

A GUIDE TO THE AIR QUALITY ACT OF 1967*

ROBERT MARTIN AND LLOYD SYMINGTON†

I

INTRODUCTION

On November 21, 1967 the President signed into law the Air Quality Act of 1967,¹ the most important step to date in organizing government's response to the nation's growing air pollution problems. The new law builds on earlier legislation going back as far as 1955 and is in form an amendment of the Clean Air Act of 1963.² Nevertheless, it sets forth a better defined approach to air pollution control than had yet emerged in either federal, state, or local legislation and begins to indicate the shape of the coordinated federal-state-local regulatory effort that air pollution control requires.

For the first time the federal government has decreed that regulation shall be undertaken by the states and has prescribed both a broad timetable for its coming into being and a basis for measuring the adequacy of that regulation. By recognizing health requirements, economic and technological realities, and the necessity for a flexible approach, the Air Quality Act provides a framework for an active government-industry partnership directed toward achieving the goal of clean air.

This article attempts to delineate the act's scope and ultimate effects in controlling air pollution attributable to stationary sources of contaminants. The act's provisions on automotive vehicle emissions are outside of the scope we have elected to adopt.³

A. The Background of the Legislation

The Air Quality Act builds on the foundations established in the Clean Air Act of 1963. The Clean Air Act authorized a broad federal program of research, technical assistance, and other aids to state and local air pollution control programs. It included provision for various conferences intended to promote voluntary pollution abatement and enforcement procedures where voluntary abatement could not be obtained. These programs were administered by the Secretary of Health, Education, and Welfare (hereinafter "HEW" designates the Secretary or his Department), and HEW actively participated in air pollution control conferences and proceedings in a

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† Members of the Washington, D.C., bar and of the firm of Leva, Hawes, Symington, Martin and Oppenheimer, Washington, D.C., general counsel to the National Coal Policy Conference, Inc.

¹ 81 Stat. 485. (Hereinafter the act is cited by section number without reference to *Statutes at Large*.)

² Pub. L. No. 88-206, 77 Stat. 392.

³ Automotive vehicle emissions are dealt with in §§ 201-12 of the act. For a full discussion, see Kennedy & Weckes, *Control of Automobile Emissions—California Experience and the Federal Legislation*, in this symposium, p. 297.

number of areas. Those conferences aroused considerable public concern about air pollution.⁴ On the other hand, as industry pointed out, it seldom was invited to participate in those conferences, thereby minimizing the opportunity for a cooperative government-industry effort to improve air quality.⁵

In 1967, the President and the Congress both reflected and stimulated the increasing public concern about air pollution. The President proposed sweeping new authority for HEW, including the establishment of national emission standards, whereby each industry would be subject to uniform nationwide controls regardless of plant location, atmospheric conditions, and so forth. Senator Edmund Muskie, chairman of the Air and Water Pollution Subcommittee of the Senate Public Works Committee, which had the principal responsibility on the Senate side for the Air Quality Act, spoke of air pollution as "a serious national problem" and served notice that "no one has the right to use the atmosphere as a garbage dump."⁶ He also recognized, however, that the problem had to be approached in the broader context of "the economic-technological-environmental relationship."⁷

Unfortunately, as the extensive congressional hearings leading to the Air Quality Act of 1967 demonstrated, the growing concern about air pollution was not matched by a concomitant advance in knowledge or effort adequate to cope with the complex problems of environmental control.⁸ This lack of knowledge and technology, the inadequacy of prior research efforts, and the confusion in regulatory effort which resulted, were typified by the sulfur oxides issue which was often discussed in the congressional hearings.

I. *The Sulfur Oxides Controversy*

The 1963 act contained a specific research mandate to HEW as to sulfur oxides. The act also authorized HEW to develop information criteria on "air pollution agents" indicating their likely adverse effects if present in the air in varying quantities. Even though HEW's sulfur research program was most limited and still in an incipient stage, HEW, on March 23, 1967, issued criteria relating to oxides of sulfur.⁹ These criteria, and certain standards of control of sulfur oxides which HEW had proposed or promulgated during the preceding year,¹⁰ were, as HEW conceded in the Senate hearings, beyond the reach of existing control technology.¹¹ Misinforma-

⁴ *Hearings, Air Pollution—1967, Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works*, 90th Cong., 1st Sess. 1149-50 (1967) [hereinafter cited as *Senate Hearings*].

⁵ *Id.* at 2035-36, 2014-15.

⁶ 113 CONG. REC. S9853-54 (daily ed. July 18, 1967) (statement of Senator Muskie, chairman of the subcommittee which considered the act).

⁷ S. REP. NO. 403, 90th Cong., 1st Sess. 8-9 (1967) [hereinafter cited as S. REP.].

⁸ *Id.* at 3-4.

⁹ PUBLIC HEALTH SERVICE, AIR QUALITY CRITERIA FOR SULPHUR OXIDES (1967).

¹⁰ PUBLIC HEALTH SERVICE, REGULATION OF SULPHUR OXIDE EMISSIONS FROM FEDERAL FACILITIES 6-11 (1967).

¹¹ *Senate Hearings* 780, 2250.

tion on the nature and limited purpose of the criteria concededly could (and did) generate pressure in communities, leading to hasty and improvident regulatory action.¹² Furthermore, the hearings raised major questions as to the accuracy of the criteria, with significant American and English authorities contradicting the HEW conclusions.¹³

While the congressional hearings were in progress, the President issued a directive ordering accelerated research on the control of sulfur oxides emissions and requested additional funds from the Congress for this purpose.¹⁴ The Congress, in the Air Quality Act, ultimately directed HEW to reconsider the sulfur oxides criteria.¹⁵ And the Senate Committee stated,

The oxides of sulfur controversy is indicative of the need more precisely to define the relationship between pollution and health and welfare. Because the committee is concerned with both long- and short-term hazards as well as the need for valid scientific data to substantiate the correlation between pollution and health and welfare the Secretary is urged to move forward with diligence and perseverance in the area of scientific analysis as well as research into ways feasibly and effectively to control potentially dangerous emissions.¹⁶

2. *Emergence of a New Mandate*

The careful and thorough approach taken in the hearings helped to establish a new tone for the nation's approach to its air pollution problems. As HEW Secretary John W. Gardner stated, "We must now enter a new era in the nation-wide struggle against air pollution The scattered hit-or-miss, uncertain control efforts on the part of all levels of government which have characterized the past must give way to a much more rational and scientifically valid national effort."¹⁷ There was unanimity that the authority granted by the 1963 act was inadequate for this purpose. It came perhaps as a surprise to some that virtually all industry supported new legislation that would lead to a more effective air pollution control effort. There was very broad support for a cooperative approach to bridge the gaps in knowledge and technology and to promote voluntary compliance in achieving higher air quality standards wherever it was necessary and economically and technologically feasible to do so. Regulations and reasonable enforcement procedures generally were accepted as necessary, with the states to bear the prime responsibility.¹⁸

The hearings and the committee reports recognized HEW's position that HEW

¹² *Id.* at 2253, 2027, 2038-42.

¹³ *Id.* at 2659-81, 2103-28.

¹⁴ Memorandum from the President to the Secretary of Health, Education, and Welfare, April 21, 1967.

¹⁵ § 107(b)(1).

¹⁶ S. REP. 10.

¹⁷ *Hearings on the Air Quality Act of 1967 Before the House Comm. on Interstate and Foreign Commerce*, 90th Cong., 1st Sess. 204 (1967) [hereinafter cited as *House Hearings*].

¹⁸ See, e.g., *Senate Hearings* 2016, 2001, 213-39, 1783, 1803-04; *House Hearings* 393-444, 539-626.

must take the lead in research and information on pollution controls; but they also reflected a desire that the research be more aggressive and the information supported by more substantial evidence than in the past.¹⁹ Moreover, the consensus of the Congress was opposed to HEW's request for national emission standards at this time. Instead, the revised act reflected the view that solution of air pollution problems required flexibility and different approaches as regions differed in atmospheric conditions, industrial concentration, and so on.

All agreed that industry should be given increased opportunity to participate in achieving improved air quality and that it had a real obligation to do so. Senator Muskie stated, "As each day passes there is a greater urgency for closer cooperation between Government and industry . . ."²⁰ Senator Jennings Randolph, chairman of the full Senate Public Works Committee, who played a most active role in formulating the legislation, emphasized "the need for participation by all segments of our national economy if air pollution control and abatement are to be achieved."

Senator Randolph also commended the proposed legislation because of its "workability, its potential for advancing the quality of the nation's air without inordinately disturbing economic balances . . ."²¹ In urging "a truly comprehensive attack" on the nation's air pollution problems, Dr. John T. Middleton, director of HEW's National Center for Air Pollution Control, testified that "a very high priority must be given to finding ways of making continued full use of our fuel resources without simultaneously adding to air pollution problems that are already serious in many places."²²

The context of the legislation thus was one not only of urgent need but also, as both Chairman Harley Staggers of the House Committee and Chairman Muskie had pointed out, of recognition that there was no immediate panacea to the nation's air pollution problems, in large part because of the gap in knowledge and technology.²³ The committee made clear that while research was "not intended as a substitute for regulation," nevertheless it was "imperative"; for "reasonable regulation should . . . be based on an accurate measurement of the health and welfare needs, technological feasibility of abatement of pollution and economic factors involved."²⁴ HEW concurred that accelerated research both by government and industry was required.²⁵ The Congress left no doubt that it intended closely to monitor that research effort.²⁶

The legislation had complete bipartisan support and was enacted without dis-

¹⁹ See, e.g., S. REP. 10-11; H.R. REP. NO. 728, 90th Cong., 1st Sess. 14, 25 (1967) [hereinafter cited as H.R. REP.].

²⁰ 113 CONG. REC. S9854 (daily ed. July 18, 1967).

²¹ *Id.* at S9858.

²² *House Hearings* 206.

²³ 113 CONG. REC. H14401 (daily ed. Nov. 2, 1967); *id.* at S9853 (daily ed. July 18, 1967).

²⁴ S. REP. 10-11, 17-19; H.R. REP. 25.

²⁵ *Senate Hearings* 786.

²⁶ 113 CONG. REC. H15165 (daily ed. Nov. 14, 1967).

sent in both the Senate and the House of Representatives. It reflected the congressional determination concurred in by the Administration, industry, and many state and local authorities that air pollution had to be dealt with on a more comprehensive, cooperative, and accelerated basis than theretofore, using the best available scientific and research tools and recognizing both the paramount demands of public health and the very real limitations imposed both by the lag in technology and by the economic considerations. The Administration labelled the bill as "a very important step in the development of the country to deal with a serious national problem"; it also expressed the view that the Congress would be directly concerned with the air pollution problem for years to come.²⁷

B. Summary of the Purposes Underlying the Air Quality Act

The Air Quality Act became law on November 21, 1967. It amended the Clean Air Act of 1963 in a number of significant respects. The main purposes of these amendments were these:

- (1) to lead to state control of air pollution problems, reflecting the need for differences in controls in different regions on account of varying atmospheric, topographic, industrial, and other conditions. Such pollution control action would be (a) in air quality regions designated by HEW based on pertinent conditions, (b) responsive to air quality criteria and recommended control techniques developed by HEW for particular air pollution agents, and (c) in accordance with air quality standards and enforcement plans developed by the states. (The earlier HEW concept of national emission standards for particular industries was deleted, although the new law provided for HEW to make a two-year study of their possible application later.)
- (2) to assure that the HEW criteria and recommended control techniques, which are necessary to trigger the state programs, will (a) be based on full consultation, consideration of the best available scientific information, and supported by substantial evidence, (b) provide sufficient information to permit flexibility to the states in establishing control plans within the limits of technological and economic feasibility, and (c) in the case of the previously issued sulfur oxides criteria, be reconsidered in view of the new requirements.
- (3) to assure adequate outside consultation by HEW in carrying out all of its major responsibilities as to air quality criteria, control techniques, research, and so on—particularly through an Air Quality Advisory Board and a number of advisory committees.
- (4) to authorize HEW to establish standards if a state fails to act or if state action is considered inadequate and to enforce those standards by court action where the pollution can be shown to affect another state.

²⁷ *Id.* at S9856 (daily ed. July 18, 1967).

- (5) to authorize immediate court action to stop pollution in emergency situations endangering health, regardless of the economic or technological feasibility of pollution control.
- (6) to give highest priority to expanded research, with specific reference to fuels.

C. Outline of Steps in Setting and Enforcing Air Quality Standards

Before beginning our detailed examination of the act, it is useful to set forth in outline form the basic scheme whereby HEW will promulgate and the states will enforce air quality standards. The authors' advice to industries affected by the various steps in the process is printed in italics. This generalized advice is, of course, no substitute for the advice of each firm's own counsel.

I. *Initial Actions by HEW*

Before the states are obligated to set standards, HEW must take several initial actions, as follows:

- (1) Designate broad *atmospheric areas* or air basins based on meteorological and topographical factors. (Eight national atmospheric areas covering the forty-eight contiguous states were announced on January 16, 1968.²⁸)
- (2) Designate *air quality control regions*, containing communities in one or more states, with a common air pollution problem (by May 21, 1969). HEW must consult with state and local authorities before making such designations.
- (3) Develop and publish *air quality criteria* for particular air pollution agents, which would describe the effect on health and welfare of varying concentrations of each agent or combination of agents in the ambient air. These criteria must reflect the best available scientific data, including views of other agencies and the advisory committees which the law requires to be established.
- (4) Develop and publish *recommended control techniques*—that is, the best available information on how to achieve air quality levels set forth in the criteria, including technology, effectiveness, costs, and economic feasibility of various alternatives. Again, consultation with other agencies and advisory committees is required.
- (5) Undertake *expanded research programs*, the results to be utilized in developing and revising these criteria and control techniques.

Before HEW designates regions or issues criteria, it must obtain the requisite advice. It was intended that HEW obtain the best advice available. Industry members should be prepared to do all they can to help develop sound criteria and accurate control information. Individuals invited by HEW to be a consultant or to work with an advisory committee in either of these areas will not be acting as in-

²⁸ 33 Fed. Reg. 548 (1968).

dustry representatives as much as experts in their fields. Therefore, other members of industry not serving on such committees must also seek an opportunity to present their points of view and information. This may be done by contacting members of an advisory committee after they have been announced or in consultation with state and local officials who will confer with the federal government on the local problems.

Industry also has a vital interest in the boundaries of the air quality control regions. In appropriate cases it should seek to be heard by the appropriate state and local officials, as well as by HEW, as to whether a particular area should be included in the region. It is suggested that local and state officials be asked for information on the recommended boundaries of air quality regions and if industry is affected by such boundaries any comments or representation may be made at that time.

In these, as in all other phases of air pollution control, it is essential that industry participation be based upon full understanding of the health, technology, and economic considerations involved, and where possible, offer an affirmative, not a negative, approach. The whole thrust of the legislation is toward a cooperative, scientific, and economically sound approach to workable and effective abatement.

2. State Air Quality Standards

As soon as HEW has taken the steps outlined above, each state in the designated regions must move promptly to develop standards and controls with respect to each substance, or group or combination of substances, in the atmosphere which are the subject of HEW criteria. Each state must do the following:

- (1) File a *letter of intent* to set appropriate standards and controls, within ninety days after receiving HEW criteria and control information regarding any designated substance emitted into the atmosphere.
- (2) Adopt, within the next 180 days, *ambient air quality standards* for the substance in question applicable to each designated air quality control region or portion thereof within the state. Standards must be consistent with HEW's criteria and control data. The state must hold a public hearing, and must consider any recommendations received from state or interstate planning agencies before adopting such standards.
- (3) Adopt, within another 180 days, a *plan* on how to achieve each of the standards within a reasonable time, including emission control requirements and means of enforcement by the state. The plan may include various alternative control methods and a timetable for achieving ultimate standards within the limits of technological and economic feasibility.
- (4) File the standards and plan with HEW. They will become effective when HEW finds them consistent with the act.

In keeping with the intent of the Air Quality Act, state and local authorities should establish their own mechanisms for hearings and consultation. Voluntary compliance with sound standards should be the objective of all concerned.

Businessmen should prepare to participate in any such organization and should be alert to the need to present their view at all appropriate state, local, and interstate levels—particularly at the public hearings. The implementation plan is at least as important as the standards, because it sets the timetable for compliance based on technological and economic feasibility.

3. Federal Standards (if State Action is Deemed Inadequate by HEW)

If a state fails to set standards as outlined above, or if HEW deems a state's action inadequate, HEW may act to develop standards for the portion of an air quality region (or regions) within that state, as follows:

- (1) HEW holds a *conference* including representatives of all interested agencies and industries.
- (2) HEW issues *regulations* setting forth air quality standards for the particular region, consistent with the HEW criteria and control information.
- (3) The state then has six months either to adopt state standards satisfactory to HEW or to request a hearing.
- (4) If the state objects to HEW's proposed standards and requests a hearing, HEW sets up special *hearing board*, including members selected by states involved, to receive evidence from all concerned, including industry. The board then makes a binding final decision on the standards to be adopted.
- (5) If a state fails to act within the six-month period, the standards in the HEW regulations become effective for such region or portion thereof.

Industry should participate actively in such proceedings, and if there is a sound and significant basis for objecting to HEW's proposed standards, should request the appropriate state governor to propose alternate standards and/or to seek a hearing and participate in that hearing.

4. Enforcement of Standards; Abatement Action

Each state will normally enforce its own standards in accordance with implementation and enforcement plans approved by HEW (which must include authority to act promptly in emergencies). If a state fails to take reasonable enforcement action in cases where apparent violations are causing air quality to fall below the new standards, HEW may act, as follows:

- (1) *Nonemergencies where standards have been adopted*: HEW gives notice to local authorities and to alleged polluters. If the violation is not corrected within 180 days,

- (a) in a case of interstate pollution, HEW may seek abatement in a federal court; the court reviews the standards and the alleged violation de novo (*i.e.*, the burden of proof is on HEW).
 - (b) where pollution is limited to a single state, HEW may take the matter to federal court only if requested by the state, or the state may request federal assistance in a state court action.
- (2) *Nonemergencies where there are no standards in effect under the new act:* HEW may use the above-described pollution abatement procedure, on its own initiative in an interstate pollution situation and at the request of the governor in an intrastate pollution situation, with modifications as follows:
- (a) HEW makes available a *report* on the problem.
 - (b) HEW calls a *conference* on thirty days' notice to hear the views of all interested parties.
 - (c) HEW recommends any necessary *abatement measures*.
 - (d) If no remedial action is taken within six months thereafter, a special *hearing board*, named by the Secretary but including members recommended by the states, will be convened and will recommend any abatement measures.
 - (e) If an alleged polluter fails to comply with the hearing board's recommendations within six months, HEW may take the matter to a federal court for a de novo hearing in the case of interstate pollution; where intrastate pollution is concerned, a federal court action is permitted only if requested by the state concerned. State action in a state court with federal assistance is also possible.
- (3) *Emergency health situations:* HEW may seek immediate federal court action to stop pollution regardless of any problems of economic or technological feasibility of controls.

In a federal court action not involving an emergency, the court must consider economic and technological feasibility. A company or industry involved in a non-emergency court proceeding must consider whether it is in violation of the applicable emission standards, whether those standards or the applicable air quality standards or even the criteria should be challenged and whether compliance is economically and technologically feasible.

Pending the establishment of standards, the conference-abatement procedures most likely will be utilized. The modification made by the new legislation provides an opportunity for full industry participation in the conference, which should be utilized.

D. Where We Stand Today

In the discussion of the Air Quality Act of 1967 it will become apparent that while the act creates a broad plan for effective air pollution control, there is room

for considerable flexibility under the act. As a result, the interpretations given to the legislation—not only by HEW and by state and local jurisdictions but also in possible court decisions and in reviews by congressional committees—will do much to shape the precise course of the nation's air pollution control effort. The act leaves the formulation of enforcement programs to state and local governments, and the scope of HEW's power to review and override the state legislation and implementing regulations adopted is not yet clear.²⁹ Even if HEW might be held to have broad powers to dictate the machinery to be employed at the local level, it might wisely choose to leave room for innovation and experimentation in control programs. For these reasons and because developing technology may greatly affect the nature of enforcement programs and administrative procedures, it is still too soon to know whether existing local laws, which for the most part appear to have been adapted from zoning laws,³⁰ represent the statutory pattern for future control programs. The initial impression, however, is that existing local laws do not manifest (on their face, at least) the flexibility needed to administer a program giving due weight to health requirements and economic and technological realities.

At the time of the writing of this article we are still at the incipient stage. Within HEW, responsibility for administration of the Air Quality Act has been placed in the National Air Pollution Control Administration, which is a part of the Consumer Protection and Environmental Health Service within the Public Health Service. This latter organization is headed by an administrator who reports to the Assistant Secretary for Health and Scientific Affairs.³¹

By the end of 1968 a number of the preliminary steps prerequisite to the regulatory scheme envisaged by the act will have been taken, and within the following two years the general control program will unfold. Thus for all those who have responsibilities for improving the nation's air, the time for a full understanding of those responsibilities has arrived. The Air Quality Act of 1967 contemplates effective opportunities for all interested persons to participate in the important processes which will lead to the establishment of specific regulations.

II

DEVELOPMENT OF AIR QUALITY STANDARDS AND CONTROL PLANS BY STATES

As indicated above, the act provides essentially that states are to develop their own air quality standards and control programs within broad federal guidelines. The several steps in this process are as follows: (a) HEW designation of atmospheric areas and specific "air quality control regions," (b) HEW development and publication of "air quality criteria" and "recommended control techniques" relating

²⁹ See the discussion of HEW's power over state implementation and enforcement plans, p. 260 *infra*.

³⁰ See PUBLIC HEALTH SERVICE, A DIGEST OF STATE AIR POLLUTION LAWS (1966 ed.). Most statutes and regulations provide flat emission standards but allow variances to be granted in narrow circumstances.

³¹ 33 Fed. Reg. 9909, 9911 (1968).

to particular air pollution agents or combination of agents, both arrived at after consultation with and advice of appropriate advisory committees, (c) development by each state of appropriate standards and control plans for each portion of the state within an air quality region and concerning those air pollution agents for which HEW has published criteria and control recommendations, and (d) evaluation and approval (or disapproval) of state actions by HEW.

A. HEW Designation of Atmospheric Areas and Air Quality Control Regions

1. *Atmospheric Areas*

The first step is for HEW to delineate the broad atmospheric areas or air basins in the U.S.—mainly on the basis of those meteorological and topographical factors that influence the diffusion and transport of pollutants in the air. The act requires that this be accomplished by November 21, 1968, twelve months after passage of the act,³² but the eight areas were designated by HEW on January 16, 1968, as follows: Great Lakes-Northeast; Mid-Atlantic Coastal; Appalachia; South Florida; Great Plains; Rocky Mountains; California Oregon Coastal; and Washington Coastal. HEW stated that each atmospheric area is “a segment of the country in which climate, meteorology, and topography—all of which influence the capacity of the air to dilute and disperse pollution—are essentially homogeneous.”³³

2. *Air Quality Control Regions*

By May 21, 1969, eighteen months after passage of act, HEW must designate existing “air quality control regions,” after consultation with state and local authorities.³⁴

The Senate committee stated that such regions should be established whenever HEW determined that “protection of health and welfare requires establishing air quality standards,” presumably because the region has “significant air pollution problems.”³⁵ The House committee stated that a region should include communities which are affected by a common air pollution problem requiring uniformity of control action.³⁶ There does not in fact appear to be any statutory requirement that the air pollution problems in the region be such as to require uniform controls, or even that a region have common problems as to one or more possible air contaminants. The existence of such a common problem requiring a concerted approach does, however, seem a logical factor to consider in establishing a region.

In designating the regions, the statute provides that HEW is to consider existing jurisdictional boundaries, urban-industrial concentrations, atmospheric areas, and any

³² § 107(a)(1).

³³ 33 Fed. Reg. 548 (1968).

³⁴ § 107(a)(2).

³⁵ S. REP. 25, 4.

³⁶ H.R. REP. 14-15.

other factors which will affect the adequacy of regional controls. It is expected that HEW will also consider the boundaries of air basins or regions already designated by state governments. It is unlikely that air quality control regions would be coterminous with an atmospheric area, in view of the size of the areas which HEW has delineated. The region may be wholly within a state or include portions of several states.

In interstate situations, the affected states are encouraged under section 106 of the act to set up interstate planning agencies, with federal financial aid, to help in recommending appropriate air quality standards for the region in question. In the absence of state action, HEW may establish an interstate planning commission.

While a critical factor in establishing a region may well be the fact that there is a common pollution problem, the act certainly does not assure uniform pollution control action when more than one state is included in the region, and does not appear to require it in a wholly intrastate region. Nevertheless, since uniform controls within a region may be the easiest (even if not the most desirable) controls to impose, it can be important to industry where the boundaries of a region are set.

On July 10, 1968, the Commissioner of the National Air Pollution Control Administration was delegated the authority by the Secretary of HEW to designate air quality control regions.³⁷ Some regions already have been proposed, including an interstate region which includes the District of Columbia and parts of Maryland and Virginia and an interstate region which includes the metropolitan New York area and adjacent counties in Connecticut and New Jersey.³⁸ These proposed designations include provision for hearings thirty days after the notice of designation, in which state and local authorities may participate. In addition, all interested parties have been invited to submit their views in writing. In fiscal year 1969 a number of other regions will be designated, with the same procedure being followed.

Thus industry should be sure that state and local officials have all pertinent information to pass on to HEW; and also that such officials understand clearly the importance of the state's making such information available to the federal government. This is a matter requiring very prompt attention in view of the timetable for establishing air quality control regions. A plant within such a region may be disadvantaged as compared with a plant outside of it. A region too broadly defined may result in controls being imposed in part of the region where in fact they are not necessary.

Moreover, it should be remembered that in an interstate region the governor of a state any part of which falls within such a region may intervene with regard to the standards and control plans of any other state within the region.

If a sound job is done in establishing the regions, much additional flexibility will be gained in improving air quality and establishing an effective control program

³⁷ 33 Fed. Reg. 9909 (1968).

³⁸ 33 Fed. Reg. 10882 (1968) (Washington, D.C.); 33 Fed. Reg. 12260 (1968) (New York City).

where it is really necessary, while avoiding the setting of rules which are unnecessarily restrictive and oppressive. For example, including in a region only those areas absolutely necessary may permit a wider choice in location of new power plants outside of the area where the pollution problem is in fact serious.

This would permit plant location to be a meaningful alternative to substitution of fuels, or other controls. It is clear that the Congress so intended. For the next few years this may prove to be most important to the fuels-burning industries, and others, in view of the control technology gap that may exist. This alternative at least provides a temporary solution while control technology is being developed.

In addition to the regions initially established (mandatory by May 21, 1969) and after similar consultation with state and local authorities, HEW may revise the designation of such regions and designate additional regions as necessary to protect the public health and welfare. This suggests that no matter where a company may decide to locate a new plant, appropriate pollution controls should be part of its planning. The fact that a particular area may have no serious pollution problem now does not mean that controls may not be needed sometime in the future.³⁹

B. HEW's Air Quality Criteria and Recommended Control Techniques

As indicated, it is primarily up to the states to set adequate air quality standards in the designated regions. But, first, to assist the states in developing such standards, HEW will develop and publish "air quality criteria" on the adverse effects of specific air pollution agents or combinations of agents. It will also develop and recommend techniques for preventing or controlling the forms of air contamination so identified. In carrying out its functions in each of these areas, HEW must consult with other federal agencies and with advisory committees representing all interested groups, including industry.

In general, these criteria and recommended control techniques also are designed to be advance warning to industry and other contaminant sources to spur them to analyze their possible pollution problems and to plan adequate control programs.⁴⁰

1. *Air Quality Criteria*

The new act continues the directive to HEW to develop such criteria, but with some important procedural modifications.⁴¹ The principal change is the new requirement of consultation with advisory committees and others. This, however, is not intended to diminish HEW's responsibility, since the Secretary of HEW will make the "final determination on all questions involved in criteria development."⁴²

These air quality criteria must accurately reflect the best available scientific knowl-

³⁹ See S. REP. 4.

⁴⁰ See S. REP. 27.

⁴¹ § 107(b).

⁴² See H.R. REP. 15.

edge on the adverse effects on health and welfare of particular contaminants present in the air in varying quantities. They must also reflect available knowledge of atmospheric and other environmental factors that may alter or otherwise influence these adverse effects. The House Commerce Committee indicated that these criteria will have to be "based upon the most careful studies and analysis," with "substantial evidentiary backup," so that they may be relied on by the states in developing effective and reasonable abatement programs.⁴³

The above requirements apply also to the already-issued criteria on sulfur oxides, which, along with any other criteria presently under development, must be re-evaluated in accordance with the new requirements. The House and Senate committees had heard much testimony questioning the validity of the sulfur oxides criteria, and the House Commerce Committee stated, "There should be no hesitancy in revising such criteria as a result of these changes in the law."⁴⁴

The new requirements, coupled with the *de novo* court consideration in any federal abatement action (see below), impose a substantial obligation on HEW to be certain that the criteria it promulgates are based upon established facts and are not just opinions based on limited information. The reason for this, of course, is that implementation of the criteria by the states can have very major health and economic consequences. This comports with testimony of representatives of HEW that as scientists they would only make findings where the evidence was "considerable" or "substantial" and that controls should be "related to measurable and demonstrable effects on public health and welfare."⁴⁵

This is true even though air quality criteria are descriptive rather than prescriptive or regulatory. Their role is to define the health and welfare considerations that must be taken into account by the states in the development of standards and regulations. Thus, according to the House committee, economic and technological considerations (although essential to implementing the criteria) have no place in the development of criteria. "Air quality criteria should provide a clear statement of how well air pollution should be controlled in order to safeguard the public health and welfare, economic and technical factors notwithstanding. If control technology is not adequate, it must be improved."⁴⁶

Thus the criteria provide the ultimate objective to be achieved. The Congress made it clear that economic and technological considerations relating to the controls needed may postpone the time of accomplishment. The criteria set the goals towards the achievement of which the state standards, and all research, must move.

In July 1968, the Subcommittee on Air and Water Pollution of the Senate Committee on Public Works commenced a series of hearings designed to develop

⁴³ See H.R. REP. 14.

⁴⁴ *Id.*

⁴⁵ Senate Hearings 2524, 2517.

⁴⁶ See H.R. REP. 16.

what factors should be considered by HEW in setting air quality criteria. A number of expert witnesses have been heard, and both government and industry have been invited to submit their views. The one certain thing established by the expert testimony is that even the best available evidence may be totally insufficient to form the basis for the kind of scientific conclusion on which one would expect broad regulations in this field to rest.

A subcommittee staff report on air quality criteria issued in July 1968⁴⁷ in advance of the hearings, while anticipating this problem, also pointed out that regulation should not await the development of adequate scientific data, but must proceed on the basis of the best evidence available. While that conclusion is the subject of considerable dispute, since there are those who believe that absent adequate scientific data the effort may move in totally erroneous directions, and while the timetable for issuance of the various criteria now is uncertain, undoubtedly some criteria will be issued by early 1969. Since the same staff report also made clear that in the standard-setting process (as distinguished from the establishment of criteria), "economic and technological considerations . . . are to be given full attention," the possible uncertainty as to the validity of the criteria to be issued may be ameliorated through the avoidance of standards and timetables which could result in significant economic disruption.

It is important to note the staff report conclusion that "throughout the standard setting process it should be recognized that precise limits for the protection of health and welfare are not possible."⁴⁸ This suggests the desirability of caveats in those circumstances where HEW's conclusions as to criteria may be subject to legitimate scientific question. For example, HEW might delineate, as part of the published criteria themselves, those areas in which the data promulgated is uncertain. This would assist the state agencies when they weigh the competing considerations with respect to particular regulations and timetables.

2. *Recommended Control Techniques*

Concurrently with its development of air quality criteria for particular air pollution substances, HEW must also develop and publish detailed information on the technology and costs of recommended control techniques.⁴⁹ These recommendations are to reflect the latest available technology and the economic feasibility of achieving various levels of air quality, including alternative control methods with cost-effectiveness analyses.

Consultation with other federal agencies and with appropriate advisory committees also would be a mandatory step in the development of this information. In

⁴⁷ STAFF OF THE SUBCOMM. ON AIR AND WATER POLLUTION OF THE SENATE COMM. ON PUBLIC WORKS, 90TH CONG., 2D SESS., AIR QUALITY CRITERIA (Comm. Print 1968).

⁴⁸ *Id.* at vi.

⁴⁹ § 107(c).

particular, the congressional committees indicated that HEW should consult with the Department of Commerce, including its Business and Defense Services Administration.⁵⁰

These requirements derive from the fact noted above, that HEW's air quality criteria will not take into consideration the technological and economic feasibility of achieving the air quality defined in the criteria.⁵¹

As in the case of its criteria, the control techniques recommended by HEW are to be based upon the most careful studies and analysis, with substantial evidentiary backup. They should also permit maximum possible flexibility so that each area may pick the means most suitable to resolve its own pollution problems. Furthermore, as noted in the House Report,

It is important that the Secretary call to the attention of the States in connection with his recommendation of control techniques, the various methods which may be used to achieve cleaner air, and provide information as to the economics of the more significant of these methods. Thus, for example, it may be possible to remove a pollutant from a fuel, or from stack gasses, or to so disperse the pollutant through the use of high stacks so that ground level concentrations are lessened by the stack emissions. The careful selection from among these various methods even within an area may greatly reduce the economic disruption involved and permit more rapid achievement of improved air quality.⁵²

Along the same lines, the Senate committee referred to the desirability of alternatives such as tall stacks to alleviate a particular pollution problem pending the development of additional control technology.⁵³

It should be noted, too, that the act does not prevent a private firm from utilizing an appropriate control technique even if it is not included in HEW's recommendations.⁵⁴

The Senate committee felt that the federal role in the development of control technology should proceed along three lines: (1) support for research by industry, (2) joint support and direction of research, and (3) federal research activities. The method chosen would depend upon the size of the industry concerned and its capabilities to carry out or share in support of the needed investigations.⁵⁵

Although the act is silent as to when HEW should publish the control technology information, the House committee felt that information on the control of sources of a given pollution agent should be made available as soon as possible. While this might occur after the publication of the related air quality criteria, simultaneous publication would be desirable.⁵⁶

⁵⁰ See S. REP. 28; H.R. REP. 15, 35.

⁵¹ See S. REP. 27.

⁵² H.R. REP. 14.

⁵³ See S. REP. 28.

⁵⁴ See H.R. REP. 17.

⁵⁵ See S. REP. 28.

⁵⁶ See H.R. REP. 16.

Similarly, the Senate committee "strongly urges" HEW to develop this information as quickly as possible, giving due regard to the need for reflecting the best available scientific knowledge. Even though existing control technology may not be adequate, the committee felt that "control methods must be implemented as soon as economically feasible and technologically available." The committee recognized that these scientific and technical documents are "more than just the tools for a standard setting procedure."⁵⁷

In brief, this provision gives HEW a major new responsibility, the purpose of which is to insure access to enough technical information to permit an informed and intelligent choice among various control techniques—the choice being left to those who are actually responsible for sources of air contamination. The extent of control needed to achieve the necessary degree of abatement will depend on various factors to be determined by the states for each region.⁵⁸

C. State Standards and Control Plans

The heart of the new act is the required adoption of regional air quality standards. These provisions are similar to existing federal law on water pollution control, with heavy reliance upon action by the states and with due weight given to both health and feasibility considerations.

The Senate committee succinctly described its concept of regulation under the act as follows:

Reasonable regulation should be based on an accurate measurement of the health and welfare needs, technological feasibility of abatement of pollution and economic factors involved. Where health considerations permit and there are technological obstacles or known and seriously adverse economic results which would grow out of precipitous abatement action, the timetable for developments through research should be synchronized so that the pollution problem can be solved in an orderly manner.

On the other hand, where there are health hazards, it is expected that State and local authorities will take the necessary abatement action, and if they do not, the Secretary is specifically authorized to commence abatement action.⁵⁹

As indicated, HEW must first take steps to designate particular regions and to issue air quality criteria and recommended control data for one or more air pollution agents. The publication of such criteria and data then triggers state action to develop appropriate air quality standards and controls in respect to each of the designated contaminants, applicable to each region or portion of a region within the state.⁶⁰

Specifically, each state involved has ninety days after receiving the HEW criteria

⁵⁷ See S. REP. 27.

⁵⁸ See H.R. REP. 17.

⁵⁹ S. REP. 10-11.

⁶⁰ §§ 108(a), (c)(1).

and control information to file a letter of intent—that is, indicating its intent to set air quality standards for the contaminants in question consistent with the purposes of the act; 180 days thereafter to conduct public hearings and set the standards; and another 180 days after setting the standards to adopt a plan to implement and enforce them. This procedure must be followed for each air pollution agent as to which HEW publishes criteria and control data and for any modification in the state standards.

These state standards must be adequate to protect the public health and welfare and consistent with HEW's air quality criteria and recommended control techniques. The implementation plan must assure achieving the standards of air quality within a reasonable time, as economic and technological feasibility permit. It must also provide means of enforcement—including authority to seek prompt court action in emergency situations similar to that given in the act to HEW.

1. *State Standards*

These ambient air quality standards of the state, when effective, will prescribe levels for contaminants in the ambient air that cannot legally be exceeded during specific times and within specific geographic areas. They have been described as imposing “actual requirements for performance by polluters or potential polluters.”⁶¹

According to the congressional committees, the development of these standards from air quality criteria will be influenced not only by a concern for the protection of health and welfare but also by “economic, social and technological considerations.” The House committee emphasized that “technological and economic feasibility are a prerequisite to sound regulation.” The Senate committee also felt that “wherever possible standards should be established which enhance the quality of the environment.”⁶²

In developing the standards the states must hold public hearings during the first 180-day period. In addition, for interstate regions, they will normally receive recommendations developed by interstate air quality planning agencies designated by the affected state governors—or by HEW in urgent cases.⁶³

There is no requirement that either the air quality standards or the control plans be uniform throughout a region. While a region may well have a common pollution problem, nevertheless the states are permitted and in fact encouraged to observe the maximum flexibility in the interests of a realistic and effective program. Moreover, even if uniformity throughout the region is appropriate for some particular contaminant, it may not be appropriate for others. Each situation must turn on its own facts.

Similarly, where a region involves portions of more than one state, and thus

⁶¹ S. REP. 28.

⁶² *Id.* at 29; see H.R. REP. 19.

⁶³ See §§ 106(a), (b)(1).

permits separately promulgated standards and control plans for each state, some variance is a possibility.⁶⁴ This may be because of different conditions in various parts of the region, or because the respective governors did not reach identical conclusions, or both. On the other hand, there will be a tendency towards uniformity within a region, deriving from HEW's right of approval, particularly concerning standards, and the right of a governor of an affected state to petition for revision of standards of another state. Thus, it is important for both government officials and industry to be aware that differences within a region may well be justified, and upheld, or that need for particular requirements in a given part of the region may be uncertain,—and that the act permits broad discretion on such matters.

In this connection, however, the House committee felt that no state should be permitted to set air quality standards which, even if fully implemented, would impair air quality in any portion of another state below that state's own standards.⁶⁵

2. Control Plans

Within 180 days after adoption of any standards (and from time to time thereafter) the state must adopt an implementation, maintenance, and enforcement plan.⁶⁶ The main purpose of the plan is to assure that the standards will be met within a reasonable time. Economics and technology clearly are the limiting factors.⁶⁷

According to both committees, the plan should include emission standards or controls applicable to the sources of the particular contaminants. Emission controls are "legally enforceable limitations on the amount of pollution that a single source or category of source may discharge in the atmosphere." Where a state lacks sufficient information on pollution sources, the implementation plan should include a timetable for obtaining it and for subsequent adoption and enforcement of emission control standards.⁶⁸

Such emission control requirements may include such alternative courses of action as process changes, flue gas stack controls, stack height requirements, fuel use limitations, or plant location rules. In any event, they should include the "best available technology required to achieve the desired level of ambient air quality."⁶⁹

Any emission control requirements should be based on a survey or inventory of the emissions within the region, including types and amounts of pollution agents and the effect of meteorological factors and other factors. These inventories should be updated from time to time to keep pace with changing conditions such as increased urbanization, industrialization, and population trends.⁷⁰

⁶⁴ See H.R. REP. 18.

⁶⁵ *Id.*

⁶⁶ See § 108(c)(1).

⁶⁷ See S. REP. 3-4, 30; H.R. REP. 18-19.

⁶⁸ See S. REP. 29-30; H.R. REP. 18.

⁶⁹ See S. REP. 29.

⁷⁰ *Id.*

Emission control requirements applicable to particular sources of air contamination must also keep pace with technology and the economics of control. Those methods of control that are technologically and economically feasible today may not be sufficiently effective to achieve the desired ambient air quality standard. Therefore, where this is true, as technology advances, the states should prescribe new requirements on a continually more restrictive basis until a satisfactory standard is achieved. This means, too, that individuals close to a given source must be assured, where feasible, of an ambient air quality equivalent to that set for the entire region.⁷¹

A recent report by HEW concerning federal research and development relating to sulfur oxides control clearly illustrates both that new technology will play a major role in solving our air pollution problems and that there is a great technological lag between air pollution control objectives and our present capability to accomplish them. That report lists numerous different approaches to control of sulfur oxides emissions which will be under active research over the next five years. It specifically points out that "no single universal solution exists to the sulfur oxide control problem but . . . a broad spectrum of solutions applicable to the diverse combination of factors surrounding each case is necessary."⁷² Hopefully the data on control techniques which HEW must publish along with the criteria will provide a sufficiently full picture concerning both availability and economic feasibility to encourage "a broad spectrum of solutions." The states thus would be able to provide realistic regulatory frameworks which both permit and result in voluntary compliance rather than lengthy disputes. This would reverse a prior trend where issuance of sweeping regulations which ignored both feasibility and flexibility has resulted in litigation challenging the validity of the regulations instead of compliance.⁷³

3. *Industry Participation at the State Level*

Obviously, a state's determination of the standards and control plans applicable to the air quality region(s) within the state are of major importance to industry. Moreover, after the initial determinations, there will be continuing revisions.

Industry thus must inform itself and actively participate in the public hearings. Each plant, new or old, where there is a potential pollution problem, must be reviewed. This review should include the effects of the plant's emissions on air quality in the region, and the economic and technological feasibility of the various means for controlling those emissions. Clearly what is feasible for one plant may not

⁷¹ See S. REP. 30.

⁷² NATIONAL CENTER FOR AIR POLLUTION CONTROL, SULFUR OXIDES POLLUTION CONTROL: FEDERAL RESEARCH AND DEVELOPMENT PLANNING AND PROGRAMMING, 1968-1972 (1968).

⁷³ See, e.g., Consolidation Coal Co. v. Kandle, No. A-1070-67 (N.J. Super. Ct., App. Div., filed April 18, 1968). In this litigation a broad spectrum of coal, railroad, and industrial groups challenged the New Jersey regulations as being neither supported by the record nor technologically and economically feasible. The regulations, which were scheduled to go into effect in early May 1968, have been held in abeyance by court order pending disposition of the case on the merits. At the time of this writing the case, which was argued in June 1968, had not been decided.

be practicable for another. Industry has the prime responsibility for presenting this information.

The objective of the legislation is "to achieve cleaner air with the minimum possible economic cost or disruption . . .,"⁷⁴ and industry's efforts should be directed toward that joint objective. Note that technological and economic feasibility are factors applicable both to the ambient air quality standards and to their implementation, including emission standards.

D. HEW Approval of State Action

All state air quality standards and control plans must be submitted to HEW for evaluation. Such standards and plan will become effective for each state involved if HEW finds (1) that the standards are consistent with HEW's related criteria and control techniques; (2) that the control plan is consistent with the purposes of the act, in assuring achievement of the standards within a reasonable time; and (3) that a means of enforcement by state action, including emergency authority, is provided.⁷⁵

To warrant HEW approval, in the opinion of the House committee, the state standards "must call for air quality levels which, based on the Secretary's criteria, are at a minimum adequate for the protection of public health and which can be achieved through the application of feasible control techniques."⁷⁶

Despite such HEW approval, any state, interstate, or local authority may set more stringent standards for stationary sources in order to achieve a higher level of ambient air quality than approved by HEW.⁷⁷ Since under some circumstances such action in industrial communities could impose a heavy economic burden on industry in that area, and conceivably could cause both relocation of existing plants and loss of possible new plants, industry must be alert to furnish the pertinent economic data to the state, interstate and local authorities.

III

PROCEDURE FOR FEDERAL STANDARDS IF STATE FAILS TO ACT OR IF ITS ACTION IS INADEQUATE

HEW may develop its own air quality standards for particular pollution agents with respect to any air quality region, or portion thereof, within a state if (a) the state fails to file a letter of intent, or (b) it fails to set standards or file an implementation-enforcement plan, or (c) HEW determines that the state's standards are not consistent with the applicable air quality criteria and recommended control techniques, or (d) if a governor of another state affected by such state's standards (for

⁷⁴ See H.R. REP. 14.

⁷⁵ § 108(c)(1).

⁷⁶ See H.R. REP. 18.

⁷⁷ § 109.

example, where there is an air quality region encompassing portions of more than one state) petitions for a revision of such standards.⁷⁸ Afterwards, if the state so however, that HEW will seldom, if ever, have occasion to exercise this residual requests, the standards must be reviewed by a special hearing board. (It is expected, authority.⁷⁹)

A. Act Ambiguous on HEW Authority as to Implementation and Enforcement Plans

The act is not clear whether, in addition to such federal standards, HEW may also promulgate a federal implementation and enforcement plan. The act, in section 108(c)(1) dealing with state action, appears to use the word *standard* ambiguously. It requires a state to establish both "air quality standards" and an implementation "plan," and clearly distinguishes between the two. It then provides that if approved by HEW, such "*standards and plan* shall be the air quality *standards* applicable to such State." Section 108(c)(2), which is the authorization of HEW action, refers to promulgation of "standards" of air quality by HEW upon failure of a state to establish appropriate "air quality *standards*," with no reference to a "plan."

The section-by-section analysis of the act in each of the committee reports mentions only "standards"⁸⁰ in respect to section 108(c)(2). On the other hand, one portion of the House committee report, and a passage in the Senate report, indicate that it was intended that HEW be authorized to promulgate both standards and an implementation plan, where a state fails to do so.⁸¹

The matter is particularly troublesome because, as the House report makes clear, regardless of whether the state or HEW promulgates the "standards," it is the state which has initial responsibility for enforcement. Federal enforcement action appears limited to the abatement actions specifically provided in the act in the absence of state enforcement.⁸² It is at least questionable whether an HEW-promulgated implementation plan could vest jurisdiction in state courts or agencies or in any way create a state implementation procedure. Thus, one might argue that the statutory scheme contemplates HEW standards only, with no HEW implementation plan, but with HEW abatement action in appropriate cases if the state fails to set up an adequate plan to implement the HEW-promulgated standards, or otherwise fails to enforce them.

Similarly, it is perhaps arguable that mere inadequacy of a state's proposed implementation and enforcement plan (as distinguished from its air quality standards) will not be enough to authorize HEW to set federal standards or a federal plan. Certainly regardless of the adequacy of the enforcement plan, if the state standards were adequate, HEW should not promulgate its own standards. And, as noted

⁷⁸ § 108(c)(2). See S. REP. 29; H.R. REP. 19.

⁷⁹ See H.R. REP. 12.

⁸⁰ See S. REP. 44; H.R. REP. 34.

⁸¹ H.R. REP. 18; cf. S. REP. 29.

⁸² H.R. REP. 13.

above, HEW may lack authority to issue an enforcement plan. Under this view, HEW's authority would be limited to the abatement remedies provided by section 108(c)(4), discussed below.⁸³

Thus in the case of a "recalcitrant" state, effective federal authority (apart from setting standards alone) conceivably would be limited to situations where the contamination involved has an adverse effect on another state. HEW enforcement officials, however, may well feel that HEW has the right to promulgate an implementation and enforcement plan under the act where state control plans are deemed inadequate.

B. Conference and Proposed Federal Standards

Whenever it becomes appropriate for HEW to develop air quality standards for a given region or portion thereof, it must first call a conference, after reasonable notice. This conference is to include representatives of all interested agencies and industries.

While the act is silent on what the conference does and how it should operate, it presumably would receive evidence and make recommendations for consideration by HEW. The Senate committee report suggests that HEW should issue detailed regulations concerning the various hearings and conferences for which it is responsible under the act. These regulations would be expected to provide for full participation by all interested persons and, to the extent practicable, would conform to the Administrative Procedure Act.⁸⁴

Following such a conference, HEW will prepare and issue regulations setting forth air quality standards for the area in question, consistent with its already-issued air quality criteria and recommended control techniques. The state has six months from the date of these regulations to adopt standards satisfactory to HEW, or to request a public hearing. If neither is done, HEW promulgates the air quality standards set forth in the regulations.⁸⁵

C. Standards Set by Hearing Board if State So Requests

Any affected state which objects to these HEW standards may request a hearing during the first six-month period, and up to thirty days after their promulgation.⁸⁶ HEW must then set up a special hearing board consisting of representatives of the affected states, HEW, and other interested federal agencies—with HEW not to have a majority. (This standards hearing board composition is similar to the composition of the abatement hearing board under the earlier law described below.⁸⁷)

It is expected that the Department of Commerce and other appropriate agencies

⁸³ See p. 263 *infra*.

⁸⁴ See S. REP. 30.

⁸⁵ § 108(c)(2).

⁸⁶ § 108(c)(3).

⁸⁷ See p. 266 *infra*.

will be represented on any such hearing board, to provide technical and economic advice and in order to achieve "the objective of air pollution abatement, with minimum economic disruption to the various industries involved."⁸⁸

The hearing is to be held in or near the affected region, after at least thirty days' notice to parties who received notice of the earlier conference, as well as publication of such notice in the *Federal Register*. At the hearing, the board would receive testimony and other evidence from state and local air pollution control officials, and from industries and other parties affected. Thereafter, on the basis of the evidence presented, the board would recommend that the HEW standards either be approved or modified. These findings must be made in ninety days, although the Secretary may grant a longer time, if necessary, up to 180 days.

In event of approval of the HEW standards, they take effect immediately. Any modifications recommended by the hearing board are binding upon HEW, and would become effective upon publication of revised regulations by HEW.⁸⁹

IV

IMPLEMENTATION, MAINTENANCE, AND ENFORCEMENT OF AIR QUALITY STANDARDS

A. State Implementation, Maintenance, and Enforcement

Upon completion of the procedures described above for setting air quality standards, the states would presumably begin action to implement, maintain, and enforce them. While the act does not so require, it is expected that such action would include, where appropriate, specific emission standards for the control of particular air contaminant sources, or provisions for setting such emission standards, and a schedule for enforcing them.⁹⁰

As noted above,⁹¹ the Senate committee considered meaningful emission controls, based on the pollution problems of the region involved, to be essential to implement the air quality standards and to permit legal enforcement action where necessary. The committee specifically noted that such emission controls were subject to technological and economic feasibility; they must, however, keep pace with advances in technology where needed to achieve the desired ambient air quality.⁹²

As indicated above, the act is unclear as to whether HEW has any authority over the methods and procedures for implementation, maintenance and enforcement of either the state's own air quality standards or of any standards promulgated by HEW. While a state must submit to HEW its proposed plan to accomplish these objectives, and HEW has the right not to approve such plan, it is possible that there

⁸⁸ H.R. REP. 34-35.

⁸⁹ § 108(c)(3).

⁹⁰ See S. REP. 29; H.R. REP. 10.

⁹¹ See p. 257 *supra*.

⁹² S. REP. 30.

are no immediate consequences of such HEW failure to approve so long as the state's air quality standards themselves are adequate. This is because the legislation provides for HEW authority to act only if the "standards" are inadequate, and it is uncertain whether the term *standards* includes the control plan. In this part of the act, *standards* is used both ways.

In this same connection, as also noted above, there is no express provision for a federal implementation plan in conjunction with federal air quality standards. There is even no apparent requirement that a state promulgate such a plan (as it must to implement its own standards) after federal promulgation of air quality standards for a given region or portion thereof. Thus it appears legally possible that the act will be construed to impose no ultimate requirement on the states to adopt federally acceptable "plans" of implementation, maintenance and enforcement, with federal intervention limited to that described in the following section.

B. Federal Enforcement by Court Action if State Enforcement Inadequate

Federal enforcement action of air quality standards may occur only if HEW finds (i) that air quality in a given region falls below the prescribed air quality standards for that region, and (ii) that a state has not taken reasonable action itself to implement and enforce them.⁹³ (It should be noted, however, that, where no standards are in effect under the new act, HEW may still act to abate existing pollution under the abatement procedure provided in the earlier act, which is left substantially unchanged.⁹⁴)

If HEW finds it necessary to act, it must first give notice to the state and all other persons contributing to the alleged violation. If the violation has not been corrected within 180 days, then HEW may seek abatement action in the appropriate federal district court in the case of interstate pollution—that is, where the air quality region involved includes portions of more than one state, and where the pollution sought to be abated is considered to be endangering the health or welfare of persons in a state other than that in which the discharges originate.

If the alleged pollution is limited to a single state, such federal district court action may be taken only if the governor of that state so requests; or the governor may request federal assistance in bringing a state enforcement action.⁹⁵ These provisions for federal action are similar to those in existing law for taking abatement actions to court, as described below.⁹⁶

In any such court proceeding the burden of proof on all issues establishing the violation is on the government. While any transcript and recommendations of a hearing board, or of HEW, must be received in evidence, the court is required to

⁹³ § 108(c)(4).

⁹⁴ See p. 264 *infra*.

⁹⁵ § 108(c)(4).

⁹⁶ See p. 266 *infra*.

make a complete *de novo* review of the air quality standards in question, as well as the alleged violation. The review of the standards could very well include consideration *de novo* of the HEW criteria and recommended control techniques. Since the court must receive evidence on all other pertinent issues, this clearly also includes whether the pollution in fact endangers the health or welfare of persons in another state.

If an interstate violation of the standards is found, the court must also consider the economic and technical feasibility of compliance with the applicable standards. On this issue it is uncertain who has the burden of proof.

The court ultimately will enter judgment "as the public interest and the equities of the case may require."

Obviously, court abatement proceedings are the last resort for all concerned. Thus the research provisions and advisory committee procedures, the encouragement of industry participation, and the recognition of the limits imposed by technological and economic feasibility, all make the major thrust of the act a cooperative endeavor to solve the pollution problems through technological advances and voluntary compliance. Presumably the states will follow a similar pattern as the quickest and least costly way to achieve clean air.

V

INTERIM AND EMERGENCY ABATEMENT PROCEDURES

A. Continuance of Prior Federal Procedures for Interim Purposes

It is not intended that the time required to establish air quality standards under the new act interfere with the protection of public health and welfare. Accordingly, the federal pollution abatement procedures provided in the earlier law are continued in effect, pending establishment of state standards and control plans, with some helpful modifications.⁹⁷

The Senate committee has directed HEW to continue to act expeditiously to abate pollution under these procedures before the new act is fully effective. When appropriate in these situations, however, HEW is to take cognizance of any air quality criteria and control techniques, already issued, and give the state opportunity to establish standards for the air pollution agents in question.⁹⁸

Briefly, these existing procedures provide for (a) an initial conference of affected state or local agencies called by HEW; (b) recommended abatement measures by HEW as a result of the conference; (c) recommended abatement measures by a special hearing board, following hearing, if no remedial action is taken within six months; (d) abatement action in a federal court if alleged polluter fails to comply with the hearing board's recommendations within six months.

⁹⁷ §§ 108(d)-(i).

⁹⁸ See S. REP. 30-31.

Emergency situations are covered by a brand new provision in the act, which is discussed below.

1. *Initial Conference*

In the case of air pollution alleged to endanger health or welfare in any interstate, state, or local situation, HEW must first call a conference of affected state or local agencies. Such a conference is initiated by request from the governor of a state, a state air pollution control agency, a municipality (with the governor's concurrence), or by HEW itself in appropriate cases. The conferees consist of the interstate, state, and local agencies concerned, but there is no industry representation unless invited by one of the agencies.⁹⁹

In order to provide all parties affected by an abatement action a greater opportunity to participate, the new act has enlarged the notice period from three weeks to thirty days, and requires HEW to make available a federal report at the time of the notice. This report is to define the matters coming before the conference, including pertinent data and any recommended conclusions or findings by HEW.¹⁰⁰ Interested parties must be given an opportunity at the conference to present their views on this report, and a transcript of the proceedings must be kept.¹⁰¹

In this connection, the Senate committee suggested that HEW issue detailed procedural regulations covering these conferences and other hearings provided for in the act. The objective would be to invite maximum participation by all persons having a substantial interest in the matter under consideration, so as to give the conferees the broadest review of the pollution problems in a given area.¹⁰²

After the conference, HEW prepares and furnishes to the agencies a summary of conference discussions on (i) the occurrence of air pollution subject to abatement under the act, (ii) the adequacy of abatement measures taken, and (iii) the nature of delays, if any, being encountered in abating the pollution.¹⁰³ Furthermore, if HEW believes at the end of the conference, or thereafter, that effective progress towards abatement is not taking place, it recommends necessary remedial action to the appropriate agencies.¹⁰⁴

2. *Reports*

In connection with any such conference, HEW may require any person causing or contributing to pollution to file a report on the alleged pollutant emissions in question and any control devices being used. After the conference has been held, similar reports may be required as the conference might recommend. No processes

⁹⁹ §§ 108(d)(1), (2).

¹⁰⁰ See S. REP. 30.

¹⁰¹ § 108(d)(2).

¹⁰² See S. REP. 30.

¹⁰³ § 108(d)(3).

¹⁰⁴ § 108(e).

constituting trade secrets need be divulged, and all information reported is considered confidential.

Failure to file any such report subjects the person in default to a penalty of \$100 per day, recoverable by the federal government in a civil action, brought in the federal court.¹⁰⁵

3. *Special Hearing Board*

If appropriate remedial action is not taken within six months after HEW's recommendations, HEW calls a public hearing before a special hearing board appointed by the Secretary. This board consists of representatives selected by the affected states, HEW, other federal agencies, and any interstate agency—with HEW not to have a majority.

The hearing is held at one or more of the places where the alleged pollution originates, after at least three weeks' notice to the affected agencies and the alleged polluter. All interested parties are to be given a reasonable opportunity to present evidence. The hearing board then makes findings as to the alleged pollution and any progress towards abatement, and may recommend suitable abatement measures if necessary. These findings and recommended abatement action are sent by HEW to the alleged polluters and to the affected agencies.¹⁰⁶

4. *Court Abatement Action*

If the alleged polluter fails to comply within six months (or longer period specified by HEW), HEW may ask the Attorney General to bring an abatement action in federal court in the case of interstate pollution. If the pollution is limited to a single state, such federal court action may be taken only if the state so requests; or the state may request federal assistance in bringing a state abatement action.

In any such federal court action, the evidence will include a transcript of the hearing board proceedings and a copy of its recommendations. As in the act's other court enforcement provisions, de novo consideration of all pertinent factual and legal questions is required with the burden of proof on the government. The court must consider the practicability of complying with any applicable standards, and the physical and economic feasibility of abating any pollution proved. The court then will enter judgment as the public interest and the equities of the case may require.¹⁰⁷

B. Emergency Court Action

A new provision in the act authorizes HEW to seek immediate court action to stop emission of alleged pollutants where there is evidence of "imminent and substantial endangerment to the health of persons" and where state or local authori-

¹⁰⁵ § 108(j).

¹⁰⁶ §§ 108(f), (i).

¹⁰⁷ §§ 108(g), (h).

ties have not acted.¹⁰⁸ Unlike other provisions in section 108, there is no feasibility limitation on the court; accordingly, an injunction could issue, where necessary, regardless of technological or economic feasibility.¹⁰⁹

This provision is intended to provide a remedy for the emergency situations specified. It is not intended as a substitute control for chronic or generally recurring problems, which should be dealt with under the other provisions of the act. For example, the emergency procedure is available for use in cases of unusual atmospheric inversion or other extraordinary circumstances of imminent danger to public health. Both congressional committees gave as examples the incidents in Donora, Pennsylvania, in 1948, in New York City in 1953, and in London in 1952 and 1962.¹¹⁰ HEW could go to court in such a case to stop traffic or shut down offending industries until the crisis is over.

This special procedure is also available to enjoin an individual source of pollution where there is evidence of a direct effect upon public health.¹¹¹

It is expected, however, that before invoking this emergency authority, HEW will want to be as fully informed as possible on the local conditions and how best to meet the emergency problem. The Secretary's statement on this point in the House committee hearings was as follows:

Appropriate action in emergency situations would require detailed knowledge of the nature and location of pollution sources, immediate access to information on local meteorological conditions and air quality levels, and detailed plans tailored to the local need to shut down or curtail pollution sources.

I will take steps, therefore, to further encourage the local and State control agencies, primarily responsible for the quality of the air in their jurisdictions, to develop appropriate air-monitoring systems and emergency procedures for curtailing sources of pollution.

Only in this way could I be assured that a decision to seek emergency court action would be based on sound technical information gathered and developed in the locality concerned.

The House committee felt that these proposed procedures were reasonable.¹¹²

VI

RESEARCH AND RELATED ACTIVITIES

A. Increased Emphasis on Research

“Research is the key to effective pollution control.”¹¹³ It is not “a substitute for regulation,” but sound regulation is dependent upon it.¹¹⁴

¹⁰⁸ § 108(k).

¹⁰⁹ See H.R. REP. 19.

¹¹⁰ See S. REP. 31; H.R. REP. 19. For a discussion of these incidents, see Cassell, *The Health Effect of Air Pollution and Their Implications for Control*, in this symposium, p. 197.

¹¹¹ See S. REP. 31.

¹¹² H.R. REP. 20.

¹¹³ *Id.* at 25.

¹¹⁴ S. REP. 10-11.

The new act keeps and strengthens the emphasis on general federal research programs in existing section 103. It also adds a new section 104, with enlarged authority, on "Research Relating to Fuels and Vehicles," in place of the specific references in the old law to research relating to sulfur removal from fuels and sulfur oxide emissions.

The act, therefore, still requires HEW to conduct research programs on the causes, effects, extent, prevention, and control of air pollution in general, and to assist air pollution control agencies and others to that end. In carrying out this responsibility, HEW is given broad authority, among other things, to collect and publish basic data on chemical, physical, and biological effects of varying air quality; to make grants to pollution control agencies, other organizations (not including private industry), and to individuals; to provide fellowships and other forms of training; and to develop effective and practical control methods and prototype control devices. And the act provides for the first time for technical advisory committees of recognized experts to help HEW in evaluating its research projects and proposals and to avoid duplication.¹¹⁵

In administering these research programs, HEW is directed to make maximum use of the expertise and resources of other federal agencies—such as the Departments of Commerce and Interior and the Tennessee Valley Authority's research into pollution control techniques.¹¹⁶

In its report, the Senate committee commented at some length on research areas which it felt needed special attention.¹¹⁷ In addition to the special emphasis on fuel research, outlined below, the committee suggested certain areas where additional federal assistance to industry in developing improved control equipment could be effective—such as joint efforts with control equipment manufacturers to study common problems, and joint support and direction of research and development with trade associations concerning unsolved pollution problems.¹¹⁸

Other research needs on a more general scale would be to determine the effects of cities on air flow; to develop methods to reduce urban pollution concentrations; and to measure and document national and global trends in atmospheric pollutants.¹¹⁹

B. Fuel Research

As indicated above, the new act eliminates the specific references in the old law to research relating to sulfur and adds a new section 104 covering the more general area of fuel research—in effect, to determine which fuels are most to blame for air contamination and how to prevent or control such contamination.

¹¹⁵ § 103.

¹¹⁶ See S. REP. 118; H.R. REP. 25.

¹¹⁷ S. REP. 17-22.

¹¹⁸ *Id.* at 18-19.

¹¹⁹ *Id.* at 21-22.

This section directs HEW, under expanded authority, to give special emphasis to accelerating research in three fuel areas—control of combustion by-products, removal of potential pollutants from fuels, and control of fuel evaporation emissions. The section also provides specific authority for such items as the development of new control methods having industrywide application, pilot plant testing, demonstration plants, studies on commercial use of by-products, and federal grants to public or nonprofit private agencies.

This new research authority of HEW is designed to include economics as well as technology—such as finding markets for by-products to make a particular control method economically feasible. And it encourages practical applications authorizing funds for the building of pilot plants, demonstration plants, and prototype equipment.¹²⁰

The Senate committee noted particularly that the enlarged research efforts provided for in section 104 include specific authority to enter into demonstration contracts with industry. Such contracts are to “prove the technological and economic feasibility of the control of pollutants from the combustion of fossil fuel and shorten the time-lag between research, development, and full-scale practice.”¹²¹

The committee commented on the need for further research on the effects of low concentrations of exposure of various contaminants for extended periods; and on the “immediate need” to develop methods to control the emission of sulfur compounds, oxides of nitrogen, carbon monoxide, and carbon dioxide. The committee also described in some detail the sulfur oxide problem and various processes being developed to meet this problem economically.¹²²

The House committee, too, was keenly interested in the critical pollution problems relating to the combustion of fuels—and commented that HEW should “pursue a most aggressive policy of research” directed toward solving these problems.

The economy of the Nation depends on an adequate supply of low-cost energy. Only through technological breakthroughs can such a supply be assured consistent with our requirements for cleaner air. Since effective regulation therefore will depend upon such technological breakthroughs, this research must be of the highest priority. Further, while the language of the legislation is discretionary in terms of how the Secretary shall proceed with regard to research activities, the imperative nature of this work should clearly be understood by all, including those who will administer the legislation.¹²³

The new act authorizes appropriations totalling \$125 million over two years for this fuel research program. For all other operations under the act, including nonfuel

¹²⁰ See H.R. REP. 25.

¹²¹ See S. REP. 18.

¹²² *Id.* at 19-21.

¹²³ H.R. REP. 25. For a full discussion of FPC policy toward the use of natural gas in electric power generation as a means of combating air pollution, see Rein, *Obtaining Boiler Fuel Gas to Reduce Air Pollution: The Policy of the Federal Power Commission*, in this symposium p. 399.

research, the act authorizes \$303.3 million over three years (considerably more than the approximately \$65 million per year currently authorized).

C. Studies and Reports

1. *National Emissions Standards Study*

In lieu of national emissions standards for stationary sources, which had been proposed by the Administration, section 211(a) of the act directs HEW to make a two-year study and report to Congress on the need for and feasibility of such standards and their effect. Several specific aspects to be included in such report are specified in that section.

2. *Comprehensive Economic Cost Studies*

Section 305 of the act directs HEW, in cooperation with state and local pollution control agencies, to make comprehensive economic cost studies—including studies of the cost of pollution programs to such agencies and the economic impact of air quality standards on industry and others. The results of such studies are to be submitted to Congress not later than January 10, 1969. HEW is also directed to study the personnel needs for effective air pollution control programs, and to report the results to Congress not later than July 1, 1969.

VII

SUPPORT FOR INTERSTATE AGENCIES AND OTHER PLANNING AND CONTROL PROGRAMS

The Congress recognized that the air quality standards to be established under the act will require careful planning to insure that they are tailored to the needs of the particular regions, the types of pollution there, and the technological and economic feasibility of proposed controls. In addition, the activities of different jurisdictions will have to be coordinated. The act therefore contains new provisions for the support of planning bodies to help the states in such regional control efforts.¹²⁴

A. Interstate Air Quality Agencies and Commissions

There are obvious administrative and political difficulties inherent in the establishment of effective pollution control planning agencies on an interstate basis. Accordingly, section 106 of the act authorizes HEW to pay up to 100 per cent of the air quality planning program costs of any interstate agency designated by the affected states for up to two years. After this initial period, grants are authorized for up to three-fourths of such costs.¹²⁵

The interstate agency is to concern itself with recommending standards of ambient

¹²⁴ §§ 105, 106. See H.R. REP. 26.

¹²⁵ H.R. REP. 25-26.

air quality, and plans for implementing and enforcing the emission controls required to achieve the recommended standards.¹²⁶

In addition, HEW may establish an "air quality planning commission" whenever this is deemed "necessary to expedite the establishment of standards for an interstate air quality control region" designated under the act. Such commission, to be chaired by HEW, would be set up only after consultation with the states involved.¹²⁷ The Senate and House committees indicate that such a commission will be formed only in the absence of action by the affected states to set up their own interstate agency.¹²⁸

According to the House committee, an air quality planning commission, when established by HEW in the absence of state action, will be essentially an arm of the federal government, in that it is "designed to assist the Secretary in establishing standards and plans for implementation."¹²⁹ Provision is made, however, for consultation with the affected states and representation of appropriate agencies within the region.

B. Grants for Other Planning and Control Programs

The earlier legislation provided for federal grants to state and local pollution control agencies to help them develop and maintain their air pollution control programs. This authority is expanded in section 105 of the new act to include grants for planning by these agencies to help the states in developing air quality standards and implementation plans under the act.

The revised section authorizes grants of up to two-thirds of the cost of planning, establishing, or improving such control programs, and up to one-half of the cost of maintaining them. For air quality planning or control purposes in regional areas including two or more municipalities (whether in the same or different states), the grants can be three-fourths and three-fifths of such costs, respectively. Grants for programs in any one state may not exceed ten per cent of the total federal funds allocated for that purpose.

Grant recipients must be capable of carrying out certain specified conditions. For example, a pollution control agency administering an interstate planning or control program must provide for adequate representation of state, interstate, and local interests.

Subsection (b) of section 105 specifies various conditions and criteria to be observed by HEW in making these grants, including population of the area in question, extent of pollution, and financial need. The House committee noted that the objective of the grant program is to provide impetus to the establishment and improvement of state and local control programs—not to provide a substitute for state and local funds. The committee also spelled out its intention that "financial

¹²⁶ *Id.* at 26.

¹²⁷ § 106(d).

¹²⁸ See H.R. REP. 26; S. REP. 24-25.

¹²⁹ See H.R. REP. 26.

need" meant ability to pay, and not merely budgetary limitations. Finally, the committee expressed its expectation that HEW would not give a grant to a local pollution control agency without clearance with the appropriate state agency.¹³⁰

C. Interstate Pollution Control Compacts

The 1963 act encouraged states to enter into interstate compacts for control of air pollution, which would become binding upon congressional approval.¹³¹ The new act added a provision that any state *not* part of a designated air quality control region should *not* participate in an air pollution compact relating to that region. The Congress currently is considering the relationship between the new act's regional system and pending interstate compacts.

VIII

AIR QUALITY ADVISORY BOARD; ADVISORY COMMITTEES

The Congress recognized the need for participation by all segments of our national economy in order to achieve effective air pollution control. For this reason, section 110 of the act provides for a sixteen-member President's Air Quality Advisory Board to advise and consult with the Secretary on policy matters relating to HEW's activities under the act.

The Board is composed of the Secretary or his designee, as chairman, and fifteen members appointed by the President, none of whom may be federal employees. Appointed members are to be representative of state, interstate, and local government agencies, and of public or private interests with active interest or expertise in the field of pollution control.¹³²

HEW is also directed to establish advisory committees from time to time in order to obtain assistance in the development of air quality criteria, recommended control techniques, standards, research and development, and to encourage continued efforts by industry to improve air quality and to develop economically feasible methods of control.¹³³

Committee members are to include, but not be limited to, knowledgeable persons from the standpoint of health, welfare, economics, or technology. The Senate and House committees felt that these advisory committees should contain sufficient representation (including state and local authorities, medical and scientific personnel, and industry experts in pollution abatement) to permit both effective and useful consultation between HEW and other interested parties.¹³⁴

According to the House committee, representation both on the Board and the advisory committees should permit HEW fully to obtain the views of individuals

¹³⁰ *Id.* at 32-33; *see also* S. REP. 42-43.

¹³¹ § 102(c).

¹³² §§ 110(a)-(c).

¹³³ § 110(d); *see also* § 103(a)(4).

¹³⁴ *See* S. REP. 32; H.R. REP. 28.

familiar with the regulatory, medical, technical, and economic aspects of air pollution abatement; of communities which bear the brunt of air pollution problems; and of those industries which will bear the brunt of the necessary regulation. It is hoped that the representation will permit frank discussion between HEW and the various affected groups so as to achieve the most meaningful and reasonable solutions to the increasing air pollution problem.¹³⁵ It is also intended that HEW consult with the Air Quality Advisory Board and with the advisory committees on all major policy issues.¹³⁶

The purpose of both the Air Quality Advisory Board and the advisory committees is two-fold. First, they are to provide a means whereby HEW may obtain the best possible advice and information available on pollution and pollution control from sources outside the government. Second, they are to provide a means of liaison with the various state and local authorities, medical and scientific groups, and industrial groups.¹³⁷

The Air Quality Advisory Board has been appointed by the President and a number of committees and subcommittees dealing with such matters as criteria and available control technology have been appointed by the Commissioner of the National Air Pollution Control Administration. While the Board and the committees generally represent a broad spectrum of governmental, industry, and other expert and interested groups and individuals, there have been some instances where industry expertise, which could be most helpful for information and liaison purposes, is not reflected in the membership. However, HEW, through subcommittees and the use of consultants, apparently intends to fill out such gaps.

IX

REGISTRATION OF FUEL ADDITIVES

Section 210 of the act provides new authority requiring certain information to be furnished to HEW by manufacturers of fuels designated by HEW (not limited to motor vehicle fuels), and by the manufacturers of additives contained in such fuels.

The fuel manufacturers must furnish the name, range of concentration, and purpose in use of any additive contained in any designated fuel to be delivered in interstate commerce. The additive manufacturer must have each such additive registered by furnishing information as to its chemical composition, recommended range of concentration, recommended purpose in use, and, where available, its chemical structure. Any trade secrets are held by HEW in confidence. Any violation is punishable by a penalty of \$1,000 per day, recoverable in a civil action brought by the United States in federal court.

¹³⁵ See H.R. REP. 28.

¹³⁶ *Id.*

¹³⁷ *Id.*

These new provisions are intended to provide an opportunity for full assessment of the effects of fuel additives, both old and new, on the environment and on public health. And their main purpose is to insure full access to the technical information needed to evaluate the possible hazards of these additives, many of which may become widely dispersed before recognition of their possible danger to human health.¹³⁸ Among such additives which are widely used, the Senate committee referred particularly to tetraethyl lead, barium, and nickel.¹³⁹

Registration of additives in fuels other than motor vehicle fuels is expected to be required where evaluation of known or suspected health hazards is deemed necessary.¹⁴⁰

The conference report stated that the secrecy and registration provisions cannot be construed to require research by an additive manufacturer relating to health or other effects of the additive as a prerequisite to registration.¹⁴¹

CONCLUSION

It is hoped that the Air Quality Act of 1967 will provide all concerned about air pollution, whether it be the federal government, state or local authorities, industry, or the public, with a better perspective on air pollution control. The public concern about air pollution and the present vacuum of information on the health, technology, and economic aspects of pollution control, have given rise to hasty, ill-conceived regulatory proposals at state and local levels, occasionally with support at some levels in HEW. The orderly, step-by-step procedure, scientific and comprehensive in approach, provided by the Air Quality Act, should cause a halt in such proposals or their implementation.

The act provides a number of excellent tools to government and industry for meeting the nation's air quality needs. If properly administered, and adequately funded, it should produce in a reasonable period of time a significant improvement in the nation's air quality with a minimum of economic disruption. This is because the approach taken has in fact been comprehensive, as HEW urged; because, in the absence of compelling health considerations, regulation must be geared to technological and economic feasibility, as industry urged; and because research has been given a major impetus, as everyone urged.

The appropriate use of the advisory committees and implementation of the act's provisions for broad participation in all conferences and hearings should promote a cooperative atmosphere. If both industry and government at all levels do their respective parts, this should result in voluntary compliance with scientifically sound and economically realistic regulations.

¹³⁸ See S. REP. 35; H.R. REP. 23.

¹³⁹ See S. REP. 35.

¹⁴⁰ See H.R. REP. 23.

¹⁴¹ CONF. REP. NO. 916, 90th Cong., 1st Sess. 26-27 (1967).