

April 1981

Implementation of Economic Impact Analysis: The Lessons of OSHA

Barry Roberts

University of North Carolina at Chapel Hill

Regina Kossek

University of Kansas

Follow this and additional works at: <https://researchrepository.wvu.edu/wvlr>



Part of the [Labor and Employment Law Commons](#)

Recommended Citation

Barry Roberts & Regina Kossek, *Implementation of Economic Impact Analysis: The Lessons of OSHA*, 83 W. Va. L. Rev. (1981).

Available at: <https://researchrepository.wvu.edu/wvlr/vol83/iss3/4>

This Article is brought to you for free and open access by the WVU College of Law at The Research Repository @ WVU. It has been accepted for inclusion in West Virginia Law Review by an authorized editor of The Research Repository @ WVU. For more information, please contact ian.harmon@mail.wvu.edu.

IMPLEMENTATION OF ECONOMIC IMPACT ANALYSIS: THE LESSONS OF OSHA

BARRY ROBERTS* and REGINA KOSSEK**

Recently, a plethora of concern has surfaced regarding the large and rapidly increasing costs of government regulation and its impact upon the economy and the free market system.¹ Much of this displeasure has focused on a seemingly ideal target—The Occupational Safety and Health Administration (OSHA). OSHA was established in 1970² amidst widespread optimism that it would greatly enhance the employee work environment.³ This hope, however, was premature; in fact, many commentators argue that, in the ten years since its creation, OSHA has done little to further its objective of improving safety and health in the workplace, despite the large compliance costs it has generated.⁴

This article will first review recent cases concerning the Occupational Safety and Health Act (OSH Act); the *Benzene*,⁵ *Cot-*

* Associate Professor of Legal Studies, University of North Carolina at Chapel Hill; J.D., University of Pennsylvania School of Law; LL.M., Harvard Law School.

** Assistant Professor of Business Law, University of Kansas; J.D., University of Pennsylvania School of Law.

¹ ARTHUR ANDERSON & Co., COST OF GOVERNMENT REGULATION STUDY FOR THE BUSINESS ROUNDTABLE (1979); COMMITTEE FOR ECONOMIC DEVELOPMENT, REDEFINING GOVERNMENT'S ROLE IN THE MARKET PLACE (1979); OSHA SAFETY REGULATION: REPORT OF THE PRESIDENTIAL TASK FORCE (P.W. MacAvoy ed. 1977); UNSETTLED QUESTIONS ON REGULATORY REFORM (P.W. MacAvoy ed. 1978); Kosters, "Counting the Costs," REGULATION, July/August 1979, at 17; Levin, "Politics and Polarity—The Limits of OSHA Reform," REGULATION, Nov./Dec. 1979, at 33; Nichols & Zeckhauser, "Government Comes to the Workplace: An Assessment of OSHA," 31 THE PUBLIC INTEREST 39 (1977); Weidenbaum, "Viewpoint-On Estimating Regulatory Costs," REGULATION May/June, 1978, at 14.

² The Occupation Safety and Health Act, 29 U.S.C. §§ 651-678 (1976).

³ LEGISLATIVE HISTORY OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (1971); Nichols & Zeckhauser, *supra* note 1, at 39-42.

⁴ See BUSINESS ROUNDTABLE STUDY, *supra* note 1, at Chapter 8, p. 1 through 27; BAILEY, REDUCING RISKS TO LIFE: MEASUREMENT OF THE BENEFIT (1980); Kosters, *supra* note 1; Nichols & Zeckhauser, *supra* note 1, at 39-42; Weidenbaum, *supra* note 1.

⁵ American Petroleum Inst. v. OSHA, 581 F.2d 493 (5th Cir. 1978), *aff'd sub nom.* Industrial Union Dep't. AFL-CIO v. American Petroleum Inst., 100 S. Ct. 2844 (1980).

ton Dust,⁶ and *Coke Oven Emissions*⁷ decisions, and then examine the feasibility of OSHA using cost-benefit analysis in promulgating new standards for industry.

I. OSHA: AN INTRODUCTION

In 1970, the nation was in the throes of a mounting public outcry lamenting the significant costs of labor hours lost through injury and disease. This prompted Congress to establish OSHA as a vehicle to solve the "lost labor" problem.⁸ Occupational disease and injuries were thought to be causing a steep decline in national productivity⁹ and "something had to be done."¹⁰ Congress believed that both the economy and workers would benefit if occupational disease and injury could be eliminated, and that an agency such as OSHA would be an effective means to reach this goal.¹¹

Several comprehensive studies however have subsequently indicated that the establishment of a federal agency to regulate the work environment may not be the appropriate mechanism to alleviate the problem.¹² In the area of occupational safety (as opposed to occupational disease) these studies attribute as much as ninety percent of the cause of industrial accidents to the workers and only ten percent to mechanical or equipment factors.¹³ OSHA safety regulation, with an emphasis on technological safety, may not be focusing its efforts on the "real" cause of industrial accidents.

OSHA has promulgated a number of regulations with just such an emphasis in an effort to protect workers; the economic cost which this course of action has resulted in is staggering.¹⁴

⁶ *AFL-CIO v. Marshall*, 617 F.2d 636 (D.C. Cir. 1979) *cert. granted sub nom. American Textile Mfrs. Inst. v. Marshall*, 101 S. Ct. 68 (1980).

⁷ *American Iron & Steel Inst. v. OSHA*, 577 F.2d 825 (3d Cir. 1978), *cert. granted sub nom. Republic Steel Co. v. OSHA*, 100 S. Ct. 3054, *cert. dismissed*, 101 S. Ct. 38 (1980).

⁸ See note 3 *supra*.

⁹ *But see* R. SMITH, *THE OCCUPATIONAL SAFETY AND HEALTH ACT* (1976).

¹⁰ LEGISLATIVE HISTORY, *supra* note 2, at 141-46.

¹¹ See note 4 *supra*.

¹² See generally Nichols & Zeckhauser, *supra* note 1.

¹³ *Id.* at 49-50; SMITH, *supra* note 9, at 64-70.

¹⁴ See note 4 *supra*.

These costs can be divided into four different categories: administrative costs, compliance costs, inefficiency costs and transfer costs.¹⁵ Administrative costs are those incurred by the agency, in this case OSHA, in carrying out its functions.¹⁶ Compliance costs are those which are incurred by the regulated companies. These costs include any incremental cost to the firm in complying with the regulations, such as paperwork and capital improvements.^{16,1} Inefficiency costs are represented by the cost of lost production and lost resources caused by regulatory misallocation.¹⁷ The final category, transfer costs, represent the shifting of costs and benefits among different groups in society.¹⁸

Compliance costs have been the subject of much industry discontent, and have given rise to many lawsuits concerning the OSH Act, and the standard which should be used by OSHA when promulgating regulations. The position taken by industry has been that compliance costs must be considered in the formulation of standards. This position, in its many forms, has met with varied success.

Initially, industry challenged standards on two grounds. Under section 6(b)(5) of OSH Act, the Secretary of Labor in promulgating permanent standards regulating worker exposure to toxic materials and harmful physical agents is required to set the standard at a level which

most adequately assures, to *the extent feasible*, on the basis of the best available evidence that no employee will suffer no material impairment of health or functional capacity even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life.¹⁹

Feasibility was interpreted as incorporating both technological and economic feasibility. Concerning economic feasibility, OSHA, and subsequently the courts,²⁰ took the position that:

¹⁵ Kosters, *supra* note 1; Weidenbaum, *supra* note 1.

¹⁶ Wiedenbaum, *supra* note 1, at 15.

^{16,1} *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ 29 U.S.C. § 655(b)(5) (1976) (emphasis added).

²⁰ See, e.g., *Turner Co. v. Sec'y of Labor*, 561 F.2d 82 (7th Cir. 1977).

Standards may be economically feasible even though, from the standpoint of employers, they are financially burdensome and affect profit margins adversely. Nor does the concept of economic feasibility necessarily guarantee the continued existence of individual employers. It would appear to be consistent with the purposes of the Act to envisage the economic demise of an employer who has lagged behind the rest of the industry in protecting the health and safety of employees and is consequently financially unable to comply with new standards as quickly as other employers.²¹

Industry, has taken the term feasibility and argued that for a regulation to be feasible, not only need the industry, in general, be able to absorb the costs, but the benefits of such a regulation must outweigh the costs.²² With this assertion, industry has framed its "cost-benefit" argument.

In interpreting the statute (as it applies to standards for toxic substances) a major and significant controversy has arisen as to the need to consider "cost-benefit" analysis. As will be discussed in detail below, the Fifth Circuit, in its *Benzene* decision concluded that a general cost-benefit analysis was a significant factual component of the Secretary's record, without which the Secretary would have great difficulty in defending a proposed standard as being supported by substantial evidence as required by the Act.²³ Faced with the same question, the D.C. Circuit in *AFL-CIO v. Marshall*²⁴ and the Third Circuit in *American Iron & Steel Inst. v. OSHA*²⁵ have rejected any cost-benefit analysis requirement.

²¹ 577 F.2d at 835. Furthermore, the courts have recognized that even though a standard is not promulgated under authority of section 6(b)(5) or does not contain the term feasible, OSHA can and should consider economic information, 581 F.2d 493. This reasoning is based upon the "reasonably necessary" language of section 3(8):

The term 'occupational safety and health standard' means a standard which requires conditions, or the adoption or use of one or more practices, means, methods, operations, or processes, *reasonably necessary* or appropriate to provide safe or healthful employment and places of employment.

29 U.S.C. § 652(8) (emphasis added). For an interesting criticism of the basis of the Fifth Circuit's reasoning see Rothstein, *OSHA After Ten Years: A Review and Some Proposed Reforms*, 34 VAND. L. REV. 71, 79-87 (1981).

²² See, e.g., industry arguments in *Benzene*, 581 F.2d at 501; *Coke Oven*, 577 F.2d at 835-36; *Cotton Dust*, 617 F.2d at 662-63.

²³ 581 F.2d at 503-04.

²⁴ 617 F.2d 636.

²⁵ 577 F.2d 825.

The *Benzene* case was appealed and on July 2, 1980 the Supreme Court handed down its *Benzene* decision which industry and government had hoped would settle the controversy. The high court's decision discreetly avoided the issue. On the same date *certiorari* was granted in *American Iron & Steel Inst. v. OSHA* (Coke Oven Emissions), with the grant specifically recognizing the importance of resolving the cost-benefit issue.²⁶ *Certiorari* was also granted in *AFL-CIO v. Marshall* (Cotton Dust)²⁷ on the cost-benefit issues. Surprisingly *Coke Oven Emissions* was dismissed pursuant to Court Rule 53 on September 10, 1980.²⁸ Consequently, resolution of the controversy rests on *Cotton Dust* which was argued on January 21, 1981.²⁹

A major controversy with significant economic overtones may thus be nearing resolution. With this background, the cases will be reviewed and an approach to resolving this controversy suggested.

II. OSHA: THE RECENT DEBATE CONCERNING THE UTILIZATION OF ECONOMIC IMPACT ANALYSIS

A. *American Iron & Steel Inst. v. OSHA*

In *American Iron & Steel Inst. v. OSHA*³⁰ (Coke Oven Emissions) the Third Circuit Court of Appeals was faced with an industry challenge to the Coke Oven Emissions standard³¹ promulgated by the Secretary of Labor, a standard which attempted to reduce worker's exposure to the toxic emissions generated in the production of coke. Coke, a fuel used principally by steel producing companies is produced by heating coal to extremely high temperatures (2000°) in ovens. During this process various gases are emitted which are undisputedly carcinogenic.³² OSHA set the permissible exposure limit at no greater than 0.15 mg of the benzene-soluble fraction of total particulate matter per cubic meter of air averaged over an eight-hour period (0.15 mg/m³ BSF/TPM). The standard prescribed particular controls which

²⁶ 100 S. Ct. 3054.

²⁷ 101 S. Ct. 68.

²⁸ 101 S. Ct. 38.

²⁹ For a summary of the oral argument in this case as well as some of the Justices' concerns during the oral argument see 49 U.S.L.W. 3523 (Jan. 21, 1981).

³⁰ 577 F.2d 825 (3d Cir. 1979).

³¹ 29 C.F.R. § 1910.1029 (1980).

³² 577 F.2d at 831.

were to be instituted as well as additional steps to be taken if the required controls did not satisfactorily reduce the emissions.

Among the challenges to this standard, industry representatives claimed that the need for the prescribed exposure limit and the feasibility of attaining the prescribed limit were not supported by substantial scientific evidence. The court phrased the issues as follows:

Is there substantial evidence supporting the conclusion that the ambient atmosphere of a coke oven contains particulate matter to which there is no safe level of exposure? Is the Secretary's limit feasible as required by [the Act]?³³

The court concluded that substantial evidence supported the Secretary's determination that coke oven emissions are carcinogenic and that no safe level of exposure was shown to be supported by substantial evidence. The court next had to address the propriety of the 0.15 mg/m³ BSFTPm exposure level. The court noted that section 6(b)(5) of the Act required the Secretary to set the standard "which most adequately assures, to the extent feasible . . . that no employee will suffer material impairment." In attempting to formulate the lowest possible exposure level, the court recognized that OSHA is constrained by both economic and technological feasibility limits as set out in *AFL v. Brennan*.³⁴ The court concluded that compliance with the exposure level was technologically feasible.

As to economic feasibility, the court recognized that Congress did not intend to eliminate all health hazards at the price of crippling industry and cited *Industrial Union Dep't., AFL-CIO v. Hodgson*, a 1974 case dealing with permissible levels of asbestos dust.³⁵ In *Industrial Union* the use of the word "feasible" was taken to mean "that practical consideration can temper

³³ *Id.*

³⁴ 530 F.2d 109, 122 (3d Cir. 1975).

³⁵ *Industrial Union Dep't. v. Hodgson*, 499 F.2d 467 (D.C. Cir. 1974), was a case concerning permissible asbestos exposure standards. Asbestos was known to be a carcinogen, and OSHA took steps to regulate its use. Union petitioners, however, challenged the OSHA reforms on the ground that implementation over the prescribed period of four years was too slow in light of the great health hazard from asbestos. The court upheld OSHA on all but two minor points, finding that OSHA could look to economic and technological feasibility when promulgating regulations.

protective requirements. Congress does not appear to have intended to protect employees by putting their employers out of business."³⁸ However, *Industrial Union* goes on to state that

this qualification is not intended to provide a route by which recalcitrant employers or industries may avoid the reforms contemplated by the Act. Standards may be economically feasible even though . . . they are financially burdensome and affect profit margins adversely. Nor does the concept . . . necessarily guarantee the continued existence of individual employers.³⁷

Thus, *Industrial Union* was relied upon as authority for not requiring that costs be taken into account.

Based upon the detailed factual record in this case, the circuit court was satisfied with OSHA's justification for the regulation and denied the challenge despite the lack of any quantifiable cost-benefit figures.

B. *American Petroleum Inst. v. OSHA*

In *American Petroleum Inst. v. OSHA* (Benzene)³⁸ the Fifth Circuit Court of Appeals held that OSHA in setting standards should perform an informal cost-benefit analysis. This case arose from a challenge to an OSHA regulation which reduced the approved level of exposure to benzene from 10ppm (parts per million) in air to 1 ppm in air; prohibited dermal contact with benzene; and instituted certain labelling requirements concerning benzene.³⁹ These restrictions were made because benzene is a carcinogen.⁴⁰ The change in approved levels of exposure was the primary point of industry outrage. For many years, the standard had been 25 ppm in air. It was subsequently reduced to 10 ppm based upon evidence that benzene at that level was carcinogenic.⁴¹ The further ten-fold reduction was based upon the

³⁸ 499 F.2d at 478.

³⁷ *Id.*

³⁸ 581 F.2d 493 (5th Cir. 1978), *cert. granted*, 440 U.S. 906 (1979).

³⁹ The Secretary proposed the standard dealing with benzene, a toxic material, in accordance with 29 U.S.C. § 655(b)(5). The proposed standards, to be codified at 29 C.F.R. § 1910.1028, published at 43 Fed. Reg. 5918-70 (1970), imposed numerous compliance requirements upon the petitioners.

⁴⁰ The Fifth Circuit Court of Appeals carefully laid out the scientific evidence and tests relevant to the toxic effects of benzene, 581 F.2d at 498-99.

⁴¹ See generally 581 F.2d at 498. The American Conference of Governmental Industrial Hygienists recommended the following limitations: in 1946-100 ppm, 1947-50 ppm, 1948-35 ppm, 1963-25 ppm, 1974-10 ppm. The American National

rationale that no safe level of exposure to benzene could be determined.⁴² Industry spokesmen claimed that there existed no proof that any benefit would be derived from the more stringent regulations, and that in view of the tremendous cost of compliance, estimated at up to five billion dollars, the regulation should be set aside. OSHA, however, argued that costs, in this instance, should not be a factor. OSHA argued that it is not required to undertake a cost-benefit analysis in promulgating standards of exposure to toxic substances since the Act did not specifically mandate such an approach.⁴³ OSHA claimed that its standard was reasonable when judged by both the "substantial evidence"⁴⁴ and the "best available evidence"⁴⁵ standards required by the text of the Act.⁴⁶

Benzene focused upon two basic issues: (1) whether the regulation was "supported by substantial evidence in the record considered as a whole,"⁴⁷ and (2) in determining what is reasonably necessary to provide a safe workplace whether OSHA must assess the expected benefits in light of the compliance costs. The ultimate holding combines these two elements:

[OSHA's] failure to provide an estimate of expected benefits for reducing the permissible exposure limit, supported by substantial evidence, makes it impossible to assess the reasonableness

Standards Institute (ANSI) adopted the 10 ppm limitation in 1969; OSHA adopted the ANSI standard in 1971 without formal rulemaking pursuant to 29 U.S.C. § 655(a). *Id.*

⁴² 581 F.2d at 498, 501, 503.

⁴³ OSHA claimed that a study had been undertaken and the standard was promulgated after consideration of the results, *id.* at 502.

⁴⁴ 29 U.S.C. § 655(f) (1976) provides that "determinations of the Secretary shall be conclusive if supported by substantial evidence in the record considered as a whole."

⁴⁵ 29 U.S.C. § 655(b)(5) (1976), pertaining to standards for toxic materials and harmful physical agents further provides that the Secretary is to:

set the standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment . . . (emphasis added).

⁴⁶ The substantial evidence standard has been construed to place the burden of proof on OSHA to show that "the Secretary carried out his essentially legislative task in a manner reasonable under the state of the record before him." 581 F.2d at 497. See generally K. DAVIS, 1 ADMINISTRATIVE LAW TREATISE 6 (1978).

⁴⁷ 581 F.2d at 497.

of the relationship between expected costs and benefits. This failure means that the required support is lacking to show reasonable necessity for the standard promulgated. Consequently, the reduction of the permissible exposure limit from 10 ppm to 1 ppm and all other parts of the standard geared to the 1 ppm level must be set aside.⁴⁸

In rejecting OSHA's contention that the Act gave it unbridled discretion in providing workers with a safe work environment⁴⁹ the court required that OSHA "assess" the expected benefits in light of the burdens to be imposed by the standard.⁵⁰ Moreover, unlike the showing found acceptable in the *Coke Oven Emissions* case, the Fifth Circuit stated that the expected benefits must be supported by substantial evidence and not mere conjecture.⁵¹ The agency must look "at the potential the standard has for reducing the severity or frequency of the injury, and the effect the standard would have on the utility, cost or availability of the product."⁵²

⁴⁸ 581 F.2d at 505. Concerning the other portions of the contested regulation the court held: (1) that the provisions prohibiting dermal contact were not supported by adequate and sufficient scientific data—they were based upon inconclusive and dated scientific evidence and not upon superior new scientific procedures, and (2) that the labelling requirements be vacated since their validity was premised upon the other two portions of the regulation, *id.* at 508-10.

⁴⁹ "Rather than attempting to measure the extent to which the leukemia hazard of benzene exposure would be reduced by lowering the permissible exposure limit from 10 ppm to 1 ppm, OSHA merely *assumed* that benefits from the reduction 'may be appreciable.' It based this assumption on a finding that benzene was unsafe at any level and its conclusion that exposures to lower levels of toxic materials would be safer than exposures to higher levels." *Id.* at 503 (emphasis supplied). However, the court found that substantial evidence does not support OSHA's conclusion that benefits are likely to be appreciable and "OSHA is unable to justify a finding that the benefits . . . bear a reasonable relationship to its one-half billion dollar price tag." *Id.* at 503.

⁵⁰ "Although the agency does not have to conduct an elaborate cost-benefit analysis . . . it does have to determine whether the benefits expected from the standard bear a reasonable relationship to the costs imposed by the standard." *Id.* at 503. *Cf.* *Aqua Slide 'N' Dive Corp. v. Consumer Product Safety Comm'n*, 569 F.2d 831 (5th Cir. 1978). *See also* *RMI Co. v. Sec'y of Labor and OSHARC*, 594 F.2d 566, 570 (6th Cir. 1979).

⁵¹ 581 F.2d at 505.

⁵² *Id.* at 502, (quoting from *Aqua Slide 'N' Dive Corp. v. Consumer Product Safety Comm'n*, 569 F.2d at 844).

C. *AFL-CIO v. Marshall*

In *AFL-CIO v. Marshall* (Cotton-Dust),⁵³ the District of Columbia Circuit Court of Appeals held that cost-benefit analysis is not required to be carried out by OSHA prior to promulgating regulations. The case involved industry challenge to an OSHA standard regulating exposure to cotton dust. Exposure to cotton dust is known to cause bysinosis, commonly called brown lung disease. The standard set by OSHA called for exposure levels limited to 200 micrograms per cubic meter in yarn manufacturing; 750 micrograms per cubic meter in slashing and weaving operations, and 500 micrograms per cubic meter for all other processes in the cotton industry.⁵⁴ Industry argued that the new standards would force manufacturers to incur enormous costs with few benefits. Union petitioners argued that the standards did not go far enough in protecting the workers from lung disease.

Judge Bazelon, writing for a unanimous court, upheld the standard reasoning that regulations are economically feasible as long as they do not go so far as to put the entire industry out of business.⁵⁵ This decision was based on the fact that Congress did not call for an economic analysis in the text of the Act.⁵⁶ The court found that costs and benefits are too difficult to measure and therefore such analysis should not be required. The court partially based its decision on *Industrial Union Dep't., AFL-CIO v. Hodgson*,⁵⁷ a case cited as authority by the Third Circuit in its *Coke Oven Emissions* decision.

As to the conflict among the circuits concerning the need for cost-benefit analysis, the D.C. Circuit specifically rejected the *Benzene* rationale and the need for cost-benefit analysis. Although the court encouraged such estimates, it held that the "Act constrains its regulation of dangerous substances 'only by the limits of feasibility'."⁵⁸ Congress was unequivocal in its mandate that OSHA must:

⁵³ 617 F.2d 636 (D.C. Cir. 1979).

⁵⁴ *Id.* at 647-48.

⁵⁵ *Id.* at 664-65.

⁵⁶ *National Industrial Sand Ass'n v. Marshall*, 601 F.2d 689 (3d Cir. 1979).

⁵⁷ 499 F.2d 467.

⁵⁸ 617 F.2d at 663 (quoting 43 Fed. Reg. at 27378).

set the standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, that *no employee will suffer material impairment of health or functional capacity.*⁵⁹

Based upon this statutory wording Judge Bazelon felt that it was Congress' intent to protect the worker and that whatever expenses were incurred would be acceptable.⁶⁰ Nothing in the Act required OSHA to determine whether the benefits bore a reasonable relationship to the costs.⁶¹

The court found that "to protect workers from material health impairment, OSHA must rely on predictions of possible future events and *extrapolations from limited data. It may have to fill gaps in knowledge with policy considerations.*"⁶² And, for that reason the court felt that Congress permitted OSHA to act on the "best available evidence."⁶³

D. *The U.S. Supreme Court Jumps Into the Fray*

Enter the Supreme Court with its *Benzene* decision. Faced with the appeal of the challenge to the benzene standard, the Supreme Court struck down the standard without deciding the cost-benefit issue, specifically leaving the issue unresolved.⁶⁴

The opinion was a 5-4 consensus opinion with Chief Justice Burger, Justice Powell and Justice Rehnquist writing concurrences. Justice Powell alone believed that the cost-benefit issue had to be addressed and held that a cost-benefit analysis was indeed required. The plurality struck down the standard based upon the following rationale: section 3(8) of the Act defines an "occupational safety and health standard as a standard that is reasonably necessary and appropriate to provide safe and healthful employment." Where toxic materials are concerned section 6(b)(5) also applies and requires the Secretary to "set the

⁵⁹ 617 F.2d at 663-64 (emphasis in original) (quoting 29 U.S.C. § 655(b)(5)).

⁶⁰ "We are talking about people's lives not the indifference of some cost accountants." *Id.* at 664 (quoting Senator Yarborough, LEGIS. HISTORY at 510).

⁶¹ *Id.* at 664-65. Moreover, the court's role in this process is to ensure that the agency carries out its mandate in a reasonable manner. *Id.* at 648-52.

⁶² *Id.* at 651 (emphasis supplied).

⁶³ 29 U.S.C. § 655(b)(5) (1976).

⁶⁴ *Industrial Union Dep't, AFL-CIO v. American Petroleum Inst.*, 100 S. Ct. 2844 (1980).

standard which most adequately assures, to the extent feasible . . . that no employee will suffer material impairment" Based upon section 3(8) of the Act the initial burden is on OSHA to show a "significant risk." Absent this showing of hazard, OSHA does not meet its burden of proof—the threshold showing that the standard is "reasonably necessary or appropriate."

In the current case, there was no question that a causal connection existed between exposure to high concentrations of benzene and leukemia. OSHA, however, took this one step further. Based upon a general policy, OSHA assumed that when carcinogens are involved, there are no presumed safe levels and the exposure limit must be set at the lowest feasible level.⁶⁵

The plurality held that this showing did not meet OSHA's burden of proof. OSHA did not show a "significant risk" requiring regulation. Consequently, the plurality held that OSHA had exceeded its standard setting authority and thus it did not need to reach the issue of whether or not costs and benefits must be weighed. Although the plurality did not reach the cost-benefit issue it did provide extremely relevant guidance. Initially, it should be noted that the plurality was definitive in stating:

We think it is clear that the statute was not designed to require employers to provide absolutely risk-free workplaces whenever it is technologically feasible to do so, so long as the cost is not great enough to destroy an entire industry. Rather, both the language and structure of the Act, as well as its legislative history, indicate that it was intended to require the elimination, as far as feasible, of significant risks of harm.⁶⁶

Although the plurality recognized that OSHA's mandate is to "attain the highest degree of health and safety protection for employees," it denied that OSHA had unbridled discretion to create absolutely risk-free workplaces regardless of cost.⁶⁷ Look-

⁶⁵ 100 S. Ct. at 2855. At the time the benzene standard was promulgated the above "carcinogen policy" had not been formally promulgated and adopted as standard. On January 22, 1980, OSHA adopted a formal policy for regulating carcinogens incorporating its "carcinogen policy," effective April 21, 1980, 45 Fed. Reg. 5002, codified at 29 C.F.R. § 1990 (generic carcinogen standard). In its *Benzene* decision, the Court makes no determination as to the propriety of the formally promulgated generic carcinogen standard.

⁶⁶ 100 S. Ct. at 2864.

⁶⁷ *Id.* at 2850 n.4.

ing at the legislative history, the plurality noted Congress' concern with giving OSHA too much power over industry and cited Congress' (a) failure to give the Secretary power to unilaterally shut down plants, (b) imposition of procedural requirements upon the Secretary in promulgating emergency standards, and (c) creation of an independent review commission to oversee the Agency, as evidence of Congress' desire to limit the Agency's authority.⁶⁸

The Justice Steven's plurality opinion was clearly concerned with OSHA's perceived power to impose costs with little, if any, discernible benefit.

As presently formulated, the benzene standard is an expensive way of providing some additional protection for a relatively small number of employees. . . . The figures outlined in OSHA's explanation of the costs of compliance to various industries indicate that only 35,000 employees will gain any benefit from the regulation in terms of a reduction in their exposure to benzene.⁶⁹

The opinion then computed cost of compliance with the benzene standard per employee in each affected industry. Due to differences in cost of compliance per industry and the numbers of workers exposed, the costs ranged from a low of \$1,390 per rubber manufacturing employee to \$82,000 per petroleum refining industry employee.⁷⁰ The plurality further noted that OSHA did not quantify the benefits to each of the various categories workers. Mr. Justice Stevens also stated that "[i]n light of the fact that there are literally thousands of substances used in the workplace that have been identified as carcinogens or suspected carcinogens, the Government's theory would give OSHA power to impose enormous costs that might produce little, if any, discernible benefit."⁷¹

The plurality also noted that the Act, itself, required prioritizing the need for establishing new standards, based upon the section 6(g)⁷² requirement that the Secretary promulgate stan-

⁶⁸ *Id.* at 2866-69.

⁶⁹ *Id.* at 2857.

⁷⁰ *Id.* at 2858.

⁷¹ *Id.* at 2866.

⁷² *Id.* at 2862.

dards to eliminate the most serious hazards first. The government conceded that this section requires some cost-benefit analysis, although the Secretary argued that these prioritizing decisions are policy decisions, subject at best to limited judicial review.⁷³

The plurality opinion then noted that OSHA did not totally ignore costs in promulgating the benzene standard. Despite the fact that OSHA assumed that no safe exposure limit existed, OSHA did not try to totally eliminate the use of benzene.⁷⁴

Finally, the plurality noted that its formulation of "significant risk" inherently incorporates some "cost-benefit" analysis. While it refused to require that significant risk be shown with "mathematical certainty," the plurality stated:

Some risks are plainly acceptable and others are plainly unacceptable. If for example, the odds are one in a billion that a person will die from cancer by taking a drink of chlorinated water, the risk clearly could not be considered significant. On the other hand, if the odds are one in a thousand that regular inhalation of gasoline vapors that are two percent benzene will be fatal, a reasonable person might well consider the risk significant and take appropriate steps to decrease or eliminate it.⁷⁵

Because this was a plurality opinion leaving the economic issue unresolved, it is important to consider the concurring and dissenting opinions. As previously stated, Justice Powell, alone, believed that cost-benefit analysis is required under the Act. In a strongly worded concurrence, he stated that "the statute . . . requires the agency [OSHA] to determine that the economic effects of its standards bear a reasonable relationship to the expected benefits."⁷⁶ Justice Powell believed that a standard could not meet the requirements of the Act without economic justification. He recognized the magnitude of the problem of controlling exposure to toxic substances and stated that a rational system of regulation must consider costs and benefits in allocating limited resources.

Chief Justice Burger in his concurring opinion felt that the Secretary did not meet the minimal threshold requirement of

⁷³ *Id.*

⁷⁴ *Id.* at 2871.

⁷⁵ *Id.*

⁷⁶ 100 S. Ct. at 2877 (Powell, J., concurring).

finding "significant risk" which is the necessary justification for imposition of OSH Act regulation.⁷⁷ However, in dicta that of necessity had to be aimed at the economic analysis question, he noted the differing functions of courts and administrative agencies. "The Congress is the ultimate regulator and the narrow function of the courts is to discern the meaning of the statute and implementing regulations The judicial function does not extend to substantive revision of regulatory policy. That function lies elsewhere—in Congressional and Executive oversight or amendatory legislation; although to be sure the boundaries are often ill defined and indistinct."⁷⁸

While this language shows the Chief Justice's desire to strictly adhere to the concept of separation of power, assuming that the Court is able to discern Congressional desire, he also notes that responsible administrative action refrains from regulation of the insignificant or *de minimus* risk. "Perfect safety is a chimera; regulation must not strangle human activity in the search for the impossible."⁷⁹

Justice Rehnquist, while concurring in the judgment invalidating the standard, reaches that conclusion in a manner totally at variance with the plurality opinion. Justice Rehnquist would invalidate section 6(b)(5) of the Act as an improper delegation of authority by Congress to the Secretary of Labor. He recognizes that the issue of considering economic costs in relation to safety benefits is one of the most difficult issues that could confront a decision-maker and to Justice Rehnquist, Congress, not the Secretary of Labor, is "best suited and most obligated to make the choice."⁸⁰ He concludes that the standard set forth in section 6(b)(5) is an improper delegation of power. Furthermore, he does not find additional guidance in the OSH Act's legislative history, nor does he believe that the standardless delegation was justifiable in light of "inherent necessities."⁸¹ Consequently, he would invalidate the first sentence of section 6(b)(5) leaving the Secretary the option of setting safe standards or no standards at all.⁸²

⁷⁷ 100 S. Ct. at 2874 (Burger, C.J., concurring).

⁷⁸ *Id.* at 2874-75.

⁷⁹ *Id.* at 2875.

⁸⁰ *Id.* at 2879 (Rehnquist, J., concurring in the judgment).

⁸¹ *Id.* at 2881.

⁸² *Id.* at 2887.

The dissent, written by Justice Marshall and joined in by Justices Brennan, White and Blackmun states that the plurality's opinion goes beyond the Court's authority. "In cases of statutory construction . . . [i]f the statutory language and legislative intent are plain, the judicial inquiry is at an end."⁸³ To Justice Marshall the "plain meaning" of the Occupational Safety and Health Act is clear and the Secretary's actions were well within his power and based upon substantial evidence. The dissent believes that the plurality opinion ignores the plain meaning of the Act in an attempt to impose the plurality view of proper regulatory policy and "the plurality's discussion of the record in this case is both extraordinarily arrogant and extraordinarily unfair."⁸⁴ *

On the issue of cost-benefit analysis, while the dissent recognizes that some balancing of costs and benefits may be necessary, the dissent voices its unified belief that the legislative history and the Act evidence Congress' antipathy toward cost-benefit balancing. The dissent interprets a standard to be economically feasible "if it is capable of achievement, not if its benefits outweigh its costs."⁸⁵

III. OSHA: A PRINCIPLED APPROACH

Where does the Supreme Court *Benzene* decision leave us? Only Justice Powell believes that cost-benefit analysis is required in the OSH Act regulatory process. The concurring opinions of Chief Justice Burger and Justice Rehnquist generate varying signals with Chief Justice Burger clearly wanting to limit the Supreme Court's role yet conscious of the need to prevent administrative action from strangling economic activity and Justice Rehnquist claiming that cost-benefit analysis in the OSH Act context is an improper delegation of power. The dissent's disagreement with imputing a cost-benefit analysis requirement into the Act is clear.

Appellate decisions on the economic analysis issue after the Supreme Court's *Benzene* decision have not been definitive. The Fifth Circuit in *Texas Independent Ginners Assn. v. Marshall*

⁸³ *Id.* at 2887 (Marshall, J., dissenting).

⁸⁴ *Id.* at 2890.

⁸⁵ *Id.* at 2902.

(Cotton Gin)⁸⁶ and the District of Columbia Circuit Court in *United Steelworkers v. Marshall (Lead Case)*⁸⁷ have been faced with the economic analysis issue. In both cases the circuit courts continued to apply the conflicting interpretations of their earlier decisions. In *Texas Independent Ginners*, the Fifth Circuit, the same court which had determined in the appellate *Benzene* case that cost-benefit analysis was necessary, determined that under the procedure set forth in the Supreme Court's *Benzene* decision, OSHA had not met the threshold requirement of showing exposure to cotton dust was a significant health risk. The court found deficiencies in the studies relied upon by the agency and then concluded that OSHA had not met the cost-benefit standard set forth in its appellate *Benzene* decision.

In a similar vein and reaching an unsurprising conclusion, the District of Columbia Circuit Court of Appeals, the same court which rejected cost-benefit analysis in the *Cotton Dust* case, determined in the *Lead Case* on an industry by industry basis whether or not OSHA met the threshold requirement of showing significant harm as set out in the Supreme Court *Benzene* decision. The court continued in its conclusion that economic feasibility is present if a standard does not threaten massive dislocation.

Neither of the recent appellate decisions is out of character or shows any change in position on the economic analysis question. Therefore, how will the Supreme Court resolve and reconcile the divergent appellate decisions?

In essence the question to be decided is to what extent should/must the Occupational Safety and Health Administration weigh economic factors when promulgating standards. This decision will affect how federal health and safety standards are applied, the amount of scientific data needed for enforcement and the role of the regulators.

The question is immediately before the Supreme Court in the *Cotton Dust* case where *certiorari* was granted on questions which squarely face the issue of cost-benefit analysis.⁸⁸

⁸⁶ 8 OSHC 2205 (5th Cir. Nov. 14, 1980).

⁸⁷ 8 OSHC 1810 (D.C. Cir. Aug. 15, 1980).

⁸⁸ 100 S. Ct. 68 (1980).

In oral argument on the issue, held on January 21, 1981, former Solicitor General Robert Bork, representing the nation's textile industry made the argument that in setting "feasible standards" as required by section 6(b)(5), OSHA must make a responsible estimate, supported by substantial evidence of what its proposed standard will cost and what impact it will have on industry with respect to such factors as production, employment, competition, and prices. He strongly disagreed with the District of Columbia's Circuit Court conclusion that an OSHA standard is economically feasible unless the cost of compliance is so prohibitive that it would put an entire industry out of business. The Justice Department and AFL-CIO representatives took the position that the statute did not impose a "magical" cost-benefit analysis. They further stated that the requirements set forth by OSHA in this standard would, at worst, destroy marginal employers. As such, they concluded that the standard is economically feasible within the meaning of the Act.

In deciding the economic analysis issue, the Supreme Court, in the abstract has three choices: 1) to require a strict cost-benefit analysis wherein regulation not justified in terms of economic savings are not enacted, 2) not to require agencies to consider the costs of their regulations at all; or 3) to require an approximate balancing or weighing of costs and benefits, i.e., some type of "economic impact" analysis.

While there is no absolute consensus as to what constitutes cost-benefit analysis, it is generally recognized that cost-benefit analysis is an "economic tool with which decision makers can estimate whether a governmental intervention will increase or decrease welfare,"⁸⁹ measured as "the sum of the value of goods, services, jobs, and profits, minus the value of health and environmental damage."⁹⁰ Requiring agencies to conduct an extensive cost-benefit analysis has a number of drawbacks. The biggest problem is the difficulty in assessing exact benefits and costs. Most people recoil at attempts to set a value on or a maximum amount on spending to save a life.⁹¹ "We cannot put a price on

⁸⁹ Berger and Riskin, *Economic and Technological Feasibility in Regulating Toxic Substances Under the Occupational Safety and Health Act*, 7 *ECOLOGY L.Q.* 341 (1979).

⁹⁰ *Id.*

⁹¹ The court in *Cotton Dust* pertinently quoted the following comment from P. Schuck, *Regulation: Asking the Right Questions*, 11 *NAT'L J.* 711 (1979):

the child who can be saved from disfigurement from flammable sleepwear, or a price on the workers who can be saved from asbestos-induced cancer."⁹² Many OSHA regulations concern toxic substances which, by their very nature, present persistent and severe regulatory problems which defy the use of traditional cost-benefit analysis.⁹³ For some substances, such as those which are carcinogenic, it is extremely difficult, based upon current knowledge, to establish safe levels of exposure. Furthermore, there has been disagreement about what methods should be used when trying to establish "safe" levels. Industry spokesmen advocate standards which, according to OSHA, would not allow them to sufficiently protect workers from such dangers in the workplace. While these are valid points about the great inadequacy of cost-benefit analysis,⁹⁴ some type of cost consideration must be required to prevent OSHA from becoming an unnecessary burden upon American industry.

Another drawback to strict cost-benefit analysis is that it works against the Act's stated primacy of instituting engineering and administrative controls⁹⁵ over the use of personal protective equipment and it blunts the technology forcing thrust of the Act, which was positively mentioned in the original legislation establishing OSHA.⁹⁶ A technology forcing statute such as the OSH Act directs the agency to resolve doubts in favor of feasibility. The industries, then, bear the burden of showing clearly that the task is not possible or that the cost is not justified by the benefits.⁹⁷ A cost-benefit analysis would favor the use of personal protective equipment over the development of engineering and administrative controls to solve a particular problem because personal protective equipment is normally less expensive

Cost-benefit analyses are also invariably flawed. The reasons for this are well-known: the difficulty of identifying and quantifying many costs and benefits; the inevitably arbitrary nature of valuations of human life or health; . . . the problem of interpersonal and intergenerational comparisons of utility; and many others.

617 F.2d at 665 n.170.

⁹² Berger and Riskin, *supra* note 89, at 287.

⁹³ Berger and Riskin, *supra* note 89, at 286.

⁹⁴ For an attempt, although unsuccessful, to support cost-benefit analysis see M. BAILEY, *REDUCING RISKS TO LIFE*, *supra* note 4.

⁹⁵ Berger and Riskin, *supra* note 89, at 343.

⁹⁶ *Id.* at 323, 343.

⁹⁷ Doniger, *Federal Regulation of Vinyl Chloride: A Short Course in the Law and Policy of Toxic Substances Control*, 7 *ECOLOGY L.Q.* 561 (1979).

than new capital expenditures. Thus, industries are not encouraged to research and develop new ways to improve safety and health in the workplace.

On the other hand, if society is being forced to bear the burden of regulatory costs, it must be shown that these costs provide some reasonable benefit. Otherwise, there would be a serious misallocation of resources: businesses would be forced to pass up new products and innovative technological advances because of regulations forcing them to utilize their resources in other areas. In our economy, this policy would lead to enormous inefficiency due to the indirect costs of compliance with regulations, such as lost productivity, delays in construction of new plants and equipment, and lost opportunities.⁸⁸ Not examining the costs and benefits is as extreme as requiring a formal cost-benefit analysis.

Moreover, such a policy will impose undue hardships upon small business—which cannot afford the additional costs of compliance and paperwork. Government regulation typically mandates significant front-end capital expenses upon industry. Companies with limited output are placed at a great competitive disadvantage by having to allocate a greater additional cost to each unit. Presidents Ford and Carter were correct in attempting to avoid these problems by requiring the executive agencies to carry out informal economic impact analyses.⁸⁹

Since the extremes of a formal cost-benefit analysis and no consideration of costs both inadequately deal with the problem, the third alternative of an approximate balancing of costs and benefits must be carefully scrutinized. Such an “economic impact” analysis would involve observing the effect of proposed standards on output, cost, inflation, small business and the general state of the economy. This would be compared to the benefits from the standard. This would mean, at the very least, that the agencies must evaluate alternatives to the proposed

⁸⁸ COST OF GOVERNMENT REGULATION STUDY, *supra* note 1; Simon, *What We Did*, REGULATION, July/Aug. 1979, at 20.

⁸⁹ See, e.g., Executive Order 12044 (Improving Government Regulations); during this period, the President also established the Regulatory Analysis Review Group to implement his economic impact policy and to ensure consistency and lack of repetition within the executive branch.

standard: "an agency, if its rulemaking is to be sustained, must demonstrate that it has considered relevant factors brought to its attention by interested parties during the course of rulemaking, and that it makes a reasoned choice among the alternatives presented."¹⁰⁰

The authors submit that this intermediate position requiring an economic impact analysis is the most justifiable from both a philosophical and legal standpoint. Philosophically, strict cost-benefit analysis is inappropriate because of the subjectiveness of assigning values to social benefits such as health. This requires tremendous subjective judgments which, can be argued, are beyond the expertise of the agency.¹⁰¹ Application of strict cost-benefit analysis would be forced and arbitrary. However, the alternative of leaving OSHA unbridled discretion to regulate is beyond the intent of Congress. OSHA must be cognizant that the economy has only so much that can be spent on safety and health and OSHA should allocate these resources to maximize the benefits.

Legally, it can be argued that the Act does not require strict cost-benefit analysis. When Congress wanted strict cost-benefit analysis, it knew how to clearly put the requirement into its enactments. Yet the legislative history is replete with concern about costs and the Act requires certain economic calculations.¹⁰² Finally, it is noted that the Supreme Court, in the *Benzene* decision has already taken the first step in requiring an informal economic impact analysis. By requiring hazards to be "significant" and giving the example of the possible acceptability of the one-in-one billion risk as opposed to the one-in-one thousand risk, the Court is saying that regulation must make some economic sense. Even though the victim of the one-in-one billion risk is individually harmed, that is an injury which we as a society are willing to accept. We accept it not because we are content with the danger, but because economically it makes no sense to ex-

¹⁰⁰ *National Industrial Sand Ass'n v. Marshall*, 601 F.2d 689, 699-700 (3d Cir. 1979).

¹⁰¹ See McGarrity, *Substantive and Procedural Discretion in Administrative Resolution of Science Policy Questions: Regulating Carcinogens in EPA and OSHA*, 67 GEO. L.J. 729 (1979).

¹⁰² See discussion of Supreme Court *Benzene* decision *supra* at notes 66-88 and accompanying text.

pend huge sums of money to prevent the one-in-one billion injury.

As a major impediment to cost-benefit analysis is the subjectivity of assigning values to certain benefits, such as health, the authors believe that the economic impact analysis required under OSH Act mandates that OSHA set forth economic justification for its regulations. This can be done by setting forth the various proposals and explaining why the selected alternative is economically reasonable. As in all policy matters left to agency discretion, absolute correctness is not required¹⁰³ and, in fact would be impossible to prove. A court of review would consider the agency basis for decision and sustain the regulation if supported by the record. If the regulation is reasonable it would be upheld.

IV. CONCLUSION

OSH Act regulation is costly and the controversy over the need for economic justification must be resolved. In resolving the problem, Congress and the Courts must grant agencies such as OSHA a "reasonable margin of safety" in which to protect human life and health. The Supreme Court must balance the need to provide OSHA with flexibility in carrying out its task and the need to not unduly interfere with the economy. Requiring cost-benefit analysis would provide the balance.

¹⁰³ *Universal Camera Corp. v. NLRB* 340 U.S. 474, 488 (1951); 5 U.S.C. § 706(2)(A) (1976); see K. DAVIS, 1 *ADMINISTRATIVE LAW TREATISE* 6.6 (1978).