An Evaluation Of Pollution Control Legislation In India

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I. INTRODUCTION *

When India and other nations convened the U.N. Conference at Stockholm in June, 1972, it marked a new epoch in international concern for the environment. The delegates returned to their respective countries with the common purpose of establishing policies to protect natural resources. They hoped to enact laws to preserve the quality of air, water and soil resources;¹ national efforts would be assisted by the establishment of international information services.² In the heady atmosphere that prevailed at Stockholm, the goal of a general improvement in the global environment did not seem beyond reach.³

India was among those nations responding to the call for a cleaner environment. However, India's environment has improved very slowly since 1972. This can be ascribed largely to conditions that have affected many developing countries, such as population growth, the increasing *per capita* demand for goods and services, and the migration from depressed rural areas to overcrowded metropolitan centers.⁴ As a result of these economic and demographic pressures, India's statutory pollution control framework has gone largely unimplemented.

In this article, we will point out several weaknesses in India's statutory scheme for environmental protection. Notwithstanding these weaknesses, India's bureaucratic structure for pollution control is not woefully inadequate. The main problem lies in the

4. U.N.E.P., The State of the Environment, 26-50 (1972-82).

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^{1.} U.N. Conference on the Human Environment, 27 U.N. GAOR Supp. 30 (A/8730, A/Res/2997, 1972).

^{2.} Id.

^{3.} Smith, Stockholm, Summer of '72: An Affair to Remember?," A.B.A.J., Nov. 1972, at 1194.

non-enforcement of existing laws, for reasons we will describe. Leadership and funding, coupled with certain changes in structure and enforcement, could enable India to approach the goals set forth in Stockholm fourteen years ago.

II. BACKGROUND

India, like most less-developed countries, has a primitive and largely ineffective pollution control system to deal with its enormous pollution problems.⁵ Scarce investment capital is typically spent on industrial plants that can be built quickly and cheaply, with scant attention to pollution control standards or equipment. India's pollution control laws are relatively weak, and their enforcement is haphazard.

Even a tragedy like the devastating chemical explosion in December, 1984, at the Union Carbide insecticide plant in Bhopal, which resulted in over 2,000 deaths and countless permanent injuries, is likely to be treated as an isolated event, warranting the abandonment of the offending chemical, the punishment of several supposedly negligent personnel, and a flood of litigation against Union Carbide and its Indian subsidiary. It is not likely to result either in the establishment of an OSHA-type watchdog agency in India or the passage of a tough law aimed at controlling the use and disposal of toxic substances.⁶ Determining what re-

5. This problem was recently reiterated by a spokesman for India's Planning Commission, who stated that:

A country like India, with a large proportion of its population living below the poverty line, cannot afford to compromise its basic objective of [economic] growth. . . . Thus environmental solutions adopted in industrialized countries cannot be adopted uncritically in the Indian situation. Solutions which seek to reconcile the imperatives of economic advancement with those of environmental improvement have to be evolved.

Environmental Planning in the Indian Power Programme, in Report by Chandran on Environment and Development in Asia and the Pacific, 6 UNITED NATIONS ENVIRONMENT PRO-GRAMME REPORTS AND PROCEEDINGS 375 (1982). See also F. Bauman, Draft Environmental Report on India (March 1980) (Library of Congress, Division of Science and Technology, the U.S. Agency for International Development) [hereinafter cited as DRAFT ENVIRONMEN-TAL REPORT].

6. This conclusion is supported by the ineffectiveness of earlier legislation. For example, India's Insecticides Act of 1968 supposedly regulates all aspects of the use of pesticides. The Tiwari Committee, a blue ribbon panel appointed by the government in 1980, called this law "totally inadequate" in another context. See The Insecticides Act, 1968 (Act No. 46 of 1968), reprinted in S.JAIN and V.JAIN, ENVIRONMENTAL LAWS IN INDIA 155-161 (1984) [hereinafter cited as JAIN]. The very weak and general Factories Act of 1948 supposedly regulates factory conditions in the interest of workers' health and safety, but has not been used to impose particular standards for the use, storage or disposal of toxic chemicals. The Factories Act, 1948, reprinted in JAIN at 155.

sponses might be fashioned requires some understanding of the sources of legal and political power in the Indian system.

A. Structure of the Government

Political power in India's federal system of government is divided between the national, or Central, government and the 22 state governments. Certain powers are vested exclusively in the Central government. These include control over defense, foreign affairs, interstate commerce (including rivers), and the atmosphere.⁷ Concurrent powers, shared by the Central and state governments, cover such matters as economic and social planning and labor relations.⁸ Powers reserved to the states include most environmental and natural resource subjects: agriculture, forestry, irrigation, surface and ground water, public health and sanitation.⁹ However, the Indian Constitution empowers the Central government to enact preemptive legislation on any subject of extraordinary national importance.

Like the United States, India's jurisprudence derives from a written constitution; from codified law based, in part, on English antecedents; and from the English common law.¹⁰ Article 48(A) of the Indian Constitution requires all states to "endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country." Article 51(A)(g) makes it a fundamental duty of every citizen of India "to protect and improve the natural environment, including forests, lakes, rivers and wildlife. . . ."¹¹

Each state has its own courts, including a High Court. The Central government has a Supreme Court which may, at its discretion, hear appeals from the High Courts of the various states.

10. See Nariman, The legal system and the legal profession in India, 1985 N.Z.L.J. 8.

11. In addition, Article 51 (A)(g) directs that every citizen "shall. . .have compassion for living creatures." These duties—to protect the environment and to have compassion for living things—were added as Directive Principles of State Policy to Part IV of the Constitution of 1976. JAIN, *supra* note 6, at 4. These principles are quite clearly mere hortatory statements. They have not, to date, provided the basis for any lawsuits by citizens against states or the Central government. It is doubtful whether these Directive Principles would ever be enforceable in Indian courts. However, for a more idealistic view of the impact of the Directive Principles of the Indian Constitution, *see* Bhagwati, *Judicial Activism and Public Interest Litigation*, 23 COLUM. J. TRANSNAT'L L. 561, 568 (1985) (Mr. Bhagwati is the Chief Justice of India.)

^{7.} See INDIA CONST. art. 246.

^{8.} Id.

^{9.} Id.

The court system is not quite as orderly as are courts in the United Kingdom or the United States, and there is considerably less reliance on precedent.¹² Court opinions are delivered by a single judge and vary greatly in content and tone. Some may be highly polemical¹³ while others may focus exclusively on procedural requirements of jurisdiction and standing.¹⁴

B. Early Responses to Pollution

Although various pollution cases have been argued in the High Courts of several states, the Supreme Court of India has very rarely heard such cases.¹⁵ The environment enjoys no special protection from the Indian judiciary; and every plaintiff must gather evidence without the aid of discovery procedures or freedom of information. Indeed, a number of environmental cases have been dismissed simply for failing to meet jurisdictional or "standing" requirements,¹⁶ or because they are better suited to legislative action than to judicial review.¹⁷

The seriousness of India's pollution problems began to be acknowledged over two decades ago. A government commission surveyed the environment in 1963, but no action was taken on the commission's recommendation that legislation be enacted to combat water and air pollution.¹⁸ Following the U.N. Conference

12. See Bhagwati, supra note 11, at 570. Chief Justice Bhagwati notes that the move away from legal principles that were established in the context of Anglo-American common law such as stare decisis was necessitated by the socio-economic conditions in India:

Anglo-American law... cannot possibly meet the challenge raised by these new concerns for the social rights and collective claims of the underpriviledged. What we therefore need to do is fashion new strategies—in fact, evolve a new jurisprudence and find a new policy of collectivity as a backdrop to our efforts.

Id.

13. See, e.g., Municipal Council, Ratlam v. Vardhichand, 1980 A.I.R. 1622 (S.C.).

14. See, e.g., Society for Protection of Silent Valley v. Union of India and others (O.P. Nos. 2949 and 3025 of 1979) abstracted in Prasad, Silent Valley Case: An Ecological Assessment in LAW AND ENVIRONMENT, 133 (P. Leelakrishnan, ed. 1984) [hereinafter cited as LAW AND ENVIRONMENT].

15. The Ratlam case, supra note 13, is one of only two environmental cases to be decided by the Indian Supreme Court. The other case, R.L. and E. Kendra, Dehradun v. State of Uttar Prdesh 1985 A.I.R. 652 (S.C.), involved stone quarrying (analagous to strip mining) in a fragile hill reigon.

16. In India the courts have construed standing requirements rather strictly, especially with regard to environmental litigation. See Mohan, Class Action and Associational Standing, in LAW AND ENVIRONMENT, supra note 14, at 115.

17. See Society for Protection of Silent Valley v. Union of India and others, supra note 14.

18. See Resolution of the Central Council of Local Self-Government. Sept. 7, 1963.

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at Stockholm, India enacted the Water (Prevention and Control of Pollution) Act of 1974 ("Water Act").¹⁹ The Water Act established a Central Water Board, appointed by the President,²⁰ to operate under the executive branch of the Central government. Each state was called upon to set up counterpart Water Pollution Control Boards.²¹ The functions of the Central Water Board include advising the Central government on water matters as well as coordinating the activities of the State Boards.²² The State Boards are empowered to promulgate industrial effluent standards and to inspect sewage and effluent treatment plants.²³ Municipal (human and animal) wastes, which are responsible for as much as two-thirds of India's water pollution, are not covered by the Water Act.

Prevention and control of water pollution is achieved through a permit or "consent administration" procedure. Discharge of effluents is permitted only after the consent of the State Board has been obtained, and is subject to any conditions specified. Any person who fails to comply with a directive of the State Board may be punished under the Act's penal provisions. Courts cannot, however, entertain a suit under this Act unless the suit is brought by, or with the sanction of, the State Board.

Seven years after the enactment of the Water Act, the Central government finally enacted a corresponding Air (Prevention and Control of Pollution) Act of 1981 ("Air Act").²⁴ The Air Act is modeled after the Water Act, with elaborate provisions prescribing the powers and functions of the Central and State Air Boards.

19. Act No. 6 of 1974. For the text, see 1974 A.I.R. 59 (Acts). Parliament enacted this law under Article 252(1) of the Constitution of India. JAIN, supra note 6, at 9.

20. The President of India invariably acts on the advice of the Prime Minister.

21. Under India's Constitution, water is a subject for state control. National legislation in such areas may be enacted only at the behest of two or more states. In the case of the Water Act, states asked the central government to pass appropriate legislation. Water Act, *supra* note 19.

Air pollution, by contrast, is contitutionally a matter for national control. Accordingly, the Air (Prevention and Control of Pollution) Act, discussed *infra* note 24 and accompanying text, is binding upon all the states. Air (Prevention and Control of Pollution) Act, 1981 A.I.R. 196 (Acts) [hereinafter cited as the Air Act]. To date, eighteen of India's twenty-two states have established Water Pollution Control Boards. All state Water Boards also function as Air Pollution Control Boards according to the terms of the Air Act. Air Act § 4. In a state where there is no Water Board, the Air Act requires that a state Air Pollution Board be established. Air Act § 5.

22. Water Act, § 16(2), supra note 19.

23. Water Act, § 17(1).

24. See Act No. 14 of 1981, supra note 21.

(In practice, the Central and all State Air Boards have merged with the Water Boards into a single Pollution Control Board at the Central and State levels.) The Act specifically empowers state governments to designate air pollution areas and to prescribe the type of fuel to be used in these designated areas. According to the Act, no person may operate certain types of industries namely, those involving production of asbestos, cement, fertilizer, and petroleum products—without the consent of the State Board.²⁵ The Air Act apparently adopts an industry-wide "best available technology" requirement.²⁶ As in the Water Act, courts may hear complaints under the Act only at the instigation of, or with the sanction of, the State Board.

The Department of Environment ("Department") was established by Presidential Notification ²⁷ on November 1, 1980 to plan, promote and coordinate environmental programs for the Central government. Executive responsibilities for implementing both the Air and Water Acts are carried out by the Central Pollution Control Board, which is now a unit of the Department.²⁸ The Department has introduced several environmental protection programs of varied nature and scope. But it has not begun to build up a pollution monitoring network or an environmental impact assessment process. The Department's modest accomplishments thus far are further evidence that the importance of environmental protection has yet to penetrate deeply into the government.

III. THE SIGNIFICANCE AND PROSPECTIVE IMPACT OF INDIA'S POLLUTION CONTROL LAWS

From the text of the Water and Air Acts, it would seem that India has a viable regulatory strategy to tackle both water pollution and air pollution problems. But the Acts are neither readily enforceable nor effective, and the elaborate administrative machinery they set up are poorly staffed and do little more than rou-

^{25.} Air Act § 21.

^{26.} By contrast, the Water Act apparently adopts an *ad hoc* requirement, based more or less on the best practicable means to control pollution in a particular situation. See *infra* notes 71-75 and accompanying text.

^{27.} See JAIN, supra note 6, at 610. Presidential Notification is the equivalent of an Executive Order in the United States.

^{28.} *Id.* at 602, 603. Sections 3 and 4 of the Water and Air Acts provide for the constitution of the Central and State Boards.

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tine paper work. The Acts are deficient in at least five areas: (A) consent administration; (B) the structure of each Pollution Control Board; (C) opportunities for public participation; (D) availability of judicial recourse; and (E) setting of standards. Each of these five defects will be discussed below.

A. Consent Administration

Prevention and control of water pollution is done through a "consent" or permit procedure. Under the Water Act consent has to be obtained from the State Pollution Control Board for a new or altered drain outlet or for a new discharge of sewer effluents into a stream.²⁹ Similar provisions are incorporated under the Air Act for new stationary sources specified in the schedule of the Air Act. Under the two Acts, the Board may vary or alter these conditions at any time, and may also revoke its consent.³⁰ These ostensibly broad powers have never been invoked, and bear little relation to the actual functioning of the Board.³¹

If, for example, an industry violates any conditions of the permit, the Board technically can revoke its consent. But this simply gives rise to a new application for consent, accompanied, perhaps, by the applicant's appeal for political intervention on its behalf in the interests of employment and economic development. In the meantime, the polluter is likely to continue its polluting activities in the absence of a permit and in violation of the Board's order and authority. In practical terms, the Board's only recourse is to institute a prosecution, the eventual outcome of which is likely to be the imposition of a modest fine. Such prosecutions are rarely effective against giant industries, their resourceful lawyers, and often amenable judges. Prosecution is also a time-consuming process and thus a poor instrument for pollution control.

Furthermore, there is a loophole in the Water Act. Under § 25(7) a consent shall be deemed to have been given unconditionally on the expiration of a period of four months after initiating an application, unless the consent is actually given or refused

29. Sections 24 and 25 of the Water Act are the main provisions in this regard. Section 24 imposes a total prohibition on certain effluent discharges, while section 25 permits certain effluent discharge within specified limits. Section 21 is the corresponding provision in the Air Act.

30. See Air Act § 37 and Water Act § 41.

31. This conclusion was confirmed in an interview with M. Parabrahman, Director of Environmental Education, Department of Environment (March 8, 1985).

before that date.³² In practice, if the Board does not dispose of all consent applications within this prescribed time, the effect is an unconditional consent for those applications not yet considered.³³ In view of the inefficient staffing and slow functioning of the Boards,³⁴ this provision could validate otherwise illegal polluting activities.

B. Constitution of the Boards

The Water Act and the Air Act contain elaborate provisions concerning the constitution of the Central and State Boards.³⁵ A close analysis of the structure, powers and functions of these statutory agencies reveal that they are ill-suited to ensure the adoption of adequate pollution control measures. Of the seven to seventeen members of each Board, including the Central Board, only two, the Chairman and Secretary, need have any expertise in environmental matters.³⁶ There are no criteria prescribing qualifications for other nominees.

The government may nominate five government officials. In practice, most of these government-appointed officials are agency heads who are already overburdened with other assignments.³⁷

32. By contrast, under the U.K. Control of Pollution Act, 1974 § 34(2), if an application is neither refused nor granted within a period of three months, it is deemed to have been *refused*.

33. According to the Member Secretary of the Kerala State Pollution Control Board, the Board often cannot keep pace with the permit applications, and numerous permits have been issued without staff reviews, under the "deemed consent" provision discussed herein. Interview with Venugopalan Nair (December 1, 1983). The authors have found no instances where such "deemed consent" orders were subsequently challenged or revoked by a State Board.

34. See Water Act § 3 and § 4. It is not surprising that the Boards are often shorthanded: only the Secretary serves full-time, while the Chairman may serve either full- or part-time, at the State's discretion. See Chandrasekharan, Structure and Functioning of Environmental Protection Agency: A Fresh Look, in LAW AND ENVIRONMENT, supra note 14, at 179 n.6.

35. See Water Act § 3(2) and § 4(2); Air Act § 4(2). In practice most State Boards and the Central Board have between 15 and 17 members, more than half of whom are government officials or representatives of government controlled companies. Interview with M. Parabrahman, supra note 31. See also Chandrasekharan, supra note 34, at 180-82.

36. One academic lawyer has suggested that all Board members should be experts in environmental protection. Chandrasekharan, *supra* note 34, at 183.

37. For example, the government of the State of Kerala regularly appoints the following officials to the board: (1) Director of Health Services; (2) Director of Industries and Commerce; (3) Director of Agriculture; (4) Director of Fisheries; (5) Chief Inspector of Factories and Boilers. When any of these officials are replaced, the new office-holder automatically succeeds to Board membership. When a Board member cannot attend, he or she typically sends a substitute—usually a subordinate within the member's agency.

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This hampers the efficiency and continuity of the Board. The inefficiency of the Boards is exacerbated by the fact that all erstwhile State Water Boards now function also as Air Boards.³⁸

The State Boards have never been adequately staffed, and lack the capability or resources to perform the various functions prescribed by the Water Act, let alone the Air Act. The Kerala State Pollution Control Board (KSPCB), one of India's most active State Boards, has a professional staff of twelve, most of whom are concerned with record-keeping.³⁹ None function as monitors, inspectors or legal counsel. The Board's annual budget is barely enough to cover staff salaries and modest travel expenses for the Chairman and Secretary.⁴⁰

The major polluters in India today are governmental plants and facilities rather than private individuals or corporations. Huge segments of Indian industry are in the public sector, including iron and steel, coal, oil and natural gas, agrichemicals and most power plants. A Board composed of government nominees may be inclined to look benignly at the pollution consequences of public sector operations.

There is, in short, excessive governmental control over the Board. The members are nominated by government, and serve at the pleasure of the government.⁴¹ The Board itself may be superseded by the government.⁴² Both Acts empower the government to give directions to the Boards.⁴³ Such directions are declared to be binding on the Board. This government hegemony, while fairly common in India, has been broadly criticized by academics and others at various national seminars on pollution problems.⁴⁴

The Central Board functions as an advisory body within the Department of Environment. It may institute prosecutions, but has no enforcement powers. To be effective, the Central Board and the State Boards must have the power to impose penalties on non-complying industries, and, if necessary, to order an industry

38. The Kerala Water Board is now named the "Kerala State Pollution Control Board" and oversees both water and air pollution control.

39. Interview with Venugopalan Nair, supra note 33.

40. The authority to set salaries is granted under § 12(3) of the Water Act. For details on salaries, see JAIN, supra note 6, at 293-295.

41. Any member of the Board may be removed from office by the government under \$ 5(3) of the Water Act. The Air Act has no such provision.

42. Water Act § 61 and § 62; Air Act § 47 and § 48.

44. See, e.g., Chandrasekharan, supra note 34, at 177-183.

^{43.} Water Act § 18; Air Act § 18.

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to shut down. The Boards should function as independent regulatory agencies⁴⁵ and should collaborate with industry to develop the best practicable means of pollution control.⁴⁶

C. Public Participation

Pollution control decision-making in India may be broadly classified into three stages, viz. the inquiry stage; the permit-granting stage; and the stage of appeal from the State boards' administrative rulings and permit conditions. Public participation can be extremely valuable at each of these three stages. Since the public's interests are deeply affected by pollution of air and water, one may reasonably expect that the public should be given opportunities to be heard at all stages of pollution control decisions. Section 25(3) of the Water Act empowers the State Board to "make such inquiry as it deems fit in respect of the application for consent and in making such inquiry it may follow such procedure as may be prescribed." The Air Act contains a similar provision.⁴⁷ In practice, the Board merely dispatches an officer to visit the premises of the permit applicant to verify information given by the applicant. This officer has no mandate to consult with members of the general public.⁴⁸

The two laws, in fact, do not give the public the right to participate in the Board's decisions at any of these three critical stages.⁴⁹ Nor do the rules framed by the State Boards refer to any public inquiry or other sort of public participation.⁵⁰ Moreover, the permit applications made by industries are never published by the Board.⁵¹ Even after a permit is granted, only persons "interested in" or "affected by" a Board's permit may scrutinize the contents

45. The State Boards should be subject to the authority of the Central Board, and the Central Board should be subject to policy direction from the Department of Environment.

46. See, Chandrasekharan, supra note 34 at 183.

47. Air Act § 21(3).

48. Interview with M. Parabrahman, supra note 31.

49. There is, in general, no tradition of public participation in government decisionmaking in India. See generally Leelakrishnan, Public Participation in Environmental Decision Making in LAW AND ENVIRONMENT, supra, note 14, at 187.

50. See, e.g., Water (Prevention and Control of Madhya Pradesh Pollution) Rules, 1975, reprinted in JAIN, supra note 6, at 290-299.

51. Secrecy about industrial emissions and effluents also prevailed in the United Kingdom prior to the Control of Pollution Act of 1974. See ROYAL COMMISSION ON ENVIRON-MENTAL POLLUTION, POLLUTION CONTROL PROGRESS AND PROBLEMS, at 6 (Fourth Report, Cmnd. 5780) (Dec. 1974). of any such permit.⁵² Anyone else must obtain exceptional permission from the Board. Such permission is normally denied to members of the general public.⁵³ The public is thus left completely in the dark as to the particulars of the pollutants discharged into water or air, and the polluters discharging them.

In any effective pollution control program in a developing country, the interests of industry tend to weigh more heavily than in developed countries. But there is no need for the interests of industry to supplant the public's interest in a clean and healthy environment. India need not sacrifice public participation to safeguard industry. Industry is amply protected under the consent administration (permit) procedure prescribed by India's air and water laws. Both government, which is often the polluter, and private industry are well represented on the permit-granting Pollution Control Boards.⁵⁴ By contrast, the Boards generally do not include public interest advocates.⁵⁵ Thus, the public interest is represented only on the rare initiative of the Pollution Control Boards.⁵⁶

Although the comparable pollution control laws of the United States and the United Kingdom were consulted by the drafters of India's clean air and clean water legislation,⁵⁷ the public participation elements of those two nations' processes for environmental decision-making were systematically ignored.⁵⁸ In the United

52. Water Act § 25(6) and Air Act § 51(2). The Acts do not define such persons. According to Venugopaplan Nair, *supra*, note 33, the "Boards have interpreted these terms to exclude the general public." *See also* Leelakrishnan, *supra* note 49, at 198 (agreeing with this statement).

53. Author's interview with Professor M.K. Prasad, a director of Kerala Sastra Sahitya Parishad (Kerala People's Science Movement) (Dec. 2, 1983). *See also* Leelakrishnan, *supra* note 49, at 200.

54. See supra note 35.

55. Interview with Venugopalan Nair, supra note 33.

56. In addition, as discussed previously, there are overwhelming hurdles to judicial recourse by private citizens; no public participation exists in the permitting process; and a permit is deemed to have been granted if it is not acted upon within four months after application. See supra notes 30-34, 49-53 and accompanying text.

57. See Evidence Submitted Before the Joint Committee on the Prevention of Water Pollution Bill (1969) (Vols. 1 and 2, Rajya Sabha Secretariat, New Delhi); Re-PORT OF THE JOINT COMMITTEE ON THE AIR (PREVENTION AND CONTROL OF POLLUTION) BILL 1978 (Lok Sabha Secretariat, New Delhi).

58. Leelakrishnan, *supra* note 49, at 187. One may speculate on the reasons for ignoring public participation in the legislative scheme: fear of controversy and avoidable delay, and a belief, on the part of legislators and other government officials, that members of the general public are too unsophisticated to appreciate the nuances of a complex scheme or to adequately consider the country's economic development needs.

States, public participation is an inherent part of the N.E.P.A. environmental impact assessment process, required of all federally supported projects.⁵⁹ In the United Kingdom, environmental groups and associations, as well as concerned industrialists, are consulted by the authorities responsible for developing and imposing "the best practicable means" to control air and water pollution.⁶⁰

Opportunities for public participation in governmental decisions have encouraged the emergence of "public interest" groups in the United States. These groups have helped to identify environmental and wildlife interests deserving protection, produced relevant evidence and arguments suggesting appropriate courses of action, and narrowed the gap between government agencies and the people, thereby serving the administrative process.⁶¹ Protest movements have formed in India only in a few instances of gross environmental despoliation.⁶² These citizens' efforts have at least forced the government to set up inquiry committees.⁶³

D. Obstacles to Judicial Recourse

As already noted, India's pollution control laws confer no effective enforcement powers. Although violators of permit conditions are criminally liable,⁶⁴ the State Boards may impose no fine or other punishment on their own authority. They must initiate a prosecution, with the aid of the state's (public) prosecutors. Such prosecutions are costly, uncertain, and slow, and rarely result in convictions.⁶⁵

59. See National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4347 (1982).

60. See Bates, Public Participation Under Control of Pollution Act, 1974, 1979 J.P.L. 205 at 209, cited in LAW AND ENVIRONMENT, supra note 14, at 193 n.18.

61. Gellhorn, Public Participation in Administrative Proceedings, 81 YALE L.J. 359, 403 (1972).

62. The campaigns against the Zuari Agro Chemicals in Goa, the Orient Paper Mills in Amlai and the Gwalior Rayons in Mavoor are a few occasions where citizens protested and agitated against environmental pollution. For a narrative of a more publicized movement, *see* DRAFT ENVIRONMENTAL REPORT, *supra* note 5, at 65 (discussion of the Chipko movement).

63. The Kerala Sastra Sahitya Parishad, a voluntary agency, spearheaded the campaign against the Gwalior Rayons, Mavoor, in the State of Kerala.

64. See Chandrasekharan Pillai, Criminal Sanctions and Enforcement of Environmental Legislation, in LAW AND ENVIRONMENT, supra note 14, at 201-208.

65. As of 1981, out of the dozens of court cases brought by the Central Water Board, fewer than ten percent of the offenders had actually been penalized. See Chhatrapati Singh, "Legal Policy for the Control of Environmental Pollution", in LAW AND ENVIRON-

The two Acts not only deny the public the right to seek court enforcement of the Acts' provisions; they expressly bar the courts from "taking cognizance of any offence (under these Acts) except on a complaint made by, or with the previous sanction in writing of, the State Board."⁶⁶ Thus, the right of a private citizen to initiate a prosecution is not recognized.⁶⁷ An appeal against the permit order of the Board is available only to the person aggrieved, i.e., the person who was denied a permit.⁶⁸ Although the Board's permit actions may have far-reaching pollution consequences, the public has no recourse. Equity jurisdiction is also unavailable to enforce the Acts. For example, Section 58 of the Water Act specifies that "no injunction shall be granted by any court or other authority in respect of any action taken or to be taken in pursuance of any power conferred by the Act."⁶⁹

Citizens lawsuits are encouraged under the United States Clean Air and Clean Water Acts,⁷⁰ and often succeed in enjoining particular pollution-causing activities. In India, the only avenue for citizen response is public demonstration and other forms of civil agitation.

E. Setting of Standards

To be enforceable in a court of law, air and water quality standards must be set out clearly and explicitly. Since the setting of standards involves broad administrative discretion, the two Acts

MENT, supra note 14, at 6. The penalties prescribed by the Act are *de minimis*—hardly sufficient to induce compliance. *Id.* at 8. Moreover, in the rare instance where a Board may be willing to commit its staff time and resources to prosecute an offender, the normal procedural delays of the Indian Court System will inevitably be encountered. Years may pass before a final decision is reached. *Id.* at 4-7.

66. See Water Act § 49 and Air Act § 43.

67. A civil suit for nuisance can certainly be brought by any individual. But Indian tort law is not well developed; court fees in the amount of 5% of the claimed damages must be posted in advance; there are no contingent fee arrangements; typical tort litigations take ten to fifteen years; and damage awards are very modest.

68. See Water Act § 28 and Air Act § 31.

69. See also Air Act § 46. But the Board apparently may apply to a court to restrain a would-be polluter from causing pollution. See Water Act § 33.

70. Water Quality Improvement Act, Pub. L. No. 91-224, §§ 101-205, 84 Stat. 91 (1970), codified at 33 U.S.C. §§ 1257-1376 (1982)(Clean Water Act); Air Pollution Prevention and Control Act, Pub. L. No. 91-604, 84 Stat. 1676 (1970), codified at 42 U.S.C. §§ 7401-7642 (1982)(Clean Air Act). See, e.g., Clean Air Act, § 304(a)(1) (individual permitted to bring action for injunctive relief against any person violating statutory standards).

might have been expected to lay down elaborate procedural requirements.⁷¹

The State Board is the standard-setting authority under the Water Act: "No person shall knowingly cause or permit any poisonous, noxious or polluting matter determined *in accordance with such standards as may be laid down by the State Board.* . . ."⁷² Sections 24-26 of the Water Act require varying standards for different regions. The actual standard in a particular area depends upon the number and type of industries, their location and the quantity of water in the stream. However, §§ 24-26 of the Water Act offer little guidance to the Board in setting proper standards. The Air Act contains no comparable provisions for varying, ad hoc standards.

In practice, instead of evolving their own standards as envisioned by the Water Act, the Boards tend to follow general standards prescribed by the Indian Standard Institute (ISI).⁷³ But since the ISI standards on industrial effluents are uniform, they serve only to guide the pollution control boards.⁷⁴ Each Board determines what variations from the prescribed standards it should allow in a particular case.⁷⁵

The Acts contain no provision for influencing, much less controlling, industrial siting decisions. Appropriate siting of industries should become a primary tool in protecting areas that are densely populated or evironmentally sensitive. But the Board's consent can be sought only *after* a site is chosen and approved by

71. Compare with the many procedural requirements in the United States Clean Water and Clean Air Acts. See § 307 of the Clean Air Act.

72. Water Act § 24(1)(a) (emphasis added). The establishment of the Department of Environment has not altered the standard-setting responsibility of the state Boards.

73. The ISI has a Water Sectional Committee, consisting of the Chairman of the Central Pollution Control Board and thirty-three other members. A water and effluents sub-committee is also similarly constituted. These committees evolve their standards in consultation with experts and affected parties. See Jain, Water (Prevention and Control of Pollution) Act, 1974: Basic Legal Issues, in LAW AND ENVIRONMENT, supra note 14, at 147.

74. Standards have been developed for industrial effluents, sewage effluents and stream quality. *Id.* According to S.N. Jain, "The industrial effluent standards approved by ISI are based on the following considerations:

- (a) Information available from overseas agencies;
- (b) Techno-economic feasibility of treatment techniques;
- (c) Protection of the environment;
- (d) Likely damage to the receiving media;
- (e) Usage of receiving waters."

Id. at 147-148.

75. M. Parabrahman, supra note 31.

the Ministry for Industry at the state or Central level.⁷⁶ This gives the Board no leverage to influence the site selection process. Given only a choice between granting and denying a permit, institutional and political pressures prevent the Board from denying a permit on grounds of poor siting. Furthermore, there is no requirement in either Act for the preparation of environmental impact assessments in connection with planned new sources of pollution.⁷⁷

Since the application of standards is a quasi-judicial determination, one might expect the Board to give notice to affected parties and to offer them an opportunity to be heard, as is done in the United States and the United Kingdom.⁷⁸ No such procedural due process refinements are offered under India's Air and Water Acts.

The Acts lay down no specific criteria for monitoring or limiting emissions from either stationary or mobile sources. The implementation of the Acts is impaired by the complete absence of monitoring equipment and personnel, and most Boards have taken no initiatives to remedy this situation.⁷⁹

Some of the most blatant defects in India's two pollution control laws have been reviewed above. Yet the Acts are not completely hollow. The Pollution Control Boards could accomplish quite a bit if they resolved to use the Act's limited powers to their fullest extent. Such a resolve can only be brought about through public pressure. Until such pressure is brought to bear, administrative inertia is likely to continue to render these Acts relatively ineffective.

IV. TOWARDS BETTER ENFORCEABILITY

The structure and functions of the existing Boards are quite unsuited to effective pollution control. The Boards need compe-

78. See, e.g., (U.K.) The Control of Pollution Act, 1974, Ch. 40, §§ 36-41; Air Pollution Prevention and Control Act, Pub. L. No. 91-604, § 307, 84 Stat. 1707 (1970); Navigation and Navigable Waters Act, Pub. L. No. 92-500, § 509, 86 Stat. 892 (1972).

79. The Boards could, for example, bring some of these monitoring deficiencies to the attention of the press and help arouse public opinion in favor of remediation. To date, they have not undertaken direct actions of this type.

The Maharashutra State Pollution Control Board has recently acquired sophisticated pollution monitoring equipment, with the support of the Bombay city government. It is unclear whether this development will be followed in other states.

^{76.} Id.

^{77.} See DRAFT ENVIRONMENTAL REPORT, supra note 5, at 148.

tent leaders who are experts in the fields of environmental science, technology, management and law. The Air and Water Acts need to be amended so that the implementing agencies—the Central and State Boards—are adequately staffed by fulltime professionals empowered to set precise permit conditions and enforce compliance with their permits. Permits should be issued only after all interested parties, including the general public, have had an opportunity to be heard. The permits need to specify pollution ceilings and precise control methods or technologies.⁸⁰ Staff and monitoring equipment must be provided by state governments to each Board, enabling it to monitor its permittees.

Each Board must be empowered to issue cease and desist orders when pollution levels exceed the permitted ceilings, or when unusual climate conditions, such as drought, warrant emergency intervention by a Board to protect public health. Failure to comply with such cease and desist orders should be grounds for revocation of a permit, which would have the effect of closing a plant. The Board should also be empowered to impose substantial fines on non-complying permittees. The permittee (or former permittee) should have the burden of appealing to the "Appellate Authority"⁸¹ for the restoration of the permit or remission of the fine.

Since India's existing courts are already overworked, separate tribunals should be created to try claims based on pollution-related offenses. A permanent administrative tribunal should constitute the "Appellate Authority" under the two Acts. Such a tribunal would relieve the workload of courts of general jurisdiction and would make access to justice easier and speedier. It could follow less formal and more flexible procedures than are followed by courts of general jurisdiction. Additionally, it could be vested with powers not only to try cases brought before it, and impose appropriate criminal penalties, but also the *suo moto* power to take up issues on its own initiative. Appeals on questions of both fact and law could be taken to the High Court of each state, and from there to the Supreme Court of India. Such a role for the judiciary would enable courts to assume a meaningful role in environmental protection.

^{80.} Guidance on best available control technologies can be obtained from two government-supported organizations: the Indian Standards Institute (ISI) and the National Environmental Engineering Research Institute (N.E.E.R.I.).

^{81.} Water Act § 28 and Air Act § 31.

V. Alternative Directions

There are, in fact, little-used provisions under the Indian Criminal Code, the Criminal Procedure Code, and the Civil Procedure Code which could be used to abate pollution.⁸² Until recently the power bestowed by § 133 of the Criminal Procedure Code had never been tapped.⁸³ The recent Supreme Court decison in the *Ratlam Municipality Case*⁸⁴ exhibits the scope and potency of this provision. Section 91 of the Civil Procedure Code, as amended in 1976, also facilitiates the institution of civil suits against pollution excesses.⁸⁵

These are only a few of the directions that could be pursued by aggressive "public interest" lawyers and environmental groups to supplement the currently ineffective pollution control regime in India and to show polluters that members of the public are pre-

82. Among the cases decided under these provisions, see Govind Singh V. Santi Swarup, 2 S.C.C. 267 (1979), where the smoke emanating from a bakery chimney was found injurious to the health of nearby residents. Under § 133 of the Code of Criminal Procedure, the sub-divisional Magistrate ordered the bakery closed. The Supreme Court upheld the Magistrate's order. See CODE OF CRIMINAL PROCEDURE (V OF 1898), § 133 [hereinafter cited as INDIA CODE CRIM. PRO.].

The Indian Penal Code (INDIA PEN. CODE) provides for the punishment of anyone who fouls the water of any public spring or reservoir or who makes the atmosphere injurious to health. See INDIA PEN. CODE §§ 277, 278.

The Indian Penal Code §§ 268, 269, 277, 288 and 290 were the basis for prosecuting the directors and managers of a rayon factory for polluting the Chambal River. The Madhya Pradesh High Court held that the directors and other officials could not be prosecuted unless a specific act or omission were attributed to them and there was mens rea on their part. See Babulal v. Chanshyamadas Birla, reprinted in JAIN, supra note 6, at 639.

These Penal Code provisions have remained largely dormant because the small number of practicing public interest lawyers are deterred by the length and expense of trials and the difficulty of establishing criminal liability. They have tended to focus their scarce time and resources on cases that have already attracted wide publicity or have been the subject of a public demonstration.

83. INDIA CODE CRIM. PROC. § 133 empowers the District Magistrate inter alia to issue orders prohibiting noxious effluent discharges into the rivers.

84. 1980 A.I.R. 1622 (S.C.). In this case, the residents of a locality within the limits of Ratlam Municipality, tormented by the stench caused by open drains and public excretion by nearby slum dwellers, demanded that the Magistrate, under § 133 of the INDIA CODE CRIM. PROC., require the municipality to do its duty to protect the interests of the public. The Magistrate gave directions to the Municipality to draft, within six months, a plan for removing the nuisance. On appeal, the Sessions Court reversed the order, but the High Court later approved the order of the Magistrate. On further appeal, the Supreme Court also affirmed the Magistrate's order—nine years after the original suit was instituted.

85. Section 91 of the Code of Civil Procedure of 1908 allowed suits against public nuisances only by or with the sanction of the Advocate General. The 1976 amendment made it easier for the general public to sue "with the leave of the court" in cases of public nuisance and other wrongful acts affecting the public. pared to defend India's air and water resources with all available means.

VI. CONCLUSION

We have attempted to assess the effectiveness of India's pollution control system by examining the defects in the two relevant laws and by indicating that even those portions of the laws that are not defective on their face lose their intended impact because they are not implemented.

It has become axiomatic to say that political will is lacking. If India's Prime Minister determined to make pollution control a high priority, resources could be made available for trained technical staff, monitoring equipment and legal enforcement. The Seventh five year plan⁸⁶ (1985-1990) could reflect these new priorities, and simple legislation could be enacted to empower the Pollution Control Boards to enforce the law and prescribe punishment severe enough to deter evasion and insure compliance.

Ultimately, executive initiative of this kind comes from a perception of public interest and public need. It is much easier to perceive such interest and need when citizens clamor for reform. In the wake of the Bhopal disaster, and in the midst of widespread awareness of environmental damage and calls for more effective control, the time seems ideal for improving India's pollution control system. People have short memories, and calls for environmental improvement tend to be episodic. If action is not taken soon, it may take years—and another disaster—before India's pollution control system is strengthened.

^{86.} Under India's planned economy, the Central Government, with the help of a Planning Commission, lays down plans for national development for the coming five years. See, e.g., Indian States Asked to Set Up Environment Departments, 6 UNITERRA 15 (July/August 1981) (U.N.E.P. report on India's sixth plan).