

TRANSPORTATION CONTROLS UNDER THE CLEAN AIR ACT: A LEGAL ANALYSIS†

THOMAS B. BRACKEN*

I. INTRODUCTION

By mid-1975 or soon thereafter most major metropolitan areas of this country should have in effect strict restrictions on the use of automobiles which will substantially change the driving habits of the American people and the way most of us live and conduct our business. Shifting most commuters from driving to work alone into car pools or public transit and cooling the great American love affair with the automobile may be a wrenching experience initially, but it will provide many benefits for everyone—cleaner air, less traffic, lower transportation costs, more efficient use of energy, and generally more habitable metropolitan areas. All of this change is being brought about by the Clean Air Act¹ (the Act) and the implementation and interpretation of that Act by the Environmental Protection Agency (EPA), the courts and the several states.

The Act itself requires the Administrator of the EPA to set national primary and secondary ambient air quality standards for various pollutants.² The primary standards must protect the public health with an adequate margin of safety and the secondary standards must protect the public welfare from any known or anticipated adverse effects, including damage to property. The primary standards are to be attained "as expeditiously as practicable," but in no event later than May 31, 1975,³ and the secondary standards within a "reasonable time."⁴ Each state is required to prepare and submit to the EPA for approval a plan for implementing the attainment and maintenance of the standards in each air quality control region within its boundaries.⁵

† The views expressed herein are those of the author. They do not represent the views of the Environmental Protection Agency.

* Regional Counsel, Environmental Protection Agency, Region I; B.A., Carleton College, 1958; LL.B., Yale Law School, 1961.

¹ 42 U.S.C. §§ 1857 et seq. (1970), which includes the Clean Air Act of 1963, Pub. L. No. 88-206, 77 Stat. 392, and amendments made by the Motor Vehicle Air Pollution Control Act, Pub. L. No. 89-272, tit. I, 79 Stat. 992 (1965); the Clean Air Act Amendments of 1966, Pub. L. No. 89-675, 80 Stat. 954; the Air Quality Act of 1967, Pub. L. No. 90-148, 81 Stat. 485; and the Clean Air Amendments of 1970, Pub. L. No. 91-604, 84 Stat. 1676.

² Clean Air Act § 109, 42 U.S.C. § 1857c-4 (1970).

³ Clean Air Act § 110(a)(2)(A)(i), 42 U.S.C. § 1857c-5(a)(2)(A)(i) (1970).

⁴ Clean Air Act § 110(a)(2)(A)(ii), 42 U.S.C. § 1857c-5(a)(2)(A)(ii) (1970). The relationship between primary and secondary standards under the Clean Air Act is discussed in Comment, *The Clean Air Amendments of 1970: Better Automotive Ideas From Congress*, 12 B.C. Ind. & Com. L. Rev. 571, 583-84 n.85 (1971).

⁵ Clean Air Act §§ 107, 110(a)(1), 42 U.S.C. §§ 1857c-2, -5(a)(1) (1970).

The intent of the law is that the standards set up by the Administrator protect all segments of society. This means that the specific standards should be set at levels which will protect the most susceptible groups in the population, namely, infants, elderly people and all those suffering from some form of respiratory or cardiovascular impairment, such as asthma, bronchitis, emphysema and heart disease. While these individuals may represent a small percentage of our population, it is known that air pollution contributes to the development of respiratory and cardiovascular impairments even in persons who are otherwise healthy.⁶ Carbon monoxide, for instance, severely affects those with heart disease; it also impairs in all of us the ability of the blood to carry oxygen.⁷ Although asthma patients suffer most from inhaling oxidants, this pollutant causes some lung damage even in healthy persons.⁸ The standards should be set at a level to protect the physically weakest people in order to offer some protection for everyone.

This article will examine recent efforts on the part of Congress, the several states and the EPA to reduce air pollution caused by motor vehicle emissions. It will analyze the various types of plans adopted by the states and the EPA wherein transportation controls have been imposed on motor vehicle pollutants, and will discuss the statutory authority under which these plans have been created. The article will then discuss questions concerning the constitutionality of the Clean Air Act and its subsequent amendments, and EPA regulations promulgated pursuant to the provisions of that Act. The manner in which plans for attaining and preserving air quality standards are to be implemented will then be considered. Finally, a brief examination will be made into the impact the energy crisis is likely to have on transportation controls designed to meet air quality standards.

II. TRANSPORTATION CONTROLS ON MOTOR VEHICLE POLLUTANTS

Under authority of the Act the EPA Administrator has to date set ambient air quality standards for six different types of air pollutants.⁹ Of these, four are directly related to motor vehicle emissions—carbon monoxide (CO), hydrocarbons (HC), nitrogen

⁶ U.S. Dep't of Health, Education and Welfare, Air Quality Criteria for Photochemical Oxidants, ch. 9 (Doc. No. AP-63, March 1970) [hereinafter cited as HEW Doc. No. AP-63].

⁷ U.S. Dep't of Health, Education and Welfare, Air Quality Criteria for Carbon Monoxide 8-34 to 8-37. (Doc. No. AP-62, March 1970).

⁸ HEW Doc. No. AP-63, *supra* note 6.

⁹ The six pollutants are: sulfur oxides, particulate matter, carbon monoxide, photochemical oxidants, hydrocarbons and nitrogen dioxide. The standards are set forth at 40 C.F.R. §§ 50.4-.11 & apps. A-F (1973).

oxide (NO_x) and photochemical oxidants (primarily ozone). Virtually all man-made CO in urban areas and over one-half of the HC emitted into the air are emitted by motor vehicles.¹⁰ Photochemical oxidants are not man-made, but result from the interaction of HC and NO_x in the atmosphere when exposed to sunlight.¹¹

To achieve the standards set up by the Administrator for these automobile-related pollutants, Congress has required the use of two separate mechanisms. One is the Federal Motor Vehicle Pollution Control Program, set forth in the Act, which requires automobile manufacturers to reduce CO and HC emissions from model year 1975 and later cars by at least ninety percent from the emissions of those pollutants allowed in model 1970 cars.¹² It also requires that emissions of NO_x from model year 1976 and later cars be reduced by at least ninety percent from the average NO_x emissions measured for model year 1971 cars.¹³ The second method for achieving the standards is through state implementation plans (SIPs), which the states are primarily responsible for adopting and implementing.¹⁴ If a state fails to submit an SIP or submits a plan which does not meet all the requirements of the Act, the Administrator of the EPA is required to prepare a plan for that state or a portion thereof to meet the deficiencies in the state-submitted plan.¹⁵ In formulating an SIP, a state should first account for the future reductions in pollutant levels which can be expected to result from the new car program and should then set emission limitations for stationary sources.¹⁶ In cases

¹⁰ U.S. Dep't of Transportation, Report of the Ad Hoc Committee on Regulatory Effects of the Cost of Automotive Transportation, app. 1-G (Feb. 28, 1973); U.S. Dep't of Health, Education and Welfare, National Inventory of Air Pollutant Emissions (Doc. No. AP-73, 1968).

¹¹ HEW Doc. No. AP-63, *supra* note 6.

¹² Clean Air Act § 202(b)(1)(A), 42 U.S.C. § 1857f-1(b)(1)(A) (1970). On April 11, 1973, the Administrator granted the automobile manufacturers' request for a one-year suspension of the 1975 motor vehicle emission standards, pursuant to his authority under § 202(b)(5)(A) of the Act, 42 U.S.C. § 1857f-1(b)(5)(A) (1970), and announced interim nationwide standards and more stringent standards for application in the State of California during the 1975 model year. The Energy Emergency Act, S. 2589, 93d Cong., 1st Sess. (1973), enacted by Congress in Feb. 1974, would freeze the auto emission standards at the 1975 interim levels for the 1976 and 1977 model year cars. The President vetoed the Act, though for other reasons, on March 6, 1974. See text of veto message, 30 BNA Energy Users Report § B (March 7, 1974). The veto was subsequently sustained by the Senate. 120 Cong. Rec. S2926 (daily ed. March 6, 1974). However, the EPA has submitted to Congress a legislative proposal to amend the Clean Air Act to achieve a similar result. See EPA Proposals for Amending the Clean Air Act, Attachment A, § 12 [hereinafter cited as Proposed Amendments], accompanying Address by Russell Train, EPA Administrator, in Washington, D.C., March 22, 1974.

¹³ Clean Air Act § 202(b)(1)(B), 42 U.S.C. § 1857f-1(b)(1)(B) (1970).

¹⁴ Clean Air Act § 110, 42 U.S.C. § 1857c-5 (1970).

¹⁵ Clean Air Act § 110(c), 42 U.S.C. § 1857c-5(c) (1970).

¹⁶ A "stationary source" is defined in the Act as "any building, structure, facility, or installation which emits or may emit any air pollutant." Clean Air Act § 111(a)(3), 42 U.S.C. § 1857c-6(a)(3) (1970).

where these controls are insufficient because of a high concentration of vehicles and the time involved in replacing in-use vehicles with the new controlled cars, the law requires that additional measures be taken. The Act provides that these additional measures may include "land-use and transportation controls."¹⁷ Eighty-eight million people in this country live in areas where primary standards (protective of health) cannot be met without some reliance on transportation controls.¹⁸

In view of the complexities inherent in transportation controls and the fact that most of the states have had little or no experience in developing them, the Administrator had permitted those states requiring transportation controls to delay submission of that portion of their SIP's until February 15, 1973, and has granted a two-year extension until mid-1977 for attainment of the standards for automobile related pollutants (CO, HC, NO_x and oxidants).¹⁹ The Natural Resources Defense Council challenged this extension and on January 31, 1973, the Court of Appeals for the District of Columbia Circuit in *Natural Resources Defense Council, Inc. v. Environmental Protection Agency*,²⁰ [hereinafter *NRDC*], held that although "the Administrator acted in the best faith in attempting to comply with the difficult responsibilities imposed on him by Congress . . . he did not conform to the strict requirements of the Clean Air Act of 1970 . . ." in permitting the delay in submission of transportation plans and in extending for two years the final compliance date.²¹ The court stated that whether or not the technology for implementation is available is a matter to be determined only *after* the plan is submitted to the EPA.²² The court required that the standards for the automobile related pollutants be attained by mid-1975 instead of by 1977.²³ Because of this shortened time period, several states

¹⁷ Clean Air Act § 110(a)(2)(B), 42 U.S.C. § 1857c-5(a)(2)(B) (1970).

¹⁸ Address by Robert L. Sansom, former EPA Assistant Administrator for Air and Water Programs, entitled *Rethinking Your Automobile—No. 2*, delivered at Manhattan Citizens Briefing, Pace College, New York City, July 11, 1973.

¹⁹ See 37 Fed. Reg. 10,842, 10,845 (1972) and the Administrator's approval of each SIP requiring transportation controls as set forth in 40 C.F.R. pt. 52, subpts. B-DDD (1973) under the heading "Extensions." The Act permits the Administrator to extend the final date for the attainment of primary standards for up to two years in any area in which he finds that certain emission sources are unable to comply with the requirements of an SIP because of the unavailability of the necessary technology. Clean Air Act § 110(e), 42 U.S.C. § 1857c-5(e) (1970).

²⁰ 475 F.2d 968 (D.C. Cir. 1973).

²¹ *Id.* at 970.

²² *Id.*

²³ The court set April 15, 1973 as the deadline date for submission by the states of the transportation portion of their SIPs; June 15, 1973 for the Administrator to approve or disapprove the plans and to propose federal regulations as a substitute for the disapproved portions of the state submissions; and Aug. 15, 1973 for the Administrator to finally

which had been developing longer-range transportation strategies felt it necessary to abandon these plans. Moreover, additional cities that had not required transportation controls because of the two-year extension for compliance now found that such a transportation plan was necessary to meet the standards by 1975.

Shortly before the decision in the *NRDC* case, the EPA proposed a far-reaching transportation control plan for Los Angeles in response to another federal court order.²⁴ The Los Angeles plan, which was based on the premise that reduction of over eighty percent in vehicle miles traveled during certain months is necessary to meet the federal standard, required extensive gasoline rationing during six months of the year, installation of expensive emission control equipment on model year 1966-1974 light and medium vehicles, and conversion of fleet vehicles to gaseous fuels.²⁵ In addition to creating this particular plan for the City of Los Angeles, between November 6 and December 12, 1973, the EPA promulgated or approved transportation control plans for 29 other major urban areas.²⁶

After taking into consideration the emission reductions that are expected to be achieved through the federal control program on new cars,²⁷ most of the plans also include controls on such items as organic solvents used for dry cleaning, paint thinners, degreasing and printing, and vapor recovery systems that prevent gasoline evaporation during handling—that is, from terminal to truck, from

promulgate a plan or portion thereof for states not submitting wholly approvable plans. 475 F.2d at 970-71.

²⁴ *City of Riverside v. Ruckelshaus*, 4 E.R.C. 1728 (C.D. Cal. 1972). Since the State in this instance had failed to submit a satisfactory plan for attaining the EPA standard for photochemical oxidants, the EPA was required by the Act to develop such a plan. Clean Air Act § 110(c), 42 U.S.C. § 1857c-5(c) (1970). Several communities in the smog-afflicted Los Angeles basin, in conjunction with various citizen groups, sued the Administrator of the EPA to hasten his development of the plan. The court ordered the Administrator to prepare and publish in the Federal Register, no later than Jan. 15, 1973, regulations for attaining the national standard for photochemical oxidants, "including all necessary transportation controls and land use controls." 4 E.R.C. at 1731. The plan proposed by the Administrator appeared in the Federal Register on Jan. 22, 1973. 38 Fed. Reg. 2194 (1973).

²⁵ 38 Fed. Reg. 2194 (1973). In the plan as finally promulgated by the Administrator, the gasoline supply limitation requirement was modified to apply only as a final resort measure, the gaseous fuels conversion requirement was dropped, and controls over motorcycles, parking surcharges and a parking management program were added. 38 Fed. Reg. 31,232 (1973).

²⁶ 39 Fed. Reg. 1848 (1974).

²⁷ As a result of (1) the Administrator's decision to defer for one year the requirements of CO and HC emission reductions on new cars, and (2) the establishment of interim standards, see note 12 *supra*, some additional controls on in-use cars may be required. However, since the interim standards go one-half of the way toward meeting the 1975 standards and since the California standards go two-thirds of the way, the additional controls will generally be small. Statement by William D. Ruckelshaus, former Administrator of the EPA, in a news release, April 11, 1973.

truck to gas station storage tank, and from gas station tanks into the tanks of automobiles. The evaporative controls are very cost effective and they conserve energy.²⁸

Another set of controls to reduce automobile pollutants apply directly to in-use vehicles and generally take two forms. One type concentrates on reduction of vehicle emissions at the tailpipe through retrofit devices,²⁹ including air bleed, vacuum spark advance disconnect (VSAD) and oxidizing catalyst,³⁰ and on inspection and maintenance programs to insure that all cars operate at peak environmental and energy efficiency. Although many of the plans contain catalytic retrofits for some pre-1975 model year vehicles,³¹ these devices are expensive, relatively inefficient per dollar of cost, and have a regressive cost impact. However, they will not cause a fuel penalty as some have contended.³² Since only a small number of prototype catalysts have been produced, the EPA has determined that they will not be available in sufficient quantity until 1977. Hence the Administrator has granted a two-year extension for implementation of this phase of the plans.³³

The other group of strategies concentrate on reducing emissions from the total vehicle population by reducing the overall use of vehicles or by reducing the total number of vehicle miles traveled (VMT). Statistics show that the average occupancy of cars in metropolitan areas during rush hours is 1.1 persons per vehicle.³⁴ These strategies, therefore, include such disincentives to single occupancy vehicle trips as bridge and tunnel tolls, off-street parking fees, limitation on usage of off-street parking space, and restrictions on construction of new parking facilities. To cut down on traffic and to further reduce harmful emissions some of the plans ban on-street parking, and restrict truck deliveries, idling of all vehicles and

²⁸ EPA, *The Clean Air Act and Transportation Controls: An EPA White Paper* 15 (Aug. 1973).

²⁹ A retrofit device is any device used to modify equipment presently in use.

³⁰ Air bleed devices increase the supply of air into the carburation process, thereby resulting in a leaner (less fuel) combustion and consequently lower emissions of CO and HC. VSAD is a device which restricts the flow of fuel into the carburation process during various modes of the driving cycle producing the same results as the air bleed device. The oxidizing catalyst is an after-burner installed in the exhaust system which changes CO and HC into CO₂ and H₂O.

³¹ See, e.g., California Plan, 38 Fed. Reg. 31,232 (1973); New Jersey Plan, 38 Fed. Reg. 31,388 (1973); Boston, Massachusetts Plan, 38 Fed. Reg. 30,960 (1973).

³² Actual fuel savings of up to 12% are expected for vehicles equipped with catalytic converters designed to meet the statutory CO and HC standards over 1973 vehicles. EPA, *A Report on Automotive Fuel-Economy* (Oct. 1973).

³³ See, e.g., Boston, Massachusetts Plan, 38 Fed. Reg. 30,960, 30,962 (1973).

³⁴ GCA Corp., *Development of a Transportation Control Plan to Meet Ambient Air Quality Standards for Carbon Monoxide and Oxidants for Metropolitan Boston*, Technical Appendix (Jan. 1973).

cruising of taxis.³⁵ At the same time the plans contain measures designed to increase the attractiveness of alternate transit, such as exclusive bus and car pool lanes, expanded and more convenient and comfortable transit facilities, discount transit tickets for commuters, fringe parking lots with connecting commuter buses, car pool matching services, the creation of bicycle lanes and pedestrian malls.³⁶ However, even with these improved services and incentives, the need for disincentives remains. Studies show that even where convenient mass transit is readily available most urban commuters still prefer to drive to work alone.³⁷ The extent to which VMTs can be realistically reduced depends on conditions in each area. Parking restrictions, for example, are more feasible in relatively confined urban areas such as Boston than they are in cities such as Los Angeles and Fairbanks, Alaska, which offer few transit alternatives. Generally, the EPA has determined that VMT reductions of more than twenty percent may be unrealistic. New York City, however, has developed a plan for substantial VMT reduction which includes such measures as bans on taxi cruising and mid-day truck deliveries, raising bridge tolls and reducing parking spaces by thirty to fifty percent.³⁸ It should be noted that the deadline for attainment of the air quality standards is mid-1977. Although the states and the EPA have attempted to meet these standards in the least costly and most practical way, the requirement of the statute as presently written is unconditional. The standards must be met by that deadline regardless of cost or technical feasibility.³⁹

Now that final transportation plans are in effect for most areas

³⁵ See, e.g., New Jersey Plan, 38 Fed. Reg. 31,388 (1973); Alaska Plan, 38 Fed. Reg. 32,656 (1973); Utah Plan, 38 Fed. Reg. 32,663 (1973); New York City Plan, 38 Fed. Reg. 16,550, 16,560 (1973).

³⁶ See, e.g., Pennsylvania Plan, 38 Fed. Reg. 32,884 (1973); Boston, Massachusetts Plan, 38 Fed. Reg. 30,960 (1973); Washington, D.C. Plan, 38 Fed. Reg. 33,702 (1973); Illinois Plan, 38 Fed. Reg. 33,556 (1973); Oregon Plan, 38 Fed. Reg. 30,825 (1973).

³⁷ EPA, Evaluation of Transportation Controls to Reduce Motor Vehicle Emissions in Major Metropolitan Areas (Doc. No. APTD-1364, Nov. 1972).

³⁸ New York City Plan, 38 Fed. Reg. 16,550, 16,560 (1973).

³⁹ Russell Train, Administrator of EPA, has often spoken of the need for greater flexibility in the Clean Air Act in achieving air quality standards for automobile-related pollutants by the statutory deadlines in certain urban areas, such as Los Angeles. See, e.g., Letter to the Editor, Wall Street Journal, March 19, 1974, at 24, col. 3. At a press conference on March 22, 1974, Mr. Train announced several EPA legislative proposals to amend the Clean Air Act, including an amendment which would give communities unable to meet air quality standards for auto-related pollutants by the 1975-1977 statutory deadline, despite implementation of all reasonable available measures in their transportation control plans, an extension of up to five years on the condition that all additional reasonable measures needed to meet the standards are implemented during the extension. The amendment would allow an additional five-year extension at the end of the first one. "Reasonably available measures" specifically exclude those that would cause serious adverse social or economic effects. Proposed Amendments, *supra* note 12, at Attachment A, § 3.

where they are required, almost 300 legal actions have been filed challenging them. Approximately 210 such actions have been instituted in California, twenty-six in Texas, nine in Massachusetts and nine in New Jersey.⁴⁰ The legal issues raised include statutory, constitutional and procedural questions.

III. STATUTORY AUTHORITY FOR TRANSPORTATION CONTROLS

The statutory authority for transportation controls is contained in § 110(a)(2)(B) of the Act which provides that an SIP must include emission limitations, schedules, and timetables for compliance with such limitations, and such other measures as may be necessary to insure attainment and maintenance of [the] primary or secondary standard, including, but not limited to, land-use and transportation controls⁴¹

Since four of the six pollutants for which standards have been set are primarily related to motor vehicles, Congress has recognized that "transportation controls" would be required in some areas in order to attain and maintain these standards. The legislative history indicates that Congress understood that these measures would have to bring about a complete change in the use of the automobile. The Senate Committee on Public Works, which considered the bill to amend the Clean Air Act in 1970, said that an implementation plan

should insure . . . that moving sources will be located and operated so as not to interfere with the implementation, maintenance, and enforcement of any applicable air quality standard or goal.⁴²

It recognized "that changes or restrictions in transportation systems may impose severe hardship on municipalities and States" and noted that

Some regions may have to establish new transportation programs and systems combined with traffic control regulations and restrictions in order to achieve ambient air quality standards.⁴³

Moreover, in recognizing that the control devices on new cars would not in themselves be sufficient to meet national air standards, the committee foresaw the necessity of interim transportation plans

⁴⁰ Office of General Counsel, EPA, Memorandum (Feb. 7, 1974).

⁴¹ Clean Air Act § 110(a)(2)(B), 42 U.S.C. § 1857c-5(a)(2)(B) (1970).

⁴² S. Rep. No. 91-1196, 91st Cong., 2d Sess. 12 (1970).

⁴³ Id. at 13.

as drastic as that employed in Los Angeles. In this regard the Committee stated:

The bill recognizes that a generation—or ten years' production—of motor vehicles will be required to meet the proposed standards. During that time, *as much as seventy-five percent of the traffic may have to be restricted in certain large metropolitan areas* if health standards are to be achieved within the time required by this bill.⁴⁴

Senator Muskie, the chief architect of the Act, said that the ambient standards

will require that urban areas do something about their transportation systems, the movement of used cars, the development of public transit systems, and the modification and change of housing patterns, employment patterns, and transportation patterns generally.⁴⁵

He envisioned that central city use of motor vehicles may have to be restricted,⁴⁶ and stated that "the way in which people move about, go to their work, and live . . . ought to be subject to modification, and must be modified if the objective of clean air is to be achieved."⁴⁷

Although Congress recognized the magnitude of the problem, there is little legislative history to indicate the exact type of control measures intended. However, in the face of the broad language of the Act and the unconditional final date for compliance with all ambient air standards, including those for pollutants caused mainly by automobiles, the EPA has concluded that Congress intended the use of whatever controls are best suited to achieve the necessary reduction in pollutant levels to carry out the purposes of the statute.⁴⁸

Generally, pollutants from stationary sources can be controlled in either of two ways: first, by reducing the emissions through a cleaning process at the point of discharge, or second, by changing the method of operations. For example, sulfur oxide emissions can be controlled by stack gas cleaning devices and other permanent smoke stack controls, by lowering the sulfur content of the fuel burned, or by a combination of the two methods. These techniques have long been accepted as proper controls for stationary sources.

⁴⁴ Id. at 2 (emphasis added).

⁴⁵ 116 Cong. Rec. S42,387 (1970).

⁴⁶ Id. at S42,384.

⁴⁷ Id.

⁴⁸ See Notice of the Administrator, 38 Fed. Reg. 30,626, 30,633 (1973).

Applying these techniques to control pollutants from mobile sources, reductions can be achieved either by tailpipe devices to cleanse the pollutants before discharge into the atmosphere or by limitations on the use of the pollution source, namely, motor vehicles. The pollutants caused by automobiles are so serious in some regions that the problem cannot be solved by one technique alone. Moreover, the desirability of relying on only one technique is questionable considering the costs and the retrogressive nature of a retrofit program and the social and economic disruptions attendant on substantial VMT reductions. Therefore, most of the transportation plans contain a mixture of the two techniques.

Controls designed to reduce vehicle use can, under the Act, be placed directly on the car owner as a "transportation control" and on the stationary source which attracts cars as an "emission limitation."⁴⁹ Direct controls on car owners could include limitations on the number of licensed drivers or registered vehicles and a ban on the use of certain vehicles during designated periods as well as such disincentives as tolls, parking fees and limitation of parking supply. For example, the transportation plan for Boston originally proposed by the EPA⁵⁰ would have banned the use of one-fifth of the vehicles registered in the metropolitan area on weekdays during periods when oxidant levels are at their highest.⁵¹ Under this system, each vehicle would have been issued a colored sticker which designated the day of the week on which that vehicle could not be used. Although this would have been a direct transportation control on the car owner and completely supportable under the statute, the intensity of the public opposition to this strategy persuaded the EPA to discard it in the final plan.⁵² In its place the EPA substituted a regional parking management system. Under this strategy each employer in a specified area employing more than fifty people at any one facility must reduce employee parking at each such facility by the greater of (a) twenty-five percent of the spaces available at such facility on October 15, 1973, or (b) that number of spaces necessary to attain a parking space/employee ratio of 0.75 at each facility.⁵³ This system is not only a "transportation control" designated to shift employees from driving alone into car pools and public transporta-

⁴⁹ Clean Air Act § 110(a)(2)(B), 42 U.S.C. § 1857c-5(a)(2)(B) (1970), provides that an approvable SIP shall include "emission limitations" and "such other measures as may be necessary to insure attainment and maintenance of such primary or secondary standard, including . . . transportation controls . . ."

⁵⁰ 38 Fed. Reg. 17,689, 17,690 (1973).

⁵¹ *Id.* at 17,697.

⁵² 38 Fed. Reg. 30,960 (1973).

⁵³ *Id.* at 30,965.

tion by limiting the parking supply, but is also an "emission limitation" imposed on the employers.

Such an emission limitation is authorized by section 110 of the Act,⁵⁴ which requires that "emission limitations" be applied to all sources of pollution which must be controlled in order to attain and maintain the standards. A "stationary source" is defined as "any building, structure, facility, or installation which emits or may emit any air pollutant."⁵⁵ Sulfur oxides and particulates which are emitted directly from the stacks of a stationary source are controlled by regulations which require the installation of control equipment or change in operations.⁵⁶ Carbon monoxide, hydrocarbons and NO_x are also emitted from the premises of many stationary sources, albeit indirectly from the parking facilities through automobile use. The Act does not distinguish between pollutants which are directly emitted from stationary sources and those which are indirectly emitted from such sources. However, any doubt on this point was removed by the United States Court of Appeals for the District of Columbia Circuit in the *NRDC* case.⁵⁷ Pursuant to the order of the court in that case, the EPA promulgated regulations applicable to "indirect sources" which require a state to set up the legal authority and procedures necessary to prevent construction, modification and operation of a facility which "directly or *indirectly* results or may result in emissions of any air pollutant at any location which will prevent the attainment or maintenance of a national standard."⁵⁸ If the operation of a parking facility will jeopardize the standards for CO, HC or NO_x, a state must be able to control that facility so that the standards are met. The parking management system of the type contained in the Boston transportation plan is a means of limiting pollutants emitted from the facilities of a stationary source and accordingly is the type of control authorized by the Act both as a "transportation control" and as an "emission limitation" on an indirect source of pollution.

⁵⁴ 42 U.S.C. § 1857c-5 (1970).

⁵⁵ Clean Air Act § 111(a)(3), 42 U.S.C. § 1857c-6(a)(3) (1970).

⁵⁶ See, e.g., Regulations 2 and 5, Mass. Dep't of Public Health Regulations for Control of Air Pollution, in Massachusetts Implementation Plan, 40 C.F.R. § 52.1120 (1972).

⁵⁷ 475 F.2d 968 (D.C. Cir. 1973). In that case the NRDC had argued before the court that the SIPs did not adequately provide for maintenance of the standards beyond the May 31, 1975 attainment date because the plans did not specifically require review of buildings and other facilities prior to construction or modification to determine the impact on air quality, not only of pollutants emitted directly from stationary sources, but also of pollution arising from mobile source activity associated with such facilities. The court ordered the EPA to review each SIP and to disapprove those which did not provide for measures necessary to insure maintenance of the standards. *Id.* at 972.

⁵⁸ 38 Fed. Reg. 15,834, 15,836 (1973). Appendix O of the regulation includes parking facilities as a type of facility requiring control by the State.

Common to many of the plans are restrictions on off-street commercial parking. These include a limitation on the construction of new parking facilities or the expansion of existing ones, a limitation on the number of existing spaces which may be utilized, and surcharges for parking.⁵⁹ The financial disincentives and restrictions on the availability of parking spaces are designed to reduce VMTs by inducing automobile drivers to enter car pools or to take mass transit. For example, in Boston, since CO is a problem mainly in the core area and is caused to a large extent by commuter traffic, controls aimed at commuters in the core area were considered particularly appropriate. The Boston plan imposes a freeze on the total quantity of parking spaces available for use at the amount available for use as of October 15, 1973,⁶⁰ bans on-street parking from 7 a.m.

⁵⁹ The Conference Committee in its Report (No. 93-681, Feb. 6, 1974) on the Energy Emergency Act provides for amendment of § 110 of the Clean Air Act, 42 U.S.C. § 1857c-5 (1970), to prohibit the Administrator from requiring any parking surcharge regulations, to declare void all parking surcharge regulations previously promulgated by the Administrator, and to authorize the Administrator to suspend until Jan. 1, 1975 the applicability of any regulations for the management of parking supply. "Management of parking supply" is defined to include any requirement that a new parking facility receive a permit which is conditioned on air quality considerations. The Conference Report would not prevent the Administrator from approving such strategies contained in a plan adopted by a state. The Report requires the Administrator to conduct a study and to submit a report to Congress not later than May 1, 1974 on the necessity of parking surcharges, management or parking supply, and preferential bus/carpool lanes, including an assessment of their economic impact, consideration of alternate means of reducing VMTs, and an assessment of the impact of such regulations on other federal and state programs dealing with energy or transportation. With respect to transportation controls, this Conference Report is virtually identical to the bill contained in the draft report of the Conference Committee made in December 1973. At that time Sen. Muskie announced during debate on the Senate floor that his Public Works Subcommittee would hold hearings on the EPA's authority to impose parking surcharges. 119 Cong. Rec. S22,685 (daily ed. Dec. 12, 1973). Construing the December draft report of the Conference Committee as providing "firm congressional guidance," the Administrator, on Jan. 15, 1974, withdrew the surcharge regulations which had been included in plans for cities in California, Massachusetts, New Jersey and the District of Columbia area, and deferred until Jan. 1, 1975 the effective date for regulations providing for the review of new parking facilities to determine their impact on air quality. 39 Fed. Reg. 1848 (1974). In addition, the Administrator announced that the EPA would conduct the study and make the report called for in the Conference Report.

The Energy Emergency Act was originally passed by both houses of Congress, but the President subsequently vetoed it, and his veto was sustained by Congress. See note 12 *supra*. Subsequent to the demise of the Energy Emergency Act, the EPA proposed direct amendments to the Clean Air Act, one of which would give the EPA authority to grant five year extensions for the attainment of air quality standards for auto-related pollutants, upon the condition that the current statutory deadline could not be met with the implementation of "reasonably available measures." The proposed amendments define "reasonably available measures" as those that would not cause "serious adverse social or economic effects." In particular, the proposed amendments provide that "[n]o transportation control measures which would have serious adverse social or economic effects shall be considered 'reasonably available.'" It could therefore be argued that the proposed amendments would permit the extension of auto-related air quality standards without requiring parking management controls. See Proposed Amendments, *supra* note 12, at Attachment A, § 3.

⁶⁰ 38 Fed. Reg. 30,960, 30,964-65 (1973).

to 10 a.m. on weekdays,⁶¹ and requires a forty percent vacancy rate at off-street parking facilities between 7 a.m. and 10 a.m. on weekdays.⁶² The hours selected will provide maximum diversion of rush-hour commuters to other transit while causing minimum inconvenience to short-term shoppers. In the Washington, D.C. plan⁶³ the daily charge on parking for more than six hours is called a "mass transit incentive charge." It will be phased in over a two-year period to allow commuters time to adjust and discover alternate modes of travel. The increase in the charge is designed to coincide with improvements in mass transit, particularly the operation of a substantial number of new buses. The charges, in turn, will be used to finance the mass transit improvements. In the interim before the expansion of the mass transit facilities are completed, car pooling is an alternative. If the average occupancy of 1.1 persons per car during rush hours in the Boston area could be raised voluntarily to 1.7 persons through the use of car pools there would be no need for any transportation controls in Boston.⁶⁴ Thus, there is a tremendous need for increased car pooling to combine trips and reduce traffic. Most plans which contain disincentives on the use of single occupant cars also have requirements for setting up systems for getting car poolers together—such as computerized methods for matching people by where they live and work, by their work hours, by car capacities, and so forth.⁶⁵

The statutory authority for the restrictions on off-street parking is contained in section 110 of the Act as discussed above in connection with the regulation requiring employers to reduce employee parking spaces. Such controls are both "transportation controls," insofar as they deter a car owner from commuting alone, and "emission limitations" as they apply to an owner of a parking facility from which pollutants are discharged by the cars using that facility.

⁶¹ *Id.* at 30,964.

⁶² The City of Boston is to accomplish the required space vacancy by establishing for each off-street parking facility in the Boston core a percentage by which such facility shall reduce the number of parking spaces available for use so that the total available off-street parking supply shall not exceed 60% of the supply available on Oct. 15, 1973. *Id.* at 30,966. Such action by the City does not appear to constitute an unconstitutional taking of private property without just compensation. For a discussion of this subject, see section IV of this article and notes 68 and 69 *infra*.

⁶³ 38 Fed. Reg. 33,702 (1973).

⁶⁴ EPA, Region I, Air Branch, in-house calculations.

⁶⁵ The American Legal Association and Radio Station WBZ have instituted a "Commuter Computer Club Car" program in the Boston area which assembles lists of commuters with similar travel patterns and provides a mechanism for bringing such persons together. The Boston transportation plan requires the Commonwealth of Massachusetts to establish a similar system in the event the privately-operated program is discontinued. 38 Fed. Reg. 30,960, 30,966-67 (1973).

IV. CONSTITUTIONAL CONSIDERATIONS

Owners of parking facilities have claimed that controls which deter car owners from using their facilities constitute a taking of private property without compensation in violation of the Fifth Amendment of the Constitution.⁶⁶ However, this claim does not appear meritorious because under case law only those regulations which result in a taking of private property for public use require compensation.⁶⁷ On the other hand, regulations which restrict the use of private property because the uncontrolled use of that property would be injurious to the public welfare do not fall within the Fifth Amendment limitation, even though a loss of revenues may result.⁶⁸ The latter is an exercise of the sovereign's inherent police powers.⁶⁹ Regulations restricting use of certain parking spaces and imposing parking fees cannot be considered takings of property for public use. To the contrary, these regulations control the use of private property for the purpose of protecting the public health and welfare from the harmful pollutants which would otherwise be emitted from such sources. Such an exercise of sovereign power for the protection of the public interest does not require compensation under the Fifth Amendment.⁷⁰

Although owners of parking facilities may suffer some financial loss as a result of these regulations, it is apparent from the legislative history of the Act that Congress contemplated that losses would result from the imposition of emission limitations and that plant changes might even occur.⁷¹ Indeed, all such limitations would appear to have some adverse economic impact on the sources con-

⁶⁶ Several parking associations have filed petitions for review. See, e.g., *Fitz-Inn Auto Parks, Inc. v. EPA*, No. 73-1386 (1st Cir., filed Dec. 6, 1973); *Pilgrim Parking, Inc. v. EPA*, No. 73-1387 (1st Cir., filed Dec. 6, 1973).

⁶⁷ See, e.g., *Franco-Italian Packing Co. v. United States*, 128 F. Supp. 408 (Ct. Cl. 1955).

⁶⁸ *Id.* The court in the *Franco-Italian Packing Co.* case held that the actions of a United States naval officer shortly after the Pearl Harbor bombing in preventing ships from continuing fishing operations in areas near the Panama Canal did not amount to a taking of plaintiff's ships and business which is compensable under the Fifth Amendment of the Constitution.

⁶⁹ In *Hamilton v. Kentucky Distilleries & Warehouse Co.*, 251 U.S. 146 (1919), a case arising under the War-Time Prohibition Act, ch. 212, 40 Stat. 1045 (1918), Justice Brandeis, writing for the Court, stated that if the restrictions on the use of property could validly be imposed by a state without compensation by exercising its police powers under the Fourteenth Amendment, the United States can impose a like restriction without compensation under the Fifth Amendment. 251 U.S. at 157. The Court held that the Act in question did not appropriate liquor for public purposes, but merely restricted its distribution, and that therefore compensation was not warranted. *Id.*

⁷⁰ See notes 68 and 69 *supra*.

⁷¹ The Senate Report states that the Committee "determined that existing sources of pollutants either should meet the standard of the law or be closed down." S. Rep. No. 1196, 91st Cong., 2d Sess. 3 (1970).

trolled, at least in the short-term. For example, the installation of control equipment to reduce sulfur oxides and particulate emissions involves a substantial initial capital outlay and increased operating costs. Likewise, regulations limiting the sulfur content in fuel oil or prohibiting the burning of coal increase the costs of doing business for all industrial and commercial fuel oil users. However, the owners of these sources have not been allowed compensation for their losses.

The parking surcharge has also been attacked as an unlawful exercise of the taxing authority conferred on Congress by Article I, section 8, clause 1 of the United States Constitution,⁷² and alternatively, on the ground that it is not uniform as required by the Constitution.⁷³ The purpose of the surcharge, of course, is not to raise revenues, but to carry out a valid regulatory scheme to reduce the emission of harmful pollutants. The courts have long held that such fees are valid. The Supreme Court in *United States v. Grimaud*⁷⁴ upheld the power of the Secretary of Agriculture to establish a fee for grazing sheep in the national forests. The Court found that the Forest Reserve Act of 1897, which gave the Secretary the power "to regulate their occupancy and use and to preserve the forests thereon from destruction,"⁷⁵ demonstrated sufficient congressional intent for the Secretary to establish administratively a fee "to prevent excessive grazing and thereby protect the young growth, and native grasses, from destruction"⁷⁶ In *Rodgers v. United States*,⁷⁷ the Sixth Circuit considered the contention that a fee on each pound of cotton sold in excess of a farmer's quota was in reality a direct tax not levied uniformly as required by the Constitution. The court upheld the fee, however, on the basis that the primary purpose of the statute was to impose a sanction rather than a tax. The court stated that the constitutional limitation on the taxing power

relates solely to taxation generally for the purpose of revenue only, and not impositions made incidentally under

⁷² U.S. Const. art. I, § 8, cl. 1 provides:

The Congress shall have power to lay and collect taxes, duties, imposts and excises, to pay the debts and provide for the common defense and general welfare of the United States; but all duties, imposts and excises shall be uniform throughout the United States.

⁷³ See, e.g., Petition for Review, *South Terminal Corp. v. EPA*, Civil No. 73-1366 (1st Cir., filed Nov. 13, 1973); Petition for Review, *Massachusetts Port Authority v. EPA*, Civil No. 73-1382 (1st Cir., filed Dec. 6, 1973).

⁷⁴ 220 U.S. 506 (1911).

⁷⁵ Act of June 4, 1897, ch. 2, 30 Stat. 35.

⁷⁶ 220 U.S. at 522.

⁷⁷ 138 F.2d 992 (6th Cir. 1943), rev'd on other grounds, 332 U.S. 371 (1947).

the commerce clause exerted either directly or by delegation, as a means of constraining and regulating what may be considered by the Congress as pernicious or harmful to commerce.⁷⁸

The court continued:

[I]f regulation is the primary purpose of the statute, the mere fact that incidentally revenue is also obtained does not make the imposition a tax, but a sanction imposed for the purpose of making effective the congressional enactment.⁷⁹

Since the parking surcharge is intended as a means of constraining and regulating the emission of pollutants into the air, and not as a technique for raising revenue, it cannot be considered an unlawful exercise of Congress' taxing powers nor can it be struck down for lack of uniformity in application.

V. IMPLEMENTATION OF THE PLANS

Many of the measures in the plans promulgated by the EPA require implementation by state or local government units. The intent of Congress expressed in the Act is that the states, not the federal government, have the primary responsibility for insuring that national ambient air standards are met.⁸⁰ This approach is not only philosophically correct but is also necessary in order to carry out the purposes of the Act since the EPA does not have the manpower, resources or organizational capability to control air pollution generated by millions of vehicles operated on an extensive network of state and local roads. The specific legal authority for this approach can be found in section 302(e) of the Act,⁸¹ which defines "person" to include "State, municipality and political subdivision of a State," and in section 113,⁸² which permits federal enforcement against "any person" in violation of applicable SIP requirements. As owners of highways, roads and public parking facilities, governmental units can be considered emission sources and held responsible for

⁷⁸ 138 F.2d at 995.

⁷⁹ *Id.* at 994.

⁸⁰ Clean Air Act § 101(a)(3), 42 U.S.C. § 1857(a)(3) (1970), provides: "The Congress finds . . . that the prevention and control of air pollution at its source is the primary responsibility of States and local governments . . ." For an examination of several issues arising from the combined federal and state approach taken by the Clean Air Act, see Luneburg, *Federal-State Interaction Under The Clean Air Amendments of 1970*, 14 B.C. Ind. & Com. L. Rev. 637 (1973).

⁸¹ 42 U.S.C. § 1857h-(e) (1970).

⁸² 42 U.S.C. § 1857c-8 (1970).

reducing pollutants emitted by automobiles using their facilities in accordance with the requirements of an SIP.⁸³ Whether government-owned roads and parking facilities are considered direct or indirect sources of pollution is not material since the Act requires that both types of sources be subject to the SIP.⁸⁴ Some of the specific measures which a state or local government are required to implement in plans promulgated by the EPA are programs for the inspection and maintenance of automobiles, the installation of "retrofit" pollution control equipment (catalytic converters, evaporative controls, air bleed, VSAD, etc.), limitation of gasoline supply, parking restrictions on publicly-owned parking facilities, on-street parking ban, road use restrictions, tolls, and driving bans on certain days.

VI. IMPACT OF THE ENERGY CRISIS ON TRANSPORTATION CONTROLS

Some form of limitation on the supply of gasoline was another strategy originally considered for inclusion in many of the plans, but it was finally discarded for inclusion in most plans because of the difficulties of administration and enforcement. Such a strategy was dropped from the Boston plan because its effectiveness would be substantially diminished by motorists crossing into Rhode Island and New Hampshire where the gasoline supply would not be controlled. On the other hand, a gasoline supply strategy is included in the Los Angeles plan for implementation in 1977 as a final resort measure because of the severity of the pollution problems.⁸⁵ This strategy can be more effectively enforced in Los Angeles than in Boston because of the long distances to neighboring states where supply is not restricted.

Today, in the face of the "energy crisis," the EPA and the states are reconsidering a limitation on the supply of gasoline as a possible alternative control strategy. In fact, in some areas the EPA and the states are considering development of contingency transportation plans based on VMT reductions resulting from measures taken to save energy. Under such a plan, the states would monitor the reductions in VMTs achieved by these energy saving measures⁸⁶ and the resultant effect on air quality. If sufficient reductions are achieved and the energy saving measures appear likely to remain in effect after 1975, it may be possible to eliminate some of the other controls now in the plans.

⁸³ Clean Air Act § 118, 42 U.S.C. § 1857f (1970), makes the requirements of an SIP applicable to federal facilities.

⁸⁴ See notes 57-58 *supra* and accompanying text.

⁸⁵ 40 C.F.R. § 52.241 (1973).

Even if the energy crisis no longer requires measures to limit the supply or use of gasoline after 1975, it may be feasible and socially acceptable to continue these measures as transportation controls. The use of gasoline can be limited by either rationing the amount which may be sold to car owners or by requiring the distributors to limit the total amount available for sale. In the former case, the control is placed directly on the operator of the source of pollution and is therefore authorized as a direct "transportation control." In the latter situation, the control imposed on the distributors of gasoline is not a direct "transportation control," nor would it appear to be a direct "emission limitation," except as it applies to the service stations. However, it can be justified under section 110(a)(2)(B) of the Act, which authorizes the Administrator to impose "such other measures as may be necessary to insure attainment and maintenance" of the standards.⁸⁶ This phrase can be construed to authorize controls over persons who neither directly nor indirectly cause the emission of pollutants, but whose activities are elements in a chain which results in pollution by others.⁸⁷

In addition to restrictions on the use of gasoline, many of the other measures contained in the various transportation plans are presently receiving recognition as useful means for solving the energy problem as well as for controlling pollution. This convergence of environmental and energy interests has been overlooked by some people who have tried to find in the energy crisis an excuse to ease environmental regulations. Both interests require a national commitment to "de-energize" our lifestyles, including, particularly, reducing our reliance on the single occupant automobile. The transportation measures being put into effect across the country will save vast quantities of energy resources through a shifting from an automobile-dominated society to real freedom of mobility through varied forms of attractive alternative transit. Nationwide, the EPA estimates that transportation control measures will result in annual gasoline savings of about eight million gallons per day, which would represent a three percent demand reduction by 1977.⁸⁸ Ultimately, we can expect the benefits from the transportation controls to go well beyond the primary goals of protecting public health and welfare and saving energy. Our large metropolitan areas will become more habitable, there will be a more effective use of land, and the quality of life for all Americans will be enhanced.

⁸⁶ 42 U.S.C. § 1857c-5(a)(2)(B) (1970).

⁸⁷ In § 211 of the Clean Air Act, 42 U.S.C. § 1857f-6(c) (1970), Congress specifically recognized the need in some situations to regulate the manufacture and sale of fuel.

⁸⁸ Internal memorandum from Robert L. Sansom, former EPA Assistant Administrator for Air and Water Programs, to Russell Train, EPA Administrator, Dec. 20, 1973.