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Michael S. Baram

Boston University School of Law

David Sandberg

Larry Dufault

Kevin McAllister

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Managing Risks to Health, Safety and Environment by the Use of Alternatives to Regulation†

Michael S. Baram,* David Sandberg,**
Dr. Larry Dufault*** and Kevin McAllister****

The management of risks to health, safety and environment is one of the central concerns of our society. This important function has been largely delegated to federal regulatory agencies which, over the last decade, have tried to respond to the difficult mandate of managing risk under conditions of technical uncertainty by implementing complex regulatory programs. The federal government is now grappling with the design and implementation of various regulatory reforms to lessen economic burdens and to harmonize regulation with marketplace considerations, because of growing opposition to further regulation.

What has been left unpromoted as a reform thus far is the apparent but surprisingly ignored option of using *alternatives to regulation* — the use of alternative measures for the management of risks which do not require substantive rulemaking by federal agencies. This article reviews the potential of three broad classes of alternative measures: *private self-regulation*, embracing industrial standards, licensure and certification;

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* Director, Program on Government Regulation, Franklin Pierce Law Center; B.A., Tufts University School of Engineering; LL.B., Columbia University School of Law.

** Assistant Director, Program on Government Regulation, Franklin Pierce Law Center; B.S., Florida Southern College; M.A. California State College at Hayward.

*** B.S., North Dakota State University; M.S., North Dakota State University; Ph.D., University of Connecticut.

**** B.A., College of the Holy Cross.

compensatory remedies, including worker's compensation, "black lung" and "Price-Anderson" types of insurance, bonds, escrow and restoration funds; and *government influence*, characterized by federal procurement, information and education, and notice of possible intent to regulate. This approach is premised on the assumption that the public expects that it is the continuing and ultimate responsibility of government to manage risks to health, safety and the environment effectively, and concludes that agency reliance on the properly-structured use of alternatives to regulation is the most important reform option available.

I. PRIVATE VOLUNTARY SELF-REGULATION

A. *Industrial Self-Regulation*

Private industry voluntarily invests considerable resources each year in developing and revising its own "standards" for a wide range of products, materials, systems, services, processes and practices.¹ These "standards" are utilized in conjunction with and independent of (but not inconsistent with) governmental regulatory requirements.² Health, safety and environmental considerations constitute no small part of industry's self-regulatory structure, and therefore, industry can regulate itself. Whether industry can regulate risks more *effectively* and in the public interest is a more complex question.

Standards developed by the private sector have been classified into three groups: (1) standards created by a single firm for its own products or raw materials (often called "proprietary standards"); (2) standards created by industrial, trade or professional associations for the practices, systems, processes or raw materials of its members, sometimes with the concurrence of suppliers or other interests (often called industry or professional standard); and (3) standards created by other organizations after persons with a variety of interests have had an opportunity to participate in the formulation of the standard and reached

1. See R. Hamilton, *The Role of Nongovernmental Standards in the Development of Mandatory Federal Standards Relating to Safety or Health* (1978) (unpublished report prepared for the Committee on Licenses and Authorizations, Administrative Conference of the United States). The report represents only the views of the author, and not necessarily those of the Conference, the Committee or the Office of the Chairman.

2. The term "standard" is used here in the sense of a descriptive technical document developed in the private sector to provide guidance to manufacturers, sellers, users and consumers of product or system. U.S. FEDERAL TRADE COMMISSION, *PROPOSED RULE AND STAFF REPORT ON STANDARDS AND CERTIFICATION 8* (1978) [hereinafter cited as *FTC PROPOSED RULE AND REPORT*]. By these standards industry regulates many of its own practices which are not currently subject to governmental regulation.

a substantial consensus regarding the desirability and level of each proposed standard. Standards of this type can be referred to as "consensus standards."³

3. See Hamilton, *supra* note 1, at I-1. Nongovernmental standards are developed for the most part by technical committees operating as integral parts of the various standards-writing organizations of the private sector. These committees often strive to achieve a degree of consensus within the community of private parties specially informed or affected by the proposed standard, in order to better achieve voluntary acceptance within the industry. Consensus-building also is crucial to a standard's potential incorporation into private contract, government procurement specifications, municipal building codes, and governmental regulatory programs. See R. Dixon, *Standards Development in the Private Sector: Thoughts on Interest Representation and Procedural Fairness 2* (1978) (unpublished report prepared for the National Fire Protection Association).

Consensus or voluntary standards are formulated, for the most part, following extensive consideration and review by members of different private interests. These standards can be used as a risk management device, for example, by mandatory incorporation of the standards into law by an appropriate governmental agency, or by allowing the industry to self-enforce its standards. But standards can no longer be characterized as voluntary if the government adopts them or ensures that the private standards will be enforced. However, "voluntary standards almost inevitably became mandatory to a greater or lesser degree through adoption by government agencies for procurement or regulatory purposes, or simply through the operation of private markets and the common law. See FTC PROPOSED RULE AND REPORT, *supra* note 2, at 31-32; AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM), *THE VOLUNTARY STANDARDS SYSTEMS OF THE UNITED STATES OF AMERICA 7* (1975) [hereinafter cited as *ASTM APPRAISAL*].

The "consensus" type of private standard-setting organization is the most important model to consider, for two reasons: (1) these organizations promulgate the great majority of widely-used industrial commercial standards, and (2) they employ built-in due process safeguards which would be conditions precedent to any governmental adoption and endorsement of privately promulgated standards. See FTC PROPOSED RULE AND REPORT, *supra* note 2, at 17-18, 29. "Consensus procedures" are, in effect, due process protections such as notice to interested parties, opportunity to participate in the work of standards development committees, wide circulation of proposed standards for comments, balloting, consideration of minority viewpoints, and periodic review and update to take into account innovation and technological change. Other organizations, such as many trade associations, do not afford significant due process protection to such noncommercial parties as may be adversely affected by the standard promulgated. *Id.* at 30. See also NATIONAL BUREAU OF STANDARDS, *REPORT OF THE VOLUNTARY STANDARDIZATION POLICY STUDY GROUP*, No. 10391 (1970). In these instances, standards are frequently developed solely by industry members or by narrow-interest producer groups despite the fact that the standards may subsequently become widely adopted in the marketplace and have broad societal implications. *Id.*

The American National Standards Institute (ANSI) is an organization principally devoted to the promulgation of standards by the consensus process, covering products and services in such fields as construction, mechanical, electrical, metal, chemical, textile and nuclear industries. See FTC PROPOSED RULE AND REPORT, *supra* note 2, at 18-19 n.25; R. Hamilton, *supra* note 1, at II-7, II-8. Many ANSI standards are developed by ANSI-created American National Standards Committees; more than half of ANSI's standards were developed by the American Society for Testing and Materials. *Id.* at II-8. See generally *ASTM APPRAISAL, supra*. Another consensus process standards developer is the National Fire Protection Association (NFPA), which has developed approximately 250 fire safety regulations as well as special areas such as boat fuel systems and mobile home design. R. Hamilton, *supra* note 1, at II-4.

Many of the professional and technical societies also develop voluntary health, safety and environmental standards, notably the American Society of Mechanical Engineers (ASME). *Id.* at II-5. The testing laboratories, of which Underwriters Laboratories Inc. (U.L.) is best known, constitute another category of private organizations engaged in standards development. *Id.* at II-6. Virtually all of U.L.'s procedures in developing standards in construction, electrical, fire protec-

The use of such private standards as an alternative to regulation has been recognized by federal agencies,⁴ but differences between private and government standard-setting have militated against adoption of private standards by agencies. A governmental agency is generally expected to weigh a wide variety of factors and make tradeoffs in reaching a regulatory decision. The factors may, for example, involve human health, environmental quality, and economic and technological feasibility;⁵ whereas a private organization developing standards on the same problem will seek to achieve a consensus among its members, and this will be based on what its members perceive is economically desirable and feasible within their own, undisclosed policy frameworks.

In assessing whether the private approach should be relied on, a government agency considers whether the consensus approach results will be adequate, and does not foreclose the opportunity to intercede later with federal regulations. For risk management, the agency assessment might ask: (1) Will the results (levels of risk reduction) to be achieved by the private approach be sufficient (*i.e.* similar to what could be reached and defended by the federal agency)? (2) Will the private initiative lead to a greater degree of industrial acceptability and compliance? (3) Will the private initiative be acceptable to consumer and environmental interests, in terms of "process" and in terms of results? (4) Will deferral to private initiative (assuming adequate results) be more cost-effective, less burdensome on industry, and less chilling on competition and innovation? (5) Overall, will reliance on or adoption of private standards by the agency be legally defensible under existing statutes; will it be acceptable from a policy perspective?

Several agencies now rely on private standards sometimes as voluntary alternatives to government regulation; and in other cases by adopt-

tion, heating, air conditioning and other fields, allow for some review by consumers and other affected interests. See FTC PROPOSED RULE AND REPORT, *supra* note 2, at 25-26. Trade associations such as the National Electrical Manufacturer's Association are generally limited in membership to producers. R. Hamilton, *supra* note 1, at 11-6. Consequently, their standards are usually classified as industry standards (as opposed to consensus standards) and are not as acceptable to the government agency because of the greater probability of industry bias being an issue. *Id.*

4. Groups addressing the issue include the Federal Trade Commission (FTC) which propose regulations applicable to standards developers, certifiers, and persons who reference standards or certifications in marketing or products, see 43 Fed. Reg. 57269 (1978) (to be codified in 16 C.F.R. § 457); the Senate Antitrust and Monopoly Subcommittee which considered S. 825, a reform bill relating to implications for consumers and competition of private standards for products in 1976 and 1977, *Legal Times of Washington*, Dec. 4, 1978, at 10, col. 1; the Administrative Conference of the United States which recommended input from and coordination with private organizations, and use of relevant voluntary consensus standards in health and safety standard development by federal agencies, 44 Fed. Reg. 1357 (1979); and the Office of Management and Budget which encouraged the federal use of private standards, 41 Fed. Reg. 48 (1978).

5. R. Hamilton, *supra* note 1, at 1-4. See also M. Baram, *Federal Regulation of Health, Safety and Environment and the Use of Cost-Benefit Analysis* (Mar. 1, 1979) (unpublished report prepared for the Administrative Conference of the United States).

ing them as regulations.⁶ Reliance on private standards is extensive at the local government level as well. Such reliance on private standards is a virtual necessity because most state and local bodies lack the technical and financial ability to independently write such standards.⁷ Uses of nongovernmental standards by regulatory agencies and state and local authorities seem a viable alternative means of managing at least some health, safety and environmental risks. Two conditions run through the historical use of private standards: the technologies involved are well understood as are the risks; and the potential liability (*e.g.* through product liability or other common law) is a significant enough factor to force a responsible industrial approach to reducing risks through voluntary standards. However, the historical experience offers little to support the notion that private standards would be an efficacious approach to certain risks when such conditions were not present in the past.

Opponents have contended that private standards often deny the consumer the benefits of superior or lower-cost new technology;⁸ of providing public input on social costs and preferences; often deny new businesses the opportunity to enter or compete in profitable industries;⁹ fail to provide adequate safety levels; inflate consumer costs; and inevitably result in deception or non-disclosure of material information.¹⁰ Overall, criticism of the nongovernmental standards approach is that it reflects strong industry self-interest. This concern is founded upon the

6. The Consumer Product Safety Commission (CPSC) has indicated that to the extent that private standards establish adequate safety levels for consumer products, it will not issue mandatory standards. See FTC PROPOSED RULE AND REPORT, *supra* note 2, at 34. The Occupational Safety and Health Administration (OSHA) asserts that it relies extensively on privately developed standards for its own regulations on workplace safety. *Id.* at 34. See also AMERICAN NATIONAL STANDARDS INSTITUTE, AMERICAN NATIONAL STANDARDS APPLICABLE TO SAFETY 15 (1975), which states: "The U.S. Department of Labor has to date adopted a referenced 210 . . . ANSI-approved national consensus standards under the Occupational Safety and Health Act."

7. See R. Hamilton, *supra* note 1, at IV-1. Municipal codes regulating fire safety, electrical, building, boiler, plumbing and other practices often require conformance of service products to privately-set standards, or incorporate them by reference. See FTC PROPOSED RULE AND REPORT, *supra* note 2, at 32.

8. The criticism is based on the judgment that utilization of private standards results in the exclusion of innovative and lower risk systems or products which do not conform to the adopted standard, but which could serve adequately as substitutes for the standardized product or system. The argument is the same as the assumption that innovations are shifted by government regulation. Though the solution in both cases is often obvious (*e.g.*, to change a design standard to a performance standard), private industry groups may be less receptive than regulatory agencies to standards which do not stifle innovation for competitive reasons.

9. The adoption by a regulatory agency of one existing private standard over another in an area not currently subject to national regulations could immediately result in the creation of a group of conforming marketers and a reduction in competition. See FTC PROPOSED RULE AND REPORT, *supra* note 2, at 100. This reduction could result in higher costs to consumer and possible deceptive practices by the conforming marketers. In these instances, anti-trust problems could be handled by industrial policing entities and/or by private or governmental lawsuit. See R. Dixon, *supra* note 3, at 3.

10. FTC PROPOSED RULE AND REPORT, *supra* note 2, at 113.

usual lack of representation afforded to small business, labor and consumer interests in the consensus-standard development organizations.¹¹

Given that the advantage of utilizing private standards as regulatory devices is the increased acquisition of invaluable technical and economic input,¹² one can see that *representation* on standard-development committees is a separate issue from *participation* in the standard-development process. One school of thought asserts that as the technical complexity of the particular health, safety or environmental risk increases, the optimum feasible representation of the interests involved decreases due to their lack of technical expertise. Proponents of this view contend that once a standard is drafted in such a technically complex area (prior to final adoption by the standard-developer), the appropriate non-expert interests should only be given the opportunity to challenge the proposed standards and force its reconsideration.¹³ In less technical areas, affected small business, labor, consumer and other interests (including those represented by agencies) should be given the opportunity to participate fully throughout the standard-development process. Regardless of the technical complexity of the issue at hand, the key to minimizing industry bias in private standard-development is the utilization of strong due process safe-guards.¹⁴ While such safeguards are now incorporated in the published practices of the more enlightened standards-development organizations, compliance with these published procedures should never be assumed. Rather, compliance would have to be established by evidence before significant weight is attributed to the standard by the governmental entity which is considering incorporating it.¹⁵ Appropriate procedural safeguards also enhance the public credibility of private standards. It is reasonable to assume that public credibility will be further increased if the consensus standard development process includes review and approval by a "balanced" group in which no single interest is given disproportionate weight.¹⁶

When a government agency considers endorsing or adopting private standards, it should bear in mind that many privately-developed safety

11. See R. Hamilton, *supra* note 1, at III-5; R. Dixon, *supra* note 3, at 6-7. While this criticism has significant merit, it is also true that the closed all-industry system which largely prevailed in private standards-development organizations in the not too distant past has been significantly reduced. R. Hamilton, *supra* note 1, at II-13.

12. See R. Dixon, *supra* note 3, at 25-31. However, there is no empirical evidence substantiating the view that non-technical persons cannot contribute significantly, early in the standard development process. The ultimate judgment as to the appropriate trade-off between cost and health and safety considerations is particularly within the province of non-technical persons. *Id.*

13. See, e.g., *In re Rhodes*, 370 F.2d 411 (8th Cir.), *cert. denied*, 386 U.S. 999 (1967); Board of Medical Examiners v. Steward, 203 Md. 574, 102 A.2d 248 (1954).

14. See note 3 and accompanying text *supra*.

15. See FTC PROPOSED RULE AND REPORT, *supra* note 2, at 159.

16. See R. Hamilton, *supra* note 1, at II-13.

standards have been found to be unsatisfactory in the past.¹⁷ The regulatory agency must determine whether the trade-off between cost, and the health, safety or environmental hazard to be protected against, leads to results in the public interest. Since absolute protection from health, safety and environmental hazard is an impossibility, what is "in the public interest" is a balancing judgment to be made by the potential regulator, based on the criteria of the pertinent enabling legislation. Thus, agency adoption of a private standard must reflect that judgment.¹⁸

In summary, any utilization of nongovernmental consensus standards is beneficial to the extent that current technical knowledge is being fully utilized and industrial initiatives are fostered. For the most part, these standards are the product of diverse points of view obtained through elaborate procedural devices.¹⁹ Alternatively, these standards have their origin in a system that was formerly private and industry-controlled. Early standards were developed without any regard for balanced membership or procedural safeguards.²⁰ The current system, by its very membership, continues to over-represent commercial interests.²¹ For this reason, any consideration of the nongovernmental standards as a potential regulatory device should be made with great care.²²

B. Licensure and Certification

Licensure is a process whereby the government uses its police power to enact certain statutes or regulations to protect the public's health,

17. FTC PROPOSED RULE AND REPORT, *supra* note 2, at 189. The final report of the National Commission on Product Safety, in 1970, documented that privately developed safety standards are "chronically inadequate, both in scope and permissible levels of risks." U.S. NATIONAL COMMISSION ON PRODUCT SAFETY, FINAL REPORT 48 (1970).

18. The advantage of utilizing the private sector's technical expertise in formulating health, safety and environmental regulatory standards cannot be overemphasized. This expertise cannot be matched, in the majority of instances, by the technical staffs of federal, state and local regulatory authorities. See R. Hamilton, *supra* note 1, at III-1. In addition, the utilization of active technical standards-writing committees from the private sector is an efficient and dependable means of ensuring that standards are kept up to date with developing technology. *Id.* at VI-6.

19. *Id.* at VI-2.

20. *Id.*

21. *Id.*

22. As reflected in the FTC's proposed rules and the Administrative Conference's recommendations, there appears to be general agreement that to instill public confidence private standards should be developed with at least the following procedural safeguards: (1) reasonable notice to interested or affected persons; (2) an opportunity by those persons to participate in the developmental process; (3) consideration to minority points of view and objections; (4) standard development by a consensus considerably more than a simple majority of the developmental committee and the subsequently affected interests; (5) the right of appeal for minorities; (6) adequate record maintenance; and (7) access to the process by the public. *Id.* II-12.

safety and welfare.²³ Licensing boards, generally consisting of established members of the profession, are organized as a result of a statute, and certain basic requirements must be followed by the board as dictated by that statute.²⁴ The purpose of licensing is to uphold the standards of a profession, with the risk reduction benefits accruing to the ultimate recipient of the professional services.

Certification, on the other hand, is a voluntary process whereby a licensed person seeks, on the basis of special education and experience, to additionally qualify for a specific designation recognized by society as marking his higher level of specialization within a profession. While certification, in contrast to licensure, does not carry with it any legal power, it does indicate to the public an attainment higher than that of the average practitioner. The potential for prestige and economic success is the incentive for certification.

For many years courts have held that a choice of an occupation was a privilege, not a right, and therefore was not protected by the fourteenth amendment. For example, in *Barsky v. Board of Regents*,²⁵ a physician's license was suspended because he was held in contempt of Congress, a sanction which had nothing to do with his capabilities as a physician.²⁶ Despite this, the licensing board decision was upheld by the United States Supreme Court. However, the Supreme Court has now abandoned the *Barsky* doctrine, even for cases where the license right has not vested. In *Schwartz v. Board of Bar Examiners*,²⁷ the Court reversed the New Mexico Board of Examiners' decision to refuse a law school graduate permission to take the bar examination on grounds of lack of good moral character. His right to take the exam was held to be protected by the fourteenth amendment.²⁸

The Supreme Court has set due process boundaries on the police

23. Licensing is a means of controlling a profession initially by limiting entrance to it and later by controlling the performance of licensees. Retaining a license may be subject to the periodic re-demonstration of the skills originally qualifying a licensee, and in some cases, of the demonstration of new skills. W. GELLHORN, *INDIVIDUAL FREEDOM AND GOVERNMENTAL RESTRAINTS* 105-51 (1968).

24. Licensing boards can be thought of as being state agencies, since the power they possess has been granted to them by state legislatures through the enactment of specific statutes. *Id.* at 106. Once a profession acquires the exclusive right from a legislature to regulate entry, it is expected to regulate itself thereafter to some extent. Note, *Professional Self-Regulation*, 29 ALA. L. REV. 679, 681 (1978). Not all licensing is focused on protecting the public. Many licensing statutes are employed, in fact, for their anti-competitive results, and economic reasons probably dominate in the usual case, rather than health or safety. W. GELLHORN, *supra* note 23, at 14.

25. 347 U.S. 442 (1954).

26. The Court said, "the practice of medicine in New York is lawfully prohibited by the state except upon the conditions it imposes. Such practice is a privilege granted by the state under its substantially plenary power to fix the terms of admission." *Id.* at 451.

27. 353 U.S. 232 (1957).

28. *Id.* at 246-47.

power of the states, affecting health, safety and welfare of its citizens by licensure and other means.²⁹ These bounds are threefold: the first is *specificity* (in standards and guidelines a board uses in issuing or revoking a license); the second is *rationality* (the standard must bear a rational relationship to good practice in the profession); and the third is *fairness* (makeup of the board and the process of review).³⁰

The licensing board must implement a means of reasonably informing those affected as to what the criteria for conduct are in the profession. In addition, there remains a constitutional limit on the power that can be delegated to any administrative body by the legislature. Despite the assumption that very broad authority can be delegated, some, including Judge Skelly Wright, think the court should still require legislatures to "channel [their] . . . delegation of power with prospective guidelines and standards to the greatest extent possible."³¹ This is in apparent opposition to one of the reasons for delegating licensure authority to a specified body — to make full use of its special knowledge.

Similarly, in matters of revocation or suspension for unprofessional conduct, the courts have upheld the delegation of such power and its use, provided some reasonable criteria are present. The criteria can be generally stated. For example, in *Moore v. Board of Trustees of Carron-Tahoe Hospital*,³² the court upheld the board revocation of a physician's staff privileges on the basis that a medical staff member " 'who is guilty of unprofessional conduct, may have his privileges reviewed, altered or rescinded by the Board of Trustees on recommendation of the Medical Staff.' "³³ Thus, some care must be taken to insure that those subject to licensure be properly notified of the standards expected of them.

*Williamson v. Lee Optical Co.*³⁴ is illustrative of how the Supreme Court once looked upon the rationality of regulations adopted by a profession. In that case, the petitioner challenged a state law which prevented opticians from duplicating lenses without a prescription from a licensed optometrist. The Court accepted the state law and simply stated it was the legislature's responsibility "to balance the advantages and disadvantages of a new requirement."³⁵ This view should be read in conjunction with *Schwartz*, where the Court held there must be a rational

29. See *California Reduction Co. v. Sanitary Reduction Works*, 199 U.S. 306 (1905).

30. See Note, *Due Process Limitations on Occupational Licensing*, 59 VA. L. REV. 1097, 1104-18 (1973).

31. Wright, Book Review, 81 YALE L. J. 575, 587 (1972).

32. 88 Nev. 207, 495 P.2d 605, cert. denied, 409 U.S. 879 (1972).

33. *Id.* at 209, 495 P.2d at 607 (quoting Carron-Tahoe's Hospital By-Laws, Rules & Regulations Governing the Medical Staff, Article 4, Section 5).

34. 343 U.S. 483 (1955).

35. *Id.* at 487.

relationship between the regulation and the objectives of the law,³⁶ as has been held for other exercises of the state police power.

Licensing boards usually consist exclusively of members of the same profession, since many feel that technical expertise alone is needed in drafting and administering licensure regulations. This has generally been acceptable, because the courts feel that whether such circumstances will promote bias is a remote and speculative matter.³⁷ Even if some bias is shown, or a danger of bias exists, the court can use its judicial review function in specific cases to correct licensure boards that have acted in an inherently unfair manner. Due process also requires that a licensee or applicant disputing a board decision be provided the opportunity to be heard, to present information or evidence, and have the opportunity to rebut opposing witnesses.³⁸ Judicial review itself is an essential element of the constitutional right of due process, and the courts have the authority to postpone suspension or revocation of a license until a proper judicial review can be had.³⁹

The licensing of physicians, as well as other professions such as architects and engineers, has obvious health, safety and environmental implications. In these fields, licensure seeks to prevent risks by controlling and maintaining standards for practitioners. This self-regulation can result in ever higher standards through continuing professional education and thus afford more protection for the public. Our present form of physician licensure did not really begin until the last part of the nineteenth century.⁴⁰ The state's right to protect its citizens from incompetent and unethical persons by licensure, under the state "police power," was held constitutional in 1889.⁴¹ Today, physicians must meet educational and competency requirements to become licensed in a state. As with other licensing boards, the power to regulate the physician continues after initial licensing.⁴² Relicensure is also a means of control,

36. *Schwartz v. Board of Bar Examiners*, 353 U.S. 232 (1957).

37. See *In re Rhodes*, 370 F.2d 411 (8th Cir.), cert. denied, 386 U.S. 999 (1967); *Board of Medical Examiners v. Steward*, 203 Md. 574, 102 A.2d 248 (1954).

38. See *Milligan v. Board of Registration in Pharmacy*, 348 Mass. 491, 204 N.E.2d 504 (1965). While licensing boards are generally not composed of professional administrative personnel, the boards must guarantee due process for application and grievance procedures. In the field of medicine, however, the opportunity to be heard before board actions may afford an incompetent physician the opportunity to harm more people. See generally note 3 *supra*.

39. See *Berryhill v. Gibson*, 331 F. Supp. 122 (M.D. Ala. 1971).

40. R. SCHROOCK, *MEDICAL LICENSING IN AMERICA, 1650-1965*, at 27-30 (1967).

41. *Id.*

42. For example, a physician in New Hampshire may have his or her license revoked if there is a

finding that the person has obtained his license by fraudulent means, is a habitual user of drugs or intoxicants or is afflicted with physical disability, insanity, psychiatric disorders or other disease deemed dangerous to the public health; or is grossly ignorant or incompetent; or is guilty of dishonest, unprofessional or immoral conduct, or negligence in practicing medicine or surgery. . . .

N.H. REV. STAT. ANN. § 329:17 (VI) (Supp. 1979).

since license renewal can be required after a certain length of time, subject to certain requirements. For example, continuing education has often been used in states as a condition of renewing one's license.⁴³

In addition to licensure, physicians have used certification for medical specializations. Private certification for about twenty specialties such as anesthesiology, dermatology, radiology and pediatrics is used.⁴⁴ Generally, certification for each specialty requires a certain level of professional ability, moral character and preliminary training.⁴⁵ While there are shortcomings to the certification of medical specialists, some level of competence for initial certification is required, and therefore some measure of control is effectuated. The goal of certification is to guide the future decisions of consumers by informing them of the higher quality and specialization of the certified person. When the certification process is conducted fairly, there usually are few problems in the later considerable amount of control exerted over a physician and any specialized practices.⁴⁶

Architects require a license in all states. One purpose for this practice is to prevent the technically incompetent from endangering life, health and property. An architecture board of licensure has powers similar to those granted by a legislature to medical boards, and therefore controls the entrance of candidates and has the ability to suspend or revoke licenses and issue reprimands. In addition, an architect is legally liable for professional misconduct. This liability is governed by general principles of law, which are broadly applicable. An architect owes his client a professional level of competence and reasonable care in the performance of his work. The standard of care required of an architect is similar to that for other professions;⁴⁷ negligence is the most frequent tort concept used when an architect is sued for malpractice.⁴⁸ Other liability concepts that may be used include fraud, conspiracy, conflict of interest, and breach of contract.⁴⁹ Frequently, an architect may be

43. *Id.* § 329:16.

44. GREENWOOD & FREDRICKSON, SPECIALIZATION IN THE MEDICAL AND LEGAL PROFESSIONS 11-47 (1964). Wallace, *Occupational Licensing and Certification: Remedies for Denial*, 14 WM. & MARY 46, 61 (1972).

45. Wallace, *supra* note 44, at 62.

46. Hospitals are accredited by the Joint Commission on Accreditation of Hospitals, sponsored by American Medical Association, the American Hospitals Association, American College of Physicians and American College of Surgeons. The accreditation is voluntary and allows accredited hospitals to attract the necessary interns and residents to provide adequate medical services. A physician must apply and be appointed to practice by the medical staff of a hospital. The hospital board has authority to withdraw that appointment for sufficient reason, and must use discretion in medical staff appointments since it can be held liable for care given patients. See *Darling v. Charlestown Community Memorial Hosp.*, 33 Ill.2d 326, 211 N.E.2d 253 (1965), *cert. denied*, 383 U.S. 946 (1966).

47. See J. ACRET, ARCHITECTS AND ENGINEERS: THEIR PROFESSIONAL RESPONSIBILITIES 2 (1977).

48. *Id.* at 16.

49. *Id.* at 34.

held liable for malpractice on the basis of statutory requirements (e.g. breach of local building code). Liability may also arise from the breach of specific terms of a contract.⁵⁰ A licensing board has the power to suspend or revoke an architect's license following such judicial decisions.⁵¹ Finally, like the medical profession, architects have a code of ethics which must be followed, and this provides another layer of self-regulation.

Licensure itself is a form of regulation, since the power or authority to license and control a profession initially comes from a state legislature. The risk management question inevitably is whether licensure is sufficient to control medicine, architecture, engineering and other professions which are engaged in the generation of risks from products and systems. The inquiry is whether licensure should be expanded to allow other and new professions (e.g. hazardous waste transporters) to self-regulate by this peer review system. To answer this question, the several disadvantages of licensing have to be considered. It excludes many persons by high initiation fees, and by rigorous requirements which are often used to protect the economic advantage of those already in the field and reduce competition.⁵² This leads to higher prices for the consumer,⁵³ and can segment skills which may cause consumers some inconvenience.⁵⁴ Many licensure boards are made up exclusively of persons in the occupation who use licensure for their own advantage. Some licensure requirements also impose unconstitutional restrictions until challenged in court. In addition, licensure causes a proliferation of administrative bodies composed quite frequently of persons with little or no administrative experience.

Licensure of a profession is therefore difficult to assess as an alternative to regulations because it is, in effect, tantamount to government regulation. Much of the success of licensure as an alternative to federal regulation will depend on the values and integrity of the peer group, and its actual practice. While it can be argued that licensure should be expanded to include more professions and occupations, many commentators propound that we have gone too far on a fragmented, state by state basis, in so controlling occupations.⁵⁵ Self regulation by licensure will work best when a real peer group exists which has developed professional guidance criteria, and when professional failure to utilize a reasonable standard of care, and gross errors in judgment or malprac-

50. *Id.* at 44-68.

51. See, e.g., N.H. REV. STAT. ANN. § 310:27 (1976).

52. Gellhorn, *The Abuse of Occupational Licensing*, 44 U. CHI. L. REV. 6 (1976).

53. Maurizi, *Occupational Licensing and Public Interest*, 82 J. POL. ECON. 399-403 (1974).

54. See Project, *Regulation of Health Personnel in Iowa — A Distortion of the Public Interest*, 57 IOWA L. REV. 1006 (1972).

55. See Wallace, *supra* note 44.

lice are easily recognizable and provable.⁵⁶ In expanding licensure, care must be given to the composition of the licensing board, since board credibility and public trust will suffer if a board is perceived as indifferent to the public interest. Agencies composed of public servants who are accountable to multiple public interests may be preferred. One approach to resolve this problem is to provide for accountability of board decisions through judicial review. Another is to screen potential board members for bias and conflicts. A third is to have public representatives serve on such boards. Thus, licensure offers an alternative regulation in the form of rule-making and is worthy of further consideration, particularly for risk contexts where professionals play significant roles.

II. INSURANCE AND OTHER COMPENSATORY PLANS

A. Workers' Compensation

Workers' compensation is a mechanism for providing cash "benefits" and medical costs to the victims of work-connected injuries.⁵⁷ It is a state administered system for imposing liability without fault, in which the employer is charged with worker injuries, arising out of the employment context.⁵⁸ Irrespective of whether the accident leading to the injury was unavoidable or due to the employee's carelessness, a workers' compensation statute entitles the employee to the "benefits" designated in the statutory framework.⁵⁹ Workers' compensation statutes are not designed to *remedy* physical injuries, or even to attempt to restore the injured employee to the condition he or she was in immediately prior to the injury. Rather, workers' compensation laws provide the worker with a measure of income insurance. It is the employee's actual or presumed loss of earnings resulting from the in-

56. The medical profession provides a good example of licensure with these attributes and with a close relationship between those giving and those receiving the services. Medicine, therefore, appears to be an excellent case study wherein licensure, private certification, liability from court action and hospital affiliation all converge to manage the risks of medical practice. Few other professions are endowed with so many review features.

57. A. LARSON, *THE LAW OF WORKMEN'S COMPENSATION* 1 (1980).

58. See W. PROSSER, *HANDBOOK OF THE LAW OF TORTS* 531 (4th ed. 1971).

59. Each of the fifty states has a workers' compensation law. The federal government has established workers' compensation programs, including the Workmen's Compensation Law of the District of Columbia, 5 U.S.C. § 8139 (1976); the Federal Employee's Compensation Act, 5 U.S.C. § 8101 (1976); and the U.S. Longshoremen's and Harbor Workmen's Compensation Act, 33 U.S.C. §§ 901-950 (1976). The basic coverage or eligibility formula for the overwhelming majority of these state and federal statutes is any "personal injury by accident arising out of and in the course of employment." See CHAMBER OF COMMERCE OF THE UNITED STATES, *ANALYSIS OF WORKMEN'S COMPENSATION LAWS* 3 (1975) [hereinafter cited as CHAMBER OF COMMERCE]; A. LARSON, *supra* note 57, at iii.

jury that provides the basis for this coverage.⁶⁰ Thus, this form of insurance is designed to compensate an individual after the fact of injury.

To a limited extent, workers' compensation manages risks to workers' health and safety from product failures and workplace system failures. Under workers' compensation statutes, employers are required to pay specified benefits after the injury. Such potential liability should inspire the employer to prevent injuries whenever possible.⁶¹ Therefore, these laws provide an alternative or supplemental mechanism to federal or state occupational safety regulation. Even where an employer has a workers' compensation *insurance* policy, this mechanism should still be an incentive for employers to control and monitor working conditions, since premium rates are correlated with an employer's safety record. The workers' compensation model, when functioning properly, contributes significantly toward alleviating the injury and illness problems of the worker (*e.g.* by the wages lost provision), the employer (*e.g.* by reducing litigation costs), and the society at large, which otherwise might be burdened with supporting the disabled worker and his or her family through charitable programs or otherwise.⁶²

States' workers' compensation statutes can be either compulsory or elective. If elective, the employer may accept or reject the requirements. If the employer rejects the act, he loses three potentially available common law defenses in actions which may later be brought by injured workers: assumption of the risk, negligence of fellow employees, and contributory negligence.⁶³ A compulsory law, on the other hand, requires each employer to provide to the injured worker the benefits that

60. Virtually all industrial employees are covered by workers' compensation. See CHAMBER OF COMMERCE, *supra* note 58, at 5. Specific applications of workers' compensation statutes vary from state to state:

Some jurisdictions cover all private employment; others exempt those with less than a stipulated number of employees. Most jurisdictions specifically exclude certain employments. Due to the nature of the work, farm labor, domestic servants, and casual employees usually are exempted. Most jurisdictions permit employees in an exempted class to be brought in voluntarily by the employer or by Board order.

Id. at 5-6.

The right to benefits under each statute is entirely subject to the exceptions and limitations prescribed by the legislative body of the jurisdiction in question. See Project, *Developments in Workers' Compensation Law*, 53 J. URB. L. 755, 760 (1976).

Professor Arthur Larson has summarized the features of the typical workers' compensation act. See Larson, *Basic Concepts and Objectives of Workmen's Compensation*, in 1 SUPPLEMENTAL STUDIES FOR THE NATIONAL COMMISSION ON STATE WORKMEN'S COMPENSATION LAWS 33 (M. Berkowitz ed. 1973).

61. For manufacturers' liability for defective tools and machines used in the workplace under a products liability theory, see Mitchell, *Products Liability, Workmen's Compensation and the Industrial Accident*, 14 DUQ. L. REV. 349 (1976).

62. It is felt that these benefits could also result in a new application of the model to areas outside the workplace where the model could serve as an alternative to health, safety and environmental regulation. *Id.* at 381-89.

63. See W. PROSSER, *supra* note 58, at 533.

are specified in the statute. When an employee rejects an elective act and sues an employer who has accepted it, the employer retains the three common law defenses set forth above.⁶⁴

As noted previously, workers' compensation internalizes the cost of injuries and provides, in theory, an incentive for employers to increase their safety efforts. Consequently, with a notable reduction in the incidence of workplace injuries in the last fifty years, it can be conjectured that workers' compensation programs are partly responsible for this trend.⁶⁵ Other observers have concluded that while the enactment of workers' compensation statutes has had an immediate, positive effect on safety in the workplace, these programs do not always induce employers to continuously seek improvements in employee safety.⁶⁶ The large number of work-related injuries and diseases that still occur support this observation. Since less than 1.5 percent of the 1976 payroll was the average employer's cost for workers' compensation, the resulting economic incentives to improve the health and safety conditions of the workplace tend to be relatively minor.⁶⁷ In addition, insurance mechanisms such as workers' compensation tend to spread risks and costs of accidents to other employers. Employers can also pass on a large portion of the workers' compensation costs by raising prices, by lowering or not raising wages, and by deducting costs as ordinary business expenses for tax purposes.⁶⁸ These factors tend to support the argument that health, safety or environmental improvements would be forthcoming in new and broader applications of the workers' compensation model, if most costs of the program are internalized or absorbed by the employer. Only then would significant economic incentives for a private and voluntary approach to risk prevention be created.

Another limitation on the efficacy of a general workers' compensation-type model as an alternative to regulation is evidenced by some states' legal and practical limitations on the recovery of medical benefits related to certain occupational diseases such as silicosis and asbestosis. For example, when Wisconsin instituted full silicosis coverage for its stone monument workers, the entire industry in that state was shut down because the workers' compensation premium was higher than the entire payroll for the industry.⁶⁹ Such a possible occurrence should be

64. See CHAMBER OF COMMERCE, *supra* note 59, at 5.

65. See P. GREGORY & M. GISSER, *THEORETICAL ASPECTS OF WORKMEN'S COMPENSATION* 116 (1973).

66. *Id.* at 116-17.

67. See *National Workers' Compensation Standards Act of 1979: Hearings on S. 420 before the Senate Comm. on Labor and Human Resources*, 96th Cong., 1st Sess. 425 (statement of Ray F. Marshall, Secretary of Labor) [hereinafter cited as *Statement of Ray Marshall*].

68. *Id.*

69. See Larson, *Occupational Diseases Under Workmen's Compensation Laws*, 9 U. RICH. L. REV. 87, 110 (1974).

carefully considered before the workers' compensation model is applied as a regulatory device to deal with non-workplace health, safety and environmental risks — particular risks arising from an industrial system that provides essential goods and services.⁷⁰ Several other risks involved in adopting the workers' compensation model are: first, whether such developments would create negative health, safety or environmental incentives on the part of potential beneficiaries;⁷¹ second, the inherent inconsistencies resulting from independent administration in each state; and third, the legislative scheduling of payments which are often inadequate and subject to change only through the cumbersome legislative process. For these reasons, workers' compensation programs have not provided an entirely satisfactory solution to safety and health hazards in the workplace. In a comprehensive study completed in 1972, the National Commission on State Workmen's Compensation Laws concluded that state laws did not uniformly provide fair and effective compensation for workers injured on the job.⁷²

In summary, the typical state workers' compensation program defines the class of eligible beneficiaries; the necessary conditions leading to the injury or illness (*e.g.* time, place and activity engaged in); the types of illness or injury; the amounts of compensation; and the applicable procedures and appeals processes. It is certainly conceivable that consumers and other classes of persons other than workers who are exposed to health and safety risks, as well as to environmental hazards, could be provided for by similar statutes. Workers' compensation programs appear to be particularly suitable as an alternative to regulation of risks from systems that produce non-essential goods and services. When industries that produce essential goods and services are involved, however, statutory modifications of such programs might be needed to ensure that the cost of the requisite insurance premiums do not put the particular commercial system affected out of business altogether. This would be in recognition of any finding that there is an "optimal" level of health, safety and environmental risks which cannot be improved upon by an insurance mechanism. Thus, primarily with regard to these essential systems, the workers' compensation model might be inappropriate in its *pure* form for application as an alternative to governmental regulation.

70. See Statement of Ray Marshall, *supra* note 67, at 410.

71. Workmen's Compensation programs might provide a negative safety incentive for workers because of the decrease in their own costs in terms of suffering occupational illnesses and injuries. See Chelins, *An Empirical Analysis of Safety Regulation*, in 3 SUPPLEMENTAL STUDIES FOR THE NATIONAL COMMISSION ON STATE WORKMEN'S COMPENSATION LAWS 54 (M. Berkowitz ed. 1973).

72. See NATIONAL COMMISSION ON WORKMEN'S COMPENSATION LAWS, STATE REPORT 25 (1972).

B. Government Subsidized Insurance

1. Black Lung Benefits Program

Heightened public awareness of the health and safety hazards posed to miners in the coal industry led to the enactment of the Federal Coal Mine Health and Safety Act of 1969 (Act).⁷³ The bill was enacted by Congress expressly to provide for the protection of "the health and safety of coal miners, and to combat the steady toll of life, limb and lung, which terrorizes so many unfortunate families."⁷⁴ The pivotal part of the Act has been extensively modified by the Black Lung Benefits Act of 1972⁷⁵ and the Black Lung Benefits Reform Act of 1977.⁷⁶

The purpose of the Black Lung Benefits Program is to provide cash benefits, in cooperation with the states, to coal miners (or their dependents) who are totally disabled by pneumoconiosis (*i.e.* black lung disease).⁷⁷ Initially, the Act set up two programs to deal with benefit claims of disabled miners. The first program provides benefits for life to a miner (or to dependent survivors) for pneumoconiosis-related death or total disability which occurred prior to December 30, 1969. The Secretary of Health and Human Services administers this program and benefits were originally funded out of the general Treasury.⁷⁸ The second program is applicable to all claims filed on or after January 1, 1974, and is administered by the Secretary of Labor. Under this program, the coal mine operator, or the U.S. Department of Labor, if the responsible employer is absent, assumes liability for the payment of total disability or death benefits to miners who have contracted pneumoconiosis, provided that the disease arose out of employment in a mine operated during a period after December 31, 1969.⁷⁹

Under both the pre-1974 and the post-1974 programs, a miner (or

73. Federal Coal Mine Health and Safety Act of 1969, Pub. L. No. 95-239, 92 Stat. 95 (codified at 30 U.S.C. §§ 901-945 (1976 & Supp. III 1979)).

74. 30 U.S.C. § 901 (1976 & Supp. III 1979).

75. Black Lung Benefits Act of 1972, Pub. L. No. 92-303, 86 Stat. 150 (codified at 30 U.S.C. §§ 901-924 (1978)).

76. Black Lung Benefits Reform Act of 1977, Pub. L. No. 95-239, 92 Stat. 106 (codified at 30 U.S.C. § 904 (1977)).

77. Total disability is defined as "when pneumoconiosis prevents [the miner] from engaging in gainful employment requiring a substantial period of time." 30 U.S.C. § 902 (1976).

78. 30 U.S.C. §§ 924, 932 (1976 & Supp. III 1979). This program applies to all miners' claims filed through June 30, 1973. See DeCarlo & Vieweg, *Federal Black Lung Law and Insurance in a Nutshell*, 11 FORUM 661, 662-64 (1977).

79. 30 U.S.C. § 932 (1976 & Supp. III 1979). Claims filed after January 1, 1974 must be filed pursuant to state workers' compensation laws, if that law provides *adequate* coverage for pneumoconiosis. However, no state law has qualified to date. Therefore, all claims are filed with the Department of Labor. See Solomons, *Workmens Compensation for Occupational Disease Victims: Federal Standards and Threshold Problems*, 41 ALBANY L. REV. 195, 228 (1977); DeCarlo & Vieweg, *supra* note 78, at 667-74; and 30 U.S.C. §§ 924, 931(a), 932, 934 (1976).

survivor) filing for total disability or death benefits is entitled to a series of statutory presumptions, evidentiary rules, and diagnostic standards, which are designed to shift the burden of establishing any medical uncertainties in favor of the compensation claimant.⁸⁰ In spite of the existence of such presumptions, coal mine operators and their insurance carriers have vigorously contested those claims for which they would be required to pay benefits.⁸¹ In 1977, it was estimated that ninety-five percent of all claims for which mine operators might be found liable were resisted in formal litigation. At that time, it was also estimated that fewer than 200 of the 3,800 claims approved for black lung benefits by the Department of Labor were being paid by the coal operators.⁸² Certainly, great costs have been absorbed by the federal government in administering and paying for the Black Lung Benefits Program. Understandably, Congress created a Black Lung Disability Trust Fund in the Black Lung Benefits Revenue Act of 1977.⁸³ The fund pays benefits to eligible black lung claimants in certain cases.⁸⁴

One significant aspect of the Black Lung Benefits Program is its accomplishment of establishing uniformity in the treatment of similarly situated miners in all states. This uniform federal approach could be adopted by the states to deal with other health, safety or environmental problems which are not serious enough to warrant federal concern or fall beyond federal regulatory authority. Additionally, legislation following the black lung model could utilize existing state and local administrative systems such as workers' compensation boards. Such a framework, if effectively established, could minimize direct federal governmental participation, and hence regulation, by fostering the possibility that systems operators and victims can resolve their health, safety and environmental disputes efficiently and equitably through a compensation system analogous to the Black Lung Benefits Program.

Although the Black Lung Benefits Program is instructive,⁸⁵ certain results of the program should be eliminated in any analogous system. For example, the coal mine operators' and insurance carriers' resistance to payment illustrates how a program designed to effectuate out-of-court settlements will not always achieve that goal. A second drawback is that the financial burden of such a program can be shifted to the

80. 30 U.S.C. § 921(c)(1)-(5) (1976 & Supp. III 1979).

81. See Solomons, *supra* note 26, at 210-11.

82. *Id.* at 211.

83. The Secretary of the Treasury is the managing trustee of the fund and is responsible for its operation, administration and maintenance. 30 U.S.C. § 934(a)(2) (1976 & Supp. III 1979).

84. These include ones in which: (a) there is deemed to be no "responsible operator"; or (b) there is operator default. See H.R. REP. NO. 95-438, 95th Cong., 2d Sess. 3, reprinted in [1978] U.S. CODE CONG. & AD. NEWS 72, 74.

85. The program has several illuminating items such as its provision for retroactive benefits and its division of responsibility for payment periods between the government and the private sector. See 30 U.S.C. § 901 (1976 & Supp. III 1979).

American public either as taxpayers or consumers.⁸⁶ However, if prevention of pneumoconiosis was more within the economical and technical means of the operator, the program would significantly affect their approach to risk management. Coal operators would have a great economic incentive to avoid a liability cost they now incur. Therefore, if the health, safety or environmental hazard presented by a system is within the feasible control of the system operator, the operator can take some necessary and feasible measures to minimize liability costs and risks by adoption of a black lung model. This would result in less government regulation.

The Black Lung Benefits Program merits attention because of the novel manner in which it deals with a problem specific to a particular industrial system and its health risk. It is an after-the-illness mechanism for awarding benefits to injured persons and allocates the financial responsibility between the private sector and federal government. Theoretically, this results in an economic incentive for the mine operator to reduce potential liability by redesigning operations to prevent the risk of illness. Clearly, other programs could be developed after the black lung model to deal with after-the-illness and other irreversible health problems.

2. Price-Anderson Insurance

The *Price-Anderson Act*⁸⁷ is a unique federal indemnity plan for nuclear energy facilities. It was enacted by Congress in 1957,⁸⁸ with two central objectives: first, to insure that the public would be compensated should an accident occur at a licensed nuclear energy facility; and second, to limit liability of private industry and remove the roadblock of financial risk to private participation in the development of nuclear energy.⁸⁹

The Act requires that utilities authorized to construct and operate nuclear power plants possess maximum insurance coverage for public liability claims at the current amount available from the insurance industry.⁹⁰ The Act further establishes that the federal government, acting

86. See Solomons, *supra* note 79, at 248.

87. 42 U.S.C. § 2210 (1976 & Supp. III 1979).

88. Atomic Energy Damages Act of 1957, Pub. L. No. 85-256, 71 Stat. 576 (codified at 42 U.S.C. § 2210 (1976 & Supp. III 1979)). Enacted for a ten year period in 1957, the Act has since been extended twice for additional ten year periods. The current version applies to all nuclear energy facilities for which construction permits are issued by the Nuclear Regulatory Commission prior to August 1, 1987. See 42 U.S.C. 2210 (1976 & Supp. III 1979).

89. See Lowenstein, *The Price-Anderson Act: An Imaginative Approach to Public Liability Concerns*, 12 FORUM 594, 597 (1976-77).

90. As of August 1, 1977, the insurance industry determined that \$140 million would be the maximum available liability coverage it would offer. See Note, *The Price-Anderson Act under Attack*, 53 NOTRE DAME LAW. 954, 956 (1978). See also 42 U.S.C. § 2210(b) (1976 & Supp. III 1979).

through the Nuclear Regulatory Commission (NRC), provide indemnity protection for liability incurred by the licensees⁹¹ in an amount in excess of the available private insurance coverage, up to a combined total of \$560 million.⁹² Damages incurred beyond the \$560 million ceiling will not be compensated unless additional congressional action is taken. In cases determined by the NRC to constitute an "extraordinary nuclear occurrence," legal defenses, which ordinarily would be available to the defendant, are automatically waived. Thus, the Act also imposes the equivalent of liability without fault, under certain conditions. As in the case of conventional insurance coverage, the utility must pay premiums for the necessary coverage dictated by the Act. However, Price-Anderson rates are not influenced by the loss (liability) experience of the individual facility; rather, they are influenced by the operating experience (losses) of the entire nuclear power industry.⁹³ Premium funds are held in insurance pools⁹⁴ operated by the insurance industry and are used only to pay actual losses and loss expenses.⁹⁵ If the premium funds are not used for liability payments within eleven years after payment by the utility, the payments are refunded.⁹⁶

The Act, in theory provides an economic incentive to reduce or eliminate health, safety and environmental risks from the operation of nuclear power plants. The individual plant proprietor wants to retrieve a large percentage of his paid premiums. All plant proprietors as a group, realize that their rates are dependent on the worst case or weakest link — if one catastrophic accident occurs at one facility, every operators' premium rates will be affected. Thus, peer pressure on a large scale is present as a force to minimize liability.

It is clear that the loss-compensation portion of the Price-Anderson structure is conducive to forming a model for health, safety and en-

91. 42 U.S.C. § 2210(c) (1976 & Supp. III 1979). In addition to indemnifying licensees, the Act also covers all potentially liable persons connected with the construction and operation of the facility, including component manufacturers, contractors, etcetera. The aggregate indemnity coverage provided by the government cannot exceed \$500 million for any single nuclear accident. *Id.*

92. *Id.* The 1975 Amendment extending the Act's coverage added a further provision that required every operator of a privately-owned commercial reactor to contribute up to \$500 million toward the cost of compensating victims of a nuclear incident who suffered losses beyond that amount covered by the combined insurance policy. Since the total liability ceiling was held at \$560 million, this "deferred premium" provision effectively reduces the government's contribution to the compensation scheme. 42 U.S.C. § 2210(b), (c) (1976 & Supp. III 1979).

93. See Marrone, *The Price-Anderson Act: The Insurance Industry's View*, 12 FORUM 605, 609 (1977).

94. *Id.* Approximately 27% of the premium is kept by the particular insurance company providing the individual facility with liability coverage. The remaining 73% goes into the insurance pool. *Id.*

95. *Id.*

96. As a result of minor and infrequent claims on the pool, \$9.7 million of the \$12.7 million collected during the first year of insurance coverage were refunded by 1977. *Id.*

vironmental risk management. Another part of the Act, the fixing of total liability at \$560 million, is *not* consistent with the goal of risk management. If a system does not have to pay for damages it causes beyond the amount of insurance and indemnity coverage, no economic incentives, beyond those already discussed, exist for the system operator to limit his health, safety and environmental risks.⁹⁷

While it may not be often that public policy would dictate such an indemnity partnership between government and private industry, this model could be considered for management of problems with catastrophic potential similar to nuclear power. Although there are some criticisms of this model, such as the limit on total liability,⁹⁸ it does hold reducing the amount of government regulation of new, high hazard technologies.

C. Bonding, Escrow and Restoration Funds

State statutes, local ordinances, and private contracts often stipulate that a person engaging in particular activities such as construction must indemnify the party (private party of public agency) for whom they perform these activities, against certain liabilities incurred during and after the course of performance. This indemnity requirement may be in the form of a posted bond,⁹⁹ securities placed in escrow,¹⁰⁰ or the creation of a restoration fund.¹⁰¹ These are automatic indemnity mechanisms;

97. While the Act provides for immediate payments to accident victims, such payments may not exceed 15% of the liability limitation without court approval. This is to ensure that if the total liability exceeds \$560 million, all injured parties will be afforded equitable treatment. All claims arising out of a nuclear incident are to be transferred to a single federal district court to further ensure fair and equitable treatment. 42 U.S.C. § 2210(o) (1976 & Supp. III 1979). See *Duke Power Co. v. Carolina Environmental Study Group, Inc.*, 438 U.S. 59, 66 n.6 (1978). See also *Carolina Environmental Study Group, Inc. v. United States Atomic Energy Commission*, 431 F. Supp. 203 (W.D.N.C. 1977).

98. See Green, *Nuclear Power: Risk, Liability, and Idemnity*, 71 MICH. L. REV. 479, 504 (1973). As early as 1957, it had been estimated that damages resulting from nuclear power plant accidents was as high as \$7 billion per incident. *Id.* at 483, citing ATOMIC ENERGY COMMISSION, THE THEORETICAL POSSIBILITIES AND CONSEQUENCES OF MAJOR ACCIDENTS IN LARGE NUCLEAR POWER PLANTS (1957).

99. The term "bond" has many meanings. For the purpose of this study, the most relevant type is the performance bond, which guarantees the performance of a contract. A performance bond is an obligation in writing which binds the signatories to pay a sum certain upon the happening of a particular event; e.g., a failure to fulfill the terms of a contract. See generally Brady, *Bonds on Federal Government Contracts: The Surety's View*, 46 N.Y.U.L. REV. 262 (1971); 12 AM. JUR. 2d *Bonds* §§ 1-79 (1964).

100. An escrow is a written instrument which similarly imposes a legal obligation, and is deposited together with a specified amount of funds with a non-party to a contract in question. The written instrument and funds so deposited are held by the third party until the full performance of an agreed-upon condition or the happening of a specified event (e.g., an accident). Upon fulfillment of the condition or happening event, the deposited instrument and funds are handed over to the person indemnified. See generally 28 AM. JUR. 2d *Escrow* §§ 1-43 (1966).

101. A restoration fund is a trust fund created to ensure that funds will be available to rectify problems caused by a specified occurrence. Upon the happening of the specified occurrence, losses

upon the happening of the stipulated occurrence or violation of an agreed-upon condition, the indemnity mechanism becomes the key remedy.

If a bond is involved, the person providing the indemnity coverage is bound by contract to pay for the costs incurred. Litigation may still be necessary to enforce the bond, however. If escrow is involved, the impartial holder of the instrument is empowered to act or remedy the occurrence of the specified event. As a consequence, litigation or other delays in providing a remedy are less likely than in the case with a bond. Similarly, in the case of a restoration fund, if there are any "trustee" losses incurred, the fund is able to dispense the funds necessary to cover losses or damages promptly, in the absence of an injunction obtained by the depositor. These mechanisms share several common characteristics in that each involves a relatively automatic and sometimes significant financial loss to the party who is providing the indemnity;¹⁰² and each involves a legally-recognized relationship between the parties to the promised indemnification. This relationship may be a contractual one between private parties or between a private party and a public agency; or the relationship may be a regulatory one between a licensing or permitting agency (e.g., an energy facility review board or a zoning board, and a developer or other private party).

While the primary purpose of these indemnity mechanisms is to provide assurance of damage recovery, there are many examples of federal, state, and local statutes and ordinances also utilizing these mechanisms as an aid to risk management.¹⁰³ For example, a Michigan statute provides that before engaging in the business of removing liquid industrial wastes from the premises of another, a person must obtain a license and submit with the license application a surety bond.¹⁰⁴ The bond is meant to indemnify the state for the elimination of hazardous conditions which may arise from the waste removal process, and for the abatement of any pollution of waters which result from the improper disposal of industrial waste by the licensee.¹⁰⁵

incurred by the obligee are compensated automatically by proceeds from the restoration fund. In this study, a restoration fund is one which could be collected and administered by a party other than the person providing the indemnity.

102. The threat of loss is real, even if an insurance company guarantees the indemnity. Since surety on a bond, for example, is usually renewable on an annual basis, insurance premiums can rise, or coverage could become unavailable, depending upon the bond performance record of the person providing the indemnity. If that person is called upon to cover losses under the performance bond, it is going to hurt financially, irrespective of whether the bond is guaranteed by a surety or not.

103. Many of the federal and state statutes discussed were identified in W. IRWIN & R. LIROFF, *ECONOMIC DISINCENTIVES FOR POLLUTION CONTROL: LEGAL AND ADMINISTRATIVE DIMENSIONS* (1974) (prepared for the Office of Research and Development, U.S. Environmental Protection Agency).

104. MICH. STAT. ANN. § 3.533 (105) (1978).

105. See Irwin & Liroff, *supra* note 103, at 11. *Accord*, MD. NAT. RES. CODE ANN. § 7-506

In a sense, the bond, the escrow instrument, and the restoration fund amount to pre-paid fines or penalties for the violation of stipulated conditions or the occurrence of identified risks. In other words, the fine for violation is put "up front," rather than being imposed as a result of a trial.¹⁰⁶ The result is that system operators (or, for that matter, product manufacturers and retailers in any potential new application of these indemnity mechanisms) providing indemnity coverage cannot rely upon litigation costs to deter injured parties from taking action against them. Many cost-related common law factors which restrict the number of causes of action brought against potential defendants are therefore eliminated by the indemnity mechanism. In addition to indemnification through these means, the potential defendant is still liable for common law damages beyond that covered by the indemnity device. Hence, these mechanisms serve to increase the obligor's incentives to minimize the stipulated risks to health, safety and the environment.

Requiring these mechanisms in public circumstances is itself a simplistic form of governmental regulation. While they do not eliminate regulatory costs entirely, such mechanisms reduce administrative costs by defining the performance conditions necessary to avoid liability in the statute and by setting the penalty ahead of time, rather than through design rules and other burdensome actions. Consequently, the need for administrative adjudications should be reduced as should the need for administrative rulemaking. In sum, where it is within the financial capability of the system operator (or product manufacturer/retailer) to provide the necessary indemnity, these mechanisms are worthy of consideration as a possible substitute for health, safety, and environmental regulation.

III. GOVERNMENT INFLUENCE

A. *Government Procurement*

This section addresses whether the federal government's procurement power can be effectively used to control risks to health, safety and the environment by providing the economic incentive of awarding federal contracts and grants only to those who meet specific criteria for eligibility. The scope of federal procurement has been broadly construed to include grants as well as contracts, but most of the discussion herein is focused on federal contracting with the private sector.

Federal contracts and grants now total approximately \$185 billion annually. Of this total roughly \$100 billion is committed through federal

(Supp. 1980) (insurance bond requirement); MICH. STAT. ANN. § 18.484 (15) (1980) (insurance on carnival and amusement rides); OHIO REV. CODE ANN. § 15.13.08 (1978) (requiring insurance bond for strip mining).

106. See IRWIN & LIROFF, *supra* note 103, at 10.

contracts,¹⁰⁷ while \$85 billion is awarded through grants.¹⁰⁸ Both contracts and grants are subject to a myriad of statutes, regulations, executive orders and policy directives.¹⁰⁹ Congress has long perceived the government's considerable procurement power as a means to achieve a variety of national goals. In fact, nearly all government contracts and grants today contain "socio-economic clauses" which have nothing to do with furthering the procurement process itself,¹¹⁰ but are used for the purpose of promoting various national objectives ranging from assisting the disadvantaged to energy conservation to environmental protection.¹¹¹ Given the extraordinary, if laudable, scope of these objectives, it is understandable that those few persons who have assessed government procurement are in agreement that a major overhaul is needed.¹¹² The most significant effort at reform has been that of the broadly mandated Commission on Government Procurement established by Congress in 1969.¹¹³

One of the Commission's major recommendations was the establishment of an ongoing procurement policy agency to coordinate and consolidate federal procurement,¹¹⁴ which led to the Congressional creation of the Office of Federal Procurement Policy (OFPP) under the aegis of the Office of Management and Budget (OMB).¹¹⁵ OFPP is charged with implementing the Commission's recommendations, but OFPP has been sharply criticized for failure to fully carry out this function.¹¹⁶ As of

107. *Report to the Congress on Recommendations of the Commission on Government Procurement: A Final Assessment* [1979] 9 GOV'T CONT. REP. (CCH) No. 424 [hereinafter cited as *Report No. 424*].

108. R. CAPPALLI, *RIGHTS AND REMEDIES UNDER FEDERAL GRANTS* 11 (1979).

109. As to contracts, see, e.g., Armed Services Procurement Act of 1947, 10 U.S.C. § 2301 (1976); Federal Procurement and Administrative Services Act of 1949, 40 U.S.C. § 486 (1976); Defense Acquisition Regulations, 32 C.F.R. § 1 (1979); Federal Procurement Regulations, 41 C.F.R. § 1 (1979).

As to grants, see Cappalli, *Federal Grant Disputes: The Lawyer's Next Domain*, 11 J. URB. L. 378 (1979). Grant procedures are currently under review by OMB pursuant to the Federal Grant and Cooperative Agreement Act of 1979, 41 U.S.C. § 507 (Supp. II 1978).

110. See Caruso, *Socio-Economic Clauses and Policies*, ABA DEV. GOV'T CONT. L. 229 (1975).

111. These socio-economic contract clauses are effectuated in light of several federal enactments. See, e.g., Military Construction Act Amendment of 1979, 10 U.S.C. § 2698 (Supp. III 1979); National Historic Preservation Act of 1966, 16 U.S.C. § 470 (1976); Coastal Zone Management Act of 1972, 16 U.S.C. § 1501 (Supp. II 1978); Safe Drinking Water Act of 1974, 42 U.S.C. § 300f (1976 & Supp. I 1977); National Environmental Policy Act of 1969, 42 U.S.C. § 4321 (1976); Noise Control Act of 1972, 42 U.S.C. § 4901 (1976); Resource Conservation and Recovery Act of 1976, 42 U.S.C. § 6901 (1976); and Clean Air Act of 1977, 42 U.S.C. § 7401 (Supp. II 1978).

112. *Summary of the Report of the Commission on Government Procurement*, [1973] 9 GOV'T CONT. REP. (CCH) No. 53 [hereinafter cited as *Report No. 53*].

113. Act of Nov. 26, 1969, Pub. L. No. 91-129, 38 Stat. 269 (codified at 41 U.S.C. § 251 (1976)).

114. See *Report No. 53*, *supra* note 112.

115. Office of Federal Procurement Policy Act of 1974, Pub. L. No. 96-83, 88 Stat. 797 (codified at 41 U.S.C. §§ 401 to 412 (1976)).

116. See *Report No. 53*, *supra* note 112, at 109.

mid-1980, OFPP had placed much of its procurement reform hopes in the newly created Council on the Uniform Procurement System, made up of senior procurement officials from twenty-two departments and agencies. The Council's mandate directs it to submit a uniform procurement system to Congress.¹¹⁷ In addition to the Council, OFPP has also issued a major policy directive calling for government agencies to assist the private sector to develop voluntary procurement guidelines wherever practicable.¹¹⁸ Despite these OFPP efforts, and the efforts of others including the American Bar Association,¹¹⁹ federal procurement is still characterized by an exceedingly complex overlay of requirements, none of which have been uniformly adopted by all federal departments.

Congress began to direct the use of the procurement power to achieve a variety of socio-economic goals in the 1930s through the enactment of several laws such as the Walsh-Healy¹²⁰ and Davis-Bacon¹²¹ Acts, and the Buy-America¹²² and Small Business¹²³ Acts. Thus, the principle of using the procurement power as an alternative to direct regulation was established early. Nonetheless, only the Walsh-Healy Act, among those early statutes, dealt with the management of certain health or safety risks.¹²⁴ Most of the laws dealt with alleviating certain economic hardships and discriminatory practices, and these goals remain important today.¹²⁵ During the 1970s, this route to the achievement of national goals was used to tackle new endeavors such as energy conservation.¹²⁶

Several fundamental distinctions help to frame an analysis of the due process issues related to the government's use of its procurement power. First, contract relationships, historically characterized by freedom of the parties to bargain as they choose, are less vulnerable to due process challenges than grants and loans, which have an aura of *in loco parentis*. Second, actual recipients of contracts, grants or loans are in a better position to argue possession of a legal interest than prospective recipients. Third, blacklisting and termination of "necessities for life" under *Goldberg v. Kelly*¹²⁷ stands virtually alone as the major issue which currently arouses concern for due process safeguards, and therefore can be used to curb the government's otherwise broad discretion to act.

117. 41 U.S.C. § 401 (1976).

118. 45 Fed. Reg. 4326 (1980).

119. See *Caruso*, *supra* note 110, at 237.

120. 41 U.S.C. §§ 35-54 (1976).

121. 40 U.S.C. § 276(a) (1976).

122. 41 U.S.C. §§ 10a-10d (1976).

123. 15 U.S.C. §§ 631-647 (1976).

124. 41 U.S.C. §§ 35(a)-35(e) (1976).

125. See, e.g., 25 U.S.C. § 47 (1976); 29 U.S.C. § 47 (1976); 41 U.S.C. §§ 46-48 (1976); Exec. Order No. 12092, 43 Fed. Reg. 51,375 (1978); and Exec. Order No. 11246, 30 Fed. Reg. 12,319 (1965).

126. See note 111 *supra*.

127. 397 U.S. 254 (1970).

Two additional legal considerations affect the due process question. *Perkins v. Lukens Steel Co.*,¹²⁸ decided by the United States Supreme Court in 1940, is still considered to be good law, standing for the proposition that the government has unrestricted power in procurement contracts to determine those with whom it deal, notwithstanding *Goldberg* which specifically excluded *Perkins*-type contract situations from its holding.¹²⁹ The other consideration is section 553(a)(2) of the Administrative Procedure Act (APA)¹³⁰ which exempts contracts, loans, and grants from section 553 notice and comment requirements for rulemaking.¹³¹ This exemption, perhaps more so than anything else, illustrates the low level of attention paid to the federal-private procurement and grant relationship.

Despite the greater sensitivity for due process concerns in grants, the government is still not generally required by statute or court holding to recognize private parties as possessing sufficient legal interests to warrant wholesale restrictions on the government's grants and awards process.¹³² As for regulatory implementation by the agencies, a review of departmental and agency due process procedures indicates that the government's main concern lies with debarment or blacklisting practices.¹³³ Both are similar to agency issuance of adverse publicity, and it is likely that they will be subject to increasingly stringent procedural safeguards.¹³⁴ The final due process consideration is the amount of discretion an agency has in its contracting process. Although government procurement is seemingly bounded at every turn by assorted procedural rules, there are indications that agencies have remarkable discretion.¹³⁵

Utilization of the government's procurement power as an alternative

128. 310 U.S. 113 (1940).

129. 397 U.S. 254, 264 (1970).

130. 5 U.S.C. § 553(a)(2) (1976).

131. 5 U.S.C. § 553(c) (1976).

132. See CAPPALLI, *supra* note 108, at 180-225.

133. The Department of Defense has enumerated causes for debarment such as a history of failure to perform. 32 C.F.R. §§ 1-600 (1979). On the civilian side, a hearing is provided for any party an agency is proposing to debar. 41 C.F.R. § 1-1.6 (1979). Similarly, the Environmental Protection Agency blacklist regulations state that no facility shall be listed without notice and, where appropriate, an opportunity to be heard. 40 C.F.R. §§ 15, 20 (a) (2) (1979).

134. See Recommendation A-46 of the Commission on Government Procurement, *Report No. 424, supra* note 107, at 81, 109, which would make debarments for socio-economic violations more uniform and equitable.

135. See, e.g., *In re Wright-Dick-Boeing*, [1977] 77-1 BCA (CCH) ¶12, 437 (Feb. 10, 1977) (holding that contractors could be held to more stringent standards than those established by the Occupational Safety and Health Act of 1970, Pub. L. No. 91-596, 84 Stat. 1590 (codified in scattered sections of 5, 15, 18, 29, 49 U.S.C.)); *In re McCollum*, [1976] 76-1 BCA (CCH) ¶11, 746 (Feb. 24, 1976) (holding that contractors could be held to more stringent safety standards than those established by contract hours and the Work Hours and Safety Act of 1962, 40 U.S.C. § 327 (1976)).

to direct regulation does have some disadvantages. Criticisms include widespread agency disregard of socio-economic clauses and agency reluctance to blacklist major companies. It has also been suggested that the procurement power has achieved little because of the government's overriding need to meet other national interests such as securing goods at minimal cost and with minimal delay.¹³⁶

Favorable opinion of the procurement power is rooted in the view that it can operate expediently with little or no delay for judicial review, and with the absence of any need to prove violations beyond a reasonable doubt.¹³⁷ Perhaps the single greatest affirmation of the procurement power's viability is the consistent inclusion or procurement provisions in statutes enacted by the Congress over the past fifty years.

In summary, the use of socio-economic procurement provisions has never been challenged in any substantive way, nor have critics called for their abolition. Criticisms cluster around the need for weeding out clauses that are no longer relevant, providing minimum uniform procedures to guide the use of this power, and consolidating the many procurement provisions to facilitate agency usage.¹³⁸ Such comparatively mild criticisms, coupled with the positive reactions from others, suggest that the procurement power has viability at its core and is mostly in need of incremental refinements. The argument for the increased use of procurement as an alternative to classical regulation is not that it is the right tool for all situations; its primary value lies in its immediate availability to agencies as a preferred means of stimulating compliance with health and environmental standards and particular.

B. Government Information and Publicity

The government's ability to disclose information and to force others to publicly disclose information as to environmental, health and safety risks, and to provide adverse publicity as to the sources of such risks is another major alternative to direct regulation. By more fully informing the public of parties generating risks, the federal government has an alternative, non-regulatory means to achieve certain health, safety and environmental objectives.

Well-known examples of public disclosure requirements have been imposed on private parties since 1934 with the passage of the Securities Exchange Act,¹³⁹ and more recently with the enactment of the Federal

136. See generally R. NASH, *FEDERAL PROCUREMENT AND THE ENVIRONMENT*, FEDERAL ENVIRONMENTAL LAW 460, 489 (2d ed. 1974).

137. See Rosenthal, *The Federal Power to Protect the Environment: Available Devices to Compel or Induce Desired Conduct*, 45 S. CAL. L. REV. 397 (1972).

138. *Id.* at 445.

139. Securities Exchange Act of 1934, ch. 404, 48 Stat. 881 (codified at 15 U.S.C. §§ 78a-78111 (1979)).

Election Campaign Act.¹⁴⁰ Although rulemaking is involved in fixing the disclosure requirements under these laws, the disclosure itself has the advantage of involving no further government intrusion into the private transactions involved. Some of the benefits of the disclosure approach include less expense than incurred in rulemaking, less time to set the government's requirement, and less need for agencies to attempt to devise "ideal" ways for people to behave by detailed regulation.¹⁴¹

In conjunction with disclosure, adverse publicity is also effective in managing risks and has two subtypes. The first embraces the power of federal agencies to warn the public about defective consumer items and safety and environmental hazards.¹⁴² The second subtype usually takes the form of agency news releases which focus on specific individuals or businesses.¹⁴³

A basic distinction between disclosure and adverse publicity is that disclosure generally relies on prior rulemaking subject to the Administrative Procedure Act (APA),¹⁴⁴ and its implications are dependent on subsequent voluntary compliance. Publicity, in contrast, seldom involves prior rulemaking, and is wholly under the government's control. Further, while individuals may avoid disclosure requirements by foregoing subsequent activities, adverse publicity sweeps broadly and allows for no similar avoidance option.¹⁴⁵ Other forms of information disclosure include labeling requirements, access to information pursuant to the Freedom of Information Act (FOIA),¹⁴⁶ and agency programs which provide for the continuing generation of public information and education.¹⁴⁷

As an alternative to direct regulation, the government's "information

140. Federal Election Campaign Act of 1971, Pub. L. No. 92-255, § 301, 86 Stat. 11 (codified at 2 U.S.C. §§ 431-442 (1976 & Supp. III 1979)).

141. Even citizen disclosures have been encouraged by agencies as part of their fact-gathering process to support agency action later, such as issuances of adverse publicity, warnings, and direct regulation. See, e.g., National Traffic and Motor Vehicle Safety Act of 1966, 15 U.S.C. §§ 1411-1420 (1976); Federal Hazardous Substances Act of 1960, 15 U.S.C. §§ 1261-1274 (1976); Consumer Product Safety Act of 1972, 15 U.S.C. § 2051 (1976); Food, Drug, and Cosmetic Act of 1938, 21 U.S.C. § 375 (1976); Occupational Safety and Health Act of 1979, 29 U.S.C. § 651 (1976); and Exec. Order No. 11566, 35 Fed. Reg. 16, 675 (1970).

142. See, e.g., Toxic Substance Control Act, 15 U.S.C. § 2613 (a) (3) (1976) (granting the Environmental Protection Agency authority to notify the public as to toxic substances which present an "unreasonable risk of injury to health or the environment.").

143. See Gellhorn, *Adverse Publicity by Administrative Agencies*, 86 HARV. L. REV. 1380 (1973).

144. See 5 U.S.C. § 553 (1976).

145. See Gellhorn, *supra* note 143, at 1413.

146. 5 U.S.C. § 552 (1976).

147. For instance, the Environmental Protection Agency is required to carry out information programs under the Federal Water Pollution Control Amendments of 1977, 33 U.S.C. § 1294 (Supp. I 1977); the Resource Conservation and Recovery Act of 1976, 42 U.S.C. § 6983 (e) (1976); and the Clean Air Act of 1977, 42 U.S.C. § 7401 (Supp. II 1978).

power” has some drawbacks. For instance, concern has been expressed about agency usage of news releases and press conferences which focus on named individuals who are under indictment or subject to an administrative complaint.¹⁴⁸ A common criticism of these practices is that agencies resort to the information power as a pressure mechanism for de facto enforcement, even in the absence of any statutory enforcement authority.¹⁴⁹ Of less concern, however, are agency news releases which target a product, an entire industry, or a particular risk because no legal action is being taken against a named person, and because such public warnings are usually explicitly authorized by statute. Further, the public’s need to know usually outweighs any harm that may fall to some party as an unavoidable consequence of such general warnings.¹⁵⁰ Another problem concerns agency gathering and dissemination of business related information.¹⁵¹ Since federal agencies have broad authority to gather information, including trade secrets, Congress has attempted to devise a compromise whereby agencies may acquire whatever information they need, but industry, in turn, is afforded protection against the public disclosure of such information under the “trade secrets” exemption to the Freedom of Information Act.¹⁵² This balancing of interests has proved effective.

Despite concerns over business information and other potential problem areas, there have been only a small number of cases in which an agency’s use of its information power has been challenged. In these instances, courts have narrowly constructed their holdings so as not to collide with congressional delegation of the information powers, however vague the delegation may be. The leading cases illustrate a strong presumption of legality accorded government use of such powers, and, thus, have directly and implicitly encouraged their use.¹⁵³

148. *See, e.g., Silver King Mines, Inc. v. Cohen*, 261 F. Supp. 666 (D. Utah 1966).

149. The Office of Federal Contract Compliance, for example, highly publicized a complaint it had brought against a major Cleveland bank for alleged widespread race and sex discrimination. *See Legal Times of Washington*, May 26, 1980, at 3, cols. 1 & 2.

150. For a statute which attempts to consider both the public’s need to know and an adversely affected individual’s right to a measure of due process, *see Consumer Product Safety Act of 1972*, 15 U.S.C. § 2051(b)(1) (1976).

151. So sweeping is the federal government’s power to secure information, agency officials have developed self-imposed, internal guidelines to manage such information. For example, the Commissioner of the Consumer Product Safety Commission proposed to narrow the scope of duties of his agency with regard to the gathering of information from manufacturers of asbestos. *See Legal Times of Washington*, May 26, 1980, at 11, cols. 1, 2, 3, & 4.

152. 5 U.S.C. § 552(b)(4) (1976).

153. *See, e.g., Chrysler Corp. v. Brown*, 441 U.S. 281, 293-94 (1979) (while Freedom of Information Act exemptions restrict an individual’s ability to secure certain information, the exemptions do not represent an absolute bar to disclosure); *FTC v. Cinderella Career and Finishing Schools, Inc.*, 404 F.2d 1308, 1313-14 (D.C. Cir. 1968) (held not prejudicial for FTC to issue news release simultaneously with the filing of a complaint, since agency has explicit statutory authority to disseminate information); *Kukatash Mining Corp. v. SEC*, 309 F.2d 647, 650 (D.C. Cir. 1962)

In the final analysis, any expanded use of the information power as an alternative to rulemaking should be accompanied by an identification of which problems are most susceptible to its responsible use, and a determination of how often dissemination can be used before its impact is diluted. If developed in this way, agency disclosure and publicity effectuated in tandem with other nonregulatory measures, will provide another sound alternative to risk regulation.

C. Advance Notice of Intent to Regulate

A relatively new tactic of several government agencies to promote voluntary risk-reduction efforts by regulated industries involves the publication of a quasi-formal "notice" in the Federal Register of an agency's "advanced notice of proposed rulemaking" (ANPRM). By issuing an early warning of an intention to consider rulemaking in response to a particular problem, the agency is attempting to generate information that may be useful, from any quarter, and is putting the sources of a problem on notice that unless voluntary measures are taken to abate or eliminate the problem, the agency will begin the fact-finding and subsequent formal stages of the rulemaking process.¹⁵⁴ Of course, an ANPRM also affords the sources of the problem an early opportunity to either begin changing their activities to abate risks, or to begin mustering an array of techniques to influence or oppose subsequent agency efforts — techniques which may include intensified lobbying of the agency, of Congress and the Executive Office, and an intensive public relations campaign.

Using ANPRMs as an alternative to classical regulation would be in keeping with a 1978 Executive Order,¹⁵⁵ requiring all executive agencies to implement regulatory reforms, including the consideration of meaningful alternatives to rulemaking. ANPRMs serve the useful function of pointing out problem areas to the public and allowing both industry and government agencies the opportunity to develop non-rulemaking solu-

(SEC disclosure requirements are imperative to inform the public); and *Ajoy Nutrition Foods, Inc. v. FDA*, 378 F. Supp. 210, 212, 217 (D. N. J. 1974) (FDA has broad statutory mandate to issue information on health warnings). *But see GTE Sylvania, Inc. v. Consumer Product Safety Comm'n*, 404 F. Supp. 352 (D. Del. 1975) (agency barred from disclosing incomplete and ambiguous information); *cf. United States v. Abbott Laboratories*, 505 F.2d 565, 568-69 (4th Cir. 1974) (despite pretrial publicity through inaccurate, agency-released information, no dismissal without concerted effort of defendant to minimize effects through *voir dire*, change of venue, or continuance).

154. *See, e.g.*, ANPRM issued by the Environmental Protection Agency regarding the perceived need for manufacturers of selected chemical substances to submit information associated with production volume, mass and exposures. 44 Fed. Reg. 37,517 (1979).

155. Exec. Order No. 12044, 43 Fed. Reg. 12,661 (1978). This Carter Administration order has been replaced by President Reagan's Exec. Order No. 12291, 46 Fed. Reg. 13,193 (1981), which incorporates Exec. Order No. 12044 requirements in a larger framework of regulatory reform measures.

tions, such as the development of voluntary standards by the private sector. If such voluntary responses are not forthcoming within a reasonable time, the agency can promptly assume full responsibility and initiate its rulemaking process.

A concluding observation is that ANPRMs, to be effective as alternative regulatory tools, should be used selectively. Particularly appropriate are situations which do not present immediate risks. Also, the government must be prepared to take prompt action where an ANPRM does not result in some type of self-regulatory behavior, and to demonstrate that the ANPRM "opportunity" should be thereafter used. Given a mix of using ANPRMs in the right situations and taking prompt regulatory action when faced with insufficient responses from the private sector, the government might find that expanded use of this simple device is an inexpensive and effective way to induce the voluntary management of risk by the private parties creating the risk.

CONCLUSION

Historically, our society has addressed risks to health, safety and environment through a variety of non-regulatory measures. Although these measures were legally sound, they often produced unsatisfactory results for a number of reasons, and this led to the rapid growth of the regulatory approach. This article has suggested a new role for the government regulator through the use of in-place and proven alternatives to regulation. Under this approach the regulator would consider an array of risk reduction strategies within a procedural framework allowing all interested parties to be heard. Then, the regulator would select the most efficacious strategy or combination of mechanisms, and would rulemake only as a last resort. Some of these strategies will require congressional assistance, either by expanding the regulator's discretion, or by creating or reinforcing the alternative mechanisms the regulator seeks to use. Such a role would be compatible with the societal need for risk management by federal agencies without the burdensome attributes of more formal and costly regulation. This would mark the beginning of a creative approach to risk management, one more finely-tuned to the attributes of the risk in question and its socio-economic context.