreted as including *prevention of forced use* by the public of an instrumentality injurious to its health—a nuisance. That government can prohibit the proliferation of a nuisance is too well established in the common law to admit dispute. The public has the right to be protected from having to use a vehicle which, although convenient and economically attractive, is highly dangerous as compared to alternatives that might be, if the automakers produced other types of engines, more expensive, but less noxious. At present, the public has no choice but to purchase vehicles propelled by the internal combustion engine, if private transportation is desired. Without federal stimulus in the form of strict emission standards in the 1970 Act, and heavy government funding for research to develop alternatives, the automobile industry would be permitted to continue compelling the public to use only the hazardous internal combustion engine. In his famous dissent in *Pennsylvania Coal Co. v. Mahon*,⁸⁸⁰ Justice Brandeis issued a sound doctrinal basis for determining the definitional limits of "takings":

[U]ses, once harmless, may, owing to changed conditions,

⁸⁷⁹ Id. at 668-69.

⁸⁸⁰ 260 U.S. 393, 416 (1922) (dissenting opinion).

seriously threaten the public welfare. Whenever they do, the legislature has power to prohibit such uses without paying compensation; and the power to prohibit extends alike to the manner, the character, and the purpose of the use. . . .

Every restriction upon the use of property imposed in the exercise of the police power deprives the owner of some right theretofore enjoyed, and is, in that sense, an abridgment by the state of rights in property without making compensation. But restriction imposed to protect the public health, safety, or morals, from dangers threatened is not a taking. . . . The State does not appropriate it or make any use of it. The State merely prevents the owner from making a use which interferes with paramount rights of the public.⁸⁸¹

The Congress has determined in the 1970 Clean Air Amendments that the automakers must reduce pollution emissions to the prescribed 1975 levels. It has determined that a state of urgency exists which imperils the public health, and that the regulation of automobile emissions, and not the prohibition of all types of automobile engines, is highly necessary. The industry is given the latitude to choose how it will achieve the 1975 standards. It has apparently chosen to gamble on improving the internal combustion engine rather than developing alternatives with all deliberate speed. Such a choice cannot be deemed a "taking" by the federal government, and a constitutional attack on the 1970 Act based upon the theory of "confiscation without compensation" would be spurious. Rather, the government's action in enacting section 202 (b) requires the automobile industry to conduct its business, the manufacture of motor vehicles, in such a way as not to infringe upon the paramount right of the public to enjoy clean air. If the public, through federal compensation, were to subsidize the automobile industry for the removal of an instrumentality dangerous to its health, the ironic consequence would be that the public would be paying for its right to breathe clean air.

CONCLUSION

The need to improve the quality of the air we breathe has been made increasingly apparent by the proliferating and tragic air pollution incidents of the past several years. The unparalleled economic growth in the nation has not occurred without an attendant toll upon our environment. Through the combined effects of stationary source pollution and motor vehicle air pollution, industry pours almost two hundred million tons of contaminants into the air annually. In parts of the nation, the air has already deteriorated to a point where school children are not able to go outdoors for physical education on days when air pollution reaches critical levels.⁸⁸² Only in recent years has Congress

⁸⁸¹ *Id.* at 417.

⁸⁸² Hearings on S. 3229, S. 3466, and S. 3546 Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 91st Cong., 2d Sess. 1295-296 (1970).

seriously addressed itself to the urgency of the menacing problem of air contamination. Unfortunately, the short history of federal air pollution legislation has been marked by weak laws, which have been unaggressively and ineffectively implemented by the various levels of government. The 1967 Air Quality Act, a slight improvement over previous federal regulatory efforts, was emasculated both by the failure of Congress to appropriate the funds and manpower necessary for its successful implementation, and by the failure of the Department of HEW to enforce it adequately.

Motor vehicles, particularly used automobiles, continue to be the largest single source of air pollution and, concomitantly, the most serious hazard to the public health. Congress has recognized that vehicular air pollution absolutely *must* be reduced to medically safe levels, and that the limitations of present technology should not prevent the achievement of this goal. In enacting Section 202(b) of the 1970 Act, the stringent vehicular emission standards for new motor vehicles, Congress challenged the automobile industry either to stop poisoning the air by sufficiently improving the internal combustion engine to meet the 1975 emission standards, or else, economic costs notwithstanding, to stop marketing that type of engine.

The Clean Air Amendments of 1970 demonstrate the increased federal commitment to the abatement of air pollution. This Act provides greater financial support for state control and research programs; stringent minimum federal standards for stationary and particularly for moving source pollution; increased federal enforcement power and direct federal enforcement assistance in state control programs; stiffer sanctions for violators; and a new federally created right of enforcement through citizen suits. But the experience of prior federal air pollution legislation indicates that the mere enactment of a new stringent law will not produce meaningful results in the attack on air pollution. If the struggle is to be successful, there must be a united effort on the part of all levels of government: federal, state, and local; on the part of industry, complying with the health protection standards; and on the part of individual citizens, who must police their own practices, as well as those of industry and those of the governmental agencies charged with the responsibility for effective administration of the anti-pollution laws.

One hundred years ago, the first board of health in the United States, organized in Massachusetts, declared that:

We believe that all citizens have an inherent right to the enjoyment of pure and uncontaminated air and water and soil, that this right should be regarded as belonging to the whole community and that no one should be allowed to trespass upon it by his carelessness and his avarice, or even by his ignorance.³⁸³

³⁸³ 116 Cong. Rec. 16,092 (daily ed. Sept. 21, 1970).

In enacting the Clean Air Amendments of 1970, the Congress has taken the first important step to protect that right. The next vital step will be the full and effective implementation of the Act by the government and the citizens. The 1970 Act will be a significant contribution to the air pollution abatement effort only if it can avoid the evisceration which has plagued its predecessors.

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