

Reorienting OSHA: Regulatory Alternatives and Legislative Reform

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The consumer and environmental movement that ushered in the 1970s brought with it several unique experiments in governmental control over business behavior. President Nixon reorganized the federal government to create the Environmental Protection Agency (EPA)¹ just as Congress was enacting comprehensive amendments to the Clean Air Act,² the Clean Water Act,³ and the Federal Insecticide, Fungicide and Rodenticide Act.⁴ Congress created the Consumer Product Safety Commission (CPSC)⁵ to administer new and existing statutes designed to protect children and the general public from hazardous products. A revitalized Federal Trade Commission began to use its latent rulemaking powers,⁶ and Congress soon gave it new powers to write rules to harness industry.⁷ Even the

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1. Reorg. Plan. No. 3 of 1970, *reprinted in* 42 U.S.C. § 4321 (1982), *and in* 84 Stat. 2086 (1970).

2. Air Quality Act of 1967, Pub. L. No. 90-148, 81 Stat. 485 (codified as amended at 42 U.S.C. §§ 7401-7642 (1982)).

3. Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (codified as amended at 33 U.S.C. §§ 1251-1376 (1982)).

4. Federal Environmental Pesticide Control Act of 1972, Pub. L. No. 92-516, 86 Stat. 973 (codified as amended at 7 U.S.C. § 136 (1982)).

5. Consumer Product Safety Act, Pub. L. No. 92-573, 86 Stat. 1207 (codified as amended at 15 U.S.C. §§ 2051-2083 (1982)).

6. *See* National Petroleum Refiners Ass'n v. FTC, 482 F.2d 672 (D.C. Cir. 1973), *cert. denied*, 415 U.S. 951 (1974) (FTC has authority to make substantive rules although it had previously interpreted its statute to deny such power).

7. Magnuson-Moss Warranty-Federal Trade Commission Improvement Act, Pub. L. No. 93-637, 88 Stat. 2183 (codified as amended at 15 U.S.C. § 57a (1982)).

Food and Drug Administration (FDA) began to experiment with procedural innovations designed to enhance its regulatory efficiency.⁸

One of the most controversial experiments of the consumer and environmental movement was the creation of the Occupational Safety and Health Administration (OSHA), which Congress empowered to write health and safety standards "reasonably necessary and appropriate" for providing workers with a safe working environment.⁹ Congress ordered the new Agency within its first six months to promulgate as federal rules "national consensus standards" written by private entities like the American National Standards Institute (ANSI) and quasi-governmental organizations such as the American Conference of Governmental Industrial Hygienists (ACGIH).¹⁰ OSHA inspectors in the field were authorized to issue citations for violations both of OSHA standards and of the employers' "general duty" to provide safe and healthful employment.¹¹ An independent three-member Occupational Safety and Health Review Commission (OSHRC) was established to adjudicate violations of OSHA standards and the "general duty" clause.¹²

The institutions created by the consumer and environmental movement have now been in place for more than fifteen years, but it is fair to conclude that none of them has fully achieved the high expectations of the consumer, environmental, and labor groups that persuaded Congress to create them.¹³ OSHA, in particular, has been a disappointment. During its seventeen-year history, the Agency has completed only twenty-four substance-specific health regulations.¹⁴ Perhaps the best indication that this output falls below what its proponents expected is that OSHA has either no worker protection standards or inadequate standards for more than one-half of the 110 chemicals used in workplaces that the National Cancer Institute (NCI) regards as confirmed or suspected carcinogens.¹⁵ A further indication is that the ACGIH has recommended exposure limita-

8. See McGarity, *Substantive and Procedural Discretion in Administrative Resolution of Science Policy Questions: Regulating Carcinogens in EPA and OSHA*, 67 GEO. L.J. 729, 761-66 (1979) [hereinafter McGarity, *Resolution of Science Policy Questions*] (discussing FDA's adoption of innovative summary judgment procedures); see also 21 C.F.R. § 12.93 (1988) (summary judgment procedures).

9. Occupational Safety and Health Act of 1970, Pub. L. No. 91-596, 84 Stat. 1590 (1970) (codified as amended at 29 U.S.C. § 656(b) (1982)).

10. See *infra* notes 73-75 and accompanying text.

11. 29 U.S.C. § 655(a) (1982).

12. See *infra* notes 334-37 and accompanying text.

13. See J. CLAYBROOK, *RETREAT FROM SAFETY: REAGAN'S ATTACK ON AMERICA'S HEALTH* (1984); J. LASH, K. GILLMAN & D. SHERIDAN, *A SEASON OF SPOILS: THE STORY OF THE REAGAN ADMINISTRATION'S ATTACK ON THE ENVIRONMENT* (1984).

14. See, e.g., Proposed Rule for Air Contaminants, 53 Fed. Reg. 20,960, 20,963 (1988).

15. U.S. Office of Technology Assessment, *Identifying and Regulating Carcinogens*, 182-84 (Nov. 1987) (on file with authors).

tions for 300 chemicals for which OSHA either has no exposure limitation regulations (approximately 200 of the chemicals) or has regulations that are less strict than the ACGIH recommendations (approximately 100 of the chemicals).¹⁶ Similarly, the National Institute for Occupational Safety and Health (NIOSH) has recommended to OSHA that it should change existing exposure limitations or promulgate new regulations for over 100 chemicals.¹⁷ Moreover, there are tens of thousands of chemicals used in workplaces (estimates range from 17,000 to 70,000) and at least 1000 new chemicals are introduced into workplaces each year.¹⁸ Although many, or even most, of these chemicals may not be dangerous, if even a small proportion require regulation, OSHA has a tremendous job on its hands.

OSHA's record, despite its limited output, should not be too quickly denigrated. A primary lesson of the experience of agencies in the modern regulatory context is that they face significant constraints that limit their productivity. No health and safety agency has been able to promulgate regulations for more than three controversial chemicals in any given year.¹⁹ Compounding the limitations faced by other health and safety agencies, OSHA labors under additional constraints not faced by most of its peers. Although OSHA has brought many of its difficulties upon itself through poor management and an inability to set priorities, its primary problem is the extraordinary, externally imposed constraints that it faces. Indeed, it is in many ways surprising that OSHA has been able to regulate at all. To a very large extent, the OSHA reform agenda must remove existing impediments to effective regulation.

The failure of OSHA and other health and safety agencies to make much of a dent in their obligations to regulate suggests that the original conception of the agencies requires rethinking. If agencies are ill-equipped to overcome existing impediments to regulation, Congress must give them new powers that specifically address the constraints they face. Congress has, to some extent, recognized this lesson in environmental law and has amended the Clean Water Act and the Clean Air Act to make it easier for EPA to regulate.²⁰ Congress' failure to realize that OSHA requires a sim-

16. Mendeloff, *Regulatory Reform and OSHA Policy*, 5 J. POL'Y ANALYSIS & MGMT. 440, 442 (1986).

17. Schroeder & Shapiro, *Responses to Occupational Disease: The Role of Markets, Regulations, and Information*, 72 GEO L.J. 1231, 1232 n.4 (1984).

18. *Id.*

19. Merrill, *Federal Regulation of Cancer-Causing Chemicals*, in ADMIN. CONFERENCE OF THE U.S., RECOMMENDATIONS AND REPORTS 21, 113 (1982); see also *Toxic Substances: EPA and OSHA Are Reluctant Regulators*, 203 SCIENCE 28 (1979) (EPA and OSHA take "years" to complete rulemaking proceeding).

20. See *infra* notes 262-64 and accompanying text.

ilar solution severely limits the Agency's ability to protect American workers from crippling or fatal accidents and diseases.

This Article examines why OSHA has produced so few health and safety regulations and what can be done to increase its output.²¹ Part I explores some of the inherent difficulties that limit the number of regulations promulgated by health and environmental agencies, and focuses on some of the unique problems that plague OSHA. Part II offers some "patch and repair" reforms that the Agency can implement internally to solve some of its problems. Part III argues that it is time for Congress to reopen the Occupational Safety and Health Act and offers some politically feasible proposals for statutory change that should lead to a revitalization of the Agency and to a more mature and effective implementation of its policy goals.

I. OSHA's Difficult Regulatory Environment

OSHA, like other health, safety, and environmental agencies, faces many constraints on productivity. These limitations have so adversely affected OSHA that the realization of Congress' original plan for the Agency has not been possible. The limitations on OSHA's productivity are discussed first, followed by an appraisal of OSHA's attempts to promulgate regulations.

A. *Constraints Affecting Regulation*

The constraints on OSHA have substantive, managerial, legal, and political dimensions. In addition, OSHA has several unique limitations that make its job more difficult than most other regulatory agencies.

1. *Substantive Constraints*

An agency that is responsible for promulgating health and environmental regulations must continually make complex scientific, engineering, and policy judgments.²² Risk assessment requires agencies to evaluate the reli-

21. The reform agenda for OSHA should also include improvement in the manner in which OSHA enforces the standards that it promulgates. If OSHA cannot successfully enforce its regulations, the promulgation of additional health and safety standards will be for naught. One of the problems with the enforcement process, the relationship between OSHA and OSHRC, is discussed in this Article. See *infra* Part III.C.2. Other problems, such as too few inspectors and a fine structure that is unrealistic, are beyond the scope of this Article. For a discussion of these and related problems, see National Safe Workplace Institute, *Ending Legalized Workplace Homicide: Barriers to Job Safety Prosecution in the U.S.* (July 15, 1988) (on file with authors); Viscusi, *Reforming OSHA Regulation of Workplace Risks*, in *REGULATORY REFORM: WHAT ACTUALLY HAPPENED* 234, 253-63 (1986).

22. Agency statutes typically require agencies to evaluate the risks that their standards address as well as the feasibility of alternative vehicles for reducing those risks. See, e.g., Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), 7 U.S.C. § 136d (1982); Consumer Product Safety Act

ability of safety data and determine its relevance for human exposure, use, or consumption.²³ Yet, because of enormous scientific uncertainties stemming from limitations in the available scientific data, the varying susceptibility of human beings to toxic substances, and the limited understanding of the biochemical mechanisms underlying many toxic reactions, scientific judgment alone is incapable of resolving many of the most important questions that arise in risk assessments.²⁴ Consequently, difficult policy judgments are necessary for adequate risk evaluations.²⁵ Placing monetary valuations on the value of reduced risks invariably raises controversial ethical questions about the appropriate dollar value to assign to a human life and the morality of human valuation techniques.²⁶ Even cost and feasibility analyses are hampered by the lack of reliable cost information and the uncertainties involved in making cost projections.²⁷

(CPSA), 15 U.S.C. § 1262(i) (1982); Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(d) (1982); Food, Drug & Cosmetic Act, 21 U.S.C. § 348(c) (1982) (food additives); 21 U.S.C. § 355 (1982) (new drugs); Occupational Safety and Health Act, 29 U.S.C. § 655(b)(3) (1982); Clean Air Act, 42 U.S.C. § 7408 (1982). See generally Cross, *Beyond Benzene: Establishing Principles For a Significance Threshold On Regulatable Risks of Cancer*, 35 EMORY L.J. 1, 5-12 (1986). In addition, Executive Order 12,291 independently requires executive agencies that have the authority to do so to calculate in a quantitative way the costs and benefits of major regulations, Exec. Order No. 12,291, 3 C.F.R. § 127 (1981), reprinted in 5 U.S.C. § 601 (1982); see McGarity, *Regulatory Analysis and Regulatory Reform*, 65 TEX. L. REV. 1243 (1987) [hereinafter McGarity, *Regulatory Analysis*].

23. See Shapiro, *Scientific Issues and the Function of Hearing Procedures: Evaluating the FDA's Public Board of Inquiry*, 1986 DUKE L.J. 288, 291-92 [hereinafter Shapiro, *Scientific Issues*]. These assessments demand scientific judgments on such matters as the statistical validity of animal experiments and the relevance of animal tests at high doses to human exposure at low doses. Relevant data usually consist of experiments conducted to evaluate the effect of a substance on animals and epidemiological studies evaluating the effect of prolonged exposure to a substance. *Id.* at 292. See generally NATIONAL ACADEMY OF SCIENCES/NATIONAL RESEARCH COUNCIL, *RISK ASSESSMENT IN THE FEDERAL GOVERNMENT: MANAGING THE PROCESS* (1983) [hereinafter *RISK ASSESSMENT IN THE FEDERAL GOVERNMENT*].

24. Shapiro, *Scientific Issues*, *supra* note 23, at 294; McGarity, *Resolution of Science Policy Questions*, *supra* note 8, at 731-49.

25. For example, when an agency chooses one risk assessment model for predicting carcinogenic risks, it must base the choice primarily upon policy considerations. Schroeder & Shapiro, *supra* note 17, at 1231-37; McGarity, *Media Quality, Technology, and the Utilitarian Ideal: Alternative Strategies for Health and Environmental Regulation of the Chemical Industry*, 46 LAW & CONTEMP. PROBS. Summer 1983, at 159, 185 [hereinafter McGarity, *Alternative Strategies*].

26. McGarity, *Alternative Strategies*, *supra* note 25, at 188-89.

27. *Id.* at 181. McGarity, *Regulatory Analysis*, *supra* note 22, at 1277-79. Agencies also have difficulty evaluating the costs of secondary economic effects, such as anticompetitive and employment effects, because of their amorphous nature. McGarity, *Alternative Strategies*, *supra* note 25, at 183; McGarity, *Regulatory Analysis*, *supra* note 22, at 1276-89.

Although OSHA conducts risk and benefit studies, it is in a different position than other regulatory agencies concerning the use to which these studies are put. *American Textile Mfrs. Inst. v. Donovan*, 452 U.S. 490 (1981) held that OSHA could not engage in cost-benefit analysis to determine what level of regulation was appropriate because Congress placed the benefit of workers' health and safety above all other considerations except whether the benefits were unachievable. Thus, OSHA is exempt from the requirement in Exec. Order 12,291, *supra* note 22, that executive agencies may not promulgate regulations unless the benefits of those regulations exceed their costs. Cost, however, is not irrelevant to OSHA. All other things being equal, OSHA should choose methods of regulation that impose the lowest possible costs. See, e.g., *infra* notes 212-17 and accompanying text (performance standards that protect workers as much as design standards should be adopted because they reduce compliance costs).

These problems are often worse for OSHA than for other agencies because unlike agencies with authority either to license or not to license products, OSHA encounters regulated industries with strong economic incentives to delay regulation. For example, because the FDA is a licensing agency, it is in the regulated industry's economic interest to cooperate with the Agency to facilitate bringing its product to market.²⁸ By comparison, if OSHA orders an industry to undertake expensive changes, postponing implementation costs can generate considerable savings.²⁹ In addition, while FDA has authority to require drug manufacturers to test new drugs in both animals and humans,³⁰ OSHA, because industry has an incentive not to cooperate, must acquire the information necessary for decisionmaking.³¹

2. Managerial Constraints

Regulatory agencies always have more tasks than they have resources. Because agencies have a relatively small number of scientists, engineers, and economists to undertake rigorous scientific and policy analysis, only a few chemicals or products can be considered for regulation at any one time.³² The growth in government spending on regulatory activities slowed considerably in the first five years of the Reagan Administration, and overall staffing by regulatory agencies fell by eleven percent in the same period.³³ Under these parsimonious conditions, government has had

28. Interview with Ben Mintz, Professor of Law, Catholic University, in Washington, D.C. (Sept. 25, 1986) (former head of OSHA Division, Office of Solicitor, Department of Labor) [hereinafter Mintz interview]. Of course, once a product receives a license, it is in the economic interest of the industry to delay regulatory action, just as it is in the economic interest of OSHA regulatees to delay.

29. Interview with David Vladeck, Public Citizen, in Washington, D.C. (Sept. 25, 1986) [hereinafter Vladeck interview]; Mintz interview, *supra* note 28; see Huber, *The Old-New Risk Division in Regulation*, 69 VA. L. REV. 1025, 1035 (1983) (under licensing regulation regulatee bears risk and cost of delay, but under standard-setting regulatee derives economic benefits from delay).

30. See McGarity & Shapiro, *The Trade Secret Status of Health and Safety Testing Information: Reforming Agency Disclosure Policies*, 93 HARV. L. REV. 837, 868-69 (1980); Shapiro, *Limiting Physician Freedom to Prescribe A Drug For Any Purpose: The Need for FDA Regulation*, 73 NW. U.L. REV. 801, 803 (1978) [hereinafter Shapiro, *Need for FDA Regulation*].

31. See *infra* Part III (OSHA lacks information necessary to reach decisions); see generally Huber, *supra* note 29, at 1034 (licensing regulation places cost of acquiring necessary information on regulatee, while standard setting places cost on Agency).

32. See Mendeloff, *Does Overregulation Cause Underregulation? The Case of Toxic Substances*, REGULATION, Sept./Oct. 1981, at 47, 50 (shortage of personnel restricts scope of EPA and OSHA activities and increases burdens on executive scientific staff); Levin, *Politics and Polarity: The Limits of OSHA Reform*, REGULATION, Nov./Dec. 1979, at 37 (Since its inception, OSHA has been "drastically underfunded for its mission of assuring 'every working man . . . in the nation safe and healthful working conditions.'").

33. Wash. Post, June 4, 1984, at D11, col. 1, *reprinted in* R. PIERCE, S. SHAPIRO & P. VERKUIL, ADMIN. LAW & PROCESS § 4.3.3 (1985) (citing study by The Center for the Study of American Business, Washington University); see R. LITAN & W. NORDHAUS, REFORMING FEDERAL REGULATION 127-28 (1983) (Reagan Administration has used "severe" budget cuts to restrain gov-

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difficulty attracting and retaining qualified staff.³⁴ Agencies' attempts to compensate by creating advisory committees and hiring consultants to carry out their regulatory missions have created problems of accountability and coordination.³⁵ Finally, upper-level management at regulatory agencies turns over at a surprisingly high rate.³⁶

While all health, safety, and environmental agencies confront these problems, OSHA generally has less scientific expertise and more organizational burdens because many of the government's occupational safety and health scientists are located in a separate agency. Congress charged NIOSH with researching what chemicals and substances OSHA should regulate and making recommendations on how the Agency should be regulated. Congress' decision to house NIOSH in the Department of Health and Human Services (HHS)³⁷ and OSHA in the Department of Labor (DOL)³⁸ makes an already troublesome organizational arrangement even more difficult. As one might imagine, this has created serious coordination problems. Moreover, although other agencies such as the FDA and EPA rely heavily on external advisory committees for technical expertise,³⁹

ernment regulation).

34. See DEPARTMENT OF HEALTH, EDUCATION & WELFARE, REVIEW PANEL ON NEW DRUG REGULATION, FINAL REPORT 45 (1977) [hereinafter HEW FINAL REPORT] (scientists and policy analysts are discouraged from government work by noncompetitive salaries).

35. Shapiro, *Scientific Issues*, supra note 23, at 302-03.

36. The following chronology of tenure of OSHA administrators demonstrates this point:

John Pendergast	May 86 - present	--
Vacant	July 85 - May 86	10 mos.
Robert Rowland	July 84 - July 85	1 yr.
Vacant	Mar. 84 - July 84	4 mos.
Thorne Auchter	Mar. 81 - Mar. 84	3 yrs.
Vacant	Dec. 80 - Mar. 81	3 mos.
Eula Bingham	Mar. 77 - Dec. 80	3 yrs. 9 mos.
Vacant	Jan. 77 - Mar. 77	3 mos.
Morton Corn	Dec. 75 - Jan. 77	1 yr. 1 mo.
Vacant	July 75 - Dec. 75	5 mos.
John Stender	Apr. 73 - July 75	2 yrs. 3 mos.
Vacant	Jan. 73 - Apr. 73	4 mos.
George Guenther	Apr. 71 - Jan. 73	1 yr. 9 mos.

Telephone interview with Susan Fleming, Public Affairs Specialist, OSHA Office of Information and Consumer Affairs (Dec. 12, 1988).

37. 29 U.S.C. §§ 652, 671 (1982).

38. See T. GREENWOOD, KNOWLEDGE AND DISCRETION IN GOVERNMENT REGULATION 116-18 (1984) (OSHA and NIOSH activities not well coordinated); F. THOMPSON, HEALTH POLICY AND THE BUREAUCRACY: POLITICS AND IMPLEMENTATION 235 (1981) (joint effort by NIOSH and OSHA to increase regulatory protection of workers ended in failure); Comptroller General of the U.S., Delays in Setting Workplace Standards for Cancer-Causing and Other Dangerous Substances 32 (May 10, 1977) (on file with authors) (standards delayed because OSHA and NIOSH have limited teamwork, different priorities, and lack joint efforts at data collection); Telephone interview with Grover Wrenn, President, Environ Corp. (Oct. 23, 1986) (former Director, Directorate of Health Standards, OSHA) [hereinafter Wrenn interview] (NIOSH provides insufficient information to OSHA to permit it to regulate).

39. See U.S. DEPT. OF HEALTH, EDUCATION & WELFARE, REVIEW PANEL ON NEW DRUG

OSHA has chosen not to appoint any rulemaking advisory committees since 1976.⁴⁰

OSHA has more organizational burdens than other agencies because of the management structure of the DOL and of OSHA itself. OSHA's proposed regulations must be reviewed by the Solicitor's Office and other DOL officials over whom OSHA has no control. Coordination problems with these administrators have produced numerous delays.⁴¹ OSHA's own internal organization creates additional management burdens.⁴² Congress located the various professionals who must work on OSHA standards in different departments, called Directorates, within the Agency. For example, the Directorate of Health Standards Programs performs risk assessment, the Directorate of Policy performs economic and feasibility analysis, and the Directorate of Technical Support assists in those functions. Because the administrators of these Directorates are coequal, no single director has the authority to set deadlines or other management guidelines for the others. Unless the assistant secretary directly supervises day-to-day operations, no suitable mechanism exists to ensure accountability and to resolve internal disputes.⁴³

REGULATION, INTERIM REPORT: THE USE OF STANDING ADVISORY COMMITTEES BY THE BUREAU OF DRUGS OF FDA 52 (1977) [hereinafter USE OF STANDING ADVISORY COMMITTEES]. EPA also relies heavily upon its Scientific Advisory board for technical advice, and it also relies on special advisory committees required by the Clean Air Act, 42 U.S.C. § 7409(d) (1982), and the Federal Insecticide Fungicide and Rodenticide Act, 7 U.S.C. § 136w(d) (1982 & Supp. IV 1986).

40. See *infra* notes 199-200 and accompanying text (explanation of OSHA decision to abandon advisory committees).

41. Interview with Frank White, Deputy Assistant Secretary, OSHA, in Washington, D.C. (Sept. 26, 1986) [hereinafter F. White interview] (coordination with offices in DOL presents problems); Interview with Barry White, Director, Directorate of Safety Standards Programs, OSHA, in Washington, D.C. (Sept. 26, 1986) [hereinafter B. White interview] (Solicitor's Office can be "slowest link" in OSHA decisionmaking); Interview with John Martonik, Directorate of Health Standards, OSHA, in Washington, D.C. (Sept. 26, 1986) [hereinafter Martonik interview] (slippages in decisionmaking caused in DOL). See generally Harter, *In Search of OSHA*, REGULATION, Sept./Oct. 1977, at 33, 36 (It is "at best difficult" for OSHA to act because DOL officials "adopt their own schedules and priorities . . .").

42. Harter, *supra* note 41, at 34 (organizational structure at OSHA is "nightmare"); Interview with Stevan Bokart, United States Chamber of Commerce, in Washington, D.C. (Sept. 9, 1986) [hereinafter Bokart interview].

43. Martonik interview, *supra* note 41 (slippage inevitable because of need to coordinate with other units that may have own problems); Interview with Frank Frodyma, Director, Directorate of Policy, OSHA, in Washington, D.C. (Sept. 26, 1986) [hereinafter Frodyma interview] (no mechanism exists to force a "consensus" between those persons who must participate to promulgate a standard). This Article will not delve deeply into OSHA's organizational and management problems. For a full discussion, see ADMIN. CONFERENCE OF THE U. S., REPORT TO THE ASSISTANT SECRETARY FOR OCCUPATIONAL SAFETY AND HEALTH AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION: OSHA RULEMAKING PROCEDURES (written by T. McGarity & S. Shapiro) 118-99 (Feb. 19, 1987).

3. *Legal Constraints*

All health and safety agencies must use some type of public process in promulgating regulations. Although many agencies arrive at their decisions through informal rulemaking,⁴⁴ Congress has apparently required OSHA to use hybrid rulemaking procedures for its substantive rules.⁴⁵ Thus, unlike agencies that only use the informal notice and comment procedures specified in section 553 of the Administrative Procedure Act (APA),⁴⁶ before OSHA promulgates rules, it holds a hearing at which interested parties can appear and cross-examine key witnesses.⁴⁷ An even more serious impediment is the increasingly heavy burden that reviewing courts have placed upon agencies to justify the rules that they adopt by reasoned analysis and by references to the rulemaking record.⁴⁸ Finally, although the APA applies an "arbitrary and capricious" standard of review for most agencies, it requires OSHA to support its rules with "substantial evidence."⁴⁹ As a result, the Agency may have to produce even more convincing evidence than most other agencies before it can regulate.⁵⁰

Although all agencies are subject to judicial review, the judicial inter-

44. See, e.g., Toxic Substances Control Act, 15 U.S.C. § 2605 (1982); Resource Conservation and Recovery Act, 42 U.S.C. § 6924 (1982).

45. The Occupational Safety and Health Act requires OSHA to hold a "public hearing" if any interested person files written objections to a proposed rule. 29 U.S.C. § 655 (b)(3) (1982). Although the Supreme Court has held that similar language in other statutes does not require procedures other than those required for informal rulemaking by the Administrative Procedure Act, *United States v. Florida East Coast Ry. Co.*, 410 U.S. 224 (1973), OSHA has decided that Congress indicated OSHA was to engage in additional procedures when it specified a scope of review of "substantial evidence" for OSHA standards. B. MINTZ, *OSHA: HISTORY, LAW & POLICY* 61-62 (1984).

46. 5 U.S.C. § 553 (1982).

47. 29 C.F.R. § 1911 (1988).

48. See *Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Automobile Ins. Co.*, 463 U.S. 29 (1983) (agencies must have "adequate reasons" for their actions). Whether these requirements produce better decisions is the subject of a lively debate. Compare Shapiro & Levy, *Heightened Scrutiny of the Fourth Branch: Separation of Powers and the Requirement of Adequate Reasons for Agency Decisions*, 1987 DUKE L.J. 387 (favoring judicial review to enforce new requirements) with Pierce, *The Role of Constitutional and Political Theory in Administrative Law*, 64 TEX. L. REV. 469 (1985) (not favoring judicial review to enforce new requirements). Nevertheless, there can be no dispute that agencies must now devote more time and resources to the hearing process than they did in the early 1970s. The first few OSHA health standards, for example, occupied only a few pages in the Federal Register, while recent standards have occupied hundreds of pages. Compare Standard For Exposure to Asbestos Dust, 37 Fed. Reg. 11,318 (1972); Standard for Carcinogens, 39 Fed. Reg. 3756 (1974); Standard for Exposure to Vinyl Chloride, 39 Fed. Reg. 35,890 (1974) with Cotton Dust Fiber Standard, 43 Fed. Reg. 27,350 (1978); Standard for Lead, 43 Fed. Reg. 52,952 (1978); Identification, Classification and Regulation of Potential Occupational Carcinogens, 45 Fed. Reg. 5002 (1980) (codified at 29 C.F.R. §§ 1900.101-1990.152 (1987)) [hereinafter OSHA Generic Cancer Policy].

49. Compare 5 U.S.C. § 706(2)(A) (1982) with 29 U.S.C. § 655(f) (1982).

50. See R. PIERCE, S. SHAPIRO & P. VERKUIL, *supra* note 33, § 7.3. Some argue, however, there is little or no difference between how courts administer the two standards of review. *Id.* See *infra* notes 256-61 and accompanying text.

pretations of OSHA's burden of proof have particularly disadvantaged the Agency. The APA generally places the burden of proof on the proponent of a rule or order.⁵¹ At FDA and other licensing agencies, the proponent is the prospective licensee, and the licensee must establish that its product is acceptable. By comparison, OSHA is the proponent of its rules, and it must establish that a regulation is necessary.⁵² The manner in which the courts have defined its burden of proof has also uniquely affected the Agency. In *Industrial Union Department v. American Petroleum Institute*⁵³ (frequently referred to as the *Benzene* case), the Supreme Court held that Congress had not delegated to OSHA the authority to decide how to proceed in the face of uncertainties about how dangerous a chemical might be. A plurality of the Court held that OSHA can promulgate a standard only if the Agency first proves that the change is "necessary and appropriate to remedy a significant risk of material health impairment."⁵⁴ In a later case, the entire Court confirmed that Congress required OSHA to prove that workers face a "significant risk" before it can promulgate a regulation limiting exposure to a chemical.⁵⁵ OSHA's obligation to prove significant risk before it can regulate is more stringent than the burden of proof under which other agencies, such as EPA, operate.⁵⁶

4. *Political Constraints*

One final constraint on agencies is the political nature of their work. Regulatory decisions are normally controversial because they both affect Congress, the White House, and various interest groups⁵⁷ and involve dif-

51. 5 U.S.C. § 556(d) (1982).

52. Huber, *supra* note 29, at 1033. This allocation has three important ramifications. First, in cases of scientific uncertainty, the same burden that tends to keep the product off the market in the case of licensing agencies operates against OSHA regulation of similar risks. *Id.* at 1034. Second, FDA can require the regulatee to develop the scientific information necessary to meet the burden. OSHA must meet its burden with its own information. Finally, since firms regulated by OSHA benefit from delay, OSHA enjoys less cooperation in gathering information than it would if firms were required to obtain a license from the Agency before they could act.

53. 448 U.S. 607, 652-53 (1980) (plurality opinion) [hereinafter *Benzene*].

54. For the benzene standard under review, the plurality concluded that OSHA did not have any evidence to support a finding of "significant risk." It rejected OSHA's explanation that since no safe level of benzene exposure could be calculated, the only prudent course was to seek the lowest exposure level that was feasible. *Id.* at 631-32, 635 n.38, 639-49, 667.

55. See *American Textile Mfrs. Inst. v. Donovan*, 452 U.S. 490, 505 n.25 (1981) (OSHA determined that exposure to cotton dust presented significant health hazard).

56. See *infra* notes 262-66 and accompanying text (Congress made it easier for EPA to regulate by assigning Agency less demanding burden of proof).

57. See Pierce & Shapiro, *Political and Judicial Review of Agency Action*, 59 TEX. L. REV. 1175 (1981). Regulatory decisions redistribute wealth, often millions of dollars, from the regulated industry to consumers or other beneficiaries. See Wilson, *The Politics of Regulation*, in *THE POLITICS OF REGULATION* 358-72 (J. Wilson ed. 1980). Congress and the White House are affected because agencies make choices about economic and social priorities for which elected officials are ultimately accountable. See Pierce & Shapiro, *supra*, at 1195-1200, 1211-13. An agency must continually inter-

difficult moral and philosophical choices.⁵⁸ OSHA is guaranteed an unusual amount of political controversy⁵⁹ because its decisionmaking process is like a zero-sum game: any decision that significantly affects worker interests will just as significantly affect employer interests in the opposite direction. The long history of antagonism between those groups hampers attempts to reconcile business and labor interests.⁶⁰ Thus, OSHA has almost continually been attacked by business and its congressional allies for overregulation⁶¹ and by labor, public interest groups, and other members of Congress for underregulation.⁶² A particular area of controversy has been OSHA's choice to implement its decisions primarily through expensive engineering controls, such as ventilation systems, instead of much less expensive personal protective devices, such as respirators.⁶³ Critics argue this choice needlessly inflates compliance costs,⁶⁴ but OSHA responds that because workers cannot be relied upon to take self-protective action, such controls are not feasible.⁶⁵ As a result of controversies like this, no significant OSHA regulation escapes critical congressional attention,⁶⁶ and in

act with these entities, and they can strongly influence the agency's ultimate success or failure. See J. CHUBB, *INTEREST GROUPS AND THE BUREAUCRACY: THE POLITICS OF ENERGY* 18-57 (1983).

58. No society has sufficient resources to protect its citizens from all dangers. As a result, agencies inevitably are faced with "tragic choices" concerning which persons will be protected and which will not. See G. CALABRESI & P. BOBBITT, *TRAGIC CHOICES* (1978). These choices must be informed by social values and they will affect the maintenance of those values. See M. DOUGLAS & A. WILDAVSKY, *RISK AND CULTURE: AN ESSAY ON THE SELECTION OF TECHNICAL AND ENVIRONMENTAL DANGERS* (1982). Wide disagreement over which values should control these decisions makes them all the more difficult. See Schroeder, *Rights Against Risk*, 86 COLUM. L. REV. 495 (1985).

59. Interview with Dorothy Strunk, Counsel, House Comm. on Education and Labor, in Washington, D.C. (Oct. 31, 1986) [hereinafter Strunk interview].

60. Levin, *supra* note 32, at 34 ("[T]he whole bitter nature of U.S. labor history—the mutual distrust, management's desire to run its business with minimal interference, labor's belief that employers cannot be trusted to do 'right things' without a gun at their heads—has been loaded on OSHA."); Thompson, *Deregulation by the Bureaucracy: OSHA and the Augean Quest For Error Correction*, 42 PUB. ADMIN. REV. 202, 205 (1982) (conflict between business and labor particularly bitter because each group views Agency decision as "addressing values of the most fundamental importance" and each sees other as a "long-term enemy of many of its most basic value commitments").

61. OSHA was attacked in its early years for "Mickey Mouse standards" such as specifying split toilet seats or forbidding ice in drinking water. Kelman, *Occupational Safety and Health*, in *THE POLITICS OF REGULATION* 258 (J. Wilson ed. 1980). In later years, business criticism focussed on the high compliance costs imposed by OSHA health regulations. *Id.* at 259; see generally Szasz, *Industrial Resistance to Occupational Safety and Health Legislation: 1971-1981*, 32 SOCIAL PROBLEMS 104 (1984) (industry has resisted OSHA initiatives by seizing popular support for repeal of costly regulations).

62. See, e.g., J. CLAYBROOK, *supra* note 13, at 110-13 (OSHA has "diligently rolled back what health and safety protections it could on behalf of its business allies" by "backdoor administrative ploys and evasive rhetoric."); Bargmann, *OSHA: The Urgency For Revival*, AFL-CIO AMERICAN FEDERATION, June 1977 ("urgent reform" of OSHA necessary for it to reach its "full potential").

63. Schroeder & Shapiro, *supra* note 17, at 1259.

64. See, e.g., Nichol & Zeckhauser, *Government Comes to the Workplace: An Assessment of OSHA*, 49 PUB. INTEREST 39, 61-62 (1977).

65. OSHA Generic Cancer Policy, 45 Fed. Reg. 5002, 5223-24 (1980).

66. F. THOMPSON, *supra* note 38, at 229; Jones & Keiser, *U.S. Senate Voting of Health and Safety Regulation: The Effects of Ideology and Interest-Group Orientations*, 6 HEALTH POL'Y 33

recent years, the White House has also maintained a keen interest in OSHA's regulatory activities.⁶⁷

The intensity of this controversy has had several debilitating effects on OSHA. First, the numerous political compromises incorporated into the Occupational Safety and Health Act robbed OSHA of the organizational coherence, power, and resources necessary to do an effective job.⁶⁸ Second, because opponents have challenged almost every health decision in the courts,⁶⁹ OSHA often goes to extraordinary lengths to assemble a supporting record and to develop a supporting rationale.⁷⁰ Third, in its short and controversial history, OSHA has not yet achieved the broad-based public acceptance, such as that experienced by older agencies like the FDA, that legitimates individual decisions and shields decisionmakers from politically motivated critics.⁷¹ Finally, because business and labor fear the outcome of an all-out political battle in Congress over amendments to the Occupational Safety and Health Act, both have vigorously blocked consideration of legislative reforms that might facilitate OSHA rulemaking.⁷²

(1986); see Levin, *supra* note 32, at 33 (from 1973-76 Congress held over one hundred oversight hearings concerning OSHA).

67. F. THOMPSON, *supra* note 38, at 225-26. Some have claimed that health regulations have been a particular target of the Reagan Administration White House staff. See, e.g., HOUSE SUBCOMM. ON OVERSIGHT AND INVESTIGATIONS OF THE COMM. ON ENERGY AND COMMERCE, OMB REVIEW OF CDC RESEARCH: IMPACT OF THE PAPERWORK REDUCTION ACT, H. REP. NO. 99-MM, 99th Cong., 2d Sess. (1986) (OMB has discriminated against collection of data for environmental and health regulations); Morrison, *OMB Interference With Agency Rulemaking: The Wrong Way to Write Regulations*, 99 HARV. L. REV. 1059 (1986).

68. See Levin, *supra* note 32, at 36-37; Telephone interview with Sy Holtzman, Deputy Staff Director, Subcomm. on Health of the House Comm. on Education and Labor (Oct. 21, 1986) [hereinafter Holtzman interview]. Examples of such compromises include the decision to put NIOSH in a separate department, see *infra* note 323 and accompanying text, the use of the "substantial evidence" test for judicial review, see *supra* note 49 and accompanying text, and the creation of OSHRC to adjudicate the merits of OSHA citations of employers for violation of OSHA standards and the general duty clause, see *infra* notes 335-36 and accompanying text.

69. Business has sought review for all but four of OSHA's first eighteen health standards. See Schroeder & Shapiro, *supra* note 17, at 1305-09. Moreover, labor and public interest groups have continually sued OSHA for failure to issue regulations. See *infra* notes 88-90 and accompanying text; Schroeder & Shapiro, *supra* note 17, at 1263.

70. Moreover, in the late 1970s all OSHA decisionmaking was brought to a halt while OSHA awaited the outcome of a series of important court cases. Viscusi, *The Status of OSHA Reform: A Comment on Mendeloff's Proposals*, 5 J. POL'Y ANALYSIS & MGMT. 469, 471 (1986).

71. See Levin, *supra* note 32, at 39 (public's commitment "to job safety and health does not run deep or wide enough to make the subject a top national priority"); Harter, *supra* note 41, at 34 (OSHA has little political support). By comparison, agencies like FDA enjoy broad popular support because they resolved years ago the type of intense political problems that currently plague OSHA. Telephone interview with Donald McLearn, Special Asst. to the Director, Bureau of Drugs, FDA (Oct. 16, 1986).

72. Strunk interview, *supra* note 59 (no constituency for legislative reform because both labor and industry perceive they would be worse off); Holtzman interview, *supra* note 68 (OSHA supporters afraid that if new legislation were to be considered Agency would be substantially weakened).

B. *Effects on OSHA's Productivity*

The above constraints have taken such a toll on OSHA that the Agency has not realized Congress' original plan. Congress recognized that it had assigned OSHA an overwhelming responsibility when it required OSHA to regulate every chemical that poses a significant health hazard and, to the extent feasible, to make every workplace safe.⁷³ Congress authorized the Agency to adopt and enforce voluntary, "consensus" industry health and safety codes, including some 400 exposure ceilings for toxic substances set by the ACGIH.⁷⁴ Congress intended that OSHA would update the consensus standards as it received recommendations from NIOSH;⁷⁵ in the meantime, these standards would protect workers.⁷⁶ Although these "consensus standards" are now hopelessly out of date,⁷⁷ the previously discussed constraints have prevented OSHA from updating or supplementing them. OSHA admits that its regulation of health hazards is so inadequate that "millions of employees in total are exposed to levels of . . . chemicals which the literature or expert opinion indicates do or may create deleterious health effects."⁷⁸

The amount of time necessary for OSHA to adopt a regulation is indicative of the extent of the difficulties it has when it attempts to update and supplement its consensus standards. The combination of agency and judicial delay has often been extreme. Each of OSHA's first twelve health standards took an average of four years and two months to adopt,⁷⁹ and judicial review delayed their implementation by an average of two more years.⁸⁰ Five important standards between 1971 and 1984 took six to eight

73. 29 U.S.C. § 655(b)(5) (1982).

74. 29 U.S.C. § 655(a) (1982); *see* Schroeder & Shapiro, *supra* note 17, at 1257; Hamilton, *The Role of Nongovernmental Standards in the Development of Mandatory Federal Standards Affecting Safety or Health*, 56 TEX. L. REV. 1329, 1388-91 (1978) (description of OSHA adoption of consensus standards).

75. S. REP. NO. 1282, 91st Cong., 2d Sess. 6, *reprinted in* 1970 U.S. CODE CONG. & ADMIN. NEWS 5177, 5182.

76. Interview with Robert Gombar, Venable, Baetjer, Howard & Civiletti, in Washington, D.C. (Oct. 30, 1986) [hereinafter Gombar interview] (Congress erroneously expected that OSHA could quickly adopt new standards).

77. OSHA does not have standards for most of the carcinogens found in workplaces, *see supra* note 15 and accompanying text. Similar discrepancies exist for safety standards. For example, although the consensus standards contain no encompassing regulation for disabling all types of machines to protect employees when service or maintenance activities are performed, *see* Control of Hazardous Energy Sources (Lockout/Tagout), Proposed Rule, 53 Fed. Reg. 15,496 (1988), OSHA has not yet adopted such a general standard.

78. Proposed Rule for Air Contaminants 53 Fed. Reg. 20,960, 20,962 (1988) (to be codified at 29 C.F.R. pt. 1910) (proposed Apr. 29, 1988).

79. Schroeder & Shapiro, *supra* note 17, at 1305-09. Two standards (coke oven emissions and lead) took more than six years; three standards (inorganic arsenic, cotton fiber, and cotton gin dust) took three to four years; two standards (asbestos and fourteen carcinogens) took two to three years; and the other five standards took less than two years.

80. *Id.* at 1258.

and one-half years from the time OSHA commenced work until the completion of judicial review.⁸¹ Since 1984, OSHA's pace has not quickened. For example, OSHA finally promulgated a standard for benzene in 1987, nearly seven years after the Supreme Court struck down the previous standard.⁸² Similar delays have occurred for safety standards. For example, in 1977, OSHA first considered a standard for locking out or disabling all machines or equipment to protect workers during maintenance or service activities,⁸³ but the Agency has yet to adopt a final standard.⁸⁴

II. Patch and Repair Solutions

OSHA clearly cannot continue to operate as it has in the past. Given a four to eight year gestation period and other resource constraints,⁸⁵ OSHA has the capacity to undertake only two to five new projects in any single year. To avoid falling even further behind, absent statutory change, OSHA must optimize the use of its limited resources.

If OSHA is to increase its ability to regulate, it must take three steps. First, it must adopt a system of setting priorities among the various problems it needs to address. Although how OSHA chooses new projects among the thousands of conditions that create potentially hazardous workplaces is a matter of no small importance to the Agency, the regulated industries, and workers, OSHA at the moment has no discernable system for setting priorities.⁸⁶ Second, it must adopt different regulatory approaches that offer more protection for workers. If OSHA can promulgate only a few regulations each year, it should choose methods of regulation that maximize the extent to which workers will be protected. Yet

81. *Id.*

82. The previous standard was struck down in the *Benzene* decision, 448 U.S. 607, 652-53 (1980). For the OSHA standard, see Occupational Exposure to Benzene, 52 Fed. Reg. 34,460 (1987) (to be codified at 29 C.F.R. pt. 1910) (proposed Sept. 11, 1987).

83. See Machinery and Machine Guarding, Request for Information on Technical Issues and Notice of Public Meetings, 42 Fed. Reg. 1741 (1977) (to be codified at 29 C.F.R. pt. 1910) (proposed Jan. 7, 1977).

84. OSHA finally proposed a standard in 1988. See Control of Hazardous Energy Sources (Lock-out/Tagout), Proposed Rule, 53 Fed. Reg. 15,496 (1988) (to be codified at 29 C.F.R. pt. 1910) (proposed Jan. 7, 1988).

85. OSHA has sufficient resources to pursue actively only about 15 to 20 rulemaking efforts at any given moment. The Health Standards Directorate has approximately 33 professionals to devote to rulemaking activities. Martonik interview, *supra* note 41. That Directorate is currently working on about seventeen to eighteen projects, but many of these are small and some are winding down. The Safety Standards Directorate has approximately 20 professionals. B. White interview, *supra* note 41. One long-time health scientist in the Health Standards Directorate estimates that at current staffing levels, OSHA is only capable of working effectively on six or seven standards at any one time. Telephone interview with Edward Stein, Directorate of Health Standards Programs, OSHA (Oct. 21, 1986) [hereinafter Stein interview]. A member of the Policy Directorate put the number at nine to ten health standards. Telephone Interview with Larry Braslow, Supervising Economist, Directorate of Policy, OSHA (Oct. 24, 1986) [hereinafter Braslow interview].

86. See *infra* notes 88-102 and accompanying text.

OSHA currently has no methodology to identify and seek out such alternative methods of regulation.⁸⁷ Finally, OSHA must consider how it can increase the efficiency of its decisionmaking process. The next section considers how OSHA can implement these patch and repair solutions.

OSHA can begin its search for reforms capable of speeding up its standard-setting pace by examining mechanisms already at its disposal. While the Occupational Safety and Health Act is more constraining than some of the other modern rulemaking statutes, it still gives OSHA a fair degree of flexibility in adopting standard-setting techniques. Furthermore, unlike some of the modern standard-setting agencies, OSHA has a great deal of discretion to set its own priorities, a discretion that has languished unused in the past.

A. *Establish Priorities at OSHA*

Many different groups exert influence on the formation of OSHA priorities. The conflicting forces produced by these groups establish a need for a formal priority-setting process. OSHA has several different alternative priority-setting schemes from which it may choose.

1. *Current Sources of OSHA's Priorities*

OSHA compiles its regulatory agenda in reaction to interest group demands, congressional and White House pressure, and information from its employees and other regulatory agencies. As might be expected, these sources require more of OSHA than it has resources to provide. Without a coherent priority-setting process, OSHA has no means of choosing among the many available projects.

The most frequent source of OSHA rulemaking initiatives during the last five years has been petitions from unions and public interest groups backed by the threat of a "bureaucracy forcing" lawsuit.⁸⁸ Unions or public interest groups typically petition OSHA to write rules on topics that are the subject of recent scientific studies or media attention. Beneficiary groups and many OSHA officials firmly believe that but for the threat of a lawsuit, OSHA would never decide to take up difficult and controversial projects.⁸⁹ Some Agency officials are content to let beneficiaries play a very large role in setting the Agency's agenda. Yet, it is inappropriate for

87. See *infra* notes 136-76 and accompanying text.

88. A "bureaucracy forcing" lawsuit is one in which a regulatory beneficiary sues an agency to "compel agency action unlawfully withheld or unreasonably delayed." 5 U.S.C. § 706(1) (1982).

89. Telephone interview with Margaret Seminario, Assistant Director, Department of Occupational Safety, Health, and Social Security, AFL-CIO (Nov. 4, 1986) [hereinafter Seminario interview].

beneficiary groups to dominate OSHA's agenda-setting process. No individual petitioner is likely to have the expertise or the inclination to assess comparative risks across a broad spectrum of occupations to determine which workers are most in need of protection. Indeed, relying exclusively on petitions to set agency priorities would probably force the Agency to give less attention to the working conditions of unorganized workers.⁹⁰

Congressional pressure also influences OSHA. While input from elected representatives is a necessary and proper element of setting priorities, it sometimes deteriorates into wasteful partisan posturing. Although most knowledgeable members of Congress know that scientific rulemaking is an arduous process that should not be undertaken lightly, the opportunity to score easy political points at the Agency's expense sometimes proves irresistible. Congress also lacks sufficient technical expertise to divine which rulemaking topics should take precedence over others. More than most institutions, Congress is susceptible to the "chemical-of-the-month syndrome,"⁹¹ under which the Agency is forced to undertake intense scrutiny of new topics on an ad hoc basis as new evidence reaches the media. The Agency may find itself chasing after high-visibility, low-risk subjects, while low-visibility, high-risk topics go unaddressed.⁹²

White House and Office of Management and Budget (OMB) pressure is another source of OSHA priorities. Like Congress, the White House is sensitive to political constituencies, and like congressional pressure, presidential pressure can be highly motivating.⁹³ Presidential pressure has many of the same advantages and disadvantages of congressional pressure.

90. Telephone interview with Dr. Imogene E. Sevin, Directorate of Health Standards Programs, OSHA (Nov. 3, 1986) [hereinafter Sevin interview]; Telephone Interview with George Henschel, Department of Labor, Office of Solicitor (Oct. 28, 1986) [hereinafter Henschel interview]. A recent increase in the frequency of petitions suggests that OSHA must act quickly to protect its limited rulemaking resources. The experience of the CPSC under a now-defunct provision of the Consumer Product Safety Act suggests that inundation is a very real possibility. Consumer Product Safety Act § 10(e), 15 U.S.C. § 2059(e) (repealed 1981), required the CPSC to respond to petitions within 120 days. Failure to respond could result in a "bureaucracy-forcing lawsuit" in federal district court in which the question whether the product's risks crossed the statutory threshold was tried de novo. In its first three years, CPSC was inundated with two hundred petitions. Schwartz, *The Consumer Product Safety Commission: A Flawed Product of the Consumer Decade*, 51 GEO. WASH. L. REV. 32, 47 (1982).

91. E.g., Steelworkers Seek Emergency Standard for High Hazard Chemical Plants, 888 Empl. Safety & Health Guide (CCH) 2-3 (May 17, 1988) (OMB objected to OSHA decision to investigate high hazard chemical plants following Bhopal disaster because there was little evidence that U.S. plants were dangerous).

92. Vladeck interview, *supra* note 29.

93. F. White interview, *supra* note 41 (OMB pressured OSHA to eliminate burdensome record-keeping requirement in brief twelve-month period); Telephone interview with Mike Wright, Director of Safety and Health, United Steelworkers (Oct. 24, 1986) (OMB pressured OSHA not to formalize standard to address Bhopal-like chemical leaks).

One significant difference, however, is that White House and OMB pressure has been considerably less visible than congressional pressure.⁹⁴

Other agencies and OSHA's own employees bring data to OSHA's attention, influencing its regulatory agenda. NIOSH publishes "criteria documents" which contain analyses of existing information on workplace hazards and recommendations for addressing those hazards.⁹⁵ EPA refers chemicals to OSHA for regulation under the provisions of the Toxic Substances Control Act.⁹⁶ OSHA also considers information from its inspectors⁹⁷ and developments in other states and foreign countries.⁹⁸ Yet, OSHA has found NIOSH data to be inadequate for its purposes;⁹⁹ in any case, OSHA cannot cede its priority-setting power to an agency in an entirely separate department of government.¹⁰⁰ A similar problem exists concerning EPA referrals.¹⁰¹ Finally, information from OSHA inspectors

94. While members of Congress score political points through high visibility investigations, the White House can score political points through quiet intervention into ongoing rulemaking activities. Moreover, there is some reason to believe that OMB and White House pressure originates outside of the government. For example, the Vice President's Task Force's "hit list" was largely based on suggestions from the regulated industries. *See, e.g.,* Houck, *President X and the New (Approved) Decisionmaking*, 36 AM. U. L. REV. 1 (1987); HOUSE COMM. ON ENVIRONMENT AND PUBLIC WORKS, 99TH CONG., 2D SESS., OFFICE OF MANAGEMENT AND BUDGET INFLUENCE ON AGENCY REGULATIONS (Comm. Print 1986).

95. Schroeder & Shapiro, *supra* note 17, at 1257.

96. EPA may refer chemicals to another agency for regulation if there is a reasonable basis to conclude that a chemical will present an unreasonable risk and if EPA determines that "such risk may be prevented or reduced to a sufficient extent by action" taken by another agency. 15 U.S.C. § 2608 (1982).

97. OSHA has a large cadre of inspectors who are continually observing and monitoring workplaces on a daily basis. Frodyma interview, *supra* note 43. Their efforts produce large amounts of information about safety hazards and the levels of some hazardous substances, B. White interview, *supra* note 41, which can be used to set priorities. Henschel interview, *supra* note 90.

98. Telephone interview with Arthur Gas, Industrial Hygienist, Directorate of Health Standards Programs, OSHA (Oct. 30, 1986) [hereinafter Gas interview].

99. *See infra* notes 323-32 and accompanying text (OSHA and NIOSH have significant coordination problems); Peterson, *OSHA May Drop Standard-Setting Efforts*, Wash. Post, Sept. 21, 1983, at A2, col. 3 (OSHA staff recommended Agency stop working on NIOSH criteria documents for 115 substances).

100. Clearly, governmental resources would best be utilized if NIOSH and OSHA could coordinate their efforts to address the prioritization problem. Past efforts at coordination, however, have failed, *see* Schroeder & Shapiro, *supra* note 17, at 1256-1257 (NIOSH and OSHA standards completion project aimed at coordinating two agencies ended in failure). Better coordination may not be possible unless NIOSH is moved to the DOL, *see infra* notes 329-30 and accompanying text (arguing that NIOSH should be moved to DOL to ensure coordination with OSHA).

101. Since EPA is in no better position than OSHA to determine workplace exposures, EPA can refer to OSHA chemicals that may pose relatively trivial workplace risks. Seminario interview, *supra*

is usually too poorly organized to be a basis for setting priorities.¹⁰²

2. *The Need For a Formal Priority-Setting Process*

OSHA must respond to all of these internal and external demands for regulation, but it has no formal means of doing so. OSHA's one attempt to rank priorities systematically was its 1979 carcinogen policy, which contained a scheme for ranking substances that showed indications of carcinogenicity.¹⁰³ OSHA screened about 200 substances and attempted to rank them according to exposure, quality of data, and potency.¹⁰⁴ This effort was intensely controversial, and OSHA ultimately abandoned it after the *Benzene*¹⁰⁵ decision cast doubt on its validity. The vehemence with which employers rejected this first attempt by OSHA to set a priorities list has made the Agency chary of public priority-setting, and in the intervening years it has not attempted any similar projects.

Although some participants and observers of the OSHA rulemaking process maintain that the petition process is sufficient to force OSHA toward regulating the most hazardous workplaces,¹⁰⁶ most agree that OSHA should set its own priorities.¹⁰⁷ While few would argue that past rulemaking petitions have addressed trivial risks, only OSHA is in a position to determine whether a particular rulemaking initiative represents the best use of the Agency's severely limited resources.¹⁰⁸ However, despite several half-hearted internal attempts to establish an explicit priority-

note 89; Martonik interview, *supra* note 41. Moreover, EPA may use a referral to OSHA as a convenient device for avoiding difficult regulatory questions, and there is some evidence that OMB has sought referrals to OSHA to avoid some of the more stringent regulatory tools available to EPA. *Hearings Before Subcomm. on Oversight and Investigation of the House Comm. on Energy and Commerce, EPA's Asbestos Regulations: Report on a Case Study of OMB Interference*, 99th Cong., 1st Sess. (1985); Interview with Debra Jacobson, Counsel, Subcomm. on Investigations of the House Comm. on Energy and Commerce, in Washington, D.C. (Oct. 16, 1986).

102. Frodyma interview, *supra* note 43; Sevin interview, *supra* note 90.

103. 29 C.F.R. pt. 1990 (1987).

104. Telephone interview with Charles Gordon, Department of Labor, Office of the Solicitor (Oct. 23, 1986) [hereinafter Gordon interview]; Stein interview, *supra* note 85.

105. *Industrial Union Dep't v. American Petroleum Inst.*, 448 U.S. 607 (1980).

106. *E.g.*, Frodyma interview, *supra* note 43; Martonik interview, *supra* note 41; Telephone interview with Neil King, Wilmer, Cutler & Pickering (Oct. 28, 1986) [hereinafter King interview].

107. Interviews with academics, labor union officials, business officials, and OSHA employees revealed virtual unanimity on the proposition that OSHA should have some process for establishing its own priorities. Seminario interview, *supra* note 89; Sevin interview, *supra* note 90. Telephone interview with Arthur Sampson, Kirkland & Ellis (Oct. 24, 1986) [hereinafter Sampson interview].

108. Seminario interview, *supra* note 89; Sevin interview, *supra* note 90.

setting scheme,¹⁰⁹ virtually all observers of the process agree that OSHA currently lacks even a rudimentary priority-setting process.¹¹⁰

An explicit priority-setting mechanism would be useful to OSHA in its internal management. Without a list of priorities, members of the Agency staff can never be certain that a superior will not call them away in the midst of a project to begin a new project with a higher priority.¹¹¹ Likewise, OSHA can coordinate with contractors and other agencies so that up-to-date information is available to Agency decisionmakers at the time that they will find it most useful.¹¹²

There are, however, significant practical obstacles to adopting a formal priority-setting process. First, the Agency must devise a rational scheme for ranking priorities. Although an ideal priority-setting scheme would stress risks to workers (including considerations of toxicity and extent of exposure) and would perhaps pay some attention to the practicality of controls, there is rarely enough high-quality information available to make quantitative comparisons. Second, an explicit priority-setting process might destroy OSHA's carefully nurtured mystique that everything that comes before it has a high priority.¹¹³ Third, there could be difficulty in

109. Stein interview, *supra* note 85; Telephone interview with Robert Beliles, Senior Scientist, Carcinogen Assessment Group, EPA (Oct. 21, 1986) [hereinafter Beliles interview]; Telephone interview with Susan Harwood, Office of Risk Assessment, OSHA (Oct. 21, 1986) [hereinafter Harwood interview].

110. Wrenn interview, *supra* note 38; Braslow interview, *supra* note 85; Seminario interview, *supra* note 89; Sevin interview, *supra* note 90; Sampson interview, *supra* note 107. An appropriate metaphor for the current OSHA standard-setting process is that of a business establishment with a front door, a side window, and a back door. The owner expects most business to come through the front door, but it reserves the back door for dealing with complaints about previous transactions. Impatient customers come in through the side window and thereby avoid the crowd pressing at the front door. In the context of OSHA, petitions, information from the field, and recommendations for exposure limitations from private standard-setting groups, such as the ACGIH and the ANSI, are all pressing at the front door. OMB and the White House are pushing some previously promulgated rules in through the back door, and Congress and the courts are pushing some rulemaking petitions and other hot topics through the side window. At present, the press of business for OSHA's reduced staff from the back door and side window is so great that it cannot accept any business through the front door. Instead of an orderly queue at the front door, there is a great crowd of potential topics. At frequent intervals an interest group becomes impatient with waiting in line and moves over to the side window. The time is near when there will also be a disorderly crowd at the side window. OSHA long ago lost control over its front-door agenda; it now risks total paralysis as its limited capacity to produce rules becomes overwhelmed by the press at the side window. OSHA's inability to set its own priorities also affects the regulated industry's ability to make future investment decisions. Industry representatives complain of the "halting process of regulation" that results from OSHA's failure to establish definite priorities. Sampson interview, *supra* note 107; Interview with Scott Railton, Reed, Smith, Shaw & McClay, Washington, D.C. (Oct. 30, 1986) [hereinafter Railton interview]. An explicit and open priority-setting procedure would not only allow OSHA to regain some degree of control over its own agenda, but it would also make regulatees and beneficiary groups aware of OSHA's plans for the future.

111. Sevin interview, *supra* note 90; Stein interview, *supra* note 85; Braslow interview, *supra* note 85.

112. Stein interview, *supra* note 85.

113. F. White interview, *supra* note 41; Frodyma interview, *supra* note 43.

designing a priority-setting mechanism with sufficient flexibility to enable OSHA to place a high-priority project on hold when the subject industry suffered an economic recession.¹¹⁴ Finally, to the extent that the prioritization scheme results in a public list or agenda, the Agency can expect resistance from those with an economic interest in the hazards that wind up on the list.

Despite these disadvantages, there is a broad consensus that OSHA must assume control over its own rulemaking agenda.¹¹⁵ OSHA should immediately establish a process for determining an explicit list of Agency priorities to which it will presumptively adhere in undertaking future rulemaking initiatives.

3. *Alternative Priority Schemes*

Although priority setting is never easy, other agencies appear to have achieved a greater degree of control over their own agenda than OSHA. Several broad priority-setting models are available, including ad hoc management choices, quantitative risk assessment, numerical scoring devices, and systematic selection by committee.¹¹⁶

Under an ad hoc arrangement, management reacts to all potential sources of agency priorities in an unbounded fashion. For example, upper-level management may periodically gather with staffers and mid-level management to brainstorm about agency priorities—especially when the agency must prepare its submission for the President's Regulatory Agenda.¹¹⁷ Agency managers find ad hoc arrangements attractive for the following reasons: they avoid expensive data gathering; they increase flexibility; they sidestep difficult political questions; and they do not require detailed explanation about the Agency's priorities.¹¹⁸ These advantages, however, are also disadvantages. Ad hoc arrangements, because they are

114. Frodyma interview, *supra* note 43. Likewise, explicit priorities reduce the extent to which the Agency can place a high priority on uncontroversial projects that will not necessarily produce large health and safety benefits but that will yield attractive statistics. For example, the Agency can give the appearance of high productivity by simply promulgating a large number of standards that entail very few compliance costs because they entail very few safety enhancing changes. Interview with Daniel Jacoby, Department of Labor, Office of Solicitor, in Washington, D.C. (Sept. 26, 1986) [hereinafter Jacoby interview].

115. See, e.g., Federal Regulation of Cancer-Causing Chemicals (Recommendation No. 82-5), 1 C.F.R. § 305.82-5 (1986); Priority Setting and Management of Rulemaking by the Occupational Safety and Health Administration (Recommendation No. 87-1), 1 C.F.R. § 305.87-1 (1988).

116. This analysis of the various types of priority-setting schemes is based in large measure on the observations of Dr. Imogene Sevin, an OSHA health scientist. Sevin interview, *supra* note 90.

117. *Id.* In addition, staff members receive subtle signals from superiors about the amount of attention that should be devoted to various topics, and these signals change periodically as the topic heats up or cools off in the political atmosphere in which management operates. Frodyma interview, *supra* note 43.

118. Sevin interview, *supra* note 90.

more political, less scientific, and less structured than other priority-setting systems, are likely to do an inadequate job of ranking hazards according to their relative risks.¹¹⁹ In addition, these arrangements can cause confusion among Agency staff concerning how to allocate time, breed inconsistency during Agency transition, and ultimately waste Agency resources.

At the opposite extreme from ad hoc arrangements is the quantitative listing approach. The most technically precise quantitative listing approaches require an agency to rank substances according to their relative risk based on detailed information concerning the toxicity of various compounds and the extent of worker exposure. A somewhat less rigorous, but still highly quantitative tool is the mega-scoring device, in which agency officials attach quantitative scores to identifiable aspects of potentially hazardous workplace conditions based on their qualitative evaluation of the existing data. They then rank substances according to these scores.¹²⁰ Mega-scoring devices have the advantage of using information that is more readily available than the information necessary for the quantitative listing approach.¹²¹ Use of both approaches is limited by a lack of available data,¹²² by the unsettled state of the art of risk assessment,¹²³ and by their failure to accommodate the political needs of agency leadership.

119. For example, there is fairly broad agreement within the Agency that an oil and gas industry safety standard would provide very large safety benefits, but political considerations have essentially eliminated that topic from the Agency's agenda. Conversely, the political furor that erupted over the discovery of ethylene dibromide in citrus and food grains sent OSHA scurrying to promulgate an EDB standard that will protect only a relatively few workers from a substance that is almost certainly doomed to extinction in the near future. Vladeck interview, *supra* note 29.

120. See Peat, Marwick, Mitchell & Co., *The Role of Risk Assessment in Setting Federal Regulatory Priorities*, Report Prepared for the Chemical Manufacturers' Ass'n. (1984) [hereinafter Peat, Marwick Report] (on file with authors). Given accurate risk assessments, this method ensures that the Agency is addressing the worst risks first. Harwood interview, *supra* note 109. See generally U.S. National Institute of Occupational Safety & Health, *A Model for the Identification of High Risk Occupational Groups Using RTECS and NOHS Data* (Oct. 1983) (describing computer program for combining risk data from Registry of Toxic Effects of Chemical Substances with exposure information from National Occupational Hazard Survey).

121. For example, production quantities may be used as a rough surrogate for actual worker exposure. A mega-scoring approach is also less resource intensive, can be adjusted to reflect the degree of confidence of the Agency in the available data, and can incorporate administrative, economic, and technological feasibility considerations into the ranking scheme.

122. See Seminario interview, *supra* note 89 (OSHA sometimes lacks even rudimentary toxicological data on chemicals and usually lacks accurate information for toxic chemicals). Mega-scoring devices are also unreliable because they are based on surrogates for real data and rely heavily upon subjective considerations. Sevin interview, *supra* note 90.

123. Risk assessment tools are only available for a very few health effects, such as carcinogenesis. Sevin interview, *supra* note 90; Stein interview, *supra* note 85; Beliles interview, *supra* note 109. Even those quantitative tools that are available are always controversial, Stein interview, *supra* note 85. See generally Comment, *The Significant Risk Requirement in OSHA Regulation of Carcinogens: Industrial Union Department, AFL-CIO v. American Petroleum Institute*, 33 STAN. L. REV. 551, 564 n. 68 (1981).

Many agencies use a process that can incorporate both of the previous approaches.¹²⁴ The committee approach preserves much of the flexibility of the ad hoc approach, while at the same time building technical expertise into the priority-setting process by including persons who have technical expertise and who are sensitive to political considerations. Committees can use the results of risk assessment or mega-scoring exercises,¹²⁵ but they also can adjust agency priorities on the basis of new information, new assessments of old information, judicially imposed deadlines, and changed political circumstances. While the committee approach deprives upper-level management of some of its control over the agency's agenda, granting managers membership on the committee can overcome this disadvantage somewhat.¹²⁶

4. *Establishing A Committee Approach*

An internal committee is the most promising approach for OSHA.¹²⁷ OSHA should establish a permanent priority-setting committee charged with both drafting an initial ranked list of Agency priorities for regulation and meeting on a continuing and periodic basis to reexamine the list either to add or to subtract items.¹²⁸ To guarantee both technical expertise and political sensitivity, membership of the committee should consist of highly regarded health professionals from OSHA's technical staff and management staffers, including at least one of OSHA's deputy assistant secretaries.¹²⁹ To preserve badly needed continuity, committee member-

124. For example, in 1976 Congress established an Interagency Testing Committee to set priorities for testing chemicals under the Toxic Substances Control Act, 15 U.S.C. § 2603 (1982). NIOSH is currently adopting a committee approach toward setting its own priorities. Sevin interview, *supra* note 90.

125. See Telephone interview with Dale Ruhter, Branch Chief, Economic Analysis Branch, Waste Management and Economics Division, Office of Solid Waste, EPA (Nov. 20, 1986) [hereinafter Ruhter interview].

126. Other disadvantages of the committee approach are the problems that afflict any group decisionmaking device. For example, committees can become afflicted with the vision-narrowing disease referred to in the public policy literature as "groupthink." The committee must have a chairman who is willing to bring matters to closure. Since the committee would be more in the nature of a decision-making entity than a study committee, it would have to decide how it would address the absence of consensus and whether dissenting opinions would be allowed or encouraged.

127. OSHA should reject the temptation, to which other agencies have succumbed, to employ an outside committee of experts appointed by the National Research Council of the National Academy of Sciences (NAS). See generally C. Grobstein, *The Role of the National Academy of Sciences in Public Policy and Regulatory Decisionmaking*, in LAW AND SCIENCE IN COLLABORATION 115 (1983). Since its policy-laden decisions cannot be made on a purely scientific or technical basis, OSHA should not cede control over and responsibility for its priorities to the NAS.

128. OSHA must have some method to process important policy considerations which require rapid treatment. Sampson interview, *supra* note 107; Seminario interview, *supra* note 89.

129. To ensure coordination with other agencies, the committee could also include nonvoting representatives from NIOSH, the National Toxicology Program (NTP), and EPA. Congress clearly meant for NIOSH to play a role in OSHA priority-setting. See 29 U.S.C. § 655(g) (1982). The NTP is a multi-agency chemical testing program housed in the HHS, which tests chemicals for OSHA and

ship should not turn over any more rapidly than once every three years, and committee members should be eligible for reappointment. Finally, to promote candid interchange, the meetings should be closed to the public, but OSHA should make public the results of the meetings after the assistant secretary has had an opportunity to adopt or overrule the committee recommendations.

OSHA can expect significant resistance to any explicit priority list from regulated industries¹³⁰ and beneficiary groups.¹³¹ The Agency can limit this opposition by taking two steps. First, the priority-setting committee could hold one or more workshops during which all of the relevant interest groups would attempt to agree on a consensus list of priorities.¹³² Second, OSHA could avoid some opposition by grading chemicals or other hazards, rather than ranking them in numerical order. For example, rather than ranking fifty potentially hazardous chemicals on a scale of one to fifty, the committee could divide the fifty into ten "top priority" chemicals, ten additional "very high priority" chemicals, and so forth.

Because outside parties may have information that could be important to the Agency's ranking decisions, the committee should invite public comment on its work and be open to changing its ranking in light of the comments. The Agency should take the position that its priority lists are merely internal aids to setting an agenda and are not themselves rules subject to notice and comment procedures¹³³ and judicial review.¹³⁴ If the

other agencies. Both the NTP and EPA have the capability of generating new information on suspect chemicals, a capacity that OSHA lacks. Seminario interview, *supra* note 89.

130. No company is happy to see a hazard that it deals with labeled a "bad actor," even if OSHA action never flows from that determination. Interview with Karl Kronenbush, Office of Technology Assessment, in Washington, D.C. (Oct. 31, 1988) [hereinafter Kronenbush interview]. For example, an OSHA priority list might trigger product liability suits. Once a chemical finds its way onto an OSHA "hit list," workers and others who are exposed to the substance become aware that it has harmful effects, and they may be inclined to attribute particular afflictions to their exposure to the chemical. King interview, *supra* note 106.

131. Opposition is inevitable from labor unions and other beneficiaries that believe that hazards relevant to their interests are too low on the priority list.

132. For example, NIOSH recently held a national strategy workshop to help that agency set its top ten priorities. Seminario interview, *supra* note 89.

133. Rulemaking is unnecessary because placing a chemical or hazard on the list in no way obligates the Agency to take regulatory action. See 5 U.S.C. § 553(b)(3)(A) (1982) (APA requirements of notice and comment do not apply to "general statements of policy"). The Administrative Conference has recommended that agencies consider rulemaking procedures for priority-setting systems, but more informal methods are appropriate for ranking individual chemicals for evaluation and regulation. See Federal Regulation of Cancer-Causing Chemicals (Recommendation No. 82-5), 1 C.F.R. § 305.82-5 (1988).

134. A challenge to the list would not be ripe for review until the list is applied in an individual case to initiate a rulemaking action, in which case judicial review would only be appropriate at the end of the rulemaking activity. *Texas v. Department of Energy*, 764 F.2d 279 (5th Cir. 1985) (designation of two sites as potentially acceptable sites for nuclear waste repository not ripe for judicial review); see *Abbott Laboratories v. Gardner*, 387 U.S. 136, 148-52 (1967) (rule may be ripe for review at completion of rulemaking process). See generally K. DAVIS, *ADMINISTRATIVE LAW TREATISE* § 25.6 (1983). *Eagle-Picher Indus. v. EPA*, 759 F.2d 905 (D.C. Cir. 1985), which allowed a

evolving list were subject to judicial review upon initial promulgation or upon amendment, then the attendant delays could defeat the purpose of the exercise.¹³⁵

B. *Adopt Different Approaches To Regulation That Maximize Worker Protection*

If OSHA adopts a priority-setting process, it will be able to use its resources to protect workers from the most serious of those hazards that are not regulated, or are not adequately regulated, by the consensus standards. This step, however, is not enough. Even a well-functioning priority-setting system cannot greatly increase the number of hazards that OSHA can regulate. If OSHA can only adopt a few regulations each year, it must focus on regulations that maximize the protection available to workers.

Two additional temporary solutions are currently within OSHA's power. First, the Agency should update its consensus standards to provide a minimum floor of protection while it considers whether more stringent regulations are appropriate. Second, whenever possible it should use generic regulations that cover multiple hazards.

1. *Update Consensus Health Standards*

OSHA has not changed most of its health standards since it adopted them in 1971 when the Agency was founded, and as a result, millions of workers are exposed to chemicals considered to be dangerous.¹³⁶ OSHA therefore has decided to update its consensus standards by replacing the existing primary exposure limitations (PELs) with new limitations recommended by the ACGIH and NIOSH.¹³⁷ Under its new rule, the Agency

challenge to EPA's hazard ranking system for waste sites under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. § 9601-9657 (1982), can be distinguished. CERCLA required EPA to promulgate the list, it specified criteria for creating the list, and it authorized judicial review of it. *Eagle-Picher*, 759 F.2d at 909-10, 916. None of those conditions apply to OSHA's situation. Moreover, the relative position of a particular hazard is not appropriate for judicial review because, like a decision whether to prosecute, the ranking of a hazard is based on a combination of technical and policy considerations for which there is little statutory guidance. *See Heckler v. Chaney*, 470 U.S. 821 (1985) (Agency decision not to prosecute is not judicially reviewable in absence of clear statutory guidelines for decision).

135. If the list were subject to judicial review, however, it is highly unlikely that a court would overturn a reasonable scheme, even if OSHA could not support it with hard data and analysis. *See Eagle-Picher*, 759 F.2d at 921-22 (court gave considerable deference to EPA's ranking of hazardous waste sites).

136. *See supra* notes 77-78 and accompanying text.

137. OSHA recently initiated a generic rulemaking process to update the PELs. Notice of Proposed Rulemaking, 53 Fed. Reg. 20,960 (1988). OSHA has attempted to avoid some of the problems with the generic approach by undertaking an independent evaluation of the ACGIH standards. OSHA has thoroughly examined all of the substances for which it proposes to update PELs, has

established new PELs for hundreds of chemicals and substances.¹³⁸ OSHA's decision to update its consensus standards is exactly the aggressive type of regulatory action that the Agency must begin to adopt if it is to increase its productivity.

Nevertheless, OSHA's new proposal faces some significant legal hurdles. Although Congress expressly authorized the Agency to adopt consensus standards in 1971,¹³⁹ it made no provision for updating the standards. Consequently, the update must meet the conditions specified by Congress for adopting new health standards. Thus, OSHA must prove that workers are at a "significant risk" unless an update occurs¹⁴⁰ and that any update will protect workers to the extent that is "feasible."¹⁴¹

The "significant risk" test presents a dilemma for OSHA. If the Agency attempts to prove that each of the hundreds of chemicals for which it is adopting a new standard poses a significant risk, the job could take years. OSHA has therefore proposed to make several generic findings that workplaces exposing workers to concentrations greater than the updated PELs pose a significant risk.¹⁴² However, the *Benzene* decision¹⁴³ may make this solution ineffectual and may indeed require OSHA to prove significant risk on a chemical-by-chemical basis.¹⁴⁴

Although *Benzene* requires proof of significant risk, a generalized finding should be sufficient to satisfy that obligation. The plurality opinion in *Benzene* clearly stated that when OSHA attempted to quantify a risk, it had considerable freedom to design an appropriate methodology.¹⁴⁵

provided a minimum data set for each of 18 groups of workplace air contaminants, and has prepared a brief discussion of the scientific basis for its proposed change for each individual substance regulated. Finally, it has made generic economic and technological feasibility determinations that are entirely independent of any similar considerations that may have motivated the experts in ACGIH and NIOSH in making their recommendations. OSHA appears to have made an honest effort to apply independently the statutory criteria to an existing set of recommendations that are ultimately grounded in a vast body of scientific literature. In addition, OSHA has indicated its intention to rely upon evidence and arguments presented in the informal rulemaking hearings that it held in the summer of 1988 and in written comments to the Agency in response to its notice of proposed rulemaking.

138. Molotsky, *New Limits Imposed on Many Substances Found in Workplace*, N.Y. Times, Jan. 14, 1989, at A1, col. 1.

139. 29 U.S.C. § 651 (1982).

140. See *supra* notes 55-56 and accompanying text. As interpreted by the Supreme Court, the Occupational Health and Safety Act requires OSHA to prove a "significant risk" exists before it can regulate health hazards. *Benzene*, 448 U.S. at 639.

141. 29 U.S.C. § 655 (1982).

142. Notice of Proposed Rulemaking, Air Contaminants, 53 Fed. Reg. 20,960 (1988).

143. *Benzene*, 448 U.S. at 652-53.

144. See *supra* notes 55-56 and accompanying text (*Benzene* decision requires OSHA to prove significant risk before it can regulate health hazards).

145. The plurality said that requiring a demonstration of significant risk would not "strip [OSHA] of its ability to regulate carcinogens" and would not "require the Agency to wait for deaths to occur before taking any action." 448 U.S. at 655. It recognized that the significant risk requirement was not a "mathematical straitjacket" and that a determination of what was significant would be "based largely on policy considerations." 448 U.S. at 655-56 n.62. The plurality also said that OSHA

OSHA used a generic approach to make the significant risk determination for its hazard communication rule,¹⁴⁶ and the Third Circuit Court of Appeals upheld the rule.¹⁴⁷ Finally, other Supreme Court decisions provide indirect support for OSHA's use of generic risk assessments. *Chemical Manufacturers Association v. Natural Resources Defense Council*¹⁴⁸ suggested that courts should apply a deferential standard of review when an agency interprets its enabling act and that courts should overrule the agency only if "the statute clearly reveal[s] a contrary intent on the part of Congress."¹⁴⁹ *Weinberger v. Hynson, Wescott & Dunning, Inc.*¹⁵⁰ endorsed an innovative generic approach to regulation employed by FDA on the ground that, unless the Agency used that approach, it would be prevented from accomplishing its legislative mandate.¹⁵¹

The Occupational Safety and Health Act also requires OSHA to adopt the most protective health standard that is "feasible."¹⁵² This requirement presents two problems for OSHA. First, the Agency must prove that the

need not support its finding with "anything approaching scientific certainty" and that it can use "conservative assumptions in interpreting . . . data, . . . risking error on the side of overprotection rather than underprotection." 448 U.S. at 656. Finally, with regard to benzene, the plurality admitted that a "precise correlation between exposure levels and cancer risks" may never be possible, but they believed that quantifiable data would be "at least helpful" in performing risk assessments. 448 U.S. at 657 n.64.

Based on the previous comments, Professor Mintz believes that OSHA has "considerable flexibility in performing risk assessments and determining that a risk [is] significant" and that the only important limitation imposed on OSHA is that it cannot "avoid [risk assessment] entirely by relying on a policy that makes attempts at quantitative estimation completely unnecessary." B. MINTZ, *supra* note 45, at 283. Professor Mintz's prediction seems to be borne out by the judicial deference accorded OSHA after the *Benzene* case in the circuit courts. *See, e.g., ASARCO, Inc. v. OSHA*, 746 F.2d 483, 490-95 (9th Cir. 1984) (OSHA had substantial evidence that arsenic exposure posed significant risk); *United Steelworkers of Am. v. Marshall*, 647 F.2d 1189, 1248 (D.C. Cir. 1980) (OSHA had substantial evidence that lead exposure posed significant risk).

146. 48 Fed. Reg. 53,282-83 (1983).

147. *United Steelworkers of Am. v. Auchter*, 763 F.2d 728 (3d Cir. 1985).

148. 470 U.S. 116 (1985).

149. 470 U.S. at 126. This holding is consistent with *Benzene*, which concluded that OSHA's policy judgment to seek maximum feasible protection when a safe level of exposure for a chemical could not be identified was an attempt to avoid the burden of proof that Congress had establish for OSHA. *Benzene*, 448 U.S. at 662. Since no similar legislative prohibition exists against the use of generic risk assessment, OSHA should be able to use this approach to update its consensus standards.

150. 412 U.S. 609 (1973).

151. FDA had made a generic determination not to hold a hearing before it removed from the market thousands of drugs for which no reliable scientific evidence of efficacy existed. 412 U.S. at 610. Although FDA is required by statute to hold a formal hearing before it removes any drug from the market, 21 U.S.C. § 355(3) (1982), FDA had interpreted that provision to allow it to use a summary judgment procedure to deny a hearing for drugs for which no reliable scientific evidence of efficacy existed. The Court approved this innovation because, "[i]f FDA were required automatically to hold a hearing for each product whose efficacy had been questioned[,] . . . we have no doubt that it could not fulfill its statutory mandate to remove from the market all those drugs which do not meet the effectiveness requirements of the Act." 412 U.S. at 621. OSHA's current posture is very similar to that of FDA in the late 1960's. Like FDA, OSHA will be able to act effectively only if it can use an innovative procedure that will avoid case-by-case determinations and its enabling act can be construed to permit such a process.

152. 29 U.S.C. § 656(b)(5) (1982).

PELs it is proposing are feasible or capable of being implemented by the regulated industry.¹⁵³ If OSHA must prove that each PEL is feasible, an update of the consensus standards will no longer be practical.¹⁵⁴ However, OSHA ought to be able to make generic findings concerning feasibility based on the same kinds of authorities that support generic findings of significant risk.¹⁵⁵

Second, unions have opposed the update proposal on the ground that it violates OSHA's mandate to seek the maximum protection feasible for workers.¹⁵⁶ The unions base their objection on the fact that the proposed PELs for any given chemical could be less stringent than a full-fledged OSHA standard for the same chemical. Moreover, unlike the consensus standards, OSHA's individual standards ordinarily require, in addition to a PEL, protections such as exposure monitoring, medical surveillance, removal of employees to other work as a medical precaution, employee training and education, and warning labels and signs.¹⁵⁷ The unions, however, may be ignoring the overall effect of the proposed update. By increasing the minimum levels of protection available to workers, the proposed update protects millions of workers from dangerous chemicals. The update will protect a greater number of workers, albeit to a lesser degree, than any other type of regulation OSHA could adopt. The proposed update thus meets the requirement that OSHA seek the most protection feasible for workers.¹⁵⁸

2. *Promulgate Generic Regulations*

An update of the consensus standards will help solve the problem caused by inadequate consensus standards. This update, however, will not

153. To prove a standard is feasible, OSHA must establish that it is technologically and economically capable of implementation. M. ROTHSTEIN, *OCCUPATIONAL SAFETY AND HEALTH* §§ 73-74 (1983). A standard is technologically feasible when OSHA establishes that "modern technology has at least conceived some industrial strategies or devices which are likely to be capable of meeting the PEL and which the industries are generally capable of adopting." *United Steelworkers of Am. v. Marshall*, 647 F.2d 1189, 1266 (D.C. Cir. 1980), *cert. denied sub nom. Lead Indus. Ass'n v. Donovan*, 453 U.S. 913 (1981). A standard is economically feasible when it is "'capable of being done, executed or affected.'" *American Textile Mfrs. Inst. v. Donovan*, 452 U.S. 490, 508-09 (1981) (*quoting WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY* (1976)).

154. *See supra* notes 73-84 and accompanying text.

155. *See supra* notes 55-56 and accompanying text.

156. 3 *Empl. Safety & Health Guide* (CCH) ¶ 9815 (1988).

157. M. ROTHSTEIN, *supra* note 153, § 66.

158. While OSHA has the authority to update its consensus standards, the union objections should not be ignored. OSHA should consider the update an interim step and expeditiously meet its obligation to promulgate stricter standards whenever there is evidence indicating that they are necessary. Moreover, OSHA should require additional protection for workers (other than PELs) for all chemicals that will be regulated under the new consensus standards. *See infra* notes 265-78 and accompanying text (proposal that OSHA adopt regulation requiring additional protections for chemicals regulated under consensus standards).

address the problem created by OSHA's inability to adopt more than a few full-fledged regulations each year. Thus, the Agency must maximize the extent to which each regulation adopted protects workers. Generic regulations, which regulate more than one subject or problem in the same rulemaking proceeding,¹⁵⁹ offer the greatest potential for maximum worker protection. Although OSHA has promulgated some generic regulations,¹⁶⁰ most of its standards have addressed only one hazard at a time.¹⁶¹ OSHA can adopt three types of generic standards: industry-wide standards, multi-chemical standards, and work-practice standards.

a. *Industry-Wide Standards*

Industry-wide standards, by which OSHA regulates all of the significant safety or health problems in a single industry,¹⁶² allow OSHA to focus its attention on the most dangerous industries and on the most significant risks in those industries. Industry-wide regulations also simplify feasibility analysis, when a single risk reduction would address several factors,¹⁶³ and make abatement efforts less expensive when there are synergistic effects.¹⁶⁴ By implementing this type of standard, OSHA could quickly regulate those industries where there is little opposition to regulation, thereby providing immediate protection for some employees.¹⁶⁵

159. Another type of generic regulation is one that resolves recurring or repetitive problems by specifying how an agency will resolve the problem each time it comes up. See Procedures for Resolution of Environmental Issues In Licensing Proceedings (Recommendation 73-6), 1 C.F.R. § 305.73-6 (1988) (licensing agencies should use "generic proceedings" to resolve environmental issues "common to more than one application and appropriate for across-the-board treatment"). OSHA adopted this approach in its now defunct cancer policy, 29 C.F.R. § 1990.101 (1982), which attempted to resolve in a single proceeding issues relating to worker exposure to carcinogens and thereby preclude the necessity of resolving those issues on a case-by-case basis.

160. See *infra* notes 173-74 and accompanying text.

161. Through 1985, only four of OSHA's twenty-six safety standards and only five of its eighteen health standards were generic. See U.S. OFFICE OF TECHNOLOGY ASSESSMENT, PREVENTING ILLNESS AND INJURY IN THE WORKPLACE 363-64 (April 1985) [hereinafter PREVENTING INJURY]; Schroeder & Shapiro, *supra* note 17, at 1305-09.

162. The Agency has promulgated rules for commercial diving operations, marine terminals, and telecommunications. See PREVENTING INJURY, *supra* note 161, at 364. It is considering rules for such industries as grain storage facilities, gas well drilling and servicing, and logging. U.S. OFFICE OF MGMT. & BUDGET, REGULATORY PROGRAM OF THE UNITED STATES GOVERNMENT (Apr. 1, 1986-Mar. 31, 1987), at 266-68, 272-74, 295-96 [hereinafter REGULATORY PROGRAM]. The rubber production and chemical manufacturing industries are good candidates for extending the generic approach. Vladeck interview, *supra* note 29; Holtzman interview, *supra* note 68. Similarly, OSHA has regulated common problems that occur in many industries by setting generic standards for fire protection, noise exposure and hearing conservation, employee access to medical and exposure records, and information concerning workplace hazards. See 29 C.F.R. § 1910.95 (1988) (noise exposure and hearing conservation standard); 29 C.F.R. § 1910.20(b)-(e) (employee access to medical and exposure records standard); 29 C.F.R. § 1910.1200 (1988) (hazard communication standard).

163. Jacoby interview, *supra* note 114.

164. Kronenbush interview, *supra* note 130.

165. Vladeck interview, *supra* note 29 (industry-wide standards would speed regulation in industries where compliance is easier). See Perritt, *Analysis of Four Negotiated Rulemaking Efforts*, in

Industry-wide standards also have several disadvantages. First, OSHA needs a great deal of information about individual industries to promulgate industry-wide standards.¹⁶⁶ Second, since a small number of firms in particular industries would bear all of the costs, OSHA should expect significant and perhaps coordinated business resistance.¹⁶⁷ Third, because industry-wide standards focus broadly on the feasibility of employing technologies across entire industries, OSHA is open to individual complaints that it is imposing costs inequitably.¹⁶⁸ Fourth, workers would probably oppose the generic approach if OSHA began to make trade-offs in the stringency of exposure limits for different chemicals.¹⁶⁹ Fifth, workers in unregulated industries exposed to the same chemicals might also oppose this approach,¹⁷⁰ thus requiring OSHA to provide a reasoned explanation for its discrimination.¹⁷¹ Finally, if the Agency must make a "significant risk" determination for each hazard in the chosen industry, a generic standard may be impossible for some industries.¹⁷²

Although industry-wide generic standards will probably never play a large role in OSHA standard-setting, the Agency should consider them in appropriate instances. OSHA should consider this device when: (1) it can narrowly define an industry targeted for such regulation; (2) most of the hazards to be regulated are unique to that industry (or other industries that OSHA plans to regulate in the near future); (3) the hazards are likely to be relatively stable over time; (4) industry-wide generic rulemaking would impose fewer costs on the industry than standards for individ-

ADMIN. CONFERENCE OF THE U.S., RECOMMENDATIONS AND REPORTS 637, 698 (1985).

166. Gordon interview, *supra* note 104.

167. Seminario interview, *supra* note 89. OSHA might be able to offset this effect, however, by engaging in consensus building through negotiated rulemaking or advisory committees. *See infra* notes 189-211 and accompanying text.

168. Sevin interview, *supra* note 90. This problem would be intensified if OSHA had difficulty defining what constitutes a discrete industry, a problem that frequently plagues EPA in promulgating standards under the Clean Water Act. Frodyma interview, *supra* note 43; Jacoby interview, *supra* note 114; *see also* A. KNEESE & C. SCHULTZE, POLLUTION, PRICES AND PUBLIC POLICY 62 n.9 (1975).

169. Since individual workers are often exposed to only a single chemical, they would gain no benefit from any trade-offs in the level of protection negotiated between OSHA and industry. Interview with Jack Sheehan, United Steelworkers of America, in Washington, D.C. (Oct. 30, 1986). This possibility would be greater if the Agency engaged in negotiated rulemaking.

170. Martonik interview, *supra* note 41 (unions oppose any approach that creates second-class citizens who are not protected from some hazard); F. White interview, *supra* note 41; Interview with Charles Adkins, Director, Directorate of Health Standards, OSHA, in Washington, D.C. (Sept. 26, 1986).

171. *See* *United Steelworkers of Am. v. Auchter*, 763 F.2d 728 (3d Cir. 1985) (OSHA failed to explain adequately why it could not apply coverage).

172. For example, producers in the paint and allied products industry use literally thousands of unrelated chemicals and the identity of the relevant chemicals shifts as production lines change from year to year or even batch to batch. Even for industries with a fairly stable set of hazards, industry-wide standards would generate only narrow efficiencies resulting from simplified feasibility analysis.

ual hazards; and (5) the industry-wide generic approach would be more efficient for OSHA.

b. *Multi-Chemical Standards*

OSHA might also consider promulgating standards that regulate two or more chemicals at one time.¹⁷³ The primary advantage of this approach is that it would allow OSHA to prepare a generic risk assessment for all of the regulated chemicals. Multi-chemical standards might also simplify the feasibility analysis if the same types of abatement techniques were available for all of the chemicals. There are limits, however, upon the extent to which OSHA may base a significant risk determination on a generic risk assessment for chemicals having dissimilar characteristics. Moreover, because there is no guarantee that chemicals with similar toxicological characteristics will be used to perform similar functions, separate feasibility analyses might also be necessary. Finally, since different chemicals may be used in many different industries, a multi-chemical standard might well attract a larger number of dissatisfied parties than either the traditional case-by-case approach or industry-wide generic standards.¹⁷⁴ Despite these difficulties, OSHA should attempt to identify situations in which a multi-chemical approach would be cost-effective for the Agency.

c. *Work-Practice Standards*

A work-practice standard specifies some protective technology or work practice.¹⁷⁵ Generic work-practice standards allow OSHA to make generic risk and feasibility assessments that are independent of the individual workplace; therefore, OSHA can efficiently protect a large number of workers in many industries. Because the standards do not focus on a particular chemical or a particular industry, opposition to their implementa-

173. In 1974, OSHA promulgated this type of standard for 14 carcinogens that had similar chemical properties. *See Synthetic Organic Chem. Mfrs. Ass'n v. Brennan*, 506 F.2d 385 (3d Cir. 1974); *Synthetic Organic Chem. Mfrs. Ass'n v. Brennan*, 503 F.2d 1155 (3d Cir. 1974). Some observers have recommended that it establish more, including standards for solvents, wood preservatives, dusts, and neurotoxins. *E.g.*, Kronenbush interview, *supra* note 130.

174. *See supra* note 156 and accompanying text.

175. Good examples are OSHA's hazard communication standard, 29 C.F.R. § 1910.1200 (1988), and its medical and exposure records access rule, 29 C.F.R. § 1910.20(b)-(e) (1983). In many of its individual health standards, OSHA requires employers to provide general services such as exposure monitoring, warning labels and signs, and others. *See supra* note 157 and accompanying text. OSHA could promulgate generic work practice standards requiring some of the same protections for any employer subject to a consensus PEL. Martonik interview, *supra* note 41; Jacoby interview, *supra* note 114; *see also supra* notes 136-141 and accompanying text (discussion of work practice standards for employers subject to consensus PELs). In addition, OSHA could prescribe on a generic basis protective technologies and procedures, such as respirators for workers who are exposed to airborne chemical hazards and ventilation techniques for chemical holding tanks. REGULATORY PROGRAM, *supra* note 162, at 260-61; Kronenbush interview, *supra* note 130.

tion may be moderated. For individual workplaces where the requirements of a generic work-practice standard are inappropriate, OSHA can craft criteria for granting case-by-case variances.¹⁷⁶

C. *Adopt Faster Approaches To Regulation*

Generic approaches hold some promise for increasing the extent to which each standard protects workers. Nevertheless, the numerous problems associated with such approaches suggest that OSHA should consider additional solutions to its regulatory productivity problem. Since many OSHA standards currently take six to eight years to promulgate,¹⁷⁷ workers would clearly benefit if the Agency could act faster. One strategy for speeding up OSHA rulemaking is to adopt regulatory solutions that minimize the opposition by some or all of the interested parties. Another strategy mandates that OSHA improve the efficiency of its rulemaking procedures.

1. *Minimize Regulatory Opposition*

OSHA has traditionally assumed an adversarial orientation toward setting health and safety standards. Under this approach, the Agency proposes what it perceives to be the best regulation, receives data and arguments from interested parties, and then determines whether the proposed rule is justified by the evidence.¹⁷⁸ Critics maintain that this process is ill-suited for making regulatory decisions that are essentially legislative in nature, require political compromises, and have no ideal solution.¹⁷⁹ Moreover, this effort is time-consuming because the evidence is rarely clear-cut, limited Agency resources make it difficult to conduct many standard-setting activities at the same time, strict regulations engender more political controversy, and it requires OSHA to expend substantial

176. To the extent that work-practice standards tend to address relatively uncontroversial "boiler plate" topics, they are not likely to reduce OSHA's overall workload appreciably. Still, they can sometimes be quite useful in eliminating the need to address recurring issues in individual proceedings.

177. See *supra* note 81 and accompanying text.

178. See Boyer, *Alternatives To Administrative Trial-Type Hearings For Resolving Complex Scientific, Economic and Social Issues*, 71 MICH. L. REV. 111, 122-133 (1972) (attributes of advocacy-hearing process).

179. See, e.g., *Oversight on the Administration of the Occupational Health and Safety Act 1981: Hearings Before Subcomm. on Investigations and Oversight and the Subcomm. on Labor of the Senate Comm. on Labor and Human Resources*, 97th Cong., 1st Sess. 126 (1981) [hereinafter *1981 Oversight Hearings*] (statement of Robert Thompson, U.S. Chamber of Commerce); Bokart interview, *supra* note 42 (OSHA ends up worrying about trivial matters because administrators are unwilling to compromise); see also Jaffe, *The Illusion of the Ideal Administration*, 86 HARV. L. REV. 1183, 1184, 1188 (1973) (criticizing adjudicative model on assumption that nonpolitical resolution of issues is possible).

resources preparing to defend "strict" regulations that will inevitably be attacked in court.¹⁸⁰

Proponents of the adversarial approach argue that OSHA's statutory mandate requires it to seek the most protection feasible for workers¹⁸¹ and that it is inappropriate (or even immoral) for a health and safety agency to make trade-offs concerning dangers to human life.¹⁸² Moreover, they contend that a consensus approach ultimately devolves to industry self-regulation with little or no government supervision¹⁸³ and that a consensus approach designed to conciliate industry will therefore engender the opposition of labor unions, who often regard current regulations as too weak.¹⁸⁴

Critics counter that because of the Agency's slow pace, it either does not regulate hazards or does so inadequately.¹⁸⁵ They argue OSHA could better protect workers by proposing less stringent regulations that could be adopted more rapidly, mediating disputes and implementing the positions of affected parties, and placing greater reliance on advisory committees to guide the way to consensus positions.¹⁸⁶ They further argue that if OSHA adopted a more cooperative attitude, industry would share technical knowledge and experience which OSHA lacks and needs to regulate more effectively.¹⁸⁷

However, union representatives counter that some companies will fight less stringent standards just as fiercely. They contend that the issue of control over the workplace is a matter of principle. In addition, they question whether adopting a standard that the regulated firms can live with provides sufficient practical protection for workers.¹⁸⁸

Although those opposed to consensus approaches raise valid objections,

180. Mendeloff, *supra* note 16, at 442-43.

181. See 29 U.S.C. § 655(b)(5) (1982).

182. B. White interview, *supra* note 41; S. KELMAN, REGULATING AMERICA, REGULATING SWEDEN: A COMPARATIVE STUDY OF OCCUPATIONAL HEALTH AND SAFETY POLICY 81 (1981).

183. See C. NOBLE, LIBERALISM AT WORK: THE RISE AND FALL OF OSHA 181-82 (1986).

184. B. White interview, *supra* note 41 (Assistant Secretary of OSHA inhibited from consensus approach because of antagonistic views of labor unions). Moreover, even though the consensus approach is widely used in other countries, supporters note that it may not be very adaptable to an American system of administration, in which advocacy and conflict are predominant. G. WILSON, THE POLITICS OF SAFETY AND HEALTH: OCCUPATIONAL SAFETY & HEALTH IN THE UNITED STATES & BRITAIN 151 (1985); R. BRICKMAN, S. JASANOFF & R. ILGEN, CONTROLLING CHEMICALS: THE POLITICS OF REGULATION IN EUROPE AND THE UNITED STATES 314 (1985).

185. See, e.g., Mendeloff, *supra* note 16, at 441.

186. See, e.g., *id.*; Mendeloff, *supra* note 32, at 51; Levin, *supra* note 32, at 38. See generally Harter, *Dispute Resolution and Administrative Law: The History, Needs, and Future of A Complex Relationship*, 29 VILL. L. REV. 1393 (1984); Harter, *Negotiating Regulations: A Case of Malaise*, 71 GEO. L.J. 1 (1982) [hereinafter Harter, *Negotiating Regulations*].

187. Gombar interview, *supra* note 76 (in consensus approach industry would share information that Agency currently lacks).

188. Seminario interview, *supra* note 89.

OSHA cannot afford to ignore entirely this method of speeding up its efforts. OSHA's traditional reliance on adversarial approaches has produced so few standards that the Agency must consider whether a consensus orientation would be of some value. Three consensus-oriented techniques—negotiated rulemaking, advisory committees, and flexible regulatory standards—offer some hope of generating at least some solutions that are acceptable to all concerned. The Agency must, however, carefully avoid conveying the impression that its use of a consensus-based approach is inspired by a desire to avoid conflict with industry at the expense of worker safety.

a. *Negotiated Rulemaking*

In the past few years, negotiated rulemaking has been a popular technique for drafting the text of proposed regulations.¹⁸⁹ Negotiated rulemaking is a structured discussion among all interested parties, often with the aid of a mediator or facilitator. The goal of this discussion is to arrive at a consensus on a proposed rule.¹⁹⁰ When the process is successful, the Agency can promulgate the proposed rule with substantial savings in costs and time.¹⁹¹ Some observers believe negotiated rulemaking will not work at OSHA,¹⁹² but others are more optimistic.¹⁹³ OSHA has

189. See Recommendation 85-5: Procedures for Negotiating Proposed Regulations, in ADMIN. CONFERENCE OF THE U.S., RECOMMENDATIONS AND REPORTS, 23-27 (1985); Procedures for Negotiating Proposed Regulations (Recommendation 82-4), 1 C.F.R. 305.82-4 (1988); Perritt, *supra* note 165, at 677-745.

190. See generally Harter, *Negotiating Regulations*, *supra* note 186.

191. Other advantages include the avoidance of litigation, the possibility of more accurately identifying the real concerns of the parties (because they do not engage in the posturing that occurs in litigation), the opportunity to gauge the intensity of the parties' concerns over various issues, and the legitimacy the promulgated rule will enjoy because it was a joint product of the Agency and the parties. See *id.* at 28-31.

192. The doubters argue there is too much distrust between management and labor for this idea to function effectively, Mintz interview, *supra* note 28; Vladeck interview, *supra* note 29; that its usefulness is limited because OSHA and labor have only a limited number of experts who can participate, Kronenbush interview, *supra* note 130, that OSHA uses regulatory negotiations to stall difficult decisions, see, e.g., 1984 O.S.H. Rep. 1339 (BNA) (May 24, 1984) (union representative criticizes OSHA for using mediation as means to delay benzene rulemaking), that industry will not cooperate because OSHA is unlikely to issue a rule anyway, Vladeck interview, *supra* note 29; Railton interview, *supra* note 110, and that OSHA employees will object that negotiated rulemaking compromises the Agency's mission or reduces their authority. See Mendeloff, *supra* note 16, at 456. See generally, Rothstein, *Substantive and Procedural Obstacles to OSHA Rulemaking: Reproductive Hazards As An Example*, 12 B.C. ENVTL. AFF. L. REV. 627, 664 (1985) (former OSHA administrators Corn and Bingham were "skeptical about negotiated rulemaking"); Schuck, *Litigation, Bargaining and Regulation*, REGULATION, July-Aug. 1979, at 34 ("[D]irect bargaining between interests will probably never play a major role in the development of regulatory policy and regulatory decisions.").

193. Supporters of regulatory negotiations stress that labor and management somehow reach agreements in collective bargaining, Railton interview, *supra* note 110, and maintain that bargaining over health and safety issues will work if OSHA becomes a more active participant. See Perritt, *supra* note 165, at 755 (benzene process would have benefited from OSHA participation). They explain that several conditions are necessary for a successful result, see Harter, *Negotiating Regulations*, *supra*

recently proposed a rule that resulted from negotiated rulemaking,¹⁹⁴ but its other efforts at mediation have not been very successful.¹⁹⁵

Negotiated rulemaking is not likely to succeed in large generic rulemaking efforts. Nor is it likely to be useful in addressing issues, such as the use of respirators versus engineering controls, about which the positions of the interested participants have already hardened. Negotiated rulemaking may also fail for topics in which a large number of parties have widely divergent interests. On the other hand, negotiated rulemaking might be entirely appropriate for new topics, such as risks posed in the pharmaceutical industry by genetically engineered microorganisms, about which positions have not yet been formed and for which large investments have not yet been made. Finally, a precondition to a successful negotiated rulemaking is equality in participants' power to affect the outcome of the proceeding if the negotiations falter. A party in a very powerful position to influence the outcome is likely to have a disproportionate impact on negotiations. Knowing this, weaker parties may refrain from participating at the outset.¹⁹⁶

Given these constraints, OSHA should evaluate the possibility of using negotiated rulemaking on a case-by-case basis. Moreover, although negotiated rulemaking has a significant potential for speeding up the regulatory process, the Agency must develop devices for abandoning it when the negotiations reach a stalemate. Otherwise, OSHA's already slow decision-making process will slow further. The best solution may be to set an irrevocable deadline at the outset for the completion of any regulatory negotiation. As the deadline nears, the Agency should continue its own rulemaking efforts to minimize the time lost in negotiations if they fail.

note 186, at 42-52 (listing conditions for successful negotiations); Perritt, *supra* note 165, at 671-75 (also listing conditions); and that many of these were missing in OSHA's failures at mediation. *Id.* at 692-93. Finally, supporters argue that even if negotiations fail, OSHA will gain a better understanding of the issues and a feel for what the parties can accept. Bokart interview, *supra* note 42.

194. See Methylenedianiline (MDA) Mediated Rulemaking Advisory Committee Recommendations, 52 Fed. Reg. 26,776 (1987) (recommendations of MDA negotiated rulemaking advisory committee).

195. In 1976, regulations controlling coke oven emissions were adopted in accordance with agreements reached among OSHA, industry, and organized labor, Exposure to Coke Oven Emissions, 41 Fed. Reg. 46,742 (1976), but these efforts did not forestall a legal challenge to the regulations. See *American Iron & Steel Inst. v. OSHA*, 577 F.2d 825 (3d Cir. 1978). In 1983, mediation was used to a limited extent, with OSHA involvement, concerning the cotton dust standard. See Perritt, *supra* note 165, at 747. In the same year, an ambitious effort to mediate an agreement concerning the benzene standard failed. *Id.* at 677.

196. See Perritt, *supra* note 165, at 664-68.

b. *Advisory Committees*

OSHA may be able to build a consensus on some aspects of proposed regulations by using advisory committees. Although OSHA does seek some advice from the National Advisory Committee of Occupational Safety and Health (NACOSH),¹⁹⁷ it has not appointed a rulemaking advisory committee since 1976.¹⁹⁸ OSHA apparently abandoned rulemaking advisory committees because they did not function well¹⁹⁹ and the Occupational Safety and Health Act subjected them to unreasonably short deadlines.²⁰⁰

OSHA could gain some important advantages by resuming the appointment of rulemaking advisory committees. Advisory committees can assist an agency by explaining complex technical issues, providing peer review for agency decisions, identifying areas of consensus among scientists, and expanding the participation of interested experts in agency decisionmaking.²⁰¹ When they function in this fashion, committees improve the credibility of agency decisions, and thereby increase their acceptance.²⁰² The usefulness of such committees, however, is limited to issues of science, where technical expertise is critical, and does not extend to policy ques-

197. NACOSH, which is composed of 12 members, makes "recommendations . . . relating to the administration of the [Occupational Safety and Health Act]." 29 U.S.C. § 656(a) (1982). Some members of NACOSH have found it to be a useful forum to air significant issues, e.g., Ashford, *The Role of Advisory Committees in Resolving Regulatory Issues Involving Science and Technology: Experience from OSHA and EPA*, in LAW AND SCIENCE IN COLLABORATION: RESOLVING REGULATORY ISSUES OF SCIENCE AND TECHNOLOGY 165, 172 (1983) [hereinafter Ashford, *Role of Advisory Committees*], but an ACUS report found that the Committee's role has always been a secondary one and that over time its importance has declined. Merrill, *supra* note 19 at 147. OSHA continues to rely on NACOSH, but it has been criticized for not using it enough. See, e.g., 1981 Oversight Hearings, *supra* note 179, at 210-11 (Statement of Ray Denison, AFL-CIO) (OSHA should make better use of NACOSH); Ashford, *Advisory Committees in OSHA and EPA: Their Use In Regulatory Decisionmaking*, 9 SCI. TECH. & HUM. VALUES 72, 79 (1984) (OSHA should make better use of NACOSH).

198. B. MINTZ, *supra* note 45, at 65. PREVENTING INJURY, *supra* note 161, at 65.

199. T. GREENWOOD, *supra* note 38, at 125 (committees were only a forum for labor and employers to argue with each other); B. MINTZ, *supra* note 45, at 65 (OSHA, on balance, found use of committees burdensome); L. BACOW, BARGAINING FOR OCCUPATIONAL SAFETY AND HEALTH 41-42 (1980) (committees became "tools for political manipulation"); *Risk Assessment Research, 1984: Hearings on H.R. 4192 Before the Subcomm. on Natural Resources and Environment of the House Comm. on Science and Technology*, 98th Cong., 2d Sess. 20-23 (1985) (statement of Nicholas Ashford, MIT) (OSHA often disagreed with committee recommendations).

200. 29 U.S.C. § 655(b)(1) (1982) (maximum 270 day deadline for committee to complete work); *id.* § 655(b)(2) (OSHA must propose standard 60 days after committee finishes work); see Tomlinson, *Report on the Experience of Various Agencies with Statutory Time Limits Applicable to Licensing or Clearance Functions and to Rulemaking*, in ADMIN. CONFERENCE OF THE U.S., RECOMMENDATIONS AND REPORTS 207 (1978) (OSHA had considerable difficulty complying with statutory deadlines concerning advisory committees).

201. See RISK ASSESSMENT IN THE FEDERAL GOVERNMENT, *supra* note 23, at 98; Ashford, *supra* note 197, at 166; Merrill, *supra* note 19, at 135-56.

202. Shapiro, *Scientific Issues*, *supra* note 23, at 306-07.

tions, where technical expertise has no particular virtue.²⁰³ Although advisory committees should not assist OSHA in making policy decisions, Agency administrators would still benefit if the committees were to indicate when a consensus existed concerning the scientific data upon which the Agency might base policy decisions.

If OSHA is to use rulemaking advisory committees effectively in the future, it will have to overcome the problems that led the Agency to abandon their use. While some observers believe these problems can be solved,²⁰⁴ others are less confident.²⁰⁵ OSHA has limited use for advisory committees under the existing law; such committees could be more useful if Congress eliminated the current requirements concerning committee membership and time deadlines. The problem with committee membership requirements is that because OSHA must appoint an equal number of representatives of labor and management, this requirement limits the number of independent experts it can appoint.²⁰⁶ Moreover, there is little doubt that this requirement contributes to the politicized and adversarial nature of OSHA committees and limits the range of their expertise.²⁰⁷ Although there may be a way for OSHA to reduce the number of members appointed from management and labor,²⁰⁸ a better solution would be for Congress to eliminate the present membership qualifications and replace them with a simple requirement that membership be "balanced."²⁰⁹ While OSHA faces statutory time deadlines which are difficult

203. T. GREENWOOD, *supra* note 38, at 229 ("Expert panels often do not admit (and may not even recognize) when they go beyond science or engineering knowledge in reaching their conclusions.").

204. See, e.g., RISK ASSESSMENT IN THE FEDERAL GOVERNMENT, *supra* note 23, at 98; Gombar interview, *supra* note 76 (advisory committees would benefit OSHA decisionmaking); Railton interview, *supra* note 110 (advisory committees would extend OSHA's scientific expertise).

205. Vladeck interview, *supra* note 29 (committees will not work because industry will not cooperate); Mintz interview, *supra* note 28 (conflict would erupt between industry and labor in advisory committees).

206. Membership, which is composed of 15 or fewer persons, must include one designee of the Secretary of HHS, at least one representative of state health and safety agencies, and an equal number of representatives from labor and management. 29 U.S.C. § 656(b)(1) (1982). The Secretary of Labor may appoint other persons with expertise in the area of occupational safety and health, but the number of such persons cannot exceed the number appointed to the committee as representatives of federal and state agencies. *Id.*

207. See *supra* notes 57-72 and accompanying text.

208. OSHA must include an equal number of representatives from management and labor, but the existing law does not specify how many such representatives must be appointed. 29 U.S.C. § 656(b)(1) (1982). If OSHA were to appoint only one person each from labor and management, it would be able to appoint a majority of the committee based on their expertise. A committee with a majority of independent or government scientists might have a better chance of operating as a scientific body, rather than as a group of individual advocates for management or labor. Rothstein, *supra* note 192, at 655-56.

209. See Federal Advisory Committee Act, 5 U.S.C. app. § 5(b)(2) (1982) (all government advisory committees must have membership "fairly balanced in terms of the points of view represented and the functions to be performed.").

to meet, the Agency can comply if it takes special precautions.²¹⁰ Because these suggestions will not work in many circumstances, however, legislative action to eliminate the deadlines is appropriate.²¹¹

c. *More Flexible Standards*

In addition to using procedures like negotiated rulemaking and advisory committees that may produce a consensus concerning a regulatory issue, OSHA can also reduce the opposition to its regulations by adopting more flexible standards. One of industry's principal criticisms has been that OSHA has been too quick to order the use of a specific design (a design standard) rather than allowing firms to meet mandatory safety goals by whatever design they choose (a performance standard).²¹² Although this criticism is not entirely accurate or fair,²¹³ OSHA may benefit from the increased use of performance standards.

Greater use of performance standards may reduce industry opposition because this type of regulation generally reduces industry compliance costs.²¹⁴ Moreover, performance standards may be less time-consuming for OSHA to adopt.²¹⁵ But unless performance standards are as protective of workers as design standards, labor opposition could provoke considerable litigation and controversy.²¹⁶ Thus, OSHA should consider using per-

210. OSHA can limit the issues it refers to a committee to the most difficult scientific and technological issues, it can carefully monitor the committee's progress, and it can use existing deadlines as leverage to prompt action. See Tomlinson, *supra* note 200, at 206-07 (OSHA can meet deadlines in certain instances).

211. Existing deadlines should be eliminated in favor of deadlines established by the Agency itself, as recommended later in this Article. See *infra* notes 291-322 and accompanying text.

212. See, e.g., *1981 Oversight Hearings*, *supra* note 179, at 156 (Statement of Robert Thompson, U.S. Chamber of Commerce) (criticism of design standards); Viscusi, *supra* note 21, at 248 (criticism of design standards). See generally PREVENTING INJURY, *supra* note 161, at 363-64; Schroeder & Shapiro, *supra* note 17, at 1305-09.

213. The PELs that are the core of OSHA's health regulations are performance-oriented. Morgan & Duvall, *OSHA's General Duty Clause: An Analysis of Its Use and Abuse*, 5 *INDUS. REL. L.J.* 283, 319 (1983) (employers are free to use any technology (other than respirators) capable of achieving ambient concentration specified in PEL). Moreover, OSHA has attempted in recent years to expand its use of the performance-oriented approach beyond use of PELs. The hazardous communication standard permits firms to design their own labeling systems, and the grain-handling standard allows a firm to use any one of several methods to decrease grain dust. Viscusi, *supra* note 21, at 251-52.

214. A performance standard frees industry to choose the method of compliance with the lowest costs, to design methods of compliance that are easily understood, and to discover and adopt less expensive methods of compliance in the future. Nichol & Zeckhauser, *OSHA after a Decade: A Time for Reason*, in *CASE STUDIES IN REGULATION: REVOLUTION AND REFORM* 203 (1981); OSHA SAFETY REGULATION: REPORT OF THE PRESIDENTIAL TASK FORCE 14, 18 (P. MacAvoy ed. 1977) [hereinafter OSHA SAFETY REGULATION]; R. SMITH, *THE OCCUPATIONAL SAFETY AND HEALTH ACT: ITS GOALS & ACHIEVEMENTS* 75-77 (1976); Viscusi, *supra* note 21, at 248.

215. OSHA must know a great deal about an industry when it promulgates a design standard and this information usually comes from industry itself. These enormous information requirements virtually ensure that the pace of regulation will be slow.

216. Design standards have the advantage of creating precise expectations for employers, facilitat-

formance standards when they offer the same degree of protection as design standards, lower industry compliance costs, and can be easily understood and monitored. In these circumstances, the use of performance standards is Pareto-superior, because they yield the same benefits at a lower cost.²¹⁷

In the minds of some reformers, information-oriented standards provide a more flexible approach to regulation.²¹⁸ They propose that OSHA increase its efforts to provide workers with more information about safety and health hazards. The reformers believe that because this solution addresses the failure of labor markets to provide information, it assists those markets to promote additional safety. In theory, workers will use this information to change their conduct in dangerous situations, bargain for wage premiums for dangerous work, and participate more effectively in relevant legislative and administrative proceedings.²¹⁹ Proponents of information-oriented standards therefore applaud OSHA's hazardous communication rule²²⁰ and urge OSHA to increase its efforts to provide or require written materials and training programs for workers.²²¹

While increased reliance on information-oriented programs will no doubt aid uninformed workers,²²² it is not enough to protect all workers adequately.²²³ In particular, workers in unregulated labor markets have been unable to obtain protection from hazards even when those hazards

ing the ability of employees and OSHA inspectors to monitor compliance, and permitting OSHA to require employers to implement new safety technologies. OSHA SAFETY REGULATION, *supra* note 214, at 18. For the previous reasons, opponents of performance standards argue they are often unenforceable and therefore tend to shift the burden of risk avoidance from the employer to the worker. *Id.* at 19. Moreover, employers may lack the expertise and resources to translate performance criteria into suitable engineering designs, especially at small firms that can ill-afford to hire outside expertise. *Id.*

217. See A. ALCHIAN & W. ALLEN, EXCHANGE AND PRODUCTION: COMPETITION, COORDINATION AND CONTROL 76 (3rd ed. 1983).

218. See, e.g., W. VISCUSI, RISK BY CHOICE 37-58 (1983); R. SMITH, THE OCCUPATION SAFETY AND HEALTH ACT 27-28 (1976); Zeckhauser & Nichol, *The Occupational Safety and Health Administration—An Overview*, in SENATE COMM. ON GOV'T AFFAIRS, STUDY ON FEDERAL REGULATION, VOL. VI APPENDIX, S. DOC. NO. 96-14, 96th Cong., 1st Sess., 169, 172 (1978).

219. Viscusi, *supra* note 21 at 248; Schroeder & Shapiro, *supra* note 17, at 1295-97.

220. 48 Fed. Reg. 53,280 (1983) (to be codified at 29 C.F.R. pt. 1910 (1988)) (requiring employers to place warning labels on containers of hazardous chemicals, to provide employees with material safety data sheet, and to train employees to use information provided).

221. See, e.g., Nichol & Zeckhauser, *supra* note 214, at 228; R. SMITH, *supra* note 214, at 77-78.

222. See Viscusi & O'Connor, *Adaptive Responses to Chemical Labeling: Are Workers Bayesian Decision Makers?*, 74 AM. ECON. REV. 942 (1984) (providing information protects workers as long as information is new knowledge rather than general exhortations to act safely).

223. Communicating long-term risks are much more difficult for OSHA to communicate than short-term risks. S. HADDEN, READ THE LABEL, 101-13 (1986). Moreover, OSHA cannot easily determine in which industries it should require information programs concerning long-term risks because the information about those risks is so scarce. *Id.* In addition, complex problems of trade secrecy arise whenever information relevant to communicating workplace risks can also be used by competitors to the employer's disadvantage. McGarity & Shapiro, *supra* note 30, at 838 (1980).

are well known to the workers.²²⁴ Thus, while OSHA should continue to explore how it can increase the information available to workers, such solutions will never be a substitute for health and safety standards.

2. *More Efficient Procedures*

OSHA can also increase the number of regulations it issues by adopting more efficient procedures. Three possible changes can be considered: adoption of a less formal hearing process, limited use of advance notices of proposed rulemaking, and improved preparation of the record.

a. *An Informal Hearing Process*

OSHA uses a hybrid form of rulemaking to promulgate health standards. According to its enabling Act, OSHA can use informal rulemaking unless an interested person requests a hearing, which almost always happens.²²⁵ OSHA regulations provide that an Administrative Law Judge (ALJ) shall preside, the ALJ shall allow cross-examination on crucial issues, and a verbatim transcript shall be kept.²²⁶ Although OSHA could legally forego some of these procedures, such as cross-examination,²²⁷ doing so will probably have little impact on the pace of OSHA decisionmaking. Because the time elapsed in hearings is only a small portion of the time consumed in internal decisionmaking and judicial review,²²⁸ streamlining the hearing process will not greatly help the Agency increase its

224. Schroeder & Shapiro, *supra* note 17, at 1240-42 (proof that workers can obtain protection from health hazards without OSHA regulation difficult to establish empirically); see Abel, Book Review, 83 MICH. L. REV. 772, 777 n.15 (1985) (reviewing E. BARDACH & R. KAGAN, GOING BY THE BOOK: THE PROBLEM OF REGULATORY UNREASONABLENESS (1982)) (discussion of wage premiums obscures "compulsion and exploitation of workers").

225. OSHA has held a hearing for all but one of its first eighteen health standards and for all but nine of its first twenty-six safety standards. PREVENTING INJURY, *supra* note 161, at 363-64.

226. 29 C.F.R. § 1911.15(b) (1988). OSHA typically requests witnesses to pre-file testimony, to limit oral presentations to 10 or 15 minutes, and to participate in a prehearing conference with the Agency staff. Whenever possible, the Agency also limits the issues to be covered at a hearing. Finally, OSHA arranges for experts to explain the technical basis for its proposals and, more generally, to answer questions and help develop a full technical record on the issues in the proceeding. B. MINTZ, *supra* note 45, at 63-64. For example, OSHA presented 46 experts in the field of cancer research in the hearing held for the Agency's cancer policy. *Id.*

227. An agency is required to use formal rulemaking only when Congress has required that a rule be made "on the record after an opportunity for an agency hearing." United States v. Fla. East Coast Ry. Co., 410 U.S. 224 (1973). Congress made no such requirement of OSHA.

228. The following table indicates the time elapsed for the various components of the process:

regulatory output.²²⁹ Moreover, hybrid procedures may be useful in resolving some kinds of scientific disputes.²³⁰ Hybrid procedures, when properly applied, can be especially useful in probing cost and feasibility issues, which often require an evaluation of conclusions drawn from anecdotal evidence and unscientific telephone surveys. Finally, if procedural changes were to affect adversely the quality of OSHA's decisionmaking, the Agency could suffer an increase in judicial remands and a loss of public confidence. OSHA can best address delays caused by hybrid procedures by setting strict deadlines for hearings and by ensuring that ALJs do not feel constrained to grant every request for cross-examination or continuance out of fear of reversal by the Agency.

b. *Advance Notices of Proposed Rulemaking*

OSHA has shown an increasing tendency to rely routinely on Advance Notices of Proposed Rulemaking (ANPRs) to solicit information from regulated industries, beneficiary groups, and other interested parties.²³¹ Although the ANPR can be an effective tool for acquiring information

(footnote 228 continued)

<u>Standards</u>	<u>Hearing</u>	<u>Agency Decision- Making</u>	<u>Judicial Review</u>	<u>Entire Process</u>
Asbestos	3 days	4 mos.	21 mos.	25 mos.
14 Carcinogens	3 days	11 mos.	10 mos.	21 mos.
Vinyl Chloride	6 days	85 mos.	2 mos.	7 mos.
Coke Oven Emissions	75 days	63 mos.	16 mos.	79 mos.
Benzene	22 days	21 mos.	28 mos.	49 mos.
DBCP	2 days	6 mos.	none	6 mos.
Arsenic	12 days	51 mos.	34 mos.	85 mos.
Lead	49 days	69 mos.	20 mos.	89 mos.
Cotton Fiber Dust	7 days	44 mos.	35 mos.	79 mos.
Acrylonitrile	11 days	18 mos.	none	18 mos.
Noise	24 days	100 mos.	46 mos.	146 mos.

See Schroeder & Shapiro, *supra* note 17, at 1305-09; McGarity, *OSHA's Generic Carcinogen Policy: Rule Making Under Scientific and Legal Uncertainty*, in *LAW & SCIENCE IN COLLABORATION* 78 (1983).

229. McGarity, *supra* note 228, at 78.

230. Shapiro, *Scientific Issues*, *supra* note 23, at 297-98. One long-time analyst of OSHA believes Agency decisionmaking has generally benefited from the hybrid approach; B. MINTZ, *supra* note 45, at 65-66.

231. An Advance Notice of Proposed Rulemaking (ANPR) is a tool used much earlier in the rulemaking process than the Notice of Proposed Rulemaking (NPRM). Typically, the NPRM is the last notice published before the adoption of the rule; therefore, it must be in substance substantially the same as the final rule. In contrast, the ANPR serves many functions. An agency may use this advance notice to request comments or solutions to a general problem. By publishing an ANPR, the Agency indicates that it has recognized and may in the future address a certain problem area. OSHA used an ANPR in only one of the first sixteen health standards it promulgated and in only one of the first twenty-six safety standards. PREVENTING INJURY, *supra* note 161, at 363-64. It then used an ANPR in four of the next six health standards it proposed. *Id.*; Schroeder & Shapiro, *supra* note 17, at 1305-09.

and ideas at an early stage in a rule's development,²³² there is a general feeling among Agency staff and outside practitioners that it rarely results in the production of useful information for OSHA.²³³ At the same time, the ANPR slows the progress of Agency contractors, who are understandably reluctant to complete their reports until they have assimilated any information that an ANPR produces.²³⁴ Moreover, Agency administrators can use the process, which can last from six months to a year, to avoid hard decisions.²³⁵ Invoking the ANPR process demonstrates some movement by the Agency, but does not necessitate any final decisions. For these reasons, the ANPR should be used only when information that is not available through other vehicles is very likely to be forthcoming in response to the ANPR.

c. *Preparation of the Record*

Some Agency staffers and most representatives of beneficiary groups believe that because OSHA goes to extreme lengths to perfect the record in a rulemaking proceeding to avoid reversal on appeal, the Agency needlessly delays the promulgation of a final rule.²³⁶ They point to 100-page preambles that discuss every minor contention raised in the comments as evidence of overpreparation of the record. Most industry representatives forcefully dispute this idea and contend that OSHA must establish a sound technical basis for its rules. OSHA's attorneys in the Solicitor's Office are also convinced that elaborate analysis and documentation are necessary to survive judicial review, and they explain that concern for the quality of the Agency's analysis accounts for much of the delay caused by their office.²³⁷

Although the Solicitor's Office should be free to determine the type of record that is necessary for the Agency to prevail on judicial review, attorneys in that office should be subject to reasonable time constraints. Even under the pressure of such deadlines, the Solicitor's Office cannot become

232. See 1 C.F.R. § 305.76-3(f) (1986) (suggesting that ANPRs are effective when: "(1) the scientific, technical or other data relevant to the proposed rule are complex; (2) the problem posed is so open-ended that an agency may profit from receiving diverse public views before publishing a proposed rule for final comment; and (3) the costs that errors in the rule may impose, including health, welfare and environmental losses imposed on the public and pecuniary expenses imposed on the affected industries and consumers of their products, are significant.").

233. Outside parties are simply unwilling to scour their files for information at this early stage, and to the extent that information that is not readily available to OSHA is available to outside parties, they are often unwilling to provide it and incur the risk of revealing or foreclosing later strategies. Harwood interview, *supra* note 109; Gas interview, *supra* note 98.

234. Gordon interview, *supra* note 104.

235. Stein interview, *supra* note 85.

236. Harwood interview, *supra* note 109; B. White interview, *supra* note 41.

237. Jacoby interview, *supra* note 114.

more productive without additional resources.²³⁸ Given the current absence of any mechanism for holding the Solicitor's Office accountable for delays, it is impossible to say whether it has been underfunded inadvertently or as part of a deliberate attempt by budget managers in the DOL or OMB to slow down OSHA rulemaking. Whatever the reason, without additional resources, the Solicitor's Office will continue to be a bottleneck.²³⁹

From a somewhat broader perspective, the source of the problem may be that the Supreme Court has encouraged "searching and careful" review on the part of the courts of appeals.²⁴⁰ Since the parties usually may shop among all of the courts of appeals for the most favorable forum, OSHA attorneys must prepare the record under the assumption that it will be reviewed by the least sympathetic court.²⁴¹ Although an extended discussion of the advantages and disadvantages of the "hard look" doctrine is not appropriate here,²⁴² it is worth noting that the courts of appeals should not perform their essential institutional role in a vacuum, unaware of the consequences of intense judicial review. One of the most important consequences from the Agency's perspective is the tendency of stringent judicial review to constrain the Agency's rulemaking output.²⁴³

D. *Implementation of Patch and Repair Reform*

If OSHA is serious about increasing its ponderous standard-setting pace, it should implement a priority-setting system, rely more heavily upon generic approaches to standard-setting, choose methods of regulation that minimize conflict between interested parties and the Agency, and adopt more efficient approaches to its hearings. To maximize the potential of these reforms, OSHA should take two additional steps: seek additional resources and adopt a regulatory plan.

The Reagan administration budget cuts have left OSHA, and particu-

238. *Id.*

239. See *infra* notes 243-44 and accompanying text (discussion of current underfunding of OSHA).

240. See *supra* notes 53-56 and accompanying text; McGarity, *Beyond the Hard Look: A New Standard for Judicial Review?*, 2 NAT. RESOURCES & ENV'T 32 (1986) [hereinafter McGarity, *Beyond the Hard Look*]; McGarity, *Judicial Review of Scientific Rulemaking*, 9 SCI. TECH. & HUM. VALUES 97 (1984).

241. See McGarity, *Multi-Party Forum Shopping for Appellate Review of Administrative Action*, 129 U. PA. L. REV. 302 (1980).

242. See Shapiro & Glicksman, *Congress, The Supreme Court and the Quiet Revolution in Administrative Law*, 1988 DUKE L.J. (forthcoming manuscript on file with authors) (discussing advantages and disadvantages of hard look doctrine); McGarity, *Beyond the Hard Look*, *supra* note 240 (criticizing "hard look" review and advocating "pass-fail professor" test to replace it).

243. For a possible remedy, see *infra* note 286 and accompanying text.

larly the Health Standards Directorate, seriously understaffed.²⁴⁴ Individual health professionals in that Directorate are responsible for multiple rulemaking projects and have numerous additional responsibilities.²⁴⁵ In addition, OSHA badly needs an infusion of new personnel.²⁴⁶ Creating new positions in the Health Standards Directorate would allow the Agency to hire new professionals and take on additional tasks. It is, in the final analysis, hypocritical for Congress and OMB to criticize OSHA for poor work if they are unwilling to provide sufficient resources for the Agency to do a good job.

Whether or not it receives additional resources, OSHA should establish a committee to draft a regulatory plan setting out the Agency's agenda for the foreseeable future.²⁴⁷ The plan could be most useful in identifying areas where the Agency should adopt generic approaches toward regulating hazards on the priority list.²⁴⁸ For example, if a generic standard for the petroleum industry would effectively regulate eighty percent of the use of the chemicals ranked third, fourth, and eighteenth on the priority list, the plan might require OSHA to initiate a generic rulemaking proceeding immediately and forestall promulgating individual standards for chemicals ranked third and fourth. The plan could also initially examine whether a consensus approach²⁴⁹ or use of a performance or information standard would be appropriate for particular initiatives.²⁵⁰ A regulatory plan

244. See *supra* notes 32–36 and accompanying text (describing Reagan budget cuts).

245. See *supra* notes 41–43 and accompanying text.

246. Many of OSHA's health scientists and industrial hygienists have been with the Agency since the early 1970s, and a few are approaching retirement age. Although most are enthusiastic about their jobs, they have "been around the block" a few times and sometimes lack commitment to the Agency's worker protection goals. An infusion of new talent could have the effect of reinvigorating some of the long-term employees.

247. The plan could be developed for the Assistant Secretary for Occupational Safety and Health by the priority-setting committee recommended earlier, see *supra* notes 127–35 and accompanying text, or by a specific committee appointed for this purpose. Use of the priority-setting committee would integrate the functions of priority-setting and regulatory planning, but the members of the priority-setting committee may not have the relevant expertise for regulatory planning. For example, the priority-setting committee may have to have representatives from the Solicitor's Office or the Agency's budget office. If a separate committee is used, it could be composed of high-level management staffers from at least the deputy director level, a lawyer from the Solicitor's Office, and professionals from the Directorates of Health Standards, Safety Standards, and Policy. Coordination between the priority-setting and regulatory planning committees would be facilitated if one or two persons were members of both committees.

248. See *supra* notes 159–76 and accompanying text.

249. For example, if the Agency lacks sufficient resources to convene a scientific advisory committee for every hazard on its priority list, it could use the plan to designate those hazards for which a committee would be used. See *supra* notes 127–35 and accompanying text (discussing advisory committees). Similarly, the plan could be a vehicle for identifying at an early stage potential candidates for negotiated rulemaking. See *supra* notes 189–96 and accompanying text (discussing negotiated rulemaking).

250. See *supra* notes 212–24 and accompanying text (discussing performance and information oriented standards). This aspect of the regulatory plan would be less useful than its other advantages, however, because performance and information options are more likely to arise in the standard setting

would give OSHA a clearer picture of the Agency's near-term goals, allow the Agency to match resources with its priorities list, and give some signal to the public and to OSHA's staff about how the Agency intends to meet its goals. Finally, this planning process should fold neatly into OSHA's existing program to comply with Executive Order 12,498,²⁵¹ which requires the Agency to submit an annual report to OMB identifying its regulatory program.

The committee's first drafting of a plan would be quite burdensome and no doubt controversial. Holding one or more public meetings is possible to aid the committee in this initial task.²⁵² All committee members would attend such meetings, at which interested persons would be invited to comment on methods of regulation and their relationship to OSHA's priorities. The regulatory planning committee should make public the results of these meetings after the Assistant Secretary has had an opportunity to review any proposed decisions of the committee. Because outside parties may have information that is important to the Agency's plan, the committee should invite public comment on its work and be open to changing the plan in light of the comments. The Agency, however, must take the position that its statutory mandate does not require the use of informal rulemaking procedures,²⁵³ and it should resist strongly any judicial review of the plan.²⁵⁴ If the Agency is forced to litigate the value of the plan, or any amendment of it, the attendant delays could defeat the purpose of the entire exercise.

III. Fundamental Legislative Solutions That Congress Should Adopt

The reforms suggested above can increase OSHA's productivity, but they have significant limitations. Updating the 1971 consensus standards presents a tangle of legal and practical problems and may provide only marginal additional protection for workers. In many situations, formula-

process when the Agency has more information concerning the costs and benefits of several options.

251. Executive Order 12,498, 50 Fed. Reg. 1036 (1985), *reprinted in* 5 U.S.C. § 601 (Supp. IV 1986). Executive Order 12,498 establishes a government-wide regulatory planning process, the purpose of which is to aid presidential oversight, reduce the burden of regulation, minimize duplication and conflict, and enhance public understanding of regulations. Each agency is required to assemble an annual regulatory program and send it to the OMB for approval. The regulatory program must contain a statement of the agency's regulatory goals for the year and information concerning all significant regulatory actions underway or planned for the year. If the agency fails to include an action in its regulatory program, it may not initiate that action during the year, absent an emergency or statutory or judicial deadlines.

252. *See supra* note 132 and accompanying text (discussing use of public workshops to comment on priorities list).

253. *See supra* note 133 and accompanying text (discussing why OSHA need not use rulemaking procedures for adoption of priorities list).

254. *See supra* notes 134-35 and accompanying text (discussing why judicial review of priorities list is not required).

tion of generic, performance, or information standards is not possible and will not protect workers as effectively as OSHA's traditional standard-setting approaches. Negotiated rulemaking and advisory committees probably will not work for very many of the problems that OSHA must address. Improving the hearing process is unlikely to decrease substantially the time it takes promulgate a standard. Thus, comprehensive reforms can come about only through legislative change.

Congress should act not only because the potential for internal reform is limited, but also because the current statute is the cause of many of OSHA's problems. Congress has given OSHA less flexibility than most other health and safety agencies, has failed to hold OSHA as accountable as other agencies, and has created unique organizational impediments to effective action by OSHA. Without legislative change, it is highly likely that OSHA will continue to regulate at its current slow pace, imposing extensive requirements on a few industries while leaving most workers without adequate protections.

Congress can adopt three relatively moderate solutions that should improve OSHA's limited productivity without radically altering the nature of government regulation of workplace risks. It can provide a more flexible mandate, impose more appropriate time deadlines, and bring about a reorganization of NIOSH and OSHRC. Congress has available more profound solutions, such as governmentally induced "industrial democracy," that deserve further attention,²⁵⁵ but the probability that Congress will consider relatively radical reforms at this juncture is sufficiently low that this Article will not discuss them.

A. *A More Flexible Mandate*

OSHA badly needs a more flexible mandate within which to exercise its discretion. Congress can create such a mandate by amending the substantive criteria for standard-setting and by clarifying the scope of judicial review.

1. *A Realistic Legal Mandate*

OSHA's most ambitious effort to increase its regulatory productivity—its generic cancer policy²⁵⁶—came to a grinding halt in 1980 when

255. C. NOBLE, *supra* note 183 at 235-44 (1986); B. JUDKINS, *WE OFFER OURSELVES AS EVIDENCE: TOWARD WORKERS' CONTROL OF OCCUPATIONAL HEALTH* 204-05 (1986).

256. Identification, Classification, and Regulation of Potential Occupational Carcinogens, 29 C.F.R. § 1990 (1987). This approach adopted "fill-in-the-blank" standards for carcinogens. For example, exposure levels for substances that caused an increased incidence of tumors in two species, or in two experiments in a single species, would presumptively have been set at the lowest feasible level. In addition, there would have been monitoring, surveillance, and housekeeping requirements for such

the Supreme Court handed down its remarkable plurality opinion in the *Benzene* case.²⁵⁷ The immediate effect of the decision was to end OSHA's generic cancer policy.²⁵⁸ Over the long term, the Court's significant risk test has been a significant impediment to effective implementation of OSHA's statutory mandate. Having imposed the test on an unsuspecting OSHA, the Court failed to give coherent guidance as to the meaning of the term.²⁵⁹ As a result, OSHA may not act to protect workers until it has accumulated substantial evidence that a chemical is dangerous;²⁶⁰ moreover, it often hesitates to act out of fear of judicial reversal even when it may have sufficient evidence to do so.²⁶¹

As interpreted by the Supreme Court, OSHA's mandate is considerably less flexible than EPA's mandate under the Federal Water Pollution Control Act²⁶² and the Clean Air Act.²⁶³ Congress amended those acts when it became clear that EPA could not regulate effectively under the prior legislative constraints. Congress could increase OSHA's productivity by establishing mandates similar to those that now constrain EPA.²⁶⁴

chemicals. At the rulemaking hearing, the issues would have been limited to whether (1) the substance was correctly identified as a carcinogen; (2) the presumption about the level of exposure had been successfully rebutted; (3) the exposure level was feasible; (4) the substance had unique properties that would make protective measures required by the cancer policy inappropriate or infeasible; and (5) the environmental impact of the regulation was correctly identified. OSHA hoped that this generic approach to regulating potential occupational carcinogens would have substantially increased its rulemaking output. See McGarity, *supra* note 228.

257. *Benzene*, 448 U.S. 607 (1980). Juxtaposing the definition of standard in § 3(8) of the Act against the specific requirement of § 6(b)(5) that OSHA should "to the extent feasible" set standards that protect workers for their entire lives from risks of material impairment, the plurality opinion found that OSHA had an affirmative burden to prove that an occupational health standard was necessary to reduce a "significant risk" in the workplace. 448 U.S. at 639. The four dissenting justices found no mention of the words "significant risk" in the statute and accused the plurality of intruding into the Agency's legitimate policymaking domain. 448 U.S. at 688 (Marshall, J., dissenting).

258. See, e.g., Schroeder & Shapiro, *supra* note 17, at 1261-62.

259. Justice Stevens, the author of the plurality opinion, suggested that a one-in-a-billion probability of contracting cancer from a drink of chlorinated water is "insignificant," while a one-in-a-thousand probability of contracting cancer from breathing benzene in gasoline vapors would be "significant." *Benzene*, 448 U.S. at 655. Justice Stevens did not understand, however, that both the probability of contracting a disease and the number of persons at risk must be considered. See RISK ASSESSMENT IN THE FEDERAL GOVERNMENT, *supra* note 23, at 18. If the number of persons are taken into consideration, about 365 persons will contract cancer from drinking water according to Justice Stevens' hypothetically insignificant risk. (Assumes 200 million Americans, each of whom drinks five glasses of water per day, with a probability of contracting cancer of one-in-one-billion.) Again, taking the number of persons into account, about 400 persons will contract cancer from breathing benzene from gasoline vapors. (Assumes 2,000 gasoline stations, each with two attendants who are exposed to benzene 365 days a year, with a probability of contracting cancer of one-in-one-thousand.) Yet, Justice Stevens assures us that the former risk is insignificant, while the latter is significant.

260. Schroeder & Shapiro, *supra* note 17, at 1256-64.

261. See *supra* notes 44-56 and accompanying text (arguing that OSHA lawyers refuse to promulgate rule until all possible evidentiary defects are eliminated).

262. 33 U.S.C. §§ 1251-1376 (1982).

263. 42 U.S.C. §§ 7401-7642 (1982).

264. When EPA encountered difficulties implementing its mandate under § 307(a) of the Clean Water Act to promulgate standards sufficing to "protect the public health" with an "ample margin of

Congress could incorporate its experience in the environmental area into a regulatory mandate for OSHA by adopting a regulatory scheme that requires OSHA to establish a list of chemicals and other substances that “could reasonably be anticipated to cause a material impairment of health or functional capacity.”²⁶⁵ The scheme would presume that any chemical substance on the list was a Class II hazard unless OSHA redesignated it as Class I or III. For all Class II hazards, OSHA would promulgate standards requiring the installation of the “best available technology” (BAT).²⁶⁶

OSHA would redesignate a chemical or substance if it would be inappropriate to treat it as a Class II hazard. The proposal would require OSHA to redesignate the hazard to a more stringently regulated category (Class I) if regulation under Class II would leave workers exposed to a “significant risk of material impairment to health or functional capacity.” For Class I hazards, OSHA would reduce exposure to the extent “feasible.” This would mean applying the stringent technology-based test that OSHA currently uses to require exposure reductions in workplaces posing

safety,” Congress amended the act to empower EPA to require the installation of best available technology for controlling toxic pollutants. 33 U.S.C. § 1311(b)(2)(A) (1982). EPA retained its authority to regulate under the “ample margin of safety standard,” but it has relied almost exclusively on technology-based effluent limitations for pollution control. Latin, *Ideal Versus Regulatory Efficiency: Implementation of Uniform Standards and “Fine-Tuning” Regulatory Reforms*, 37 STAN. L. REV. 1267, 1309 (1985). Rather than searching for safe levels of toxic pollutants and identifying ample margins of safety, EPA could simply look for top-of-the-line pollution control technologies in the same or similar industries. Similarly, the courts held that EPA was required to promulgate regulations capable of preventing significant deterioration of “clean air” areas, *Sierra Club v. Ruckelshaus*, 344 F. Supp. 253 (D.D.C. 1972). The Court of Appeals for the District of Columbia affirmed the decision without opinion and the U.S. Supreme Court failed to overturn it by a 4-4 vote. *Fri v. Sierra Club*, 412 U.S. 541 (1973). Congress once again allowed EPA to require that major emitting facilities install “best available control technology.” 42 U.S.C. § 7475(a)(4) (1982). In addition, Congress established a classification scheme under which maximum allowable increases in ambient levels of two pollutants would vary, depending upon how the states classified particular clean air areas. 42 U.S.C. § 7473 (1982). Congress itself set the maximum allowable increases for particulates and sulfur dioxide. 42 U.S.C. § 7473(b) (1982). It ordered EPA to establish maximum allowable increases for each class for other pollutants. 42 U.S.C. § 7476 (1982). Congress, however, established the initial classifications for all areas, some of which could be upgraded, but not downgraded by the states.

265. These words would signal Congress’ intent to mandate a lower threshold than “significant risk” for including a substance or hazard on the list. Thus, OSHA would be required to place a chemical or hazard on the list even if it lacked sufficient information to assess its risk with a high degree of accuracy. Congress could even specify that the list contain at least those chemicals considered to be carcinogens or suspected carcinogens by outside expert bodies, such as the National Cancer Institute. U.S. OFFICE OF TECHNOLOGY ASSESSMENT, *supra* note 15, at 182-83 (1987) (NCI publishes annual list of known and suspected carcinogens).

266. The term “best available technology” would be defined by reference to the best technology actually being used within industry, technologies that could relatively easily be transferred from industries presenting similar hazards, and pilot plant technologies that OSHA could demonstrate are available for use in new and existing workplaces. OSHA could take the position that if the prescribed technology did not meet OSHA’s predicted PEL in a particular workplace after having been installed, then the PEL would be based on the level that the technology did consistently reach.

a significant risk.²⁶⁷ OSHA would redesignate a hazard to a less stringently regulated category (Class III) if regulation under Class II was unnecessary to avoid a "reasonable anticipation of material impairment of health or functional capacity." For Class III hazards, OSHA would reduce exposure to the extent permitted by any applicable nongovernmental standard, which would connote the consensus test that OSHA used to adopt its original health standards.²⁶⁸ Table 1 is a diagram of this risk-management scheme.

Table 1

CLASS	DEFINITION	REGULATORY LEVEL
I	Regulation as Class II presents a significant risk of material impairment	Extent permitted as feasible
II	Any hazard on list presumed to be in this class unless redesignated	Extent permitted by Best Available Technology
III	Regulation as Class II unnecessary to prevent a reasonable anticipation of material impairment.	Extent permitted by nongovernmental consensus standard

The procedures for regulation under the suggested mandate would not differ greatly from the existing process. OSHA would issue an announcement of a proposed rulemaking that would include the classification of the hazard. Interested persons could file comments and otherwise participate in the existing process, except that they could now raise two additional types of objections. First, they could object that the chemical being regulated could not reasonably be anticipated to cause a material impairment of health or functional capacity, even if exposures would exceed those permitted under a Class III classification. Second, they could propose a classification different than Class II. For either or both objections, they could submit evidence to support their arguments. After OSHA issued a final health standard, any interested party could seek judicial review as at pre-

267. See *Benzene*, 448 U.S. 607 (1980) (OSHA may regulate chemicals that pose "significant risk" to extent feasible); *Society of Plastics Indus. v. OSHA*, 509 F.2d 1301 (2d Cir. 1975) (stringent test for "feasibility").

268. See *supra* note 74 and accompanying text (OSHA adopted consensus health standards as its own regulations when it was formed).

sent. Under the new mandate, a reviewing court would consider whether the class of regulation chosen and technology prescribed by OSHA was arbitrary and capricious, in light of the evidence and policy judgments relied upon by the Agency and the evidence and arguments submitted by interested parties.

Although the proposed classification scheme should increase the protection available to workers,²⁶⁹ workers may object that the proposal weakens the substantive principle, established by the existing statute, that workers are entitled to be protected to the extent "feasible."²⁷⁰ This asserted right, however, was substantially diluted by the *Benzene* decision, which held that workers are entitled to maximum protection only if OSHA can first prove that a hazard presents a "significant risk."²⁷¹ The reality is that in many cases either OSHA cannot meet that burden of proof or it takes so long to do so that it cannot regulate more than one or two hazards a year.²⁷² Internal reforms are unlikely to accelerate greatly OSHA's productivity.²⁷³ Any given worker might be protected by standards somewhat less stringent under the proposed regime than under the existing regime, but the new approach should protect many more workers than the current scheme.²⁷⁴

Employers are likely to object that the proposed scheme gives OSHA too much discretion to promulgate regulations whose costs exceed their

269. In cases where there is sufficient information to justify the strictest level of regulation (Class I regulation), the proposal operates in the same manner as the existing act. Workers are entitled to a reduction in risk to the level of feasibility. *See supra* note 259 and accompanying text (hazards posing significant risk are regulated under feasibility standard). In cases where there is insufficient information to justify that level of protection, however, OSHA will still have to regulate, although somewhat less stringently.

270. *See supra* note 259 and accompanying text (workers entitled to be protected from "significant risks" to the extent feasible). Workers may also object that the proposal can shift the burden of justifying the level of regulation to them. If OSHA proposes that a chemical remain designated as Class II, workers could ask that it be redesignated as Class I. If OSHA disagrees, however, workers would have to demonstrate that OSHA's classification was arbitrary and capricious. Yet workers are in no better position under the existing act when they disagree with OSHA about the proper level of regulation. If OSHA proposes a less strict exposure than that preferred by workers, they can file comments supporting a stricter limitation, but OSHA will be upheld if it has substantial evidence for its position.

271. *See supra* notes 51-56 and accompanying text.

272. *See supra* note 84 and accompanying text.

273. *See supra* Part II.

274. Congress could offer workers additional protection by specifying standardized protections that would be applicable to each class of chemicals, or it could require OSHA to do so in a generic rulemaking proceeding. When OSHA currently promulgates a health standard, it not only establishes a PEL, but it also requires protections such as exposure monitoring, medical surveillance and others. *See M. ROTHSTEIN, supra* note 153, §§ 71-72 (1983) (discussion of other protections required by OSHA). OSHA could promulgate generic standards for such protections and then incorporate them into individual proposals for health standards. Interested parties could file comments concerning the application of any of the generic requirements in a specific case. If OSHA were to be persuaded, it could grant variances as appropriate, which would be subject to judicial review.

benefits.²⁷⁵ There are at least three responses to this objection. First, unless OSHA's burden of proof is adjusted, it cannot protect workers in the manner Congress intended.²⁷⁶ Second, in cases where OSHA has a lower burden of proof, it has regulatory authority only to impose regulatory requirements that are likely to be less costly.²⁷⁷ Finally, when OSHA proposes an inappropriate regulation, employers can reduce compliance costs by proving that a lower classification is appropriate.²⁷⁸

2. *An Appropriate Scope of Review*

Much of the good that might be accomplished by giving OSHA a more flexible mandate could easily be undone by a judiciary unwilling to give OSHA the proper degree of deference. Most regulatory agencies have suffered from over-intrusive judicial review,²⁷⁹ and OSHA is no exception.

275. OSHA's existing authority has been criticized because it permits the Agency to regulate without proving that the benefits of a rule are reasonably related to its costs. *See, e.g.*, J. MENDELOFF, *REGULATING SAFETY: AN ECONOMIC AND POLITICAL ANALYSIS OF OCCUPATIONAL SAFETY AND HEALTH* 61-71 (1980). The proposed scheme is subject to the same objection. Employers are protected to the extent that OSHA must prove a significant risk before it can regulate under Class I. Yet employers will no doubt still argue that OSHA should not be allowed to promulgate less stringent BAT standards where there is only a "reasonable anticipation" that workers are endangered.

276. "[T]he practical consequence of making particularized risk estimates legally relevant—indeed mandatory—is to emasculate the regulation of carcinogens under prevailing conditions of scientific uncertainty." Latin, *supra* note 264, at 1329.

277. If there is only a reasonable anticipation of harm, OSHA can require the reduction of exposure only to the level of BAT, and not to the level of feasibility. Moreover, Congress could require that firms in an industry should be capable of installing BAT without causing prices to rise so high as to cause significant (perhaps 10%) substitution for other products from a different industry. Finally, OSHA should be given the authority to require a specific technology or to set a PEL based on a technology and allow individual firms to meet the PEL with whatever technology would do the job. This flexibility would allow OSHA to avoid lengthy debates about whether a particular technology can meet a particular PEL in a particular workplace before the standard goes into effect, and it should give industry the flexibility to adopt the less costly technology that will meet the PEL. *See supra* notes 197-211 and accompanying text (OSHA should adopt performance standards whenever they offer same degree of protection to workers as design standards).

278. Employers will probably also argue that, under the *Benzene* decision, a "significant risk" test is constitutionally compelled. In *Benzene*, the plurality justified their statutory interpretation on the ground that OSHA's interpretation would violate the nondelegation doctrine. 448 U.S. at 646. This objection, however, does not apply to the proposed scheme for two reasons. First, the plurality worried that under its interpretation, OSHA would have "unprecedented power." 448 U.S. at 645. The proposal, however, is modeled on the powers that Congress has given to EPA. *See supra* note 264 and accompanying text (Congress authorized EPA to use classification system based on BAT). Second, because the proposal requires proof of significant risk if OSHA reduces a hazard to the point of feasibility, it is consistent with the *Benzene* decision.

279. *E.g.*, Mashaw & Harfst, *Regulation and Legal Culture: The Case of Motor Vehicle Safety*, 4 YALE J. ON REG. 257 (1987) (National Highway Traffic Safety Agency attempts to promulgate rules have been emasculated by judicial review); Ashford, Ryan & Caldart, *Law and Science Policy In Federal Regulation of Formaldehyde*, 222 SCIENCE 40, 45-46 (1983) (court that decided *Gulf S. Insulation v. Consumer Prod. Safety Comm'n*, 701 F.2d 1137 (3d Cir. 1983), "substituted its judgment for that of the agency concerning whether formaldehyde is a human carcinogen."); *see also* McGarity, *Resolution of Science Policy Questions*, *supra* note 8, at 796 (courts fail to give agency policy decisions deference).

An example is *Forging Industries Association v. Secretary of Labor*,²⁸⁰ where the issue was the legality of OSHA's 1983 hearing conservation amendment that ordered employers to test employees exposed to loud noises and to prevent further hearing loss if the employees had been adversely affected.²⁸¹ The court, in a two-to-one decision, held that OSHA had exceeded its statutory authority because it required employers to take preventive actions even if an employee suffered a hearing loss due to a nonoccupational cause. Although the panel's decision was subsequently overruled by the Fourth Circuit sitting en banc,²⁸² it illustrates that courts sometimes fail to defer to OSHA's policy decisions, and that even if corrected, such decisions can consume enormous quantities of Agency resources.

In reaching its result, the original Fourth Circuit panel majority paid no attention to OSHA's justification for the amendment.²⁸³ OSHA made a specific finding that most hearing losses would be work-related.²⁸⁴ More important, OSHA determined as a policy matter that even if an injury was not work-related, an employer should be required to take preventative actions to avoid a high risk of further injury in the workplace. OSHA found that once a person suffers a hearing injury, the person is more susceptible to further hearing injury than others who have been exposed to loud noises without being injured.²⁸⁵ By ignoring this finding, the court gave OSHA's policy judgment no deference whatsoever. It is hard to avoid the conclusion that the prospect of judicial review by a panel like the one that wrote the *Forging Industries* opinion has a major impact on the speed with which OSHA promulgates occupational health and safety standards.²⁸⁶

280. 748 F.2d 210 (4th Cir. 1984), *rev'd en banc*, 773 F.2d 1436 (4th Cir. 1985).

281. 748 F.2d at 212-213.

282. *Forging Indus. Ass'n v. Secretary of Labor*, 773 F.2d 1436 (4th Cir. 1985) (en banc).

283. 748 F.2d at 214. The exact basis of the panel's decision is obscure. Judge Sprouse's dissent understood the majority to have concluded that even if workers were likely to be injured on the job, OSHA could not act because a hearing loss could be aggravated by nonwork related causes. As the dissent observed, this conclusion is not only illogical, but also it would prevent OSHA from regulating any hazard the health effects of which could be aggravated by other factors. 748 F.2d at 216 (Sprouse, J., dissenting). There are many negative physiological effects for which the precise cause cannot be determined, but which are known to be associated with occupational exposure. *See* Schroeder & Shapiro, *supra* note 17, at 1236. An example is reproductive hazards, where most negative reproductive outcomes are of unknown origin even though certain workplace exposures have been proven to have adverse effects on reproduction. *See* M. ROTHSTEIN, *supra* note 153, § 66 (1988 Supp.). If adopted by other courts, this rationale would have effectively emasculated the Agency.

284. 29 C.F.R. § 1910 (1987). "[S]ince this amendment covers workers who are occupationally exposed to significant amounts of noise, the occupational loss can be expected to be the dominating component in most cases. Even though people may hunt or engage in noisy hobbies, most [injuries] will be work-related because the average person spends more time on a routine basis at work than in recreational activities." *Id.*

285. *Id.*

286. *See supra* notes 44-54 and accompanying text (prospect of stringent judicial review slows

The judiciary has been sending contradictory signals to OSHA. At the behest of unions and public interest groups, courts have on numerous occasions ordered OSHA to proceed with rulemaking at a faster pace. Yet after the Agency has struggled through an expedited rulemaking initiative, the reviewing courts (which in many cases are the very courts that ordered the Agency to expedite things) remand portions of the rule under the relatively stringent hard-look doctrine.²⁸⁷

Decisions like *Forging Industries* have led to a fair degree of consensus in the legal community that the current standards for judicial review of administrative action require clarification.²⁸⁸ The Administrative Law Section of the American Bar Association adopted a "Restatement of the Scope-of-Review Doctrine"²⁸⁹ that improves the APA and OSHA's enabling act, by listing the types of legal, policy, and factual conclusions that agencies typically reach in informal rulemaking and indicating what scope of review is to be applied to each. Agency "policy judgments" are subject to a standard of "arbitrariness"; the factual premises upon which they are based are subject to a standard of "substantial support in the administrative record viewed as a whole."²⁹⁰

At best, existing scope-of-review statutes confuse unwary judges, and at worst, invite judicial overreaching. To mitigate the tendency of strict judicial review to emasculate aggressive administrative implementation of statutory mandates, Congress should enact amendments to OSHA's enabling act, or even better, to the APA, based on the ABA's Restatement of the Scope-of-Review Doctrine. Congress should express its dissatisfaction with cases like *Forging Industries* that give very little or no deference to Agency policy judgments and attempt to substitute the opinions of judges for the policy judgment of the agencies to whom Congress delegated policymaking functions.

OSHA's decisionmaking).

287. See, e.g., *Ethyl Corp. v. EPA*, 541 F.2d 1, 69-70 (D.C. Cir. 1976) (MacKinnon, J., dissenting) (observing that court order to EPA to promulgate regulation within 30 days resulted in "the flawed regulation which we now review"). See generally R. MELNICK, *REGULATION AND THE COURTS: THE CASE OF THE CLEAN AIR ACT* (1983).

288. The Administrative Conference of the United States has recommended that Congress not utilize the "substantial evidence" standard for informal rulemaking. Preenforcement Judicial Review of Rules of General Applicability (Recommendation 74-4), 1 C.F.R. § 305.74-4 (1988).

289. Am. Bar Ass'n Admin. Law Section, *Restatement of the Scope of Review Doctrine*, 38 ADMIN. L. REV. 235-37 (1986). The Restatement is based on a report written by Professor Ronald Levin. See Levin, *Scope-of-Review Doctrine Restated: An Administrative Law Section Report*, 38 ADMIN. L. REV. 239 (1986). Preliminary drafts of the report were widely circulated within the Section of Administrative Law and the broader administrative law community, including members of the Administrative Conference. *Id.*

290. *Id.* at 242-90.

B. More Appropriate Time Deadlines

OSHA is not the only agency to encounter difficulty in completing rulemaking initiatives within a reasonable period of time. When Congress wanted to motivate EPA to act more expeditiously, it assigned statutory deadlines within which the Agency is required to complete its tasks.²⁹¹ Taking the EPA experience into account, Congress should establish more appropriate time deadlines for OSHA.

Statutory deadlines can improve legislative oversight,²⁹² provide a signal to an agency which decisions are most important to Congress,²⁹³ enable courts to determine more easily when agency action is unreasonably delayed in violation of the APA,²⁹⁴ and mitigate various pressures on an agency to act slowly.²⁹⁵ Unfortunately, these advantages are often lost because of the agency's limited resources,²⁹⁶ and because Congress sets deadlines that are unrealistically short.²⁹⁷ If the agency ignores the deadlines, scarce resources flow to litigation over the deadlines, rather than to more

291. See Shapiro & Glicksman, *supra* note 242, manuscript at 16-17 (Congress has set numerous deadlines at EPA to speed its regulatory efforts).

292. Ogden, *Reducing Administrative Delay: Timeliness Standards, Judicial Review of Agency Procedures, Procedural Reform, and Legislative Oversight*, 4 U. DAYTON L. REV. 71, 85 (1979) ("Legislative imposition of standards for timeliness . . . indicates the legislature's commitment to timely agency decisionmaking."). Missed deadlines generate public concern and thereby focus congressional attention on deadlines. ENVTL. AND ENERGY STUDY INST., STATUTORY DEADLINES IN ENVIRONMENTAL LEGISLATION: NECESSARY BUT NEEDED IMPROVEMENT 33 (1985). Moreover, a statutory deadline provides a clear, articulable standard easily used by oversight committees at agency and budget review time. Ogden, *supra*.

293. ENVTL. AND ENERGY STUDY INST., *supra* note 292, at 41.

294. See 5 U.S.C. § 706(a)(1) (1982) (authorizing courts to "compel agency action . . . unreasonably delayed"); see also Tomlinson, *supra* note 200, at 138 (statutory deadlines provide clear standard for measuring "unreasonable delay" and shift burden to agency to explain why it has not fulfilled Congress' expectations).

295. Deadlines mitigate political pressures to slow agency decisionmaking, ENVTL. AND ENERGY STUDY INST., *supra* note 292, at ii, including pressure from OMB, *id.* at 27. Deadlines also give agencies a reason to end otherwise interminable analysis of incomplete information, and compel agencies to reach difficult, but necessary decisions. Without deadlines, agencies tend to delay difficult decisions in the hope that additional evidence will be forthcoming or the necessity for a decision will disappear. *Id.* at 30-31.

296. Tomlinson, *supra* note 200, at 122 (Congress sets inappropriate deadlines because it fails to appreciate that proceedings of different degrees of complexity require different deadlines), Abbott, *The Case Against Federal Statutory and Judicial Deadlines: A Cost-Benefit Appraisal*, 39 ADMIN. L. REV. 171, 182 (1987) (Congress is insensitive to agency resources when it sets deadlines); SENATE COMM. ON GOV'T AFFAIRS, STUDY ON FEDERAL REGULATIONS: DELAY IN THE REGULATORY PROCESS, PART IV, S. DOC. NO. 72, 95th Cong., 1st Sess. 147 (1977) [hereinafter SENATE COMM. ON GOV'T. AFFAIRS] (Congress sets inappropriate deadlines because it is unfamiliar with details of regulatory process); see ENVTL. AND ENERGY STUDY INST., *supra* note 292, at 12 (EPA has met few deadlines imposed on it).

297. See, e.g., Graham, *The Failure of Agency-Forcing: The Regulation of Airborne Carcinogens Under Section 112 of the Clean Air Act*, 1985 DUKE L.J. 100, 123 (deadlines requiring EPA to regulate hazardous air pollutants are "ludicrous"). When an agency is unable to comply with its deadlines, it ends up making undesirable trade-offs in its decisionmaking.

worthwhile substantive projects,²⁹⁸ thereby undermining public confidence in the agency.²⁹⁹

Critics argue that OSHA's experience with deadlines confirms that they create serious problems.³⁰⁰ The few deadlines in OSHA's current statute are, in fact, inappropriate. They are generally too strict and apply to the wrong activities. Indeed, the deadlines for advisory committees have probably played a large role in OSHA's virtual abandonment of that process.³⁰¹ The fact that deadlines are inappropriate for some purposes does not imply that they will not enhance OSHA decisionmaking in other contexts.

Strategically placed statutory deadlines can have two salutary effects on OSHA decisionmaking. First, they should improve legislative oversight. If deadlines are not met, Congress can require Agency management to explain what problems are impeding their progress. Deadlines should prompt Agency management to emphasize the alternative regulatory approaches discussed earlier. If the Agency could not comply with the deadlines even after it used those alternatives, Congress would have ample evidence that OSHA's enabling act should be further amended. Finally, deadlines would assist OSHA in seeking an appropriate level of resources. In oversight and appropriation hearings, OSHA would have the opportunity to demonstrate the level of resources necessary to meet applicable deadlines. Even if OMB did not allow OSHA to seek additional resources, deadlines would be useful in alerting Congress to the possibility that OMB budget oversight had resulted in underfunding.

Second, without legislative guidance, the courts have floundered in trying to determine what constitutes unreasonable delay. A good example of this problem is the interaction between the courts and OSHA concerning the field sanitation standard. Although OSHA has required employers to provide drinking water, toilets, and hand-washing facilities for most work-

298. *E.g., id.* at 124-27 (EPA's fruitless attempt to comply with deadlines for regulating hazardous air pollutants diverted resources from development of emission standards for new sources); *see ENVTL. AND ENERGY STUDY INST., supra* note 292, at 44. Alternatively, the Agency may take action in such haste that it will not withstand judicial review. H.R. REP. NO. 253, 99th Cong., 1st Sess., pt. 1, at 56, 71 (1986), *reprinted in* 1986 U.S. CODE CONG. & ADMIN. NEWS 2835. Strict time limits also make it difficult for the Agency to obtain input from OMB and the public. Abbott, *supra* note 296, at 196.

299. ENVTL. AND ENERGY STUDY INST., *supra* note 292, at 48.

300. *See, e.g.,* Tomlinson, *supra* note 200, at 201-03 (OSHA deadlines are unrealistic, do not apply to stages of rulemaking process that are most important causes of delay, and have forced OSHA to concentrate its resources on proceedings subject to deadlines). Two of OSHA's deadlines concern the use of advisory committees. *See supra* notes 199-200 and accompanying text (describing deadlines applying to advisory committees). Another deadline applies to emergency standards. 29 U.S.C. § 655(c)(3) (1982) (OSHA must promulgate permanent standard within six months of issuing emergency standard).

301. *See supra* notes 199-200 and accompanying text.

ers since 1971, the standard did not apply to farmworkers until 1987.³⁰² In 1972, El Congreso, an organization representing Hispanic Americans, petitioned OSHA to eliminate the exemption.³⁰³ The fourteen years of litigation that followed are a dreadful example of administrative foot-dragging and judicial delay, and clearly demonstrate the problems of unclear legislative direction.

In 1973, El Congreso sued OSHA for its failure to act on its petition, and in 1977 the D.C. Circuit reversed a district court order requiring OSHA to propose a standard.³⁰⁴ When OSHA failed to comply with the circuit court's order that it submit a timetable for the completion of the standard, the district court ordered the Agency to issue the standard "as soon as possible."³⁰⁵ The D.C. Circuit, however, reversed that order in 1979 and again required OSHA to submit a timetable.³⁰⁶ In 1982, OSHA agreed to issue a standard by February of 1985,³⁰⁷ but in January of 1985, it reneged on that commitment, which caused the court to order OSHA to complete the standard.³⁰⁸ OSHA replied that it would instead wait two years to determine if the states developed their own standards.³⁰⁹ The D.C. Circuit reacted to this Agency statement by ordering OSHA to issue a standard within thirty days.³¹⁰ Although Secretary Brock described the court's order as a "jackass decision,"³¹¹ he complied, and the standard was issued fourteen and one-half years after El Congreso's petition was filed.³¹²

Appropriate statutory deadlines hold out some promise of assisting judicial efforts to end unreasonable delay of the kind that El Congreso experienced.³¹³ Without a legislative deadline, courts are reluctant to overrule an agency's proposed timetable, even if it appears to be dilatory.³¹⁴ With a

302. See *Field Sanitation*, 52 Fed. Reg. 16,050 (1987).

303. See *Farmworker Justice Fund, Inc. v. Brock*, 811 F.2d 613, 614 (D.C. Cir. 1987).

304. *National Congress of Hispanic Am. Citizens v. Usery*, 554 F.2d 1196 (D.C. Cir. 1977). The district court's order was reversed on the ground that courts ought to preserve "agency discretion to alter priorities and defer action due to legitimate statutory considerations." 544 F.2d at 1200.

305. Memorandum Opinion at 5 (Dec. 26, 1978), *quoted in* *National Congress of Hispanic Am. Citizens v. Marshall*, 626 F.2d 882, 884 (D.C. Cir. 1979).

306. *National Congress of Hispanic Am. Citizens v. Marshall*, 626 F.2d 882, 890 (D.C. Cir. 1979). The court reversed the district court on the ground that OSHA had reasonably exercised its discretion in postponing the standard in order to confront more pressing business. 626 F.2d at 889.

307. See *Farmworker Justice Fund, Inc. v. Brock*, 811 F.2d 613, 617 (D.C. Cir. 1987).

308. 811 F.2d at 633.

309. *Agriculture Health and Safety Standards*, 50 Fed. Reg. 42,660-42,662 (1985).

310. *Farmworker Justice Fund, Inc. v. Brock*, 811 F.2d at 631-33.

311. O.S.H. Rep. (BNA) 1179 (Apr. 8, 1987).

312. 29 C.F.R. § 1928 (1987).

313. See Shapiro & Glicksman, *supra* note 242, manuscript at 28 (analyzing effect of statutory deadlines on court enforcement of APA's prohibition of unreasonable delay).

314. *Oil, Chem. and Atomic Workers Int'l Union v. Zegeer*, 768 F.2d 1480, 1487-88 (D.C. Cir. 1985) (refusing to order Mine Safety and Health Administration (MSHA) to expedite rulemaking to protect underground miners from radon gas, in light of complex scientific and technical issues in-

legislative deadline, the courts have some congressional guidance in evaluating the Agency's excuses for delay.³¹⁵ Moreover, though statutory deadlines may not result in strict compliance, they permit a court to insist on more timely compliance than it might otherwise feel comfortable enforcing. Perhaps most important, deadlines give beneficiaries leverage to ensure that a lethargic or reluctant agency does not attempt to avoid its sometimes controversial rulemaking responsibilities by failing to face tough issues.

Most of the disadvantages of statutory deadlines can be successfully minimized. Some diversion of Agency resources to bureaucracy-forcing lawsuits may be a necessary cost of holding the Agency accountable. Beneficiary groups contend that past OSHA administrators have refused to decide difficult controversies until they were required to by a court order.³¹⁶ The field sanitation saga supports this allegation.³¹⁷ Finally, if the Agency establishes an effective priority-setting process, it should be better able to cope with deadlines and resulting litigation.

Realistic deadlines would provide regulatory beneficiaries with a tool to prod a sometimes reluctant OSHA to move more quickly. The deadlines, however, must be tailored so as not to "overstimulat[e] the organism."³¹⁸ For this reason, Congress should require OSHA to set rulemaking deadlines and then should make those deadlines judicially enforceable. This would permit the Agency to set realistic deadlines,³¹⁹ while still holding

volved). The *Zegeer* court set forth a deferential standard of review in cases seeking to expedite Agency action: "The difficulty and uncertainty inherent in the venture caution us against second-guessing MSHA's judgment that its ultimate disposition will be facilitated" by ordering the Agency to act more quickly. *Id.*; see, e.g., *International Union, UAW v. Donovan*, 756 F.2d 162 (D.C. Cir. 1985) (affirming district court decisions to grant three extensions to OSHA beyond original commitment to finish formaldehyde standard); *United States Steelworkers of Am. v. Rubber Mfrs. Ass'n*, 783 F.2d 117, 1119-20 (D.C. Cir. 1986) (court accepts OSHA's proposed 14-month schedule as reasonable).

315. See, e.g., *New York v. Gorsuch*, 554 F. Supp. 1060 (S.D.N.Y. 1983) (ordering EPA to expedite issuance of proposed regulations establishing emission standards for inorganic arsenic under § 112 of Clean Air Act, 42 U.S.C. § 7412 (1982)); *Sierra Club v. Gorsuch*, 551 F. Supp. 785 (N.D. Cal. 1982) (issuing order scheduling EPA issuance of proposed regulations establishing emission standards for radionuclides under same statutory provision); cf. *Environmental Defense Fund v. Thomas*, 627 F. Supp. 556 (D.D.C. 1986) (holding that OMB could not invoke its authority under Exec. Order 12,291 to delay issuance of EPA regulations beyond deadline established in 1984 RCRA amendments). But see *Illinois v. Costle*, 12 Env't. Rep. Cas. (BNA) 1597 (D.D.C. 1979), *aff'd sub. nom.* *Citizens for a Better Env't. v. Costle*, 617 F.2d 851 (D.C. Cir. 1980) (court of equity has little power to enforce statutory deadlines against agencies claiming impossibility.).

316. Seminario interview, *supra* note 89.

317. See *supra* notes 302-12 and accompanying text.

318. *Natural Resources Defense Council, Inc. v. Train*, 510 F.2d 692, 712 (D.C. Cir. 1975).

319. The Administrative Conference suggests that the problem of unreasonable deadlines and adverse effects on agency decisionmaking can be mitigated if the agency sets its own deadlines, 1 C.F.R. § 305.78-3 (1987), because the deadlines reflect the agency's understanding of its own resource limitations. See also Ogden, *supra* note 292, at 86; Abbott, *supra* note 296, at 202.

the Agency accountable.³²⁰ Congress could further assure accountability by providing that Agency-set deadlines could be extended only for good cause and only for congressionally determined intervals. Finally, Congress should provide for judicial review of Agency-set deadlines to prevent OSHA from setting unreasonably long deadlines.

In addition to setting deadlines for Agency action, Congress might also consider the use of substantive “hammers” in appropriate cases.³²¹ Congress might mandate that if OSHA did not write a standard for a listed chemical before the deadline, the legally applicable PEL would automatically be the most stringent of a national consensus standard, a NIOSH recommendation for the chemical, or the most stringent PEL required by any state. The hammer technique would allow Congress to make a decision and then give the Agency an opportunity to modify it. In this manner, Congress could ensure not only that a controversy was resolved, but also that it was resolved in an expeditious fashion. If the Agency did not act, the legislative decision would take effect. If the Agency did act, Congress would have forced the Agency to resolve the matter expeditiously.³²²

C. *Realign NIOSH and OSHRC*

When Congress passed the Occupational Safety and Health Act, it made two choices that were nontraditional in terms of the organization of regulatory agencies. First, it placed the scientists advising OSHA in a separate agency, NIOSH, located in another executive department, HHS. OSHA is unique among health and safety agencies in that its research arm is located in another agency. Second, it created a third agency, OSHRC, to adjudicate whether an employer has violated an OSHA standard or the employer’s general duty to provide a safe and healthful workplace. Most regulatory agencies operate under the traditional model of adjudication: the agency itself determines whether its regulations have been violated. While both of these choices may have been justifiable at the time Congress enacted them, experience indicates that they have created so many problems for OSHA that they ought to be changed.

320. Agency-set deadlines would be a more effective oversight tool for the courts because they could be used to determine what constitutes “unreasonable delay” under the APA. SENATE COMM. ON GOV’T AFFAIRS, *supra* note 296, at 141, and because if agencies set their own deadlines, they could not argue that a missed deadline was unrealistic. Abbott, *supra* note 296, at 201.

321. The metaphorically named “hammer” is legislation that allows an agency a certain period of time to regulate; if at the end of that time it has failed to act, the “hammer” falls and a regulatory result prescribed by the statute automatically goes into effect. See Shapiro & Glicksman, *supra* note 242, manuscript at 38–39 (describing use of “hammers” in environmental statutes).

322. See *id.*, manuscript at 41 (hammers allow agencies to correct Congressional decisions if they act within the allowable time period).

1. OSHA and NIOSH

Congress gave NIOSH the function of conducting research relating to occupational safety and health, including the preparation of criteria documents that describe safe levels of exposure to workplace hazards and the implementation of educational and training programs.³²³ Congress apparently located it in the Department of Health, Education, and Welfare (HEW), which became HHS, because it replaced the Bureau of Occupational Health and Safety, which was already in HEW.³²⁴ NIOSH is presently located in Atlanta, Georgia.

NIOSH's location within HHS gives it certain advantages in carrying out its functions. Its placement enhances coordination with other HHS agencies, such as the National Toxicology Program, the Center for Disease Control, and the National Institutes of Health.³²⁵ Moreover, NIOSH's location in HHS may assist in the recruitment and retention of health scientists, who may consider HHS a particularly congenial institutional home.³²⁶

At the same time, NIOSH and OSHA have significant coordination problems.³²⁷ First, OSHA does not have a sufficient number of health professionals to review NIOSH research in-depth. As a result, OSHA employees find that "OSHA-NIOSH relations are 'close to non-existent at the working level.'"³²⁸ Second, no single administrator is in a position to resolve disputes between the two organizations. The Secretary of Labor has no authority over NIOSH and the Secretary of HHS has no authority over OSHA. Coordination, therefore, requires either agreement between the two agencies or the intervention of both Secretaries. Since NIOSH and OSHA rarely elevate disputes to that level, the two agencies coexist in an uneasy, and sometimes unproductive, relationship.

If Congress were to transfer NIOSH to the Department of Labor, the Secretary of Labor would be in a position to reconcile the goals and pri-

323. 29 U.S.C. §§ 669-71 (1982).

324. S. REP. NO. 1282, 91st Cong., 2d Sess., *reprinted in* 1970 U.S. CODE CONG. & ADMIN. NEWS 5196-97. The idea to establish NIOSH originated in the Senate after the House had passed the Occupational Safety and Health Act. The House agreed to the Senate's provisions in the conference committee. CONF. REP. NO. 1765, 91st Cong., 2d Sess., *reprinted in* 1970 U.S. CODE CONG. & ADMIN. NEWS 5228.

325. See *Oversight Hearings on the Occupational Safety and Health Act Before the Subcomm. on Manpower, Compensation, and Health and Safety of the House Comm. on Education and Labor*, Part 2, 94th Cong., 2d Sess. 267 (1976) (testimony of Dr. John Finklea, Director, NIOSH) (NIOSH has available to it the resources of HHS agencies such as Center for Disease Control).

326. T. GREENWOOD, *supra* note 38, at 116.

327. See *id.* at 118 ("The lesson appears to be that such complete organization separation of functions [between OSHA and NIOSH] is counterproductive."); Rothstein, *supra* note 192, at 653 ("Both NIOSH and OSHA officials indicated disapproval of the priorities and policies of the other agency.").

328. See Rothstein, *supra* note 192, at 653 (citing interviews of OSHA and NIOSH employees).

orities of the two agencies and coordinate NIOSH research efforts with OSHA's priority-setting process.³²⁹ A change in location would also help eliminate duplicative activities. NIOSH publications are widely distributed and serve as an important source of reference on occupational hazards and controls,³³⁰ but OSHA officials do not consider them adequate for standard-setting purposes.³³¹ OSHA also engages in training and education and it should expand that activity.³³² If OSHA and NIOSH had a closer working relationship, NIOSH could take the lead in training and education, and OSHA might be able to conserve resources for its regulatory activities.

2. OSHA and OSHRC

An even more serious institutional problem is the independent status of OSHRC. As a political compromise, Congress divided regulatory responsibility between OSHA and OSHRC according to a split-enforcement arrangement.³³³ It assigned OSHA, which is in the DOL, the responsibility of promulgating health and safety standards and enforcing those standards through inspections and filing complaints against employers.³³⁴ Congress gave OSHRC, an independent commission, the responsibility of adjudicating such complaints.³³⁵ Complaints are adjudicated initially by an ALJ and can be reviewed by the three-member Commission.³³⁶

A recent study for the Administrative Conference of the United States (ACUS) found that the split-enforcement arrangement creates unneces-

329. See T. GREENWOOD, *supra* note 38, at 123 ("Research whose budget and priorities are set independently of the agenda and needs of its client regulatory program can tend toward unresponsiveness and even irrelevance from the perspective of the regulators."). OSHA employees could seek advice from NIOSH scientists when health and safety rules were being planned. Although such consultation is also possible under the current institutional arrangement, it would be more likely to occur if NIOSH were located in the same city and building as OSHA.

330. PREVENTING INJURY, *supra* note 161, at 270.

331. According to one Director of OSHA's health standards directorate, Congress may have originally envisioned that OSHA could "tear the title page off" a NIOSH criteria document and publish a standard based on the criteria document alone, but OSHA staffers have never believed that this tactic could survive judicial review. Criteria documents are simply not written with litigation in mind. Wrenn interview, *supra* note 38.

332. See U.S. DEPT. OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, REPORT OF THE PRESIDENT TO THE CONGRESS ON OCCUPATIONAL SAFETY AND HEALTH FOR CALENDAR YEAR 1987, at 63-74 (1988) (description of OSHA education and training programs).

333. When Congress was debating the creation of OSHA, employers opposed the traditional arrangement that would have placed the rulemaking, enforcement, and adjudicatory functions in OSHA. Johnson, *The Split-Enforcement Model: Some Conclusions from the OSHA and MSHA Experience*, in ADMIN. CONFERENCE OF THE U.S., RECOMMENDATIONS AND REPORTS 297 (1986). Industry objected that it would be impossible to achieve even-handed justice if the OSHA administrator supervised all three activities, and Congress adopted the split-enforcement model as a compromise. *Id.* at 297-98. M. ROTHSTEIN, *supra* note 153, § 341.

334. 29 U.S.C. §§ 655(b), 657-69 (1982).

335. 29 U.S.C. § 661 (1982).

336. 29 U.S.C. § 661(j)(1) (1982).

sary conflicts because Congress failed to specify which agency should prevail when disagreements arise.³³⁷ As a result, ACUS recommended that whenever Congress establishes a split-enforcement arrangement, it should clarify which agency has programmatic responsibility and then direct the courts to give deference to that agency.³³⁸ The ACUS recommendation, however, does not go far enough because the existing confusion extends beyond the interpretation of standards. The courts are also split over which agency should receive deference concerning interpretation of the Occupational Safety and Health Act itself³³⁹ and which agency should control various procedural aspects of enforcement proceedings.³⁴⁰

Another important source of friction concerns whether OSHRC should determine health and safety policy for cases that OSHA brings under the general duty clause.³⁴¹ The general duty clause of the Occupational Safety and Health Act provides that each employer must provide a workplace "free from recognized hazards that are causing or are likely to cause serious physical harm to employees."³⁴² A recent case amply illustrates this problem. In *Kastalon, Inc.*,³⁴³ OSHRC reviewed OSHA's citation of two

337. Johnson, *supra* note 333, at 318. Some courts have held that OSHA's interpretation of its own health and safety standards should receive deference, *e.g.*, *Brock v. Schwarz-Jordan, Inc.*, 777 F.2d 195, 197 (5th Cir. 1985) (OSHA's interpretation of term "more than 10 feet above the ground floor" in safety standard given deference); *Donovan v. Amorello & Sons, Inc.*, 761 F.2d 61, 65 (1st Cir. 1985) (OSHA's interpretation of term "obstructed view" in safety standard given deference). Others have deferred to OSHRC's interpretation, *e.g.*, *Brock v. Bechtel*, 803 F.2d 999, 1000 (9th Cir. 1986) (OSHRC gets deference to determine if barricade regulation was intended to restrain or merely to warn employees). Still others have held that neither agency should prevail, *e.g.*, *Donovan v. Anheuser-Busch, Inc.*, 666 F.2d 315, 325-26 (8th Cir. 1981) (where OSHA and OSHRC have no consistent interpretation concerning meaning of "platform" in safety standard, court need not defer to OSHRC, but may look to language, purpose, and history of act to resolve issue). Both the courts that defer to OSHA, and those that do not, claim support in the relevant legislative history. They also disagree over whether OSHRC has the expertise to interpret standards and otherwise establish policy. Compare *Brock v. Schwarz-Jordan, Inc.*, 777 F.2d 195, 197 (5th Cir. 1985); *Donovan v. A. Amorello & Sons, Inc.*, 761 F.2d 61, 66 (1st Cir. 1985) with *Marshall v. Cities Serv. Oil Co.*, 577 F.2d 126, 130 (10th Cir. 1978) and *Brennan v. Gilles & Cotting, Inc.*, 504 F.2d 1255, 1262 (4th Cir. 1974).

338. More specifically, ACUS recommended that in adjudicatory challenges to standards promulgated pursuant to rulemaking, the adjudicatory agency should give deference to the rulemaking agency's interpretation of the standard, unless it can be shown that the rulemaking agency's interpretation is arbitrary, capricious, or otherwise not in accordance with law. 1 C.F.R. § 305.86-4 (1987).

339. See, *e.g.*, *Marshall v. Sun Petroleum Prods. Co.*, 622 F.2d 1176, 1184 (3d Cir. 1980) (OSHRC has no active party status in circuit court and no rulemaking or policy role in administering act); *Brennan v. Gilles & Cotting, Inc.*, 504 F.2d 1255, 1262 (4th Cir. 1974) (Commission's definition of term "employer" under § 5(a) given deference).

340. See, *e.g.*, *Donovan v. OSHRC*, 713 F.2d 918, 930 (2d Cir. 1983) (OSHRC cannot review settlement by Secretary because it has no direct policy making function); *Donovan v. United Transp. Union*, 748 F.2d 340, 346 (6th Cir. 1984) (OSHRC's interpretation of union's right to intervene after Secretary withdraws citation not overturned if reasonable and consistent with Act); *UAW v. OSHRC*, 557 F.2d 607, 611 (7th Cir. 1977) (Commission gets deference regarding decision to grant time extension for compliance with noise standard even though OSHA opposed extension).

341. See Sullivan, *Independent Adjudication and Occupational Safety and Health Policy: A Test For Administrative Court Theory*, 31 ADMIN. L. REV. 177, 183-194 (1979).

342. 29 U.S.C. § 654 (1982).

343. 1986-87 O.S.H. Dec. (CCH) ¶ 27,643, at 35,970 (July 23, 1986).

employers for a violation of the general duty clause for exposing employees to 4,4'-Methylene bis (2 chloroniline), which is commonly called MOCA. Although expert witnesses for both OSHA and the companies agreed that MOCA was a suspected carcinogen,³⁴⁴ the Commission dismissed the citations because OSHA had failed to prove that MOCA posed a "significant risk."³⁴⁵ According to the Commission, OSHA failed to carry its burden of proof because it lacked any human studies proving that MOCA is a carcinogen and because its attempt to extrapolate the risk to humans from animal studies of the chemical contained unreliable assumptions.³⁴⁶

The Commission's decision establishes a higher burden of proof for OSHA than the Supreme Court's *Benzene* opinion, which ordered courts to give OSHA deference concerning its risk assessments.³⁴⁷ According to the Court, OSHA is not required to prove significant risk with "anything approaching scientific certainty" and it can use "conservative assumptions" in interpreting data, "risking error on the side of overprotection rather than underprotection."³⁴⁸ The Commission did exactly what the Court prohibited. It required OSHA to prove significant risk with something approaching scientific certainty and it objected to the fact that OSHA's expert witness made conservative assumptions which risked error on the side of overprotection rather than underprotection.³⁴⁹

Kastalon, Inc. is inconsistent both with the preventive purposes of the Occupational Safety and Health Act and with the *Benzene* decision. The case also demonstrates how the split-enforcement model hobbles OSHA's authority. It has spawned countless disagreements between OSHA and OSHRC, requiring OSHA to spend its limited resources constantly litigating to preserve the policies it would like to establish. Additionally,

344. *Id.* at 35,974.

345. *Id.* at 35,975.

346. OSHA's expert witness had performed a quantitative risk assessment of MOCA by extrapolating the risk to humans from a dog study in which all six animals given MOCA had died from cancer. The witness assumed that MOCA posed the same risk to humans as dogs and that MOCA and benzidine, another carcinogen, had similar effects on humans. *Id.* at 35,978. The Commission rejected this evidence because the employer's expert disagreed with the validity of those assumptions and because he believed that quantitative risk assessments could not be made from animal studies with any reasonable degree of scientific certainty. *Id.* at 35,978-79.

347. *Benzene*, 448 U.S. at 652-53 (OSHA must have quantitative evidence of risk, but if Agency has evidence, its interpretation of scientific data entitled to deference).

348. 448 U.S. at 656.

349. The Commission also claimed that OSHA had in effect admitted that extrapolations from animals to measure human risk were unreliable when it explained the difficulties of such extrapolations in its cancer policy. 1986-87 O.S.H. Dec. (CCH) ¶ 27,643, at 35,979. OSHA, however, concluded that since the exact danger to workers was difficult to compute from animal data, the prudent course was to reduce significant risks to the extent feasible. OSHRC, by comparison, concluded that nothing should be done to protect workers.

these disagreements have subjected employers and employees to endless confusion concerning their respective rights and liabilities.

Congress could avoid the split-enforcement model's problems in two ways. First, it could restrict OSHRC's function to fact-finding. Congress could allow OSHRC to find facts in individual cases de novo and subject its fact-finding function to substantial evidence review. As to policy and legal decisions, Congress could require OSHRC to give OSHA deference, leaving to the reviewing court the determination whether OSHA's policy and legal conclusions were arbitrary or capricious, or otherwise not in accordance with law. Second, Congress could move enforcement authority into the DOL. An ALJ would hear enforcement actions and write an initial decision. The decision would be final unless the Assistant Secretary chose to review the case. The first option would have the benefit of fact-finding by an independent agency, but maintaining OSHRC solely for that purpose is unnecessary. Fairness can be adequately guaranteed under the traditional model. Moreover, Congress could specifically require OSHA to separate its functions to guarantee fairness and to create internal barriers to insulate employees who worked on the adjudication of citations from those who investigated and prosecuted those citations. In addition, Congress could extend the prohibitions on ex parte contacts now in the APA to include the Assistant Secretary of Labor for OSHA.³⁵⁰ This would guarantee the independence of the ALJ.

OSHRC is the creature of a failed experiment with the split-enforcement model. Whatever slight degree of additional fairness it provides to employers is more than offset by the disabling effect that independent review of legal and policy questions by an Agency not competent to address those questions has on OSHA's implementation of its statutory mission. OSHRC should be abolished, and its functions incorporated into OSHA.

Conclusion

After seventeen years, OSHA is a long way from achieving its statutory obligation to provide a safe and healthful place of employment for every worker. OSHA started ambitiously in 1971 when it adopted hundreds of safety and health standards issued by private standard-setting organizations as its own regulations. Since then, the Agency's limited ability to update and supplement these standards has left millions of workers in danger of being killed or injured on the job.

350. See R. PIERCE, S. SHAPIRO & P. VERKUIL, *supra* note 33, § 9.3.6 (proposal to prohibit Agency administrators from conferring with ALJs).

OSHA is partly at fault for its limited productivity. It has done little to address the many constraints that slow its regulatory progress. OSHA continues to proceed ahead largely oblivious to the fact that many of the constraints that slow its regulatory progress are reducing its productivity to one or two regulations per year. Yet OSHA is not powerless to address these constraints. It can direct its limited resources toward the worst health and safety problems. However, this action requires a priority-setting process, and OSHA does not have one. OSHA can also maximize the potential of each regulation and seek to increase the number of such regulations. However, these steps require a regulatory planning process, which OSHA lacks.

Congress must bear considerable responsibility for OSHA's ineffectiveness. The regulatory framework created by the Occupational Safety and Health Act, especially the placement of NIOSH in a separate executive department and the creation of a separate agency, OSHRC, to adjudicate violations of the Act, is responsible for several of the Agency's woes. Although the various hurdles to OSHA's productivity have become obvious, Congress has remained largely inattentive and has done nothing to assist the Agency to overcome them. In similar circumstances, Congress acted in the late 1970s to make it easier for EPA to clean up the country's air and water. The time has come for Congress to make similar adjustments on behalf of OSHA. Congress should adopt a more flexible regulatory mandate, clarify the scope of judicial review of OSHA rules, establish appropriate statutory deadlines, fold NIOSH into the DOL, and transfer OSHRC's adjudicatory functions to OSHA.

When Congress created OSHA, it adopted the worthy goal of protecting every American worker from dangerous and disabling workplace conditions. This noble aspiration, however, can be attained only if the lessons of the last seventeen years become the impetus for OSHA to reform itself and for Congress to reform OSHA. These reforms will not, of course, instantly transform OSHA from an overworked agency struggling with a nearly impossible task to a paragon of administrative efficiency, but they should send OSHA on its way toward effective implementation of its statutory responsibilities.

