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State Air Pollution Control Boards

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STATE AIR POLLUTION CONTROL BOARDS: THE INTEREST GROUP MODEL AND THE LAWYER'S ROLE*

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By its nature the air pollution problem presents a suitable framework for an analysis of the concept of interest.¹ Air pollution is a complex social and political problem as well as a complex scientific and technological one. This article will attempt to determine if the concept of interest is a concept through which satisfactory solutions to complex problems may be derived.

It is around the concept of interest that many of our legal institutions are created. In addition, interest and combination of interests are used to explain and predict social change. Lawyers often see their role solely as the representatives of interests. This article will explore the effectiveness of legal institutions organized about the concept of interest by analyzing the development, composition, and functioning of a particular set of legal institutions created to respond to the air pollution problem: state air pollution control boards.

Background Relations

The existence and power of state air pollution control boards is, in part, due to the decision made in the Air Quality Act of 1967 to leave the primary responsibility to the states in developing and enforcing emission standards.² By examining the reasons and implications of this decision,³ the

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¹ This article will not attempt to present a comprehensive study of the air pollution problem. For a comprehensive study see J. ESPOSITO, *THE VANISHING AIR* (1970).

² Emission standards are to be differentiated from ambient air standards or air quality standards. Air quality standards are based upon the development of air quality regions through technical, meteorological, engineering, sociological and demographic data. Within these regions total levels of concentration considered safe and reasonable are established. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, REPORT FOR CONSULTATION ON THE STEUBENVILLE-WEIRTON-WHEELING AIR QUALITY CONTROL REGION 1-17 (Aug. 1969) [hereinafter these consultation reports will be cited in the form REPORT ON STEUBENVILLE-WEIRTON-WHEELING REGION]; in

forces at work in the creation of these legal institutions may be understood.

In the 1967 Air Quality Act, the Department of Health, Education, and Welfare sought to have included a provision allowing it to establish nation-wide emission standards on particular pollutants for certain industries.⁴ The argument in favor of such powers was that some industries were a problem wherever located.⁵ Supporters of the proposal were concerned because states had not performed well in air pollution control⁶ and feared that reliance on state action would lead to unnecessary delay in this crucial area.⁷ It was feared that without federal standards economic competition between areas and fear of losing industry would cause states to adopt overly lax standards,⁸ thereby giving polluters the power to influence, if not actually dictate, policy. To nation-wide industries, the Health, Education, and Welfare proposal offered equal and fair enforcement.⁹ Finally, proponents saw emission of pollutants which could travel great distances as basically a national rather than a state problem.¹⁰

The more numerous opponents of the Health, Education, and Welfare proposal saw the primary responsibility for standards and enforcement as resting with state and local government.¹¹ The opponents felt states were

light of these air quality standards, emission standards, which prohibit emission of pollutants for particular sources above a level which would deleteriously affect the air quality standards, are established.

³ The most controversial question in the debates over the Air Quality Act was the question of federal emission standards. Gillman, *Washington Report*, 18 J. AIR POLLUTION CONTROL ASSN. 4 (1968). [Journal hereinafter cited as J.A.P.C.A.]; this central issue seems to be an excellent one to understand the conflict of interests involved. This issue also served as the focal point for discussion on the role of the state in air pollution control.

⁴ *Hearings on S. 780 Before the Subcomm. on Air and Water Pollution of Senate Comm. on Public Works*, 90th Cong., 1st Sess., pt. 2, at 762 (1967) [hereinafter cited as *1967 Senate Hearings*]; *Hearings on H.R. 9509 and S. 780 Before the House Comm. on Interstate and Foreign Commerce*, 90th Cong., 1st Sess., at 201-206 (1967) [hereinafter cited as *1967 House Hearings*].

⁵ *1967 House Hearings* 206. In retrospect Senator Muskie saw this as one of the main contentions in favor of national emission standards. Muskie, *The Role of the Federal Government in Air Pollution Control*, 10 ARIZ. L. REV. 17, 21 (1968).

⁶ *1967 Senate Hearings* 764; *1967 House Hearings* 329-333 (low budgets, inadequate staff), 335 (little advanced planning), 852.

⁷ *1967 Senate Hearings* 1119; *House Hearings* 201, 364.

⁸ *1967 Senate Hearings* 762, 1436, 2682. During the same time this argument was convincingly made by Dr. John Middleton of the Bureau of Disease Prevention and Environmental Control in Middleton, *We Need New Weapons for Air Pollution Control*, 17 J.A.P.C.A. 822, 823 (1967).

⁹ *1967 Senate Hearings* 1436, 1665.

¹⁰ *1967 Senate Hearings* 1436, 1471. The national aspects of pollutant emission is evidenced in a study which found air contaminants released in Oklahoma and Texas in Cincinnati, 1000 miles away. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, *TECHNOLOGICAL CHANGE AS IT RELATES TO AIR POLLUTION, TECHNOLOGY AND AMERICAN ECONOMY* (1966).

¹¹ *1967 Senate Hearings* 1748, 1799, 1830, 2025, 2137, 2168, 2170, 2174, 2176, 2177, 2607;

beginning to take a responsible role in pollution control.¹² Industry did not feel that uniformity of standards insured fairness of treatment¹³ and were concerned with the economic impact of national standards.¹⁴ The threat of plant removal to gain favorable regulatory treatment was dismissed.¹⁵ Perhaps one of the most effective arguments was that uniformity of standards would prevent site relocation to areas with less stringent standards¹⁶ and presumably less dangerous health conditions.

Neither the House nor Senate versions of the Air Quality Act of 1967 provided for the power to issue national emission standards. Particularly in the House, the decision on national emission standards was seen as symbolic of the state-oriented approach of the bill.¹⁷ Despite attempts at amendment,¹⁸ both Senate¹⁹ and House²⁰ versions, as well as the conference committee bill,²¹ maintained the state-oriented approach.

Testimony and support for the state-oriented approach could be analyzed as the activity of large and well organized interests. Of course, the interest group which most actively favored state responsibility for standards and enforcement was industry, particularly those large industries most likely to be covered by national standards. The number and types of business groups that testified are exemplary of the nature and extent of interest group activity.²²

Because the issue of national emission standards was symbolic of the

1967 House Hearings 264, 265, 303, 393, 413, 507, 510, 511; see, Tukey, *Role of Federal Government in Air Pollution Control*, 17 J.A.P.C.A. 82, 83 (1967).

¹² 1967 House Hearings 298, 500. An observer of state action also felt that while states had ignored the problem of air pollution they were now beginning to act. Sussman, *State and Community Reactions to the Federal Air Pollution Program*, 16 J.A.P.C.A. 485, 487 (1966) (the federal program referred to is the 1963 Clean Air Act).

¹³ 1967 Senate Hearings 1830 (difference old and new plants), 2135 (no uniformity within industry), 2138 (competition between similar industries such as steel and aluminum).

¹⁴ 1967 House Hearings 540; Of course, the scale of economic disaster would be greater if broad federal powers were misapplied. Gillman, *Washington Report*, 17 J.A.P.C.A. 200 (1967).

¹⁵ 1967 House Hearings 511.

¹⁶ 1967 Senate Hearings 1474, 2170; This seems to have been a particularly telling argument in the Senate decision to eliminate the power to establish national emission standards. Muskie, *supra* note 5, at 21.

¹⁷ 113 CONG. REC. 14, 445; 14, 448; 14, 449 (daily ed. Nov. 2, 1967) (remarks of Congressmen McCarthy and Ryan).

¹⁸ 113 CONG. REC. 14, 450 (daily ed. Nov. 2, 1967).

¹⁹ 113 CONG. REC. 16, 240 (daily ed. Nov. 9, 1967).

²⁰ 113 CONG. REC. 14, 452 (daily ed. Nov. 2, 1967).

²¹ 113 CONG. REC. 15, 119 (daily ed. Nov. 13, 1967) (report of House conferees); 113 CONG. REC. 16, 392 (daily ed. Nov. 14, 1967) (report of Senate conferees).

²² E.g., (National corporations) 1967 Senate Hearings 2135; 2177, 2176, 2607; (trade associations) 1967 Senate Hearings 1799, 1830, 2020, 2174, 1967 House Hearings 393; (general industry organizations) 1967 Senate Hearings 2168, 2170, 1967 House Hearings 265, 500, 507; (labor) 1967 Senate Hearings 2025, 1967 House Hearings 540.

issue of state responsibility in standards and enforcement,²³ it is well to understand the relations lying beneath the interest group activity of business. These underlying relations not only indicate why industry so actively sought state responsibility but also perhaps will indicate the impact of industry's success.

Underlying the interest group activity of industry is the set of relations which establishes the values of our culture. We live in a business culture. It is a culture that has shaped our values to meet the needs of an industrial system.²⁴ The effect of this background of values is evidenced in the development of nuisance law. In nuisance law the equities of the situation were balanced.²⁵ This meant that the reasonableness of the defendant's actions was the prime factor to be considered in this balancing process.²⁶ This reasonableness of use depended upon an idea of progress and by tending to resolve the question in terms of industrial development limited the effectiveness of the nuisance doctrine in protecting the environment.²⁷

The importance that these background relations gave to industrial development rested upon the nature of the industrial process. The industrial process creates a nomadic raw material culture which stresses sequential production and assumes the infinite resources of nature.²⁸ The nature of this process created in society a novel concept of progress. Since the industrial process stressed the infinite repetition of units of production, progress came to be judged in terms of what was faster and bigger.²⁹ Men were defined as part of this network of relations and soon the economic value of industrial activity to men came to be judged superior to their biological health.³⁰ The difficulty arises because the conditions of industrial

²³ Muskie, *supra* note 5, at 22.

²⁴ Esposito, *Air and Water Pollution: What To Do While Waiting for Washington*, 5 HARV. CIVIL RIGHTS—CIVIL LIBERTIES L. REV. 32, 51 (1970). The view is one early expressed regarding the background of pollution. R. CARSON, *SILENT SPRING* 23 (1962).

²⁵ Esposito, *supra* note 24, at 52.

²⁶ Comment, *Current Legislation: State Air Pollution Control Legislation*, 9 B.C. COMM. & IND. L. REV. 712, 716-18 (1968).

²⁷ Delogu, *Legal Aspects of Air Pollution Control and Proposed State Legislation for Such Control*, 1969 WISC. L. REV. 884, 886-87; Esposito, *supra* note 24, at 52; Pollack, *Legal Boundaries of Air Pollution Control*, 33 LAW & CONTEMP. PROB. 331, 333-34 (1968); Pollack argues that this standard employed in private nuisance actions should not be employed in areas of public regulation. *Id.* at 335.

²⁸ Teller, *The Social Adequacy of Technology*, 19 J.A.P.C.A. 839 (1969).

²⁹ Udall, *A Value Revolution and Environmental Humanism*, 19 J.A.P.C.A. 844, 845 (1969); "Environmental problems that plague us . . . are largely the result of our narrow pursuit of a limited objective . . . economic efficiency . . . and our tendency to endow these activities with a life and purpose of their own, separated from or even superior to the needs of human beings they were designed to serve." From a speech by Charles C. Johnson, Environmental Health Service, before the Iowa Health Association, Des Moines, Iowa, May 1, 1969.

³⁰ Esposito, *supra* note 24, at 52; Dubos, *The Crisis of Man in his Environment*, in DE-

development which create pollution also tend to create a concept of progress that often prevents society from dealing effectively with pollution.

The economic survival of not simply individual businesses but the whole of the industrial complex is reliant upon the continued evaluation of pollution problems against the assumptions of the nature of progress contained in industrial relations.

Cooperation of threatened economic interests should not be expected and, even with a realization of the air pollution menace, has not been offered. It is true that industry, in reaction to the threat of governmental regulation, is making some investment in air pollution equipment.³¹ However, the record of industrial concern and cooperation has not been outstanding.³² The background of industrial development and business attitude explains in part why industry was successful in its interest group activities. This background also explains why industry sought decentralization of control and indicates the probable impact of that decentralization.

The economic impact of the acquisition or loss of industry is greatest on the state or local level. It is here that the concept of progress created by the process of industrialization is most apparent in the attempt to attract and keep industry. This concern with economic development can not simply be viewed as a concern with economic well being but must also be seen as the acceptance of a concept of progress, foisted by societal relations, that sees well being, even economic well being, in terms of industrial growth.³³

PARTMENT OF HEALTH, EDUCATION, AND WELFARE, PROCEEDINGS OF SYMPOSIUM ON HUMAN ECOLOGY 12, 13 (1968); The effect of this outlook is graphically indicated by Dr. Bluff in his testimony before the House Committee on Interstate and Foreign Commerce. Persons who work in the highly polluted area around Charleston, West Virginia, are able to lead economically productive lives but when they reach old age the same conditions that created economic production had also led to chronic respiratory diseases which prevented them from enjoying old age. 1967 House Hearings 365-66.

³¹ Crawford, *The Cost of Clean Energy*, 19 J.A.P.C.A. 322, 324 (1969); Luce, *Utility Responsibility for Protection of the Environment*, 10 ARIZ. L. REV. 68 (1968); it is interesting to note that Mr. Luce and Mr. Crawford both emphasize that their businesses only cause 12-14% of the air pollution in the communities they serve. Crawford, *supra* at 323, Luce, *supra* at 70.

³² 1967 Senate Hearings 148-215; the Justice Department recently by consent decree, limiting the rights of private individuals to rely on the litigation, settled in California an anti-trust suit against the major auto makers for collusion to prevent the development of air pollution control devices for automobiles. *United States of America v. Automobile Mfgs. Assn.*, Civ. No. 69-75 J. W. C.; M. GOLDMAN, POLLUTION: THE MESS AROUND US, IN CONTROLLING POLLUTION 20, 26 (M. Goldman, ed. 1967); business stresses the need for delay. Jensen, *Who Are the Bad Guys*, 19 J.A.P.C.A. 832 (1969); business stresses the economic unreality of regulations. Daley, *Problems in Statewide Uniform Air Quality Enforcement*, 19 J.A.P.C.A. 77, 78 (1969).

³³ Rankin, *Air Pollution Control and Public Apathy*, 19 J.A.P.C.A. 565, 567-68 (1969). More persons expressed resistance to air pollution control when the issues were presented in terms of industrial withdrawal (*Id.* at 568) than when the issue was presented in terms only of the individual dollar cost of increased control. *Id.* at 567.

This concern with industrial development creates the likelihood that states handling standards that will affect competition for industry will be reluctant to impose stringent regulations.³⁴ In a local area, where the industry appears vital to the community, an industry which can easily move can use relocation as a sanction to obtain favorable community decisions.³⁵

The views of, at least, a portion of industry indicate that this sanction will be used. To these members of industry, unsound and "emotional" control measures can destroy the economy.³⁶ Therefore, local control is best because the locality can better judge the value of an industry. "An industrial plant may be the only excuse for the existence of the community."³⁷

The decision to decentralize control has placed large responsibility on state and local governments.³⁸ Regardless of the policy of control adopted by state and local government, adequate budgeting and adequate staffing are necessary to the proper administration³⁹ of even a lax program. Of course, it is true that an inadequate budget often represents a decision against enforcement. The importance of budgeting and staffing is that these factors form a part of the background against which an air pollution control agency must act. Budget and staff as well as the composition of membership affect the functioning of the control agency.

There are several ways of examining expenditures by states for the activities of air pollution control agencies.⁴⁰ In 1967 the average state was spending 4.8 cents per capita on air pollution control.⁴¹ However, since all states did not have programs, the mean expenditure per capita was 4 cents.⁴² The general low level of support is also indicated in the size of state budgets.⁴³ In 1967 thirty-three states had budgets above \$10,000; two

³⁴ O'Fallon, *Deficiencies in the Air Quality Act of 1967*, 33 LAW & CONTEMP. PROB. 275 (1968).

³⁵ Note, *The "Public Purpose" of Municipal Financing for Industrial Development*, 70 YALE L. J. 789, 801 (1961); For an example dealing with Air Pollution Control see 1967 Senate Hearings 2682.

³⁶ Behle, *Industry—The Views of the Regulated*, 10 ARIZ. L. REV. 74, 78 (1968).

³⁷ *Id.* at 80.

³⁸ Middleton, *Public Policy and Air Pollution Control*, presented at Penjerdel Regional Conference, Swathmore College, Swathmore, Penn., June 11, 1969; Middleton, *Summary of the Air Quality Act of 1967*, 10 ARIZ. L. REV. 25 (1968).

³⁹ Cluster, *State and Local Man Power Resources and Requirements for Air Pollution Control*, 19 J.A.P.A.C. 217, 218 (1969); Hagevick, *Legislation for Air Quality Management*, 33 LAW & CONTEMP. PROB. 369, 391 (1968).

⁴⁰ Figures in this section concern authorized expenditures by state pollution control agencies and do not include costs to the state such as tax credits or write offs for the purchase of pollution control equipment by industry.

⁴¹ O'Fallon, *supra* note 34, at 287.

⁴² Sacco and Leduc, *An Analysis of State Air Pollution Control Expenditures*, 19 J.A.P.A.C. 416, 418 (1969).

⁴³ A chart of these expenditures may be found in O'Fallon, *supra* note 34, at 293-96.

states had budgets above \$5,000, and eleven states had no identifiable budget.⁴⁴ More recent information indicates there have been appreciable though not spectacular increases in some state budgets.⁴⁵

Budgets of local air pollution control authorities appear to be more adequate.⁴⁶ Not only do localities appear to be making a greater per capita effort but also appear to have larger budgets.⁴⁷ Still, local budgets are small. In any event, the Air Quality Act of 1967 placed upon the states the responsibility for standards and enforcement.

Low budgets⁴⁸ could be expected to lead to inadequate staffs. Even assuming that budgeted staff positions are adequate in number,⁴⁹ in 1967 there were 134 full-time staff positions in state pollution control agencies vacant or 29 percent of the total number of positions budgeted.⁵⁰ In local governments there were 220 staff positions vacant or 15 percent of the total positions budgeted.⁵¹ One reason would appear to be salaries that are not comparable to those offered by industry. The salaries of control agency engineers lag behind the national market by \$2-5,000 a year.⁵² For other

⁴⁴ Cluster, *supra* note 39, at 218.

⁴⁵ Compare REPORT ON STEUBENVILLE-WEIRTON-WHEELING REGION 20, REPORT ON MIN. NEAPOLIS-ST. PAUL REGION 19, REPORT ON BUFFALO REGION 15, REPORT ON CINCINNATI REGION 21 with O'Fallon, *supra* note 34, at 293-96. Some caution should be used in applying the amounts stated in the *Reports for Consultation*. In the *Report on Cincinnati Region 21* (Jan. 1969) the budget of Kentucky for air pollution control is set at \$320,000 while in the *Report on Louisville Region 22* (Oct. 1969) the budget of Kentucky for air pollution control is set at \$450,000.

⁴⁶ O'Fallon, *supra* note 34, at 293-96; 1967 *House Hearings* 336-39 (local air pollution programs and budgets).

⁴⁷ Cluster, *supra* note 39, at 218. Local expenditures on air pollution control averaged in 1967 29.7 cents per capita, an average per capita expenditure 5.8 times that for state agencies. O'Fallon, *supra* note 34, at 288.

⁴⁸ The reasons which prompt expenditures on air pollution control are not clear. Between states expending and states not expending and between states with modest budgets and states with smaller ones, there does not exist sufficient correlation between factors such as urbanization, industrialization, and wealth to account for the differences. Sacco & Leduc, *An Analysis of State Air Pollution Control Expenditures*, 19 J.A.P.C.A. 416, 418-19 (1969). Finally, factors such as public awareness and federal action were thought to significantly affect expenditures. *Id.* at 419; for a similar study of reasons for local expenditures see, Leduc, *The Socio-Political Characteristics of Urban Governments Engaged in Air Pollution Control Activities*, 18 J.A.P.C.A. 733 (1968).

⁴⁹ Iowa, North Dakota, New Hampshire, Oklahoma and Utah had 3 or fewer statewide positions. Cluster, *supra* note 39, at 221.

⁵⁰ Cluster, *supra* note 39, at 219, 222.

⁵¹ *Id.* at 219; The reasons for the greater number of local positions available are (1) the greater number of local governments; (2) the number of states which have none or very few statewide positions; (3) differences in hiring and job requirements which make it more difficult for localities to compete with other employers offering the same salary. Leduc, Gartner, Sacco, & Kistler, *Man Power Policies in Selected Air Pollution Control Agencies*, 18 J.A.P.C.A. 211, 212-13 (1968).

⁵² Gartner, *Staff Salaries in Air Pollution Control Agencies*, 19 J.A.P.C.A. 579, 581 (1969).

positions such as chemists and technicians salaries are 4-7 percent less than those offered by industry.⁵³

There are other reasons for inadequate staffs in air pollution control agencies. Hiring and employment policies of governmental agencies often make openings less attractive.⁵⁴ Pollution control agencies are often small organizations with limited growth and limited promotional opportunities.⁵⁵

Finally, it appears that sufficient numbers of personnel are not being trained in areas relating to air pollution control. Not only is this area of study new, but also sufficient effort is not being made to attract capable persons.⁵⁶ In addition to the lack of effort, there is a lack of a base of study and motivation that should be provided at secondary and elementary levels.⁵⁷

It is against this background that the decision to place responsibility for standards and control with the states was made.

State Air Pollution Control Boards

Despite a lack of material concerning the legislative history of the state acts that established state pollution control agencies, an examination of the nature, composition, and powers of these agencies should provide some insight into the factors operating within state legislatures.⁵⁸ What is the nature of state pollution control agencies? Are they simply state departments created or designed to administer a program?

In a few states the air pollution control agency is clearly modeled after the general pattern of administrative agencies. In these states the state department of health is responsible for standards, rules, regulations and enforcement and is therefore the primary agency.⁵⁹ In other states al-

⁵³ *Id.* at 582. Low salaries, of course, may lead to corruption, particularly if the low salaried position is one that offers immense returns through illegal activity. An inspector's job is an example. *The New York Times*, Feb. 11, 1970, at 1, col. 8.

⁵⁴ Leduc, Gartner, Sacco and Kistler, *supra* note 51, at 213.

⁵⁵ Gartner, *supra* note 52, at 580.

⁵⁶ Rossano, Moller & Dalmat, *Nationwide Air Pollution Control Training Efforts*, 18 J.A.P.C.A. 180, 181 (1968).

⁵⁷ Caldwell, *Centers of Excellence for the Study of Human Ecology*, in DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, PROCEEDINGS OF SYMPOSIUM ON HUMAN ECOLOGY, 56, 58 (1968).

⁵⁸ For a summary of state legislation concerning air pollution as of 1967, see DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, DIGEST OF STATE AIR POLLUTION LAWS 1967; For a comprehensive study of state pollution control programs as of May 1967, see 1967 *Senate Hearings* 1160-1283.

The legislative history of the Texas Air Control Act has been published. That study indicates the substantial role of industry. Comment, *Air Pollution Control in Texas*, 47 TEX. L. REV. 1086, 1091, 1095, 1097 (1969).

⁵⁹ MASS. GEN. LAWS ANN. ch. 111, § 142A (Supp. 1969) (approval of governor required

though the state department of health may appear to be the control agency, "advisory" councils hold some power that in effect gives them command of the pollution control program.⁶⁰

Although in the remainder of states which have state air pollution control boards⁶¹ state departments of health may be spoken of as the administrative agencies for air pollution control, the powers these state air pollution control boards hold make them the policy determining agencies. These boards hold the powers to set standards, rules and regulations,⁶²

for adoption of regulations); MONT. REV. CODES ANN. § 69-3907 (Supp. 1969); N. J. REV. STAT. § 26.2C-3.1 (Supp. 1971); N. M. STAT. ANN. § 12-14-3 (1968); R. I. GEN. LAWS ANN. § 23-25-4 (1968); 10 VT. STAT. ANN. § 353 (1969); WISC. STAT. § 144.31 (Supp. 1969); in Maryland the Department of Health has the power to promulgate regulation but it must first seek the advice of an advisory council. MD. ANN. CODE ART. 43 § 690, 695 (Supp. 1969).

⁶⁰ NEV. REV. STAT. § 445.490 (Supp. 1970) (Hearings Board, which ultimately may determine whether violations of regulations have actually occurred, chosen from membership of advisory council); N. D. CERT. CODE § 23-25-04 (Supp. 1970) (State Board of Health must have approval of "advisory" council to make or repeal rules and regulations). In Arizona an advisory council is not involved in the reduction in power. A state hearing board makes determinations of violations and grants variances. ARIZ. REV. STAT. ANN. §§ 36-1704, 36-1712 (Supp. 1970).

⁶¹ ALASKA STAT. § 18.30.015 (1969); ARK. STAT. ANN. § 82-1903 (Supp. 1970); CALIF. HEALTH & SAFETY CODE § 39020 (West Supp. 1971); CONN. GEN. STAT. REV. § 19-506 (1969); 7 DEL. CODE ANN. § 6002 (Supp. 1969); FLA. STAT. ANN. § 403.041 (Supp. 1969); IDAHO CODE ANN. § 39-2903 (Supp. 1969); ILL. REV. STAT. ch. 111-½, § 1004 (Supp. 1970); IND. ANN. CODE § 35-4603 (1968); IOWA CODE § 136B.3 (Supp. 1969); KAN. STAT. ANN. § 65-3004 (Supp. 1969); LA. REV. STAT. § 40.2203 (Supp. 1970); MICH. COMP. LAWS § 336.13 (1967); MINN. STAT. § 116.02 (Supp. 1970); MISS. CODE ANN. § 7106-113 (Supp. 1970); MO. REV. STAT. § 203.040 (Supp. 1970); N. H. REV. STAT. ANN. § 125.80 III (Supp. 1970); N. Y. PUB. HEALTH LAW § 1268 (McKinney Supp. 1970); N. C. GEN. STAT. § 143-214 (Supp. 1970); OHIO REV. CODE ANN. § 3704.02 (Supp. 1970); 63 OKLA. STAT. § 2002 (Supp. 1970); ORE. REV. STAT. § 449.016 (1968); 35 PENN. STAT. § 4005 (Supp. 1970); S. C. CODE ANN. § 63-195.2 (Supp. 1970); TENN. CODE ANN. § 53-3411 (Supp. 1970); TEX. REV. CIV. STAT. 4477-5, § 2.02 (Supp. 1970); UTAH CODE ANN. § 26-24-4 (Supp. 1970); VIR. CODE ANN. § 10-17.11 (Supp. 1966); W. VA. CODE ANN. § 16-20-4 (Supp. 1969); WYO. STAT. ANN. § 35-490 (Supp. 1969).

⁶² ALASKA STAT. § 18.30.080 (1969); ARK. STAT. ANN. § 82-1935 (Supp. 1969); CALIF. HEALTH & SAFETY CODE § 39051 (West Supp. 1970); CONN. GEN. STAT. REV. § 19-508 (1969); 7 DEL. CODE ANN. §§ 6011, 6203 (Supp. 1969); FLA. STAT. ANN. § 403.061 (Supp. 1969); IDAHO CODE ANN. § 39-2908 (Supp. 1969); ILL. REV. STAT. ch. 111-½, § 1004 (Supp. 1970); IND. ANN. CODE § 35-4604 (1968); IOWA CODE § 136B.3 (Supp. 1970); KAN. STAT. ANN. §§ 65-3005, 65-3010 (Supp. 1970); LA. REV. STAT. § 40.2204 (Supp. 1970); MICH. COMP. LAWS § 336.15 (Supp. 1970); MINN. STAT. § 116.07 (Supp. 1970); MISS. CODE ANN. § 7106-116 (Supp. 1969); MO. REV. STAT. § 203.050 (Supp. 1970); N. H. REV. STAT. ANN. § 125.80 II (Supp. 1970); N. Y. PUB. HEALTH LAW § 1271 (McKinney Supp. 1970); N. C. GEN. STAT. §§ 143-214, 143-215 (Supp. 1969); OHIO REV. CODE ANN. § 3704.03 (Supp. 1970); 63 OKLA. STAT. § 2002F (Supp. 1970); ORE. REV. STAT. §§ 449.785, 449.800 (1969); 35 PENN. STAT. § 4005 (Supp. 1970); S. C. CODE ANN. § 70-108 (1962); TENN. CODE ANN. § 53-3412 (Supp. 1970); TEX. REV. CIV. STAT. § 4477-53.07, 4477-53.12 (Supp. 1970); UTAH CODE ANN. § 26-24-5, (1953); VIR. CODE ANN. § 10-17.18 (Supp. 1970); WASH. REV. CODES § 70.94.331 (Supp. 1970); W. VA. CODE ANN. § 16-20-5 (Supp. 1970); WYO. STAT. ANN. §§ 35-491, 35-494 (Supp. 1969).

and, within statutory limitations, to grant variances.⁶³ In addition, the boards play a determinative role in the enforcement process.⁶⁴ With these powers there is no doubt that state air pollution control boards are the state agencies responsible for air pollution control.

Although there are a number of such state air pollution control boards with varying powers located in states with different geographical, political, social, and economic conditions, it is not unfair to view the boards together as a type of legal institution. The boards operate in varying degrees against the background of the concept of economic progress. They represent a common reaction to the problem of air pollution control on the state level. It is submitted that more can be learned by examining the similarities and differences between them than by studying in detail the situation in each state.

The size of the boards varies from four to fourteen members.⁶⁵ The

⁶³ ALASKA STAT. § 18.30.140 (1970); ARK. STAT. ANN. § 82-1939 (Supp. 1969); CONN. GEN. STAT. REV. § 19-519a (Supp. 1970); 7 DEL. CODE ANN. § 6007 (Supp. 1969); FLA. STAT. ANN. § 403.201 (Supp. 1970); IOWA CODE § 136B.13 (Supp. 1970); KAN. STAT. ANN. § 65-3013 (Supp. 1970); LA. REV. STAT. § 40.2211 (1950); MICH. COMP. LAWS § 336.30 (Supp. 1970); MINN. STAT. § 116.07(5) (Supp. 1970); MO. REV. STAT. § 203.110 (Supp. 1969); N. H. REV. STAT. ANN. § 125.83 (Supp. 1970); 63 OKLA. STAT. § 2002 (J) (Supp. 1970); ORE. REV. STAT. § 449.810 (1969); S. C. CODE ANN. § 70-123.3 (Supp. 1970); UTAH CODE ANN. § 26-24-5(7) (1953); VIR. CODE ANN. § 10-17.18(c) (Supp. 1970); WYO. STAT. ANN. §§ 35-491(d), 35-497 (Supp. 1969).

⁶⁴ ALASKA STAT. § 18.30.220 (Supp. 1970); ARK. STAT. ANN. § 82-1935 (Supp. 1969); CONN. GEN. STAT. REV. § 19-515 (1969); 7 DEL. CODE ANN. § 6203(11) (Supp. 1968); FLA. STAT. ANN. §§ 403.121, 403.061(9) (Supp. 1970); IDAHO CODE ANN. § 39-2908(3) (Supp. 1969); ILL. REV. STAT. ch. 111-½, § 1004 (Supp. 1970); IND. ANN. CODE § 35-4604 (Supp. 1970); IOWA CODE §§ 136B.4(1), 136B.10 (Supp. 1970); KAN. STAT. ANN. § 65-3011 (Supp. 1970); LA. REV. STAT. § 40: 2208 (1965); MICH. COMP. LAWS §§ 336.15(J), 336.23, 336.27 (1967); MISS. CODE ANN. §§ 7106-116(1)(1), 7106-120 (Supp. 1969); MO. REV. STAT. §§ 203.050(6)(7), 203.080 (Supp. 1970); N. H. REV. STAT. ANN. §§ 125.82, 125.85 (Supp. 1970); N. Y. PUB. HEALTH LAW § 1281 (McKinney Supp. 1970); OHIO REV. CODE ANN. § 3704.05 (Supp. 1970); 63 OKLA. STAT. § 2002I; ORE. REV. STAT. §§ 449.781, 449.800(4)(5)(6), 449.815 (Supp. 1970); 35 PENN. STAT. § 4005(5) (Supp. 1970); S. C. CODE ANN. §§ 63-195.8, 123.5 (1962); TENN. CODE ANN. §§ 53-3412(8), 53-3415, 53-3418 (Supp. 1970); TEX. REV. CIV. STAT. §§ 4477-5, 4.02, 4447-5, 4.03 (Supp. 1970); UTAH CODE ANN. §§ 26-24-5(5)(6), 26-24-11, 26-24-13 (Supp. 1969); VIR. CODE ANN. § 10-17.18(d) (Supp. 1970); WASH. REV. CODE § 70.94.333 (Supp. 1970); W. VA. CODE ANN. §§ 16-20-5(6), 16-20-6 (Supp. 1970); WYO. STAT. ANN. § 35-495 (Supp. 1970).

⁶⁵ ALASKA STAT. § 18.30.015 (1969) (9); ARK. STAT. ANN. § 82-1903 (Supp. 1970) (8); CALIF. HEALTH & SAFETY CODE § 39020 (West Supp. 1971) (14); CONN. GEN. STAT. REV. § 19-506 (1969) (13); 7 DEL. CODE ANN. § 6002 (Supp. 1969) (7); FLA. STAT. ANN. § 403.041 (Supp. 1969) (6); IDAHO CODE ANN. § 39-2903 (Supp. 1969) (5); ILL. REV. STAT. ch. 111-½, § 240.4 (1966) (9); IND. ANN. CODE § 35-4603 (1968) (7); IOWA CODE § 136B.3 (Supp. 1969) (9); KAN. STAT. ANN. § 65-3004 (Supp. 1969) (8); LA. REV. STAT. § 40.2203 (Supp. 1970) (7); MICH. COMP. LAWS § 336.13 (1967) (8); MINN. STAT. § 116.02 (Supp. 1970) (7); MISS. CODE ANN. § 7106-113 (Supp. 1970) (11); MO. REV. STAT. § 203.040 (Supp. 1970) (7); NEV. REV. STAT. § 445.555 (Supp. 1970) (10); N. H. REV. STAT. ANN. § 125.80 III (Supp. 1970) (8); N. Y. PUB. HEALTH LAWS § 1268 (McKinney Supp. 1970) (9); N. D. CENT. CODE § 23-25-02 (Supp. 1970)

composition of the boards varies but seems to fall into the following categories. In some states the law establishing the boards sets no requirements on the affiliation or position of members.⁶⁶ In the remainder of states a portion of the membership of the boards is designated by position held in some state department or agency. Generally it seems that the designation is not designed to appoint the individual holding the position but is rather designed to appoint the agency which is seen as representing certain interests. Evidence of this is the explicit provision in many statutes that allows the director or commissioner of an agency to delegate his authority to a representative of his department or agency.⁶⁷

The departments designated normally represent interests. Designating the Director of the Department of Agriculture as a member of the control board can be viewed as the functional equivalent of requiring that a representative of agricultural interests be appointed to the board. In fact, an examination will show that states have used both methods. Of course, it could be argued that by designating an agency not only is an interest represented but also a degree of expertise is brought to the board. This may be true but the equivalence found between the interest of departments designated for membership and the interest required to be represented by appointed individuals would indicate that interest representation is the more important function.⁶⁸

An examination of the departments or agencies of state government designated as members of the state air pollution control boards should indicate that they are intended to represent interests. The departments most usually designated are: the department of health,⁶⁹ department of

(7); N. C. GEN. STAT. § 143-214 (Supp. 1970) (13); OHIO REV. CODE ANN. § 3704.02 (Supp. 1970) (5); 63 OKLA. STAT. § 2001 (Supp. 1970) (7); ORE. REV. STAT. § 449.016 (1968) (5); 35 PENN. STAT. § 4005 (Supp. 1970) (11); S. C. CODE ANN. § 63-195.3 (Supp. 1970) (7); TENN. CODE ANN. § 53-3411 (Supp. 1970) (12); TEX. REV. CIV. STAT. § 4477-5, 2.02 (Supp. 1970) (9); UTAH CODE ANN. § 26-24-4 (Supp. 1970) (9); VIR. CODE ANN. § 10-17.11 (Supp. 1966) (5); WASH. REV. CODE § 70.94.300 (Supp. 1969) (8); W. VA. CODE ANN. § 16-20-4 (Supp. 1969) (7); WYO. STAT. ANN. § 35-490 (Supp. 1969) (9).

⁶⁶ CONN. GEN. STAT. REV. § 19-506 (1969); MINN. STAT. § 116.02 (Supp. 1970); ORE. REV. STAT. § 449.016 (1968); Virginia has a hybrid form in that limitations are placed on who can not serve. VIR. CODE ANN. § 10-17.11 (Supp. 1970).

⁶⁷ ALASKA STAT. § 18.30.015(d) (1969); KAN. STAT. ANN. § 65-3004 (Supp. 1970); LA. REV. STAT. § 40.2203(A) (Supp. 1970); MISS. CODE ANN. § 7106-113(C) (Supp. 1969); N. Y. PUB. HEALTH LAWS § 1268(2) (McKinney Supp. 1970); 35 PENN. STAT. § 4005 (Supp. 1970); WYO. STAT. ANN. § 35-490 (Supp. 1969).

⁶⁸ Compare note 70 *infra.* with note 83 *infra.*; note 72 *infra.* with note 84 *infra.*; note 71 *infra.* with note 87 *infra.*; note 73 *infra.* with note 85 *infra.*; note 74 *infra.* with note 88 *infra.*

⁶⁹ ALASKA STAT. § 18.30.015 (1969); ARK. STAT. ANN. § 82-1963 (Supp. 1969); CALIF. HEALTH & SAFETY CODE § 39020 (West Supp. 1971); ILL. REV. STAT. ch. 111- $\frac{1}{2}$, § 1005 (1966); IND. ANN. CODE § 35-4603 (1969) (*ex officio*); IOWA CODE § 136B.3 (Supp. 1970); KAN. STAT. ANN. § 65-3004 (Supp. 1970); LA. REV. STAT. § 40.2203 (Supp. 1970); MICH. COMP. LAWS

agriculture,⁷⁰ department of economic development⁷¹ and the department of labor.⁷² Certain "conservation oriented" departments,⁷³ are designated as well as some representing special industries.⁷⁴

The departmental positions are designated in the laws establishing state air pollution control boards. However, the selection process of members for those positions goes beyond the legislative designation. The department head designated is, in effect, delegated a limited power of selection since he may choose a member of his agency for the position.⁷⁵

The remaining membership on the state air pollution control boards is composed of individual, appointed members. Some of these members are to be selected on the basis of the expertise they possess. Normally certain members of the boards are required to be physicians,⁷⁶ engineers,⁷⁷ or to be

§ 336.13 (1967); MISS. CODE ANN. § 7106-113 (Supp. 1969); MO. REV. STAT. § 203.040 (Supp. 1970); NEV. REV. STAT. § 445.500 (Supp. 1969); N. C. GEN. STAT. § 143-214 (Supp. 1969); OHIO REV. CODE ANN. § 3704.02 (Supp. 1970); 63 OKLA. STAT. § 2002 (Supp. 1970); 35 PENN. STAT. § 4005 (Supp. 1970); S. C. CODE ANN. § 70-104 (1962) (2 appointed by executive committee of the state board of health); TENN. CODE ANN. § 53-3411 (Supp. 1970); UTAH CODE ANN. § 26-24-4 (Supp. 1969); W. VA. CODE ANN. § 16-20-4 (Supp. 1970); WYO. STAT. ANN. § 35-490 (Supp. 1969).

⁷⁰ CALIF. HEALTH & SAFETY CODE § 39020 (West Supp. 1971); FLA. STAT. ANN. § 403.041 (Supp. 1970); KAN. STAT. ANN. § 65-3004 (Supp. 1970); LA. REV. STAT. § 40.2203 (Supp. 1970); MICH. COMP. LAWS § 336.13 (1967); N. Y. PUB. HEALTH LAWS § 1268 (McKinney Supp. 1970); OHIO REV. CODE ANN. § 3704.02 (Supp. 1970); 35 PENN. STAT. § 4005 (Supp. 1970); W. VA. CODE ANN. § 16-20-4 (Supp. 1970) (ex officio); WYO. STAT. ANN. § 35-490 (Supp. 1969).

⁷¹ ALASKA STAT. § 18.30.015 (1969); KAN. STAT. ANN. § 65-3004 (Supp. 1970); LA. REV. STAT. § 40.2203 (Supp. 1970); MISS. CODE ANN. § 7106-113 (Supp. 1968). N. Y. PUB. HEALTH LAWS § 1268 (McKinney Supp. 1970); 35 PENN. STAT. § 4005 (Supp. 1970); TENN. CODE ANN. § 53-3411 (Supp. 1970).

⁷² KAN. STAT. ANN. § 65-3004 (Supp. 1970); N. Y. PUB. HEALTH LAWS § 1268 (McKinney Supp. 1970).

⁷³ ALASKA STAT. § 18.30.015 (1969) (Game & Fish Dept., Natural Resources Dept.); ARK. STAT. ANN. § 82-1903 (Supp. 1969) (Game & Fish Dept., St. Forestry Comm.); CALIF. HEALTH & SAFETY CODE § 39020 (West Supp. 1971) (Director of Conservation); MISS. CODE ANN. § 7106-113 (Supp. 1968) (Game & Fish Dept.); N. Y. PUB. HEALTH LAWS § 1268 (McKinney Supp. 1970) (Conservation Dept.).

⁷⁴ ARK. STAT. ANN. § 82-1903 (Supp. 1969) (Oil & Gas Comm.); MISS. CODE ANN. § 7106-113 (Supp. 1969) (Supervisor of the State Oil & Gas Board); 35 PENN. STAT. § 4005 (Supp. 1970) (Sec. of Dept. of Mines & Mineral Industry).

⁷⁵ *Supra* note 67.

⁷⁶ ALASKA STAT. § 18.30.015 (1969); CONN. GEN. STAT. REV. § 19-506 (1969); ILL. REV. STAT. ch. 111-½, § 240.4 (1966); IND. ANN. CODE § 35-4603 (1968); IOWA CODE § 136B.3 (Supp. 1970); LA. REV. STAT. § 40.2203 (Supp. 1970); N. H. REV. STAT. ANN. § 125.80 III (Supp. 1970); N. Y. PUB. HEALTH LAWS § 1268 (McKinney Supp. 1970); N. C. GEN. STAT. § 143-214 (Supp. 1969); TENN. CODE ANN. § 53-3411 (Supp. 1970), TEX. REV. CIV. STAT. § 4475-5.202 (Supp. 1970); UTAH CODE ANN. § 26-24-4 (1969).

⁷⁷ ALASKA STAT. § 18.30.015 (1969); ILL. REV. STAT. ch. 111-½, § 240.4 (1966); IND. ANN. CODE § 35-4608 (1968); IOWA CODE § 136B.3 (Supp. 1970); LA. REV. STAT. § 40.2203 (1965); N. Y. PUB. HEALTH LAWS § 1268 (McKinney Supp. 1970); 63 OKLA. STAT. § 2002 (Supp. 1969); 35 PENN. STAT. § 4005 (Supp. 1970); TENN. CODE ANN. § 53-3411 (Supp. 1970); TEX. REV. CIV. STAT. § 4475-5.202 (Supp. 1969); UTAH CODE ANN. § 26-24-4 (1969).

faculty members of educational institutions.⁷⁸ Even with the members who are solely appointed for their expertise, interest becomes involved. Sometimes the concern is that the expert not represent an interest⁷⁹ while at other times the concern is that a member representing an interest also possess expertise.⁸⁰ Little ambiguity seems to exist about the function of other individuals to be appointed. They are to be appointed as the representatives of interests. A typical form of describing members to be appointed is as follows: Five members shall be appointed, one to represent agriculture, one to represent the mining industry, one to represent the manufacturing industry, one to represent the fuel industry and one to represent the general public.⁸¹ The interests to be represented are political subdivisions,⁸² agriculture,⁸³ labor,⁸⁴ conservation,⁸⁵ and the general public.⁸⁶ Of course, industry is to be represented.⁸⁷ Some states require that

⁷⁸ 63 OKLA. STAT. § 2002 (Supp. 1970).

⁷⁹ UTAH CODE ANN. § 26-24-4 (1969) (neither physician or engineer to be affiliated with industry).

⁸⁰ MICH. COMP. LAWS § 336.13 (1967); N. C. GEN. STAT. § 143-214 (Supp. 1969); 35 PENN. STAT. § 4005 (Supp. 1970); TENN. CODE ANN. § 53-3411 (Supp. 1970).

⁸¹ See UTAH CODE ANN. § 26-24-4 (1968).

⁸² ALASKA STAT. § 18.30.015 (1969); ARK. STAT. ANN. § 82-1903 (Supp. 1970); IND. CODE ANN. § 35-4603 (1970); IOWA CODE § 136B.3 (Supp. 1970); KAN. STAT. ANN. § 65-3004 (Supp. 1970); LA. REV. STAT. § 40.2203 (Supp. 1970); MICH. COMP. LAWS § 336.13 (1967); MISS. CODE ANN. § 7106-113 (Supp. 1969); MO. REV. STAT. § 203.040 (Supp. 1969); N. H. REV. STAT. ANN. § 125.80 III (Supp. 1970); N. Y. PUB. HEALTH LAWS § 1268 (McKinney Supp. 1970); N. D. CENT. CODE § 23-25-02 (Supp. 1969); N. C. GEN. STAT. § 143-214 (Supp. 1969); OHIO REV. CODE ANN. § 3704.02 (Supp. 1970); 63 OKLA. STAT. § 2002 (Supp. 1970); S. C. CODE ANN. § 70-104 (1962); TENN. CODE ANN. § 53-3411 (Supp. 1970); TEX. REV. CIV. STAT. § 4475-5.202 (Supp. 1969); WASH. REV. CODE § 70.94.300 (Supp. 1970); WYO. STAT. ANN. § 35-490 (Supp. 1969).

⁸³ CALIF. HEALTH & SAFETY CODE § 39020 (West Supp. 1970); ILL. REV. STAT. ch. 111-1/2, § 240.4 (1966); IND. ANN. CODE § 35-4603 (Supp. 1970); IOWA CODE § 136B.3 (Supp. 1970); MO. REV. STAT. § 203.040 (Supp. 1969); N. C. GEN. STAT. § 143-214 (Supp. 1969); OHIO REV. CODE ANN. § 3704.02 (Supp. 1970); 63 OKLA. STAT. § 2002 (Supp. 1970); S. C. CODE ANN. § 70-104 (1962); TENN. CODE ANN. § 53-3411 (Supp. 1970); TEX. REV. CIV. STAT. § 4475-5.202 (Supp. 1969); UTAH CODE ANN. § 26-24-4 (Supp. 1969).

⁸⁴ IOWA CODE § 136B.3 (Supp. 1970); MO. REV. STAT. § 203.040 (Supp. 1969); S. C. CODE ANN. § 70-104 (1962).

⁸⁵ N. H. REV. STAT. ANN. § 125.80 III (Supp. 1970) (recreation); N. C. GEN. STAT. § 143-214 (Supp. 1969) (wildlife, public health); S. C. CODE ANN. § 70-104 (1962) (wildlife).

⁸⁶ ALASKA STAT. § 18.30.015 (1969); CALIF. HEALTH & SAFETY CODE § 39020 (West Supp. 1970); CONN. GEN. STAT. REV. § 19-506 (1969) (12 representing the general public); IND. ANN. CODE § 35-4603 (1968); IOWA CODE § 136B.3 (Supp. 1969); KAN. STAT. ANN. § 65-3004 (Supp. 1970); MICH. COMP. LAWS § 336.13 (1967); MO. REV. STAT. § 203.040 (Supp. 1970); N. H. REV. STAT. ANN. § 125.80 III (Supp. 1970); N. C. GEN. STAT. § 143-214 (Supp. 1969); 35 PENN. STAT. § 4005 (Supp. 1969); TEX. REV. CIV. STAT. § 4475-5.202 (Supp. 1969); UTAH CODE ANN. § 26-24-4 (Supp. 1969); WASH. REV. CODE § 70.94.300 (1969); W. VA. CODE ANN. § 16-20-4 (Supp. 1970); WYO. STAT. ANN. § 35-490 (Supp. 1969).

⁸⁷ ARK. STAT. ANN. § 82-1903 (Supp. 1970); CALIF. HEALTH & SAFETY CODE § 39020 (Supp. 1971); ILL. REV. STAT. ch. 111-1/2, § 240.4 (1966); IND. ANN. CODE § 35-4603 (1968);

particular types of industry be represented.⁸⁸ Occasionally there is an attempt to represent geographical areas.⁸⁹

All individuals whether supposedly representing expertise or representing interests are appointed by the governor of the state. In some states the governor alone can make the appointments.⁹⁰ Not considering the political pressure a governor would face in making these appointments, there are states in which the formal process of appointment requires the participation of other groups. Often the state senate is required to confirm the governor's appointments.⁹¹ In some instances the governor must make his appointments from lists submitted by professional or interest groups.⁹² In only one case do the appointees not enjoy the security of fixed terms.⁹³

The Interest Concept and Legal Institutions

The examination of state air pollution control boards indicates that

IOWA CODE § 136B.3 (Supp. 1969); KAN. STAT. ANN. § 65-3004 (Supp. 1970); LA. REV. STAT. § 40.2203 (1965); MICH. COMP. LAWS § 336.13 (1967); MISS. CODE ANN. § 7106-113 (Supp. 1969); MO. REV. STAT. § 203.040 (Supp. 1969); N. Y. PUB. HEALTH LAWS § 1268 (McKinney Supp. 1970); N. C. GEN. STAT. § 143-214 (Supp. 1969); OHIO REV. CODE ANN. § 3704.02 (Supp. 1969); 35 PENN. STAT. § 4005 (Supp. 1970); TENN. CODE ANN. § 53-3411 (Supp. 1970); TEX. REV. CIV. STAT. § 4475-5.202 (Supp. 1969); WASH. REV. CODE § 70.94.300 (Supp. 1970); W. VA. CODE ANN. § 16-20-4 (Supp. 1970); WYO. STAT. ANN. § 35-490 (Supp. 1969).

⁸⁸ N. D. CENT. CODE § 23-25-02 (1970) (Solid fuel industry, liquid fuel industry); 63 OKLA. STAT. § 2002 (Supp. 1970) (Manufacturing, transportation, petroleum refining with operations in the state); S. C. CODE ANN. § 70-104 (1962) (Cotton manufacturing, pulp & paper); UTAH CODE ANN. § 26-24-4 (1969) (Mining industry, manufacturing, fuels industry.)

⁸⁹ 7 DEL. CODE ANN. § 6002 (Supp. 1968) (designated by cities and counties); KAN. STAT. ANN. § 65-3004 (Supp. 1970) (admonishment to try to select from different areas of the state).

⁹⁰ ALASKA STAT. § 18.30.015 (1969); CALIF. HEALTH & SAFETY CODE § 39020 (West Supp. 1970); CONN. GEN. STAT. REV. § 19-506 (1969); 7 DEL. CODE ANN. § 6002 (Supp. 1968); IND. ANN. CODE § 39-2903 (Supp. 1969); IOWA CODE § 136B.3 (Supp. 1969); KAN. STAT. ANN. § 65-3004 (Supp. 1970); LA. REV. STAT. § 40.2203 (Supp. 1970); N. D. CENT. CODE § 23-25-02 (1970); In Delaware the governor and his council make the appointments. 7 DEL. CODE ANN. § 6002 (Supp. 1968).

⁹¹ ARK. STAT. ANN. § 82-1903 (Supp. 1970); ILL. REV. STAT. ch. 111-1/2, § 240.4 (1966); MICH. COMP. LAWS § 336.13 (1967); MISS. CODE ANN. § 7106-113 (Supp. 1969); MO. REV. STAT. § 203.04 (Supp. 1969); N. Y. PUBLIC HEALTH LAWS § 1268 (McKinney Supp. 1970); N. C. GEN. STAT. § 143-214 (Supp. 1969); OHIO REV. CODE ANN. § 3704.02 (Supp. 1970); 63 OKLA. STAT. § 2001 (Supp. 1970); TEX. REV. CIV. STAT. § 4475-5.2.02 (Supp. 1969); UTAH CODE ANN. § 26-24-4 (Supp. 1969); W. VA. CODE ANN. § 16-20-4 (Supp. 1970); WYO. STAT. ANN. § 35-490 (Supp. 1969).

⁹² LA. REV. STAT. § 40.2203 (Supp. 1970) (1 from lists of 3 submitted by La. Engineering Society, La. State Medical Assn., La. Manufacturers Assn., La. Municipal Assn.); MISS. CODE ANN. § 7106-113 (Supp. 1969) (1 from list of 10 submitted by Miss. Wildlife Federation); S. C. CODE ANN. § 70-104 (1962) (1 from lists of 3 submitted by Cotton Manufacturers Assn., Pulp and Paper Industry, S. C. Wildlife Federation, Municipal Assn. of S. C.; 2 from list of 3 submitted by Commissioner of Labor); WASH. REV. CODE § 70.94.300 (Supp. 1969) (must consult with Wash. Univ. and Wash. State Univ. Presidents on appointment of faculty to board).

⁹³ ORE. REV. STAT. § 449.016 (1968).

they are built around the concept of interest. The contradictions that exist in the composition of the boards will show that the representation of interest will not solve the air pollution problems facing the states.

Are the groups represented of such a character that effective response to the air pollution problem is likely? Not only are state departments of economic development, which could be expected to favor expansion and industrial development, represented on state air pollution control boards but industry is represented. In almost every state industry holds at least one position on the control board.⁹⁴ In many states several types of industries are represented.⁹⁵ When types of industries are required to be represented, they are normally the ones most likely to be large polluters such as solid and liquid fuel firms, mining, oil refining, public utilities, transportation, cotton manufacturing, and pulp and paper.⁹⁶ It could hardly be expected that these interests would escape the tendency to represent narrow economic concerns much less escape the tendency to see progress in terms of industrial development and repetitive production.

Whether or not other interests are countervailing ones is not as easy a question to answer as it might appear to be. The interests of political subdivisions, usually municipalities, are represented on the control boards. It would seem that municipalities, particularly cities, would have a stake in effective regulation.⁹⁷ It seems their representatives might serve to protect effective local programs.⁹⁸ However, it is municipalities which face financial crisis and upon which the withdrawal of industry will have the greatest effect.⁹⁹ Municipalities may oppose effective regulation not only because they fear competitive disadvantage in seeking industry but also because they themselves constitute a large class of polluters. The most difficult obstacles to uniform statewide enforcement of air pollution control regulations may be medium-sized municipalities that refuse to invest the funds necessary to abolish open burning of municipal trash.¹⁰⁰

The interests of labor are represented on the control boards either by a commissioner of labor or by representatives of labor.¹⁰¹ Although some labor groups may be primarily committed to regulation regardless of economic costs¹⁰² it would be expected that labor would be committed to an

⁹⁴ *Supra* note 87, 88.

⁹⁵ *Supra* note 88.

⁹⁶ *Id.*

⁹⁷ O'Fallon, *Deficiencies in the Air Quality Act of 1967*, 33 LAW & CONTEMP. PROB. 275, 286-92 (1968).

⁹⁸ *Id.*

⁹⁹ *Supra* text at note 33-37.

¹⁰⁰ Daley, *Problems in Uniform Air Quality Enforcement*, 19 J.A.P.C.A. 77, 78 (1969).

¹⁰¹ *Supra* note 72, 84.

¹⁰² 1967 Senate Hearings 538, 1662; 1967 House Hearings 852.

industrial development concept of progress. In cases of pollution regulation which directly affected the economy of an industry, labor might be allied with industry.¹⁰³

The interests of agriculture are represented on the control boards either by the state department of agriculture or by representatives of agriculture.¹⁰⁴ Agriculture does have a stake in effective pollution regulation because of the damaging effects of air pollution on vegetation.¹⁰⁵ However, agricultural operations are themselves large pollution sources.¹⁰⁶ As agriculture becomes more mechanized and larger in scale it acquires the attributes of industrial production. Agriculture as well as municipal and labor interests may not be reliable countervailing forces.

Of course, with the role of state pollution control boards in enforcement, a failure of countervailing interests would lead to a failure in enforcement. Enforcement by state pollution control boards has not been as vigorous as required.¹⁰⁷

It could be argued that there are representatives on state air pollution control boards who could act as a countervailing force. These are the

¹⁰³ *Senate Hearings 1799*, 540; Rein, *Boiler Fuel Gas: Policy of the Federal Power Commission*, 33 LAW & CONTEMP. PROB. 399, 411 & n.37 (1968).

¹⁰⁴ *Supra* note 70, 83.

¹⁰⁵ Report of the Environmental Pollution Panel, PRESIDENT'S SCIENCE ADVISORY COMMITTEE, RESTORING THE QUALITY OF OUR ENVIRONMENT 5 (1965); DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, AIR QUALITY CRITERIA FOR PARTICULATE MATTER 89 (1969) [hereinafter cited as CRITERIA FOR PARTICULATE MATTER]; Castonis & Sinclair, *Ozone Injury to Pinus Strobus*, 19 J.A.P.C.A. 867 (1969).

¹⁰⁶ Stanko, Wiseman, Wimberely & Paganini, *Some Air Pollution Problems with Agriculture in Texas*, 18 J.A.P.C.A. 164, 165 (1968); Tyler, *Methods for State Enforcement of Air and Water Pollution Laws*, 31 TEX. B. J. 905 (1968).

Agriculture has been effective in protecting its interests. *E.g.*, Air pollution as a result of typical agricultural operations is exempt in ARK. STAT. ANN. § 82-1934 (1)(2) (Supp. 1969); and in ORE. REV. STAT. § 449.775 (1)(2) (1969). In Oklahoma none of the powers of the State Board of Agriculture are repealed. 63 OKLA. STAT. § 2003 (Supp. 1969). For a description of these powers and their use see, Comment, *Water Pollution Laws and Their Enforcement in Oklahoma*, 22 OKLA. L. REV. 317, 341-42 (1969). In 1967 Texas cotton gin operators were to have passed an amendment exempting the processing of agricultural products in their natural state. Comment, *Air Pollution Control in Texas*, 47 TEX. L. REV. 1086, 1095 (1969); The New York Times, Oct. 19, 1969 at 61, col. 3.

Of course, in a sense, we are all polluters. Reitze, *Pollution Control Why It Has Failed*, 55 A.B.A.J. 923, 924 (1969). However, the individual and economic interests that pollute are at least distinguishable on the issue of responsibility. The individual finds himself in a business culture, a culture based on repetitive production and consumption. He can refuse to drink beer from throw away cans but his response is limited. It is unlikely the individual creates the demand for this style of living. This point will be developed anon when the concept of interest as a motivating force in social change is discussed.

¹⁰⁷ Esposito, *supra* note 24, at 44. REPORT ON HARTFORD-SPRINGFIELD REGION 40 (report of Conn. Task Force noted recommending transfer of enforcement powers from state control board).

representatives of the general public. Even assuming that these representatives are numerous enough to provide a balancing influence, several problems remain. The general public is not an organized interest to whom these representatives can look for support in confrontation with other well organized groups. More importantly, what measure can be used to determine the interest of the general public?¹⁰⁸ Public interest is neither identifiable nor predictable from a balancing of other interests.

The failure of the interest concept is in part evidenced by the inability to calibrate interests. The concept of interest can not operate as a predictive tool. This is evidenced by the varying attempts to subtly differentiate interest in the membership of the control boards.¹⁰⁹

It could be argued that the laws establishing the membership of state air pollution control boards are neither a surrender of these boards to interests nor an attempt to establish through the allocation of positions a balance of interests. Rather, by creating boards representing different interests, the laws could be establishing a framework for bargaining between interests. Such a process of conflict and resolution of group interest could be seen as the process by which public policies originate.¹¹⁰ Considering this process, state control agencies should be structured to facilitate bargaining. In addition to other factors, this bargaining structure should give all groups access to the control procedure and should limit the power of the control agency so it will have an incentive to bargain.¹¹¹ It could be argued

¹⁰⁸ For example, in Connecticut (CONN. GEN. STAT. REV. § 19-506) 12 members are to represent the public at large. That the interest of the public at large may only be a balancing of interests is indicated in the same section which states that not more than four of those representing the public interest shall be employed or have controlling proprietary interest in a power generating industry, or any industry emitting pollutants as part of the manufacturing process.

Simply because a membership of representatives of the general public is insured does not mean that the influence of industry is excluded. In Texas both men holding the general public seats on the control board have strong industry connections. Comment, *Air Pollution Control in Texas*, 47 TEX. L. REV. 1086, 1099 (1969).

A recent study by Gladwin Hill of the *New York Times* indicates that most state boards primarily responsible for cleaning up the nation's air and water are markedly weighted with representatives of the principal sources of pollution. See, CONG. REC. p E 10125 (daily ed. Dec. 7, 1970).

The Oklahoma board has been criticized as consisting of members relying on their livelihoods from the industries which the board must regulate. The Oklahoma Journal, Dec. 18, 1970, at 5, col. 2.

¹⁰⁹ Compare S. C. CODE ANN. § 70-104 (1962) with TEX. REV. CIV. STAT. § 4475-5.2.02 (Supp. 1969); Compare ILL. REV. STAT. ch. 111-1/2, § 240.4 (1966) with TENN. CODE ANN. § 53-3411 (Supp. 1969) and KAN. STAT. ANN. § 65-3004 (Supp. 1970).

¹¹⁰ Hagevick, *Legislating for Air Quality Management*, 33 LAW & CONTEMP. PROB. 369, 380 (1968); Perman, *Emerging Concepts of Air Pollution Control as Seen by the Political Scientist*, 16 J.A.P.C.A. 532 (1966).

¹¹¹ Hagevick, *supra* note 110, at 390; Comment, *Current Legislation: State Air Pollution Control Legislation*, 9 B. C. COMM. & IND. L. REV. 712, 740-44 (1968).

that the membership of various interests, including those to be regulated, on the state control boards both gives access to all groups and limits the powers of the agencies.

Placing representatives of interest, including those to be regulated, on the boards that will make regulation and enforcement decisions is not necessary to implement the purposes of bargaining. Access to the control process would be adequately assured by the requirements that public hearings be held before certain control decisions are made.¹¹² As to individual polluters, the laws generally require that conference and conciliation be attempted before any formal enforcement sanctions are invoked.¹¹³ Of course, the polluter has the right to a formal hearing on the validity of any enforcement procedure used against him.¹¹⁴

Placing interests on the decision-making body could, in fact, reduce bargaining. If an individual does not fear the imposition of sanction and does not feel that imposition is certain to follow his refusal to bargain in good faith, the incentive to bargain is considerably reduced. When interests that face regulation are placed on the decision-making body in a position where they can impede regulation and enforcement, the certainty of the imposition of meaningful sanctions is reduced.

Even if we assure that state air pollution control boards are properly structured to facilitate bargaining, it is necessary to examine some of the

¹¹² *E.g.*, ALASKA STAT. § 18.30.140(a) (Variances); 7 DEL. CODE ANN. §§ 6009 (Variances), 6011 (rules and regulations) (Supp. 1968); IDAHO CODE ANN. § 39-2908(2) (Supp. 1969) (rules and regulations); ILL. REV. STAT. ch. 111-½, § 240.7 (1966); LA. REV. STAT. § 40.2206(A) (1965) (regulations); MICH. COMP. LAWS § 336.17(2) (1967); MO. REV. STAT. § 203.070 (1969) (regulations); N. H. REV. STAT. ANN. § 125.83 (I) (Supp. 1969) (variances); N. D. CENT. CODE § 23-25-02(6) (1970) (rules, regulations, and standards); ORE. REV. STAT. § 449.890 (1969) (standards); TENN. CODE ANN. § 53-3412(2) (Supp. 1969); UTAH CODE ANN. § 26-24-10 (1969) (standards); VIR. CODE ANN. § 10-17.2 (Supp. 1970) (local variances); WASH. REV. CODE § 70.94.395 (Supp. 1969) (statewide regulations).

¹¹³ 7 DEL. CODE ANN. § 6006 (Supp. 1968); KAN. STAT. ANN. § 65-3011(d) (Supp. 1969); LA. REV. STAT. 40.2208(B) (Supp. 1965); ILL. REV. STAT. ch. 111-½, § 240.9(b) (1966); MICH. COMP. LAWS § 336.18 (1967); MO. REV. STAT. § 203.080(2) (1969); 63 OKLA. STAT. § 2002(I) (a) (Supp. 1969); S. C. CODE ANN. § 70-123, 41 (1962); TENN. CODE ANN. § 53-3414(D) (Supp. 1970); UTAH CODE ANN. § 26-24-11(1) (1969); WYO. STAT. ANN. § 35-495(a) (Supp. 1969). In some instances this process of conference and conciliation has proved valuable. Hill, *The Politics of Air Pollution: Public Interest and Pressure Groups*, 10 ARIZ. L. REV. 37, 42 (1968).

¹¹⁴ CONN. GEN. STAT. REV. § 19-514 (1969); 7 DEL. CODE ANN. § 6008 (Supp. 1968); FLA. STAT. ANN. § 403.121 (Supp. 1969); ILL. REV. STAT. ch. 111-½, § 240.9(c) (1966); IND. ANN. CODE § 35-4606 (1969); IOWA CODE § 136B.9 (Supp. 1969); MICH. COMP. LAWS § 336.21 (1967); MISS. CODE ANN. § 7106-120(c) (Supp. 1969); MO. REV. STAT. § 203.080(4) (1969); N. Y. PUB. HEALTH LAWS § 1283-a (McKinney Supp. 1969); 63 OKLA. STAT. § 2002(I) (b) (Supp. 1969); ORE. REV. STAT. § 449.890(1) (1969); TENN. CODE ANN. § 53-3415 (Supp. 1970); UTAH CODE ANN. § 26-24-11(2) (Supp. 1969); WASH. REV. CODE § 70.94.333 (Supp. 1970); W. VA. CODE ANN. § 16-20-4 (1966); WYO. STAT. ANN. § 35-495 (Supp. 1969).

assumptions underlying the bargaining process. It is assumed that bargaining between interests is the best way to obtain an optimum solution. In classic political theory this assumption states that the general welfare of an area is best served by resolution of competing interests in that jurisdiction by a politically responsible body.¹¹⁵ Of course, in the case of state air pollution control boards there is real doubt that they are politically responsible bodies. True, the membership of the boards is appointed or designated by elected officials but the membership from that point is isolated from the elective process.¹¹⁶ Also the classical model assumes a problem confined to the political jurisdiction of the interests. Pollution does not appear to be confined to political boundaries.

The assumption that bargaining between interests is the best way to reach an optimum solution has also been stated in terms of game theory which contends that in bargaining, as in a game, two parties not only reach a mutually satisfactory result, but also reach the most economic or low cost one.¹¹⁷ Even assuming that the bargaining method does allow the most satisfactory conclusion for the players of the game, what of groups that are not players? That conflicting interests reach a satisfactory result does not mean it is the best result for society. Perhaps, in part, this recognition of the inherent weakness of the bargaining theory as applied to the resolution of public questions explains why representatives of the "general public" are so often included on state air pollution control boards.

Game theory realizes that to a great extent the outcome of a bargaining contest is determined by the participants' perception of the nature and outline of the problem.¹¹⁸ The background of relations that define the air pollution problem makes it difficult to perceive the problems in terms that are likely to lead to a solution. As has been examined,¹¹⁹ the air pollution problem is seen against the background of a business culture that has developed a concept of progress that stresses economic development and repetitive production and consumption often at the sacrifice of human health and well-being. This background surely affects, perhaps unconsciously, the views of all participants and guides the final solution in a direction that may not be compatible with the most effective regulation and enforcement.

The bargaining approach between interests is also assumed to be the

¹¹⁵ Perman, *supra* note 110, at 532.

¹¹⁶ The one exception might be Oregon where the members of the board serve at the pleasure of the governor. ORE. REV. STAT. § 449.016(2) (1968).

¹¹⁷ Hagevik, *supra* note 110, at 381-85.

¹¹⁸ *Id.* at 385.

¹¹⁹ *Supra* text of this article at note 24-39.

best way to resolve problems about which uncertainty exists.¹²⁰ In this view, air pollution is a problem well suited to the bargaining approach. It is a complex problem interrelating all aspects of modern society.¹²¹

The difficulty with this assumption is that the complex problem is exactly the type of problem that the conflict of interests can not solve. These problems require an anticipation of future trends and developments. Policies determined by the interplay of interests tend not to be speculative in nature, for these policies are those that satisfy the most powerful interest while the most beneficial course might be to follow weaker interests or, more importantly, interest not yet in existence.¹²² Interests tend to be veto groups rather than innovative ones.¹²³ As society and technology change more rapidly, interest more and more tends to become the fossilized configurations of relationships long past. In situations where foresight and rapid reaction are required, a reliance on interest bargaining to solve problems can be futile and dangerous.

The concept of bargaining ultimately rests upon the function of the interest group process. An examination of that process and the assumptions implicit in it will yield not only a better understanding of state air pollution control boards but also yield a recognition of the weakness of the concept of interest.

The Interest Concept and Social Change

An examination of state air pollution control boards has shown that the concept of interest is neither a workable foundation for legal institutions nor a sound analytical and predictive tool. Now the concept of interest will be examined as it affects the interest group process and the role of the individual in motivating social change.

Among commentators on air pollution control, there appears to be great faith that the formation of new interest coalitions operating through the interest group process will insure solution of the air pollution problem. Growing public opinion will make polluting an unacceptable activity.¹²⁴ As skilled communicators inform the public of the real nature of the prob-

¹²⁰ Hagevik, *supra* note 110, at 398.

¹²¹ Cassell, *The Health Effects of Air Pollution and Their Implications for Control*, 33 LAW & CONTEMP. PROB. 197, 216 (1968); Cassell, *Are We Ready for Ambient Air Standards*, 18 J.A.P.C.A. 799, 800-01 (1968).

¹²² Reich, *The Law of the Planned Society*, 75 YALE L. J. 1227, 1239 (1966).

¹²³ BANFIELD, WHY THE GOVERNMENT CANNOT SOLVE THE URBAN PROBLEM, IN THE CONSCIENCE OF THE CITY 1231, 1237 (Meyerson ed. 1968).

¹²⁴ Gillman, *Washington Report*, 20 J.A.P.C.A. 6, 7 (1970).

lem,¹²⁵ public opinion will turn to political pressure that will force a change in goals and values.¹²⁶

Although the political process is primarily affected by groups of interests, these groups rest on the individual and his perception of his interests. Our society places a high value on individualism and therefore it is individual attitudes, expressed in the collective, that result in political change.¹²⁷ The development of new interest coalitions and the development of political and social change rests with the individual.¹²⁸

Study of individual and public perception of air pollution would indicate that the individual's perception is an unsound base upon which to rest a theory of social change. Although a bit simplified because it implicitly accepts that social institutions are changed by the collective of individual attitudes, the statement that we are destroying our environment not because we want to but because we do not care¹²⁹ does express the concern that public opinion and the interest group process is not operating to solve a major social problem. This pessimistic view of the individual's capacity to create change would seem to be justified by studies of public perception of the air pollution problem.

Although public concern with the pollution problem is positively related to actual levels of pollution, the concern does appear to coincide with degrees of pollution which may be considered dangerous.¹³⁰ In a study, 30 percent of the persons in an area were aware of air pollution and 10 percent felt it was a nuisance when the level of particulate suspension in the air reached 80 ug/m³.¹³¹ At levels of particulate suspension of 120 ug/m³ the percentage of persons expressing awareness and realization of the problem as a nuisance were respectively 50 percent and 20 percent.¹³² At levels of particulate suspension of 160 ug/m³ the percentages were respectively 75 percent and 33 percent.¹³³ It would be expected that an indi-

¹²⁵ Dubos, *The Crisis of Man in his Environment*, in DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, PROCEEDINGS OF SYMPOSIUM ON HUMAN ECOLOGY 230 (1968).

¹²⁶ Udall, *A Value Revolution and Environmental Humanism*, 19 J.A.P.C.A. 844 (1969).

¹²⁷ DeGroot, *Trends in Public Attitudes Toward Air Pollution*, 17 J.A.P.C.A. 679 (1967).

¹²⁸ Ennes, *Creation of Public and Professional Awareness in the Field of Human Ecology*, in DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, PROCEEDINGS OF SYMPOSIUM ON HUMAN ECOLOGY 68, 71 (1968).

¹²⁹ BANFIELD, *supra* note 123, at 1238.

¹³⁰ CRITERIA FOR PARTICULATE MATTER 102.

¹³¹ *Id.* at 187; U stands for a particle 1000th of millimeter in size, G represents the acceleration of gravity and M3 represents cubic meters. The formula then represents the concentration of particles in the air. *Id.* at 194.

¹³² *Id.* at 187.

¹³³ *Id.*

vidual would at least need to perceive the situation as a nuisance before he would contemplate taking measures to remedy the situation.

Unfortunately, significant levels of concern are at levels of particulate concentration above the point where adverse effects are realized. Although at 80 $\mu\text{g}/\text{m}^3$ only 10 percent of the individuals felt the problem was a nuisance, it is at this level that adverse health effects become measurable.¹³⁴ Even at concentrations of 160 $\mu\text{g}/\text{m}^3$ only 33 percent saw the problem as a nuisance. Perception and the severity of the problem do not coincide. This lack of correlation becomes serious when in 1961-1965 fifty-seven cities had particulate levels above 80 $\mu\text{g}/\text{m}^3$.¹³⁵

In part, the lack of complete correlation between individual perception of the problem, the minimum condition for the development of attitudes leading to the formation of interests, is explained by the nature of the human body. Although not designed as a pollution detection device, the human body is being used for this function. Public complaints seem related to the visibility of pollution.¹³⁶ Visibility is not an adequate measure of the dangerousness of pollution. As concerns particulate matter, the relation has been established between the point where difficulty of breathing becomes apparent and concern with air pollution.¹³⁷ In fact, some air pollution control programs are based upon individual awareness of noxious odors.¹³⁸ Reliance on individual interest is extremely foolhardy when individual perception is not an accurate indication of danger.

Of course, an accurate description of the extent and severity of the air pollution problem can be conveyed to the individual by education. An individual need not feel the adverse health effects of air pollution in order to understand those effects may be slowly killing him and become motivated to change the situation. The first difficulty with this view is that because we are biological entities we are more affected by direct physical experience than by information.¹³⁹ To an extent, education can not be the exact equivalent of experience.

Even if the individual were able either to experience directly the harmful effects of pollution or to absorb information so that it became

¹³⁴ *Id.* at 189; When particulate matter exceeded 60 $\mu\text{g}/\text{m}^3$ adverse effect on materials was noted. *Id.*

¹³⁵ *Id.* at 13-14.

¹³⁶ Johnson, *Citizen Complaints in Northeastern Illinois, 1954-1964*, 18 J.A.P.C.A. 399, 400 (1968).

¹³⁷ DeGroot, Loring, Rihm, Samuels & Winkelstein, *People and Air Pollution: A Study of Attitudes in Buffalo, New York*, 16 J.A.P.C.A. 245, 246 (1966).

¹³⁸ T. STUMPH & R. DUPREY, *TRENDS IN AIR POLLUTION REGULATIONS* (1969) 207 (Dept. of H.E.W.); Stumph and Duprey suggest it might be good policy and good public relations for managers to concentrate on the elimination of visual plumes from smoke stacks. *Id.* at 11.

¹³⁹ Teller, *The Social Adequacy of Technology*, 19 J.A.P.C.A. 839, 840 (1969).

the equivalent of experience, he still might not adequately perceive the situation. The interest concept of the individual upon which social change relies is based upon a psychological entity whose own prejudices may warp his perception of reality. In fact, the individual is less likely to perceive of air pollution as a problem in his own neighborhood than in the surrounding communities even though pollution may be homogeneous throughout the area.¹⁴⁰ This differential perception appears to be a major way of coping with air pollution.¹⁴¹ Perhaps 35 percent of the population deny the existence of an air pollution problem for psychological reasons.¹⁴² Even with education, individual perception may not be an accurate perception of the extent of the problem and therefore an unreliable concept upon which to base a theory of social change.

Even if the individual were to accurately perceive the problem, he might not be motivated to seek with other individuals, through the political process, a change in the situation. Perception of dangers and risks still requires a value judgment by the individual on the importance of the problem before he is motivated to act. Individual resources such as time, energy, and attention are limited and must be allocated by the individual within those areas he feels to be most important. Even if the individual felt that most time and attention should be devoted to public questions, air pollution does not appear to have first priority. Studies have shown that unemployment, juvenile delinquency, car accidents, alcoholism and lack of educational facilities all were seen as more pressing questions than air pollution.¹⁴³

Even if the individual judged air pollution to be a very important problem, his decision on a course of action would involve a consideration of other values. In a study in Charleston, West Virginia area, individuals interviewed agreed that something should be done about air pollution. When asked if they would accept costs of one dollar and five dollars per person, the majority agreed they would but there was less agreement about the five dollar level.¹⁴⁴ There was even less agreement when the individual was asked if he would accept an increase in unemployment in the community.¹⁴⁵ The consideration of other values will take place against a cultural background that gives great value to the concept of economic progress.

¹⁴⁰ Rankin, *Air Pollution Control and Public Apathy*, 19 J.A.P.C.A. 565 (1969).

¹⁴¹ *Id.*

¹⁴² DeGroot, *supra* note 127 at 680.

¹⁴³ Crowe, *Toward a "Definitional Model" of Public Perception of Air Pollution*, 18 J.A.P.C.A. 154 (1968); DeGroot, Loring, et. al., *supra* note 137, at 215; but see *infra*, note 151.

¹⁴⁴ Rankin, *supra* note 140, at 567.

¹⁴⁵ *Id.* at 568.

Even if the individual judged air pollution to be an important problem and its solution to outweigh other values, the individual still might not be motivated to act. If the individual was not optimistic about the possibility of a solution¹⁴⁶ and felt that little could be done, he might not take any action.¹⁴⁷ It does seem that the individual's propensity to create social change is limited and to the extent that it relies upon the individual's perception and action as a motivating factor in interest group formation, the concept of interest is undermined.

It could be argued that only a small number of individuals need be motivated in order to form interest alliances and create social change. To a certain extent, the law holds this view of the individual. The call for increased use of private rights in air pollution control¹⁴⁸ is both a recognition of the limitations of the interest group solution and a recognition of the ability of a small number of aroused individuals to create social change. To a certain extent, the laws that created state air pollution control boards seem to recognize this; for, while they provide no new private remedies, some of the laws explicitly state that existing private remedies are to be preserved.¹⁴⁹ Of course, these private remedies are limited as long as they operate against a hostile background of relations¹⁵⁰ unless interest group activity is able to change these relations.

Recent events may make many of the qualifications on the role of the individual in social change outmoded. It could be argued that the dramatic increase in newspaper, radio, and television coverage of pollution problems has created such an awareness of the extent of the problem, has convinced individuals that action must be taken and has motivated them to take whatever action is necessary to effect a change in the direction of public policy. A recent poll does indicate that people now perceive pollution as the second most serious domestic problem.¹⁵¹ Despite limitations on the individual's ability to perceive and act in relation to the air pollution problem, the sheer

¹⁴⁶ *Id.*

¹⁴⁷ DeGroot, *supra* note 127, at 680; Johnson, *supra* note 136, at 401.

¹⁴⁸ Esposito, *Air and Water Pollution: What to do While Waiting for Washington*, 5 HARV. CIVIL RIGHTS-CIVIL LIBERTIES L. REV. 32 (1970). Juergensmeyer, *Air Pollution Control in Indiana in 1968: A Comment*, 2 VAL. U. L. REV. 296 (1968); Juergensmeyer, *Control of Air Pollution Through the Assertion of Private Rights*, 1967 DUKE L. J. 1126; Comment, *The Role of Private Nuisance Law in the Control of Air Pollution*, 10 ARIZ. L. REV. 107 (1968).

¹⁴⁹ ARK. STAT. ANN. §§ 82-1941, 82-1943 (no actionable rights created) (Supp. 1969); LA. REV. STAT. § 40.2216 (Supp. 1965); N. H. REV. STAT. ANN. § 125.87 (Supp. 1970); N. Y. PUB. HEALTH LAWS § 1294 (McKinney Supp. 1970-71); ORE. REV. STAT. § 449(1) (1969); 35 PENN. STAT. § 4012.1 (Supp. 1970); TENN. CODE ANN. § 53-3421 (Supp. 1970); TEX. REV. CIV. STAT. § 4477-5 § 1.06 (Supp. 1970-71); WASH. REV. CODE § 70.94.370(H) (Supp. 1970); W. VA. CODE ANN. § 16-20-3 (1961); WYO. STAT. ANN. § 35-500 (Supp. 1969).

¹⁵⁰ *Supra* text at note 24-36.

¹⁵¹ The Boston Globe, May 8, 1970, at 8, col. 1 (Gallup Poll).

quantity of publicity has created a qualitative change. People who feel that social action can stimulate technical solutions will no longer be passive.¹⁵²

However, this optimistic view of recent events may only be an example of a faith in the concept of interest and the role it posits for individual interest in the creation of social change. If, indeed, the individual and his perceptions are not the meaningful elements in changing social conditions, then public education may do little more than raise the level of anxiety.¹⁵³ Opinion is used by those who hold it in a "selfish" way. The idea of changing deplorable conditions serves a psychological rather than a social function; for, it reinforces the individual's moral assumption and in our society that is the belief that problems can be solved if only the individual holds the proper motives.¹⁵⁴ It is easy to see how the discussion of a public issue, like pollution, in newspapers, magazines, and on television can become a branch of the mass entertainment media.¹⁵⁵ Such a self-gratifying frenzy normally can operate for a short period only after which people emerge a little more disillusioned but no better able to solve the problems that face them.¹⁵⁶

Not only does the role of individual interest in the process of social change seem to be faulty but also the interest group process seems incapable of solving problems arising in our complex and technological society. Air pollution is a complex problem which interrelates all aspects of modern society and is, therefore, indivisible.¹⁵⁷ Problems in modern society do have a new and different character which seems to antiquate interest as a concept for solving problems. In the past we have determined the cost-benefit balances of technological development by a process of trial and error.¹⁵⁸ In this context, reliance on the concept of interest was not obviously faulty because in time the trial and error process would balance costs and risks. If in the process new interests were created, it did little harm to see them as the motivating and causal elements in social change.

Technology is developing more rapidly and the time from the discovery of new technology to its integration into the social system has diminished dramatically.¹⁵⁹ The difficulty is that we continue to try to solve

¹⁵² Auerbach & Flieger, *The Importance of Public Education in Air Pollution Control*, 17 J.A.P.C.A. 102, 103 (1967).

¹⁵³ DeGroot, *supra* note 127, at 680.

¹⁵⁴ BANFIELD, *supra* note 123, at 1240.

¹⁵⁵ *Id.* at 1241.

¹⁵⁶ This Ecology Craze, *THE NEW REPUBLIC*, Mar. 7, 1970, at 8-9.

¹⁵⁷ Crocker, *Some Economics of Air Pollution Control*, 8 NAT. RES. J. 236, 238 (1968); Kneese, *Pollution and a Better Environment*, 10 ARIZ. L. REV. 10, 11 (1968).

¹⁵⁸ Starr, *Social Benefit v. Technological Risks*, in *Department of Health, Education, and Welfare, PROCEEDINGS OF SYMPOSIUM ON HUMAN ECOLOGY* 24 (1968).

¹⁵⁹ *Id.*

new problems with old methods.¹⁶⁰ One of the reasons for this is that we have built our institutions around the concept of interest and fail to realize that the conflict of interest will not, if it ever could, serve to solve our problems.

Because of the dramatic increase in the speed of change, current problems tend to be continuous in nature. They require a constant balancing of the costs and benefits of both present and future policies.¹⁶¹ In this framework, new alternatives must continually be presented to individuals and public opinion aroused to solve them, particularly when the solution requires the displacement of existing configurations of interests.

Since society is organized around a view of the individual and a view of interests as the meaningful elements in social change, the opinion of experts is not used as the basis of action.¹⁶² If interests are to motivate social change, they must be aroused and this means that new interests powerful enough to challenge entrenched ones are not developed until the problem has reached a point of crisis.¹⁶³ The indivisible nature of and the speed with which new problems develop and change makes the approach of interest unacceptable and dangerous.

The inadequacy of the interest approach is increased by the behavior of interest groups. Not only are interests entrenched but also they are given special importance in the way decisions are made. They tend to see the defense of their position by almost any means as serving a wider interest. If public policy is to be determined by interest conflict and resolution, the public interest is served by a vigorous defense of one's particular interest even if it involves propaganda, misrepresentation and manipulation of public opinion.¹⁶⁴

Interests have the power and inclination to serve as veto groups rather than innovative ones.¹⁶⁵ This prevents the rapid response to problems that is now necessary. Policies determined by the interplay of interests tend not to be speculative; for, the determined policies are those that satisfy the

¹⁶⁰ Teller, *supra* note 139, at 839.

¹⁶¹ DeGroot, *supra* note 127, at 679.

¹⁶² Rumford, *Politics of Pollution*, 16 J.A.P.C.A. 359, 360 (1966).

¹⁶³ *Id.*

¹⁶⁴ For an example of such activity see, HACKER, *PRESSURE POLITICS IN PENNSYLVANIA: THE TRUCKERS VS. THE RAILROADS, IN THE USES OF POWER: SEVEN CASES IN AMERICAN POLITICS* (A. Westin ed. 1962); It is interesting that the *Noer Motor Freight v. Eastern Railroad Presidents Conference* case upon which Hacker's study was based was used by the Automobile Manufacturers to sanction their combination to prevent the development of emission control devices for automobiles. Crowley & Verleger, *Air Pollution, Regulation and Anti-Trust Laws*, 2. NAT. RES. L. 131, 141 (1969).

¹⁶⁵ BANFIELD, *supra* note 123, at 1237.

most powerful interest when the most beneficial course might be to follow weaker interests or, more importantly, interests not yet in existence.¹⁶⁶ As society and technology change more rapidly, interest tends to become the fossilized configuration of relationships long past.¹⁶⁷ The concept of interest fails as a meaningful foundation of legal institutions and it fails as explaining the motivation and direction of social change.

Conclusion

The failure of the concept of interest as evidenced by an examination of state air pollution control boards has several implications for lawyers. Lawyers operate in a society whose institutions and whose theories of social change are built around the concept of interest. In this context, it is reasonable for lawyers to perceive their role as that of representing interests.

However, lawyers are also the creators and conservators of values. In this role the lawyer must be a judge as well as an advocate. He must have the habit of asking hard questions about the institutions and interests that he serves. He must have the habit of making value judgments about them.¹⁶⁸ It is well that the lawyer remember that there may be situations, particularly where economic interests are involved, where the representation of interests may not lead to an adequate or just result.

An understanding that all legal institutions can not be created around the concept of interest nor all problems solved by the representation of existing interests may enable the lawyer to step back and examine the institutions of his society. This ability to see beyond interests and to appraise their effect may help the lawyer to be a more effective planner. As conditions change more rapidly, the planning function of the lawyer becomes more important.¹⁶⁹

With air pollution as with many other problems the expertise and planning ability of the lawyer are particularly needed. It is the lawyer who has the ability to plan and create legal institutions and procedures to meet these problems.

In planning these institutions, the lawyer may need to look beyond interests that are existing and attempt to create institutions that implement broader values. This is a difficult task and one fraught with some danger.

¹⁶⁶ Reich, *supra* note 122.

¹⁶⁷ *Supra* text of this article at note 122-23.

¹⁶⁸ Levy, *The Lawyer as Judge: Brandeis' View of the Legal Profession*, 22 ORLA. L. REV. 374, 387 (1969).

¹⁶⁹ Reich, *supra* note 122, at 1229.

Value often appears to be a subjective and elusive thing.¹⁷⁰ Yet lawyers must attempt the task as a positive response to cries for the destruction of institutions that create order and allow change. The lawyer must look beyond interests and face the dilemmas, paradoxes, and problems that confront us all in a rapidly changing world.

¹⁷⁰ For a discussion of the problem of value in society, see, E. BECKER, *THE STRUCTURE OF EVIL* (1968); E. BECKER, *ANGEL IN ARMOR* (1969); Value in Law is neither subjective nor metaphysical but objective in the cultural relations of society. Duncan, *Natural Law as Corporate Purpose*, 13 OKLA. L. REV. 274, 287 (1960).

Value or purpose is returning not only in the law and social sciences but also in the life and physical sciences. See, L. FULLER, *THE MORALITY OF LAW* (REV. ED. 1969); A. KOESTLER, *THE GHOST IN THE MACHINE* (1968); L. VON BERTALANFFY, *ROBERTS, MEN AND MINDS* (1967); M. CAPEK, *THE PHILOSOPHICAL IMPACT OF CONTEMPORARY PHYSICS* (1961).