

CASENOTES

Avoiding the Use of Cost-Benefit Analysis in the Context of Occupational Safety and Health; The Requirement of Significant Risk; *Industrial Union Department AFL-CIO v. American Petroleum Institute*¹ — In 1970 Congress passed the Occupational Safety and Health Act (OSH Act)² in response to what was considered to be a lack of adequate protection for American workers from hazards in their work environments.³ The OSH Act created the Occupational Safety and Health Administration (OSHA), a federal agency charged with the responsibility of carrying out the daily administration of the Act. The authority to establish OSHA standards regulating conditions in the work environment, however, was granted to the Secretary of Labor.⁴ There are three types of OSHA standards: interim standards,⁵ permanent standards⁶ and emergency temporary standards,⁷ each to be adopted by separate procedures

¹ 100 S.Ct. 2844 (1980).

² 29 U.S.C. § 651-78 (1976).

³ The Senate Labor and Public Welfare Committee noted that, at the time of the Act's passage, state-imposed safety standards varied greatly, often offering little protection. "No one has seriously disputed that only a relatively few states have modern laws relating to occupational health and safety and have devoted adequate resources to their administration and enforcement." S. REP. NO. 91-1282, 91st Cong., 2d Sess. 4, *reprinted in* [1971] U.S. CODE CONG. & AD. NEWS 5177, 5180.

In 1970, for instance, it was estimated that unsafe conditions in the workplace were causing an average of 14,500 deaths and over 2 million disabilities each year. *Id.* at 2, [1970] U.S. CODE CONG. & AD. NEWS at 5178. In addition recent studies had uncovered a number of previously unknown dangers from toxic materials, excessive noise levels, and harmful physical agents, all routinely encountered by workers. *Id.* Because of this situation, Congress designed the Act to provide, to the extent possible, that every employee would have a safe and healthful work environment. As the statute itself states: "The Congress declares it to be its purpose and policy . . . to assure so far as possible every working man and woman in the nation safe and healthful working conditions. . . ." § 2(b) of The Act, 29 U.S.C. § 651(b) (1976).

⁴ 29 U.S.C. § 655 (1976).

⁵ Interim standards were the mechanism by which the Act was to be brought into effect as soon as possible after its passage. The OSH Act directed the Secretary to choose from among the then-existing national health standards the one which assures the greatest protection to workers and to adopt it as an OSHA standard. 29 U.S.C. § 655(a) (1976).

⁶ The procedure for establishing permanent standards is more complex. The Secretary, after determining that a standard should be issued, publishes a proposed rule in the Federal Register. Interested parties are then allowed to file written comments or objections to the proposal and to request a hearing. The Secretary may then grant this request, but he is not required by the OSH Act to hold a formal hearing at which a record for review is generated. 29 U.S.C. § 655(b) (1976). Where a hearing is granted, the Secretary has chosen to add a limited right of cross-examination to facilitate the creation of an evidentiary record suitable for review under the substantial evidence standard established in the OSH Act. 29 C.F.R. § 1911.15 (1980). After an opportunity for comments or hearing has occurred the Secretary may adopt or amend the proposed standard before it finally is issued. 29 U.S.C. § 655(b) (1976).

⁷ Emergency temporary standards take effect immediately following publication in the Federal Register. The Act limits the use of such standards, however, to instances where the Secretary determines that employees are exposed to a grave danger and that an emergency temporary standard is necessary to protect workers from this danger. 29 U.S.C. § 655(c) (1976). In

set forth in the Act. The Department of Labor is the primary enforcer of these standards.⁸ Preenforcement review of OSHA standards is available in the United States courts of appeal.⁹ The Act explicitly provides that the determinations made by the Secretary in establishing a standard shall be upheld if they are supported by substantial evidence in the record considered as a whole.¹⁰

Following the passage of the OSH Act, the federal government became actively involved in the regulation of employee exposure to benzene, a toxic substance produced mostly by the petrochemical industry.¹¹ It has long been recognized that exposure to benzene can be a health hazard causing a wide variety of nonmalignant diseases¹² and prior to the passage of the OSH Act some states had set maximum worker exposure levels.¹³ In 1971, the Secretary of Labor, acting pursuant to his authority under the OSH Act, adopted an interim standard¹⁴ setting the maximum benzene exposure rate averaged over an eight hour work day at 10 parts per million (ppm).¹⁵

Throughout the 1970's, a number of medical studies were published that indicated a strong connection between benzene exposure and cancer.¹⁶ Apparently acting in response to this additional information,¹⁷ the Secretary of Labor issued a proposed permanent standard in 1977 that would have lowered the permissible benzene exposure level from 10 ppm to 1 ppm.¹⁸ At that time, OSHA requested comments from interested parties on various aspects of the

several cases the lower courts have invalidated OSHA emergency temporary standards because the Secretary failed to demonstrate that the danger was grave and that emergency measures were necessary. *See, e.g.,* Florida Peach Growers Ass'n, Inc. v. Dept. of Labor, 489 F.2d 120, 132 (5th Cir. 1974); Dry Color Mfrs. Ass'n, Inc. v. Dept. of Labor, 486 F.2d 98, 100, 106 (3d Cir. 1973).

⁸ 29 U.S.C. § 655 (1976).

⁹ 29 U.S.C. § 655(f) (1976).

¹⁰ This standard of review is something of a hybrid since it applies the substantial evidence test, usually reserved for on-the-record rulemaking, to findings that may be made after an informal quasi-legislative proceeding.

¹¹ 43 Fed. Reg. 5918 (1978).

¹² *Indus. Union Dept. AFL-CIO v. Am. Petroleum Inst.*, 100 S.Ct. 2844, 2851-52 (1980).

¹³ *Id.* Massachusetts, for example, set a maximum employee exposure level at 35 parts per million (ppm). *Id.*

¹⁴ See note 5 *supra*.

¹⁵ 43 Fed. Reg. 5919 (1978). Section 6(a) of the OSH Act, 29 U.S.C. § 655(a) (1976) authorized the Secretary of Labor, during the first two years following the Act's effective date, to adopt as an interim standard one of the existing national consensus standards. In this case, the Secretary chose the standard approved by the American National Standards Institute. In addition to the 10 ppm requirement, the standard adopted by OSHA limited short-term exposure to 25 ppm for ten-minute periods or a maximum peak exposure of 50 ppm. 43 Fed. Reg. 5919 (1978).

¹⁶ 100 S.Ct. at 2852.

¹⁷ In its reports to OSHA, the National Institute of Occupational Health and Safety (NIOSH) had indicated that the benzene standard should be set as low as possible. In a report issued just prior to the Secretary's decision to lower the standard, NIOSH had erroneously suggested that exposure levels between zero and 15 ppm had caused a five times greater number of cases of leukemia in certain workplaces studied over a nine-year period. *Id.* at 2854, 2854 n.16.

¹⁸ The proposed standard also lowered short-term exposure from 25 ppm to 5 ppm for any ten-minute period and eliminated the permissible maximum peak exposure level of 50 ppm. 42 Fed. Reg. at 22517 (1977).

standard and its likely impact.¹⁹ After holding informal hearings and receiving evidence, OSHA issued the new benzene standard on February 10, 1978.²⁰

In *American Petroleum Institute v. OSHA* parties representing industrial producers and users of benzene brought suit in the Fifth Circuit Court of Appeals challenging the validity of the new benzene standard.²¹ They contended that the standard did not conform to the definition of an OSHA standard found in section 3(8) of the OSH Act, which requires that OSHA standards be "reasonably necessary or appropriate."²² In their view, a standard could not be reasonably necessary or appropriate unless its benefits were shown to be greater than its cost to the affected industry.²³ Bolstering this argument, the challengers also contended that section 6(b)(5) of the OSH Act, which requires the Secretary of Labor to set, for toxic substances, standards which protect employees "to the extent feasible,"²⁴ also required cost-benefit analysis to determine whether a standard is feasible.²⁵ Since the Secretary of Labor had not done a cost-benefit analysis of the benzene standard, they argued that OSHA had failed to meet its statutory obligations and that the standard was, therefore, invalid.²⁶

OSHA denied that the phrase "reasonably necessary or appropriate" imposed an obligation on the agency to weigh the costs and benefits of its standards.²⁷ In addition OSHA argued that the benzene standard was "feasible" because it was achievable without causing serious economic dislocation in the affected industries.²⁸ Thus, OSHA denied that either section 3(8) or section 6(b)(5) of the OSH Act required cost-benefit analysis of its standards.

The Fifth Circuit Court of Appeals disagreed, however, with OSHA's position. Reading the OSH Act's "reasonably necessary or appropriate" language in conjunction with its requirement that standards be "feasible," the court in *American Petroleum Institute v. OSHA* held that the Secretary of Labor is required to quantify the costs and benefits of a proposed standard and to find

¹⁹ 42 Fed. Reg. at 27452 (1977).

²⁰ 43 Fed. Reg. 5918 (1978). In its final form the benzene standard also banned all exposure to liquids containing more than .5% benzene. *Id.*

²¹ 581 F.2d 493 (5th Cir. 1978).

²² *Id.* at 500. This language is found in the definition of an OSHA standard which reads as follows: "[t]he 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." (emphasis added) 29 U.S.C. § 652(8) (1976).

²³ 581 F.2d at 501.

²⁴ The first sentence of § 6(b)(5) of the OSH Act reads in part:

The Secretary . . . shall 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 even if such employee has regular exposure to the hazard . . . for the period of his working life.

29 U.S.C. § 655(b)(5) (1976).

²⁵ 581 F.2d at 501.

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.* at 503.

that they are reasonably related, before he is empowered to adopt the proposal as an OSHA standard.²⁹ Because the Secretary had failed to quantify and weigh the costs and benefits of the benzene standard in this manner, the court held that the standard was invalid.³⁰ The court not only endorsed the view that cost-benefit analysis is required by the OSH Act, but by requiring costs and benefits to be quantified, it also raised serious doubts concerning the Secretary's authority to set any OSHA standard when, even with the best scientific techniques, these variables could only be estimated in a general way.

Upon a petition by the Industrial Union Department of the AFL-CIO, brought on behalf of its workers in the affected industries, the Supreme Court granted certiorari.³¹ In a 5-4 decision, the Court, in *Industrial Union Department AFL-CIO v. American Petroleum Institute*,³² affirmed the judgment of the court of appeals and held: (1) that the OSH Act requires the Secretary of Labor to find that the proposed 1 ppm benzene standard is reasonably necessary or appropriate to protect employees against a significant risk of material health impairment before he is empowered to adopt it as an OSHA standard, and (2) that because the Secretary had failed to make this necessary threshold finding the benzene standard was invalid.³⁴ By invalidating the benzene standard on these grounds the Court managed to avoid deciding the question whether the OSH Act requires the Secretary to do a cost-benefit analysis of proposed standards for toxic substances.

The decision of the Court was written by Justice Stevens, joined by Justice Stewart.³⁵ Chief Justice Burger, Justice Powell and Justice Rehnquist each wrote concurring opinions, with Powell concurring only in part and Rehnquist agreeing solely with the Court's judgment.³⁶ Justice Marshall wrote a dissenting opinion in which he was joined by Justices Brennan, White and Blackmun.³⁷ Since the majority was far from unanimous in its views, these divisions in the Court are particularly important in evaluating the likely impact of the case.

The Court's decision in *Industrial Union Department AFL-CIO v. American Petroleum Institute* is significant, not only because it invalidated OSHA's

²⁹ *Id.* at 504.

³⁰ *Id.* at 505. The court focused on the lack of findings regarding the likely benefits of the benzene standard and concluded:

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 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.

Id.

³¹ 440 U.S. 906 (1979).

³² 100 S.Ct. 2844 (1980).

³³ *Id.* at 2850.

³⁴ *Id.* at 2873.

³⁵ *Id.* at 2849.

³⁶ *Id.* at 2874 (Burger, C.J. concurring); *Id.* at 2875 (Powell, J., concurring); *Id.* at 2878 (Rehnquist, J., concurring).

³⁷ *Id.* at 2887 (Marshall, J., dissenting).

benzene standard, but also because it was the Court's first attempt to resolve the controversy over whether the Occupational Health and Safety Act requires cost-benefit analysis of OSHA standards. Although the Court did not decide whether cost-benefit analysis is necessary,³⁸ the various opinions provide some indication as to how the Court ultimately will decide this hotly debated issue. OSHA's critics have repeatedly called for an end to what they consider to be OSHA's tendency to over-regulate in instances where the benefits of a standard are meager or where the likelihood of harm is remote. These critics argue that such regulations actually contravene the basic purpose of the OSH Act by seriously misallocating industry resources available for health and safety, thereby reducing the overall degree of safety that can be achieved.³⁹ Accordingly, they contend that the provisions in the OSH Act that state that OSHA standards set by the Secretary of Labor must be "reasonably necessary or appropriate"⁴⁰ and must prevent material impairment of health "to the extent feasible"⁴¹ should be read as requiring the Secretary to rely on cost-benefit analyses in setting OSHA standards.

OSHA has vigorously opposed the imposition of a cost-benefit requirement. It has argued that the impossibility of putting a value on human life makes the cost-benefit approach impractical in the health and safety context.⁴² OSHA has further contended that the OSH Act's emphasis on achieving the greatest degree of safety leaves no room for consideration of the cost-effectiveness of its standards.⁴³ Consistent with this view, OSHA has contended that the "reasonably necessary or appropriate" language of section 3(8) does not restrict the Secretary's authority to set standards that reasonably can be expected to improve worker safety.⁴⁴ OSHA has argued that a standard is "feasible" for purposes of section 6(b)(5) of the OSH Act if it is achievable without widespread harm to the viability of the affected industries.⁴⁵

The multitude of opinions in *Industrial Union Department AFL-CIO v. American Petroleum Institute* is indicative of the differences that exist among the

³⁸ *Id.* at 2863. At the same time, the plurality made it clear that the cost-benefit issue may be addressed directly in a future case. "Because the Secretary did not make the required threshold finding in this case, we have no occasion to determine whether costs must be weighed against benefits in an appropriate case." *Id.*

³⁹ This argument is clearly stated in the American Petroleum Institute's Supreme Court brief:

Nothing could frustrate the purpose of the OSH Act more completely than to have a grave or extraordinarily dangerous hazard go unregulated because the affected industry had already been driven to the limits of survival by the costs of controlling a far less serious risk addressed in a previous regulation.

Brief for Respondent at 32, *Indus. Union Dept. AFL-CIO v. Am. Petroleum Inst.*, 100 S.Ct. 2844 (1980).

⁴⁰ Section 3(8) of the OSH Act, 29 U.S.C. § 652(8) (1976). See note 22 *supra*.

⁴¹ Section 6(b)(5) of the OSH Act, 29 U.S.C. § 655(b)(5) (1976). See note 24 *supra*.

⁴² Brief for the Federal Parties at 62 n.52, *Indus. Union Dept. AFL-CIO v. Am. Petroleum Inst.*, 100 S.Ct. 2844 (1980).

⁴³ *Id.* at 48.

⁴⁴ *Id.* at 46.

⁴⁵ *Id.* at 56-59.

justices on this issue. At the same time, a majority of the justices either opposed or refused to consider whether the Act required a cost-benefit approach.⁴⁶ The plurality position, which requires the Secretary of Labor to find a significant risk before proposing an OSHA standard, indicates that the Court is searching for an effective way to clarify the limits of the Secretary's authority to set standards without resorting to the cost-benefit approach.

This casenote will analyze whether the requirement of significant risk, adopted by the Court in *Industrial Union Department AFL-CIO v. American Petroleum Institute*, is a more appropriate means of defining the authority to set OSHA standards for toxic substances than a cost-benefit approach, in light of the language and purpose of the OSH Act. After briefly describing the origin and purpose of the OSH Act, this casenote will examine the case law and legislative history regarding those provisions of the Act that are the focus of the Court's decision in this case. This discussion will be followed by a thorough review of the opinions and the standard of review each justice would apply. Next, the probable impact of the plurality approach will be appraised. Finally, it will be proposed that the requirement of significant risk can be used to clarify the limits of the Secretary of Labor's standard setting authority in a manner that is more workable and consistent with the OSH Act's purposes than a cost-benefit approach.

I. THE LIMITS OF THE SECRETARY OF LABOR'S AUTHORITY TO SET OSHA STANDARDS FOR TOXIC SUBSTANCES

The threshold requirement of significant risk is derived by reading sections 3(8) and 6(b)(5) together, so that an OSHA standard is not valid unless it fits within the general definitional language of section 3(8) and is adopted in the manner prescribed by section 6(b)(5). It is essential to understand how these provisions operate separately before it is possible to determine how they interrelate within the framework of the OSH Act. For this reason, the following sections will examine the language, legislative history and pertinent case law regarding each of these provisions to explain how each was construed prior to *Industrial Union Department AFL-CIO v. American Petroleum Institute*.

A. *The Definitions of an OSHA Standard: Construing Section 3(8)*

The two provisions of the Act that are central to the Court's decision in this case are sections 3(8),⁴⁷ the general definition of an occupational health and safety standard, and section 6(b)(5),⁴⁸ which governs the Secretary's con-

⁴⁶ Six of the justices addressed this issue. The four dissenters opposed the use of cost-benefit analysis where the costs did not pose a threat to the industry. 100 S.Ct. at 2903; see text and notes at notes 167-75 *infra*. Justice Rehnquist asserted that the Act provided insufficient detail as to how costs and benefits should be weighed. *Id.* at 2885; see text and notes at notes 159-65 *infra*. Only Justice Powell endorsed the cost-benefit approach. *Id.* at 2877-78; see text and notes at notes 156-58 *infra*.

⁴⁷ 29 U.S.C. § 652(8) (1976). See note 22 *supra*.

⁴⁸ 29 U.S.C. § 655(b)(5) (1976). See note 24 *supra*.

duct in selecting permanent standards for toxic substances. In section 3(8), the Act defines an OSHA standard as a standard that requires conditions or practices which are "reasonably necessary or appropriate to provide safe or healthful employment or places of employment." Before *Industrial Union Department AFL-CIO v. American Petroleum Institute* no court had attempted to define what impact, if any, this definition had on the standard setting authority accorded to the Secretary elsewhere in the Act. In construing similar language in statutes that confer rulemaking power on other administrative agencies, however, the Court has accorded to the agency broad discretion to determine the means that are necessary to effectuate the statute's purpose. For example, in *Mourning v. Family Publications Service, Inc.*⁴⁹ the Court considered the Federal Reserve Board's authority to issue regulations that are "necessary and proper" to effectuate the Truth in Lending Act.⁵⁰ In that case, the Board had issued a regulation that, while regulating conduct not specifically addressed by the statute, was intended to prevent circumvention of the statute's purposes.⁵¹ The Court read the "necessary and proper" language in the statute as requiring the regulations issued by the Board to be reasonably related to the statute's purposes.⁵² Using this standard, the Court upheld the regulation in question since it was a reasonable means of achieving the purposes of the Truth in Lending Act.⁵³

Statutory language authorizing an agency to issue regulations that are "necessary and appropriate" has been construed by the Court to have much the same meaning. In *Permian Basin Area Rate Cases*,⁵⁴ the Court reviewed the decision of the Federal Power Commission to set maximum rates for the sale of natural gas on an area-wide basis.⁵⁵ The Natural Gas Act⁵⁶ directs the FPC to set reasonable rates⁵⁷ and to issue rules, orders, and regulations "necessary or appropriate" to achieve that purpose.⁵⁸ Several producers of natural gas, noting that the statute provides for the regulation of rates set by individual

⁴⁹ 411 U.S. 356 (1973).

⁵⁰ 15 U.S.C. § 1604 (1976).

⁵¹ The Truth in Lending Act requires merchants who extend credit to their customers to make certain disclosures including the amount and rate of finance charges. 15 U.S.C. § 1631 (1976). The Federal Reserve Board issued a regulation that included not only situations involving credit, but also transactions where payment is made in more than four installments, the assumption being that such transactions often include a hidden finance charge. 12 C.F.R. § 226.2(k) (1972).

⁵² *Mourning*, 411 U.S. at 369. *Accord*, *FCC v. Nat'l Citizens Comm. for Broadcasting*, 436 U.S. 775 (1978). In *National Citizens Committee* the Court stated that the FCC's authority, under the Communications Act, 47 U.S.C. § 303 (1976), to issue regulations "necessary to carry out the provisions of the Act," requires only that its regulations not be an unreasonable means of achieving the purposes of the Act. *Id.* at 796.

⁵³ *Mourning*, 411 U.S. at 371.

⁵⁴ 390 U.S. 747 (1968).

⁵⁵ *Id.* at 754.

⁵⁶ 15 U.S.C. § 717 (1976).

⁵⁷ Sections 4(a) and 5(a) of the National Gas Act of 1938, 15 U.S.C. §§ 717c(a), d(a) (1976).

⁵⁸ 15 U.S.C. § 717(o) (1976).

companies, argued that area-wide rates were not authorized by the statute.⁵⁹ The Supreme Court upheld the FPC's regulations setting area-wide rates, finding that the Commission had exercised its discretion in a reasonable manner.⁶⁰ In so doing, the Court noted that the "necessary or appropriate" language only required the FPC to issue regulations that were reasonably related to the statute's purposes,⁶¹ thereby allowing the FPC broad discretion to choose the appropriate means to achieve those purposes. In view of this result and the result in *Mourning*, it seems that section 3(8) grants to OSHA broad discretion similar to that provided the FPC and the Federal Reserve Board. Such discretion would make an OSHA standard consistent with section 3(8) if a reasonable relationship between the standard and the purpose of the OSH Act could be established.

The legislative history of section 3(8) fails to give any indication that the phrase should be given a more restrictive meaning. The provision was identical in all versions of the bill, suggesting that there was no dispute over this language.⁶² It also should be emphasized that the phrase appears in the definition of an OSHA standard, rather than in the rule-making provisions as was the case in *Mourning* and *Permian Basin Area Rate Cases*. This placement further weakens any suggestion that Congress intended to structure the statute so that the phrase would have a more restrictive effect on the standard setting authority granted by the statute than the language interpreted by the Court in the above cases. Thus, it would seem that the phrase grants to the Secretary of Labor broad discretion to choose the means necessary to carry out the purposes of the OSH Act.

*B. The OSH Act's Criteria for Selecting a Permanent Standard
for Toxic Substances: Construing Section 6(b)(5)*

The parameters of the Secretary's authority to choose a permanent standard are further defined in section 6(b)(5) of the OSH Act.⁶³ This section imposes essentially three requirements on the Secretary when promulgating a permanent OSHA standard. First, it directs the Secretary to choose a standard that prevents "material impairment of health or functional capacity."⁶⁴ The courts have not had occasion to decide what constitutes "material" impairment of health. The legislative history indicates, however, that the word "material" was inserted to prevent the Secretary from attempting to regulate

⁵⁹ 390 U.S. at 774.

⁶⁰ *Id.* at 828.

⁶¹ The opinion stated: "This court has repeatedly held that the width of administrative authority must be measured in part by the purposes for which it was conferred." 390 U.S. at 776. (citations omitted).

⁶² The language was mentioned only briefly in committee reports and was identical in the House and Senate versions of the bill. SENATE COMM. ON LABOR AND PUBLIC WELFARE, 92d Cong., 1st Sess., LEGISLATIVE HISTORY OF OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970 166, 832, 1156 (Comm. Print 1971). [hereinafter cited as LEGISLATIVE HISTORY].

⁶³ 29 U.S.C. § 655(b)(5) (1976). See note 24 *supra*.

⁶⁴ *Id.*

negligible hazards.⁶⁵ Second, the Secretary is required to act on the basis of "the best available evidence."⁶⁶ This phrase allows the Secretary to act in circumstances where the scientific knowledge is conflicting or uncertain.⁶⁷ The courts of appeal have construed this language to impose a duty on the Secretary to act even though the facts in dispute are on "the frontier of scientific knowledge" and existing methodology or research is deficient.⁶⁸ Third, section 6(b)(5) directs the Secretary to choose standards that prevent material impairment of health "to the extent feasible."⁶⁹ The appeals courts have construed this feasibility requirement to include both economic and technological feasibility. As for technological feasibility, these courts have allowed the Secretary to set OSHA standards which go beyond the status quo and force improvements in existing technology.⁷⁰ However, the courts of appeal have split on the issue of how to define economic feasibility. While some courts have allowed the Secretary to exercise broad discretion in determining what is economically feasible, other courts have required the Secretary to find that the economic costs of a standard are justified by the benefit provided.

The broad discretion view is held by the District of Columbia and Third Circuits. In *Industrial Union Department v. Hodgson*,⁷¹ the D.C. Circuit considered whether the Secretary had acted improperly in considering the economic impact on an industry of setting an OSHA standard for asbestos.⁷² In upholding the Secretary's decision to take into account economic impact, the court noted that a standard that is "prohibitively expensive is not

⁶⁵ The language in the initial Senate Committee bill read "any impairment of health." (emphasis added) S. REP. NO. 2193, 91st Cong., 2nd Sess. 40; LEGISLATIVE HISTORY, *supra* note 68, at 242. Senator Dominic of Colorado proposed an amendment to delete this portion of § 6(b)(5) in which he noted that:

This requirement is inherently confusing and unrealistic. It could be read to require the Secretary to ban all occupations in which there remains some risk of injury, impaired health, or life expectancy. In the case of all occupations, it will be impossible to eliminate all risks to safety and health. Thus, the present criteria could, if literally applied, close every business in this nation. In addition, in many cases, the standard which might most "adequately" and "feasibly" assure the elimination of the danger would be the prohibition of the occupation itself.

LEGISLATIVE HISTORY, *supra* note 68, at 367. Eventually, after conferring with the bill's sponsors, Senator Dominic offered a substitute amendment that replaced the word "any" with "material." LEGISLATIVE HISTORY, *supra* note 62, at 503.

⁶⁶ 29 U.S.C. § 655(b)(5) (1976). See note 24 *supra*.

⁶⁷ See, e.g., *Soc'y of the Plastic Indus., Inc. v. OSHA*, 509 F.2d 1301, 1308 (2d Cir.), *cert. denied*, 421 U.S. 992 (1975); *Indus. Union Dept. AFL-CIO v. Hodgson*, 499 F.2d 467, 476 (D.C. Cir. 1974).

⁶⁸ *Id.*

⁶⁹ 29 U.S.C. § 655(b)(5). See note 24 *supra*.

⁷⁰ In *Soc'y of Plastics Indus., Inc. v. OSHA*, 509 F.2d 1301, 1309, (2d Cir.) *cert. denied*, 421 U.S. 992 (1975), the appeals court stated: "[t]he Secretary is not restricted by the status quo. He may raise standards which require improvements in existing technologies or which require the development of new technology, and he is not limited to issuing standards based solely on devices already fully developed." (citations omitted). See also *AFL-CIO v. Brennan*, 530 F.2d 109 (3d Cir. 1975) (The OSH Act is technology-forcing).

⁷¹ 499 F.2d 467 (D.C. Cir. 1974) (reviewing an OSHA asbestos standard).

⁷² *Id.*

feasible.⁷³ the court further noted that the Secretary may consider how the cost will affect individual employers and change the competitive structure of the industry as a whole,⁷⁴ but stopped short of requiring the Secretary to do so.

In *AFL-CIO v. Brennan*⁷⁵ the Third Circuit faced the same issue in reviewing the OSHA decision to issue a new standard setting less stringent regulations on the safety of power press operations⁷⁶ because the existing standard was not economically feasible. The court noted that the Secretary could set a standard that would put marginally efficient businesses out of business,⁷⁷ but it added that the Secretary did not have authority to establish a standard that would result in massive economic dislocation in an industry.⁷⁸ Accordingly, the court concluded that the economic costs could be considered in setting a standard.

More recently, in *American Iron and Steel Institute v. OSHA*,⁷⁹ the Third Circuit affirmed this view of economic feasibility. Industry representatives had provided data indicating that the economic impact of OSHA's coke emissions standard would be severe.⁸⁰ The court reasoned, however, that the evidence fell short of demonstrating the "massive dislocation which could characterize an economically infeasible standard."⁸¹ Moreover, the court noted that the Secretary, while not quantifying the likely benefits, had found the substantial costs to be justified in light of the hazards involved.⁸² The court concluded, therefore, that the Secretary had given proper consideration to economic feasibility.⁸³ Thus, prior to the Fifth Circuit Court's review of the benzene standard in *American Petroleum Institute v. OSHA*,⁸⁴ the D.C. and Third Circuit Courts had determined that widespread economic dislocation in an industry would

⁷³ *Id.* at 477.

⁷⁴ *Id.* at 478. The court noted that economic feasibility does not "guarantee the continued existence of individual employers," and that "if the competitive structure of the industry would be otherwise adversely affected — perhaps rendered unable to compete with imports or with substitute products — the Secretary could properly consider that factor." *Id.*

⁷⁵ 530 F.2d 109 (3d Cir. 1975).

⁷⁶ *Id.*

⁷⁷ *Id.* at 123. The court remarked, "Congress did contemplate that the Secretary's rulemaking would put out of business some businesses so marginally efficient or productive as to be unable to follow standards otherwise universally feasible." *Id.*

⁷⁸ The court stated, "We will not impute to congressional silence a direction to the Secretary to disregard the possibility of massive economic dislocation caused by an unreasonable standard." *Id.*

⁷⁹ 577 F.2d 825 (3d Cir. 1978) (OSHA coke oven emissions standard).

⁸⁰ *Id.* at 836.

⁸¹ *Id.* (citation omitted).

⁸² *Id.* The court quoted from the Secretary's findings as follows:

[A]lthough we cannot rationally quantify the benefit of the standard, careful consideration has been given to the question of whether these substantial costs are justifiable in light of the hazards. OSHA concludes that these costs are necessary in order to adequately protect employees from the hazards associated with coke oven emissions.

Id. (quoting 41 Fed. Reg. 46751 (1976)).

⁸³ *Id.* at 836-37.

⁸⁴ 501 F.2d 493 (5th Cir. 1978).

make an OSHA standard economically infeasible, while the economic failure of a few marginally efficient firms would not.⁸⁵ No court had read economic feasibility as a requirement that the Secretary should subject OSHA standards to cost-benefit analysis.

In its review of the benzene standard, the Fifth Circuit Court of Appeals held that economic feasibility required consideration of both the costs and benefits that could be expected to result from an OSHA standard.⁸⁶ In a previous decision,⁸⁷ the Fifth Circuit had held that the Consumer Product Safety Act⁸⁸ required the Consumer Product Safety Commission to rely on cost-benefit analysis in determining the need for its standards.⁸⁹ The Fifth Circuit reasoned that the purpose of the OSH Act was sufficiently similar to give it an analogous reading.⁹⁰ Thus, the court concluded that there must be a reasonable relationship between the expected costs and benefits for an OSHA standard to be valid.⁹¹ With regard to the benzene standard, the court noted that OSHA's failure to quantify the expected benefits of that standard made it impossible to assess whether its benefits were reasonably related to its costs.⁹² Accordingly, the court held the standard to be invalid.⁹³

After the Fifth Circuit's decision in the benzene case, the Sixth Circuit also held that the OSH Act required the Secretary to weigh costs and benefits in setting standards. In *RMI Co. v. Secretary of Labor*,⁹⁴ the Sixth Circuit remanded for further proceedings an enforcement action brought against RMI Co. for a violation of an OSHA noise control standard. The court took this action because the Secretary had failed to determine the economic feasibility of that standard.⁹⁵ The court asserted that a standard was not necessarily feasible merely because it was easily affordable.⁹⁶ Instead, it held that the benefits of a standard must be weighed against its costs.⁹⁷ While declining to suggest exactly

⁸⁵ See text and notes at notes 72-77 *supra*.

⁸⁶ *Id.* at 503.

⁸⁷ *Acqua Slide n' Dive Corp. v. Consumer Prod. Safety Comm'n*, 569 F.2d 831 (5th Cir. 1978).

⁸⁸ Consumer Product Safety Act, 15 U.S.C. § 2051.

⁸⁹ 569 F.2d at 844.

⁹⁰ 581 F.2d at 502. The Consumer Product Safety Act directed the commission to set standards "reasonably necessary to prevent an unreasonable risk of harm." 15 U.S.C. § 2058(c)(2)(A) (1976). The Fifth Circuit read the "reasonably necessary or appropriate" language in § 3(8) of the OSH Act in conjunction with the provision in § 6(b)(5) directing the Secretary to set standards that prevent material harm "to the extent feasible," and concluded that the OSH Act and the Consumer Product Safety Act had "precisely similar requirements" which called for cost-benefit analysis of standards. *Id.* at 502.

⁹¹ *Id.* at 503.

⁹² *Id.* at 505.

⁹³ *Id.*

⁹⁴ 594 F.2d 566 (6th Cir. 1979).

⁹⁵ *Id.* at 573. Enforcement proceedings for violations of OSHA standards are brought before the Occupational Health and Safety Review Commission., 29 U.S.C. § 659(c) (1976). The court, therefore, remanded the case to that body for further proceedings.

⁹⁶ 594 F.2d at 573.

⁹⁷ *Id.*

how costs and benefits are to be weighed, the court noted that such an analysis is essential in determining whether an OSHA standard is feasible.⁹⁸

The Sixth Circuit's decision left the courts of appeal evenly divided on the issue of how the OSH Act directs the Secretary to consider the economic feasibility of an OSHA standard. The D.C. and Third Circuits, choosing widespread economic dislocation in an industry as the characteristic indicating infeasibility, would allow the Secretary to set standards that drove marginally efficient employers out of business. The Fifth and Sixth Circuits, reasoning that a standard is not feasible if its costs are disproportionate to its benefits, required the Secretary to use cost-benefit analysis to determine feasibility.

II. THE SUPREME COURT'S DECISION: *INDUSTRIAL UNION DEPARTMENT V. AMERICAN PETROLEUM INSTITUTE*

A. *The Plurality Opinion*

In *Industrial Union Department AFL-CIO v. American Petroleum Institute*⁹⁹ the Supreme Court faced the question whether the Secretary had exceeded his authority under the OSH Act in setting a standard that limited benzene exposure to the lowest level technologically and economically achievable without widespread harm to the affected industries. The Secretary's decision to set the benzene standard at that level was a product of several determinations. First, because of the absence of evidence clearly indicating that long-term exposure to benzene in any quantity was risk-free, the Secretary determined that the exposure level should be set at the lowest level feasible.¹⁰⁰ Then, taking a liberal reading of the feasibility restriction in section 6(b)(5), he determined that the 1 ppm standard was feasible since it could be achieved without widespread harm to the affected industries.¹⁰¹ Thus, in reviewing the benzene standard, the Supreme Court was presented with the question whether the Secretary had erred by exceeding his authority under the OSH Act when he set the benzene standard in this fashion.

The plurality opinion, written by Justice Stevens, shared the Fifth Circuit's view that the "reasonably necessary or appropriate" language in the Act's definition of an OSH standard imposed some restrictions on the Secretary's authority to set standards.¹⁰² For a standard to fall within this

⁹⁸ *Id.* The court held that the Secretary had the burden of proving feasibility and added, In order to justify the expenditure, there must be a reasonable assurance that there will be an appreciable and corresponding improvement in working conditions. The determination of how the cost-benefit balance tips in any given case must necessarily be made on an ad hoc basis. We do not today prescribe any rigid formula for conducting such analysis.

Id.

⁹⁹ 100 S.Ct. 2844 (1980).

¹⁰⁰ 43 Fed. Reg. at 5932 (1978).

¹⁰¹ 43 Fed. Reg. at 5939 (1978).

¹⁰² 100 S.Ct. at 3850.

definition, Justice Stevens concluded, the Secretary must first find that there is a significant risk of material health impairment that the standard will address.¹⁰³ Without such a threshold finding, Stevens argued, a standard could not be characterized as reasonably necessary or appropriate to effectuate the Act's purposes.¹⁰⁴

Although the Secretary had found that benzene causes cancer, he had not found that workers were exposed to a significant risk of such harm at the currently permissible exposure level. The plurality, therefore, upheld the lower court's decision to invalidate the new, more restrictive standard without determining whether the Fifth Circuit was correct in holding that the OSH Act also required the Secretary to engage in cost-benefit analysis of OSHA standards to determine their economic feasibility.¹⁰⁵

In determining that the Secretary had failed to find a significant risk under the former 10 ppm standard, Stevens reviewed the rationale and procedure involved in the decision to issue the new 1 ppm standard. He stated that the evidence linking benzene exposure to cancer, on which the Secretary had relied, did demonstrate a linkage, but at exposure levels far above the current permissible level of 10 ppm.¹⁰⁶ While recognizing that estimating the harm that will result from low levels of exposure to benzene is a highly speculative matter,¹⁰⁷ Stevens argued that OSHA, by assuming that *any* exposure to benzene is unacceptable, had placed upon those opposing the proposed standard the impossible burden of proving that a safe level of exposure existed.¹⁰⁸ He noted that, in setting the 1 ppm benzene standard, OSHA had applied its policy for regulating carcinogens having no proven safe exposure level.¹⁰⁹ That policy was to set a standard at the lowest feasible level.¹¹⁰ Reflecting on this

¹⁰³ *Id.* The court held,

We agree with the Fifth Circuit's holding that § 3(8) requires the Secretary to find, as a threshold matter, that the toxic substance in question poses a significant health risk in the workplace and that a new, lower standard is therefore 'reasonably necessary or appropriate to provide safe or healthful employment and places of employment.' *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.* at 2854. Although OSHA originally had believed that the exposure level in one of the studies was between zero and 15 ppm., the authors of that study later admitted that the exposure levels were, in fact, much higher, perhaps as much as 1000 ppm. *Id.* at 2854 n.16. In its explanation of the benzene standard OSHA stated: "[i]t is impossible to derive any conclusions regarding dose-response relationships for benzene." 43 Fed. Reg. at 5946 (1978).

¹⁰⁷ Individual susceptibility to harm from carcinogens varies greatly. Moreover, because of the lack of data regarding long-term exposure to low doses of such substances it is often impossible to construct a reliable dose-response curve to predict the harm that will occur at any given level of exposure. In such cases, it is also impossible to determine a safe level. See McGarity, *Substantive and Procedural Discretion in Administrative Resolution of Science Policy Questions: Regulating Carcinogens in EPA and OSHA*, 67 GEO. L. J. 729, 733-36. (1979). [hereinafter cited as McGarity].

¹⁰⁸ 100 S.Ct. at 2861 n.39.

¹⁰⁹ 100 S.Ct. at 2861.

¹¹⁰ *Id.* at 2861. OSHA has adopted a "generic" policy to guide its regulation of all carcinogens. Under this policy the exposure limit for a substance with no proven safe dose level would be set at the lowest level feasible. 45 Fed. Reg. 5219-20 (1980). The policy formally took

standard-setting process, Stevens asserted that OSHA, by assuming that no safe exposure level existed, had evaded its burden of determining that a significant risk was posed by exposure under the current standard.¹¹¹

Indeed, Stevens argued that OSHA's reading of the Act ignored the need to consider risk.¹¹² He noted that OSHA regarded the "reasonably necessary or appropriate" phrase in section 3(8) as merely requiring its standards to be reasonably expected to improve safety in the work environment.¹¹³ Stevens objected to this broad construction of the statute's purposes and argued that such a reading implied that the Act's purpose was to produce absolute safety.¹¹⁴ Instead, Stevens believed that the Act was intended to eliminate only significant risks of harm, not to require that the workplace be risk-free,¹¹⁵ and he cited legislative history to support this claim. In particular, Justice Stevens discussed the Senate Committee's decision to limit the scope of the Act's coverage to "material impairment of health" rather than "any impairment of health."¹¹⁶ He argued that this change indicated Congress's desire to avoid regulation of not only trivial types of harm, but also insignificant risks of harm.¹¹⁷

Stevens also pointed to other provisions in the Act that indicate that its purpose is not to eliminate all risks of harm. In particular, he noted that the Act allows the Secretary to set standards for "toxic chemicals" and "harmful physical agents" rather than for substances in general.¹¹⁸ In addition, he pointed to the requirement of *grave* risk contained in the provision regarding emergency temporary standards as proof that something more than speculation about possible harm is required before the Secretary can set standards.¹¹⁹ Finally, he noted that OSHA's reading of the statute would give the Secretary authority to regulate all substances and conditions in the work environment, even when there was no significant risk of harm.¹²⁰ Such unbridled discretion,

effect on April 21, 1980, and was not in force at the time OSHA established the benzene standard. As Justice Stevens pointed out, however, OSHA took this same approach in setting the benzene standard. 100 S.Ct. at 2861 n.39.

¹¹¹ *Id.* at 2869. The very purpose of this policy view is administrative convenience. OSHA asserts that it should not be forced to determine whether there is an acceptable exposure level for each carcinogen on a case-by-case basis. By presuming any level of exposure to be harmful, OSHA can streamline its regulatory process by concentrating its efforts on determining the lowest level achievable. 45 Fed. Reg. 5013 (1980). See also Berger and Riskin, *Economic and Technological Feasibility under OSHA*, 7 ECOL. L. Q. 285 (1978).

¹¹² 100 S.Ct. at 2863-64.

¹¹³ *Id.* at 2863.

¹¹⁴ *Id.* at 2864.

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 2866-68. See note 65 *supra*.

¹¹⁷ 100 S.Ct. at 2866.

¹¹⁸ *Id.* at 2864.

¹¹⁹ *Id.* at 2869 n.59. Justice Stevens cited the appeals court decision in *Florida Peach Growers Ass'n v. Dept. of Labor*, 489 F.2d 120 (5th Cir. 1974), and *Dry Color Mfrs. Ass'n v. Dept. of Labor*, 486 F.2d 98 (3d Cir. 1978), as support for the notion that the Secretary's authority is carefully constricted by the OSH Act. *Id.*

¹²⁰ *Id.* at 2866.

he warned, could be an unconstitutional delegation of legislative authority to an administrative agency.¹²¹

Stevens then explained his own reading of the statute. In his view, the burden of proof is on OSHA to demonstrate the need for a new standard.¹²² This requires the Secretary to determine that it is "more likely than not" that exposure at the current permissible level presents a significant risk of material health impairment.¹²³ He noted that in this case OSHA, by assuming that no safe level existed, had failed even to attempt to meet this burden of proof.¹²⁴ Additionally, he explained that the "best available evidence" provision of the Act does not require OSHA to support its determinations with scientific certainty.¹²⁵ Stevens cited with approval the approaches taken by the lower courts in allowing OSHA to rely on data that is "on the frontier of scientific knowledge."¹²⁶ He noted that the Secretary may use such data so long as it is supported by "a body of reputable scientific thought."¹²⁷ At the same time, he declined to comment on what specific factual findings are required to support a finding of significant risk.¹²⁸ He did assert, however, that risk must be "quantified sufficiently to enable the Secretary to characterize it as significant in an understandable way."¹²⁹ Stevens also indicated that, in issuing other standards, OSHA has demonstrated that it is able to determine the magnitude of a risk by a variety of methods.¹³⁰

Stevens thus read the language and legislative history of the OSH Act as requiring only the elimination of significant risks, not the achievement of ab-

¹²¹ *Id.*

¹²² *Id.* at 2869.

¹²³ *Id.*

¹²⁴ *Id.* at 2870.

¹²⁵ *Id.* at 2871.

¹²⁶ *Id.* (citing *Indus. Union Dept. v. Hodgson*, 499 F.2d 467 (D.C. Cir. 1974)); *Soc'y of The Plastics Indus., Inc. v. OSHA*, 509 F.2d 1301 (2d Cir 1975). See note 70 *supra*.

¹²⁷ 100 S.Ct. at 2871.

¹²⁸ *Id.* at 2872.

¹²⁹ *Id.* at 2866.

¹³⁰ *Id.* at 2871. Stevens noted with approval the techniques used by OSHA to estimate the risks involved in exposure to coke oven emissions in *Am. Iron and Steel Inst. v. OSHA*, 577 F.2d 825 (3d Cir. 1978). The court granted certiorari in this case on the same day it decided the *Industrial Union Dept. case*. Industry representatives subsequently filed motions to withdraw their challenge to the OSHA coke oven emissions standard. [1980] 487 EMPL. SAFETY AND HEALTH GUIDE (CCH) 1.

Justice Stevens also stated that in many cases OSHA can make use of data from animal experiments in determining whether a substance poses a significant risk at current exposure levels. He noted that OSHA had relied on such data in setting its vinyl chloride standard and in setting standards for other carcinogens. *Id.* at 2872. While acknowledging that animal studies could not be used in estimating the risk posed by exposure to benzene (because benzene has not been found to cause cancer in animals), Stevens remarked that OSHA had failed to make use of data from a number of epidemiological studies involving benzene exposure. *Id.* He added: "Although the agency stated that this evidence was insufficient to construct a precise correlation between exposure levels and cancer risks, it would at least be helpful in determining whether it is more likely than not that there is a significant risk at 10 ppm." *Id.* at n.64.

solute safety. For this reason, he asserted that the Secretary must find it more likely than not that there is a significant risk at the current exposure level before he is with authority to set a more stringent standard.¹³¹ He also made it clear that the Secretary's finding of risk need not be supported by scientific certainty since section 6(b)(5) expressly directs him to act on the "best available evidence."¹³² Stevens strongly objected, however, to the Secretary's reliance on the mere assumption that any exposure to benzene poses a significant risk in setting the 1 ppm benzene standard.¹³³ He concluded that the failure to find that a significant risk was probably present under the prior 10 ppm standard rendered the new standard invalid.¹³⁴

B. *The Concurring Opinions*

There were three concurring opinions in this case, written by Chief Justice Burger,¹³⁵ Justice Powell¹³⁶ and Justice Rehnquist.¹³⁷ Each took a different view of the Secretary's authority to set standards. Chief Justice Burger, agreeing entirely with the plurality's reasoning, emphasized the differing functions of the courts and administrative agencies and argued that courts should carefully avoid substantive revision of agency policy while keeping the agency within the limits of its statutory authority.¹³⁸ In his concurring opinion, Justice Powell also agreed with the plurality's reasoning insofar as it required the Secretary to find a significant risk.¹³⁹ Powell argued, however, that the statute also requires the Secretary to find that the benefits of a standard bear a reasonable relationship to their cost.¹⁴⁰ Justice Rehnquist, concurring only in the Court's judgment, argued that section 6(b)(5) does not imposed adequate limits on the Secretary's authority to set standards and that it, therefore, constitutes an invalid delegation of legislative authority.¹⁴¹

Chief Justice Burger, in his opinion, reinforced the plurality's view of the Secretary's obligation to find a significant risk before he sets a standard.¹⁴² He also agreed that the risk must be "sufficiently quantified to characterize it as significant in an understandable way."¹⁴³ The Chief Justice distinguished between the proper roles of administrative agencies and the courts in the rule-making process, and emphatically disclaimed the notion that the court was engaging in revision of agency policy by means of the significant risk requirement.¹⁴⁴ In his view, determining whether a risk is significant is a decision for

¹³¹ *Id.* at 2850.

¹³² See text and notes at notes 125-27, *supra*.

¹³³ See text and notes at notes 106-11, *supra*.

¹³⁴ 100 S.Ct. at 2850.

¹³⁵ *Id.* at 2874 (Burger, C.J., concurring).

¹³⁶ *Id.* at 2875 (Powell, J., concurring).

¹³⁷ *Id.* at 2878 (Rehnquist, J., concurring).

¹³⁸ *Id.* at 2874-75.

¹³⁹ *Id.* at 2875.

¹⁴⁰ *Id.* at 2877-78.

¹⁴¹ *Id.* at 2886.

¹⁴² *Id.* at 2874. (Burger, C.J., concurring).

¹⁴³ *Id.*; see text at note 129 *supra*.

¹⁴⁴ *Id.* at 2875.

the Secretary to make, while the court's role is to ensure that the Secretary acts within the limits of his statutory authority.¹⁴⁵ At the same time, the Chief Justice took issue with the view that the Secretary has a statutory obligation to remedy all risks of harm. He argued that the Secretary had both the responsibility and the authority to refrain from the use of extravagant regulatory schemes to remedy minimal risks.¹⁴⁶ Like the plurality, Chief Justice Burger avoided the question whether cost-benefit analysis is required, by setting aside the benzene standard on the grounds that the Secretary had failed to make the threshold finding of significant risk.¹⁴⁷

In his concurring opinion, Justice Powell differed from the plurality's reasoning in two important respects. First, he argued that the Secretary had come close to carrying his burden of proof on the issue of significant risk.¹⁴⁸ Second, he addressed the cost-benefit issue and concluded that the OSH Act requires the Secretary to find a reasonable relationship between a standard's costs and benefits.¹⁴⁹ On the issue of whether the Secretary had found a significant risk at the current exposure level, Powell argued that the Secretary had not relied solely on a carcinogen policy in adopting the new standard. Instead, he noted that OSHA had provided specific findings to support its determination that the substantial costs of the standard were justified in light of the hazard it was intended to alleviate.¹⁵⁰ Powell contended that this determination would itself amply demonstrate the existence of a significant risk.¹⁵¹ Powell, however, argued that such an approximation of the risk's magnitude would only be adequate in cases where the best available evidence indicated that quantification of risk was impossible.¹⁵² Thus, he reduced the issue of significant risk in this case to two questions. Does substantial evidence in the record support the claim that the risk cannot be quantified?¹⁵³ If so, then, does substantial evidence in the record support the finding that the risks are significant?¹⁵⁴ Without noting his reasons, Powell concluded that OSHA had failed to carry its burden of proof on the threshold requirement.¹⁵⁵

¹⁴⁵ *Id.* Chief Justice Burger noted: "When the facts and arguments have been presented and duly considered, the Secretary must make a policy judgment as to whether a specific risk of health impairment is significant in terms of the policy objectives of the statute." *Id.*

¹⁴⁶ *Id.* The Chief Justice summed up this point with the following caveat: "Perfect safety is a chimera; regulation must not strangle human activity in the search for the impossible." *Id.*

¹⁴⁷ *Id.* at 2874.

¹⁴⁸ *Id.* at 2877.

¹⁴⁹ *Id.* On this point Justice Powell took a position quite similar to that held by the Fifth Circuit Court of Appeals. "An occupational health standard is neither 'reasonably necessary' nor 'feasible' if it calls for expenditures wholly disproportionate to the expected health and safety benefits." *Id.*; compare *Am. Petroleum Inst. v. OSHA*, 581 F.2d 493, 503.

¹⁵⁰ *Id.* at 2876. (Powell, J., concurring). This is the same agency finding relied upon by the Third Circuit Court of Appeals in determining that the Secretary properly had considered economic feasibility in *Am. Iron and Steel Inst. v. OSHA*. See note 82 *supra*.

¹⁵¹ 100 S.Ct. at 2876.

¹⁵² *Id.*

¹⁵³ *Id.* at 2876-77.

¹⁵⁴ *Id.* at 2877.

¹⁵⁵ *Id.*

Powell, however, went on to the question whether the Act required cost-benefit analysis of OSHA standards. Powell stated that a standard was not "reasonably necessary" or "feasible" unless its benefits were *reasonably related* to its cost.¹⁵⁶ Any approach that failed to restrict the Secretary's authority in this fashion, Powell argued, would result in a serious misallocation of resources devoted to employee health and safety.¹⁵⁷ Accordingly, Powell concluded that the OSH Act required cost-benefit analysis, including an explanation of the method used to balance economic cost to the industry against the value of the standard's health and safety benefits.¹⁵⁸

Justice Rehnquist joined in the court's judgment, but rejected entirely the plurality's reasoning. Instead, Rehnquist contended that, in fashioning the structure of the OSH Act, Congress failed to provide adequate guidelines to direct the Secretary in setting standards.¹⁵⁹ In particular, he focused on the language of section 6(b)(5), which requires the Secretary to set a standard that assures employee safety "to the extent feasible."¹⁶⁰ Rehnquist noted that neither the Act nor its legislative history clarified how the Secretary should determine what is "feasible."¹⁶¹ In fact, Rehnquist asserted that Congress chose to avoid this difficult legislative decision by delegating it to the Secretary.¹⁶² He concluded that this rendered invalid the first sentence of section 6(b)(5), which authorizes the Secretary to set "feasible" standards, as an unconstitutional delegation of legislative authority to an administrative agency.¹⁶³ For this reason, Rehnquist found the benzene standard invalid and would invalidate the first sentence of section 6(b)(5) as it applies to toxic substances for which no safe level of exposure is known.¹⁶⁴ He noted that this solution would eliminate the criteria of feasibility. Thus, in Rehnquist's view, the Secretary would be forced to set standards which are absolutely safe or none at all.¹⁶⁵

C. *The Dissenting Opinion*

The four dissenting justices, in an opinion written by Justice Marshall, also dismissed the plurality's significant risk requirement as a fabrication unrelated to the Act or its legislative history.¹⁶⁶ Instead, Marshall contended that the OSH Act's purpose was to improve the health and safety of American

¹⁵⁶ *Id.*

¹⁵⁷ *Id.* at 2878.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.* at 2879. (Rehnquist, J., concurring).

¹⁶⁰ *Id.* at 2878-79.

¹⁶¹ *Id.* at 2883. Justice Rehnquist remarked that "the feasibility requirement, as employed in § 6(b)(5) is a legislative mirage . . . assuming any form desired by the beholder." *Id.*

¹⁶² *Id.* at 2885.

¹⁶³ *Id.* at 2886.

¹⁶⁴ *Id.* at 2887.

¹⁶⁵ *Id.*

¹⁶⁶ *Id.* at 2897. (Marshall, J., dissenting).

workers¹⁶⁷ and that section 3(8) should be read to allow the Secretary to set any standard that could be reasonably expected to achieve that purpose.¹⁶⁸ Marshall asserted, therefore, that the benzene standard should be upheld so long as the Secretary has acted reasonably and in compliance with the procedure set forth in the Act.¹⁶⁹ Noting that OSHA had found that benzene causes cancer, that the existing standard involved more risk than the lower standard, and that benefits would result from the lower standard,¹⁷⁰ Marshall argued that these findings indicated the reasonableness of the decision to set a new standard.¹⁷¹ He then addressed the question whether the Secretary had fully complied with the statute's procedural requirements. Marshall noted that section 6(b)(5) authorized the Secretary to set the most protective standard feasible.¹⁷² Concurring in OSHA's reading of the feasibility requirement, he argued that the term "feasible" should be given its ordinary meaning of achievable.¹⁷³ Since the proposed benzene standard was both technologically and economically achievable without widespread harm to the industry, Marshall considered it feasible.¹⁷⁴ Thus, he concluded that the Secretary had acted wholly within his statutory authority in setting the standard.¹⁷⁵

III. THE COURT'S DECISION TO REQUIRE A THRESHOLD FINDING OF SIGNIFICANT RISK

A. *The Relationship between the OSH Act's Purposes and its Definition of an OSHA Standard*

The Court's use of the language "reasonably necessary or appropriate," in section 3(8) of the OSH Act, to restrict the Secretary of Labor's authority to set OSHA standards can be reconciled with its interpretation of similar language in prior cases.¹⁷⁶ In those cases the Court required that the agency's regulations be reasonably related to the statutory purposes.¹⁷⁷ In *Mourning*,¹⁷⁸ for example, the Court held that a regulation that is a reasonable means of accomplishing the statutory purpose is not necessarily invalid simply because it is not specifically called for in that statute.¹⁷⁹ In *Industrial Union Department AFL-CIO v. American Petroleum Institute*, however, the Court determined that by pro-

¹⁶⁷ *Id.* at 2889.

¹⁶⁸ *Id.* at 2897.

¹⁶⁹ *Id.* at 2896.

¹⁷⁰ *Id.* at 2887-88.

¹⁷¹ *Id.* at 2888, 2896.

¹⁷² *Id.* at 2889-90.

¹⁷³ *Id.* at 2902-03.

¹⁷⁴ *Id.* at 2902-03.

¹⁷⁵ *Id.* at 2888, 2904.

¹⁷⁶ *FCC v. Nat'l Citizens Comm. for Broadcasting*, 436 U.S. 775 (1978); *Mourning v. Family Publications Serv., Inc.*, 411 U.S. 356 (1973); *Permian Basis Area Rate Cases*, 390 U.S. 747 (1968).

¹⁷⁷ *Id.* See text and notes at notes 47-62 *supra*.

¹⁷⁸ *Mourning v. Family Publications Service, Inc.* 411 U.S. 356 (1973).

¹⁷⁹ *Id.* at 373.

mulgating the benzene standard the Secretary had exceeded the OSH Act's statutory purpose because he had failed to identify a relationship between the selection of a lower standard and the reduction of significant risk.¹⁸⁰ The emphasis in the benzene case, then, was upon the relationship between the regulation and the statutory purpose. Thus, a court may sustain a regulation that falls outside the explicit language of the statute, if it serves a statutory purpose, but a court will not sustain a regulation that has not been shown to be related to that purpose.

This reading of section 3(8) adds importance to the Court's view of the OSH Act's purposes. Citing the requirement of "material" harm in section 6(b)(5)¹⁸¹ and other provisions¹⁸² of the OSH Act as evidence of a clear congressional intent to avoid a bill that would attempt to create a risk-free work environment,¹⁸³ the Court determined that the Act requires some degree of risk to be tolerated.¹⁸⁴ The Court reasoned that these provisions restricted the scope of the OSH Act's purposes to the reduction of significant risks;¹⁸⁵ when such a risk is not present the Secretary is not empowered to set an OSHA standard.¹⁸⁶

B. *The Likely Impact of the Requirement of Significant Risk*

It is difficult to determine how well the threshold requirement of significant risk actually serves its purpose of keeping the Secretary within his statutory authority while not impinging on his ability to reduce serious hazards. Much of this difficulty stems from the Court's decision to leave the requirement somewhat flexible by refusing to specify how a significant risk must be demonstrated.¹⁸⁷ Nevertheless, by focusing on the Court's reasons for adopting this requirement, it is possible to estimate in a general way how OSHA's standard-setting activities are likely to be affected.

First, the threshold requirement of significant risk makes it clear that the Secretary's authority to set OSHA standards is limited not only by the nature of the harm threatened, but also by the probability of its occurrence.¹⁸⁸ In addition to finding "material" harm, the Secretary must now also find that the probability of such harm is "significant." This undoubtedly will impede OSHA's efforts to establish strict standards in instances where there is little or no

¹⁸⁰ 100 S.Ct. at 2863.

¹⁸¹ 29 U.S.C. § 655(b)(5) (1976). See note 24 *supra*.

¹⁸² See text at notes 117 & 121 *supra*.

¹⁸³ 100 S.Ct. at 2866-2868; see also note 65 *supra*.

¹⁸⁴ *Id.* at 2864.

¹⁸⁵ *Id.*

¹⁸⁶ *Id.* The Court summarized the Secretary's duty by stating: "[B]efore he can promulgate any permanent health or safety standard, the Secretary is required to make a threshold finding that a place of employment is unsafe — in the sense that significant risks are present and can be eliminated or lessened by a change in practices." *Id.*

¹⁸⁷ See text and notes at notes 127-30 *supra*.

¹⁸⁸ The plurality's discussion emphasized the fact that many ordinary activities involve risks of material harm which cannot be characterized as "unsafe" because the possibility of harm is so remote. 100 S.Ct. at 2864.

evidence that the current standard will result in harm to employees. To this extent, the significant risk requirement apparently distinguishes between a demonstrable or actual risk of harm and mere speculation that such harm may occur.¹⁸⁹

Thus, the threshold requirement of significant risk is an attempt to keep OSHA from avoiding its burden of proof in showing the need for a standard.¹⁹⁰ Quite clearly, the Court viewed with hostility OSHA's decision to base its justification on policy arguments rather than facts.¹⁹¹ The Court may well have seen OSHA's procedure as a threat to the statutory requirement that the Secretary's findings be supported by substantial evidence.¹⁹²

The Court's decision also ought to dampen the enthusiasm with which OSHA has been viewing the use of policy judgments, as a substitute for the need to rely on facts, in determining the appropriate standard for each toxic substance it regulates.¹⁹³ These policy judgments would be embodied in categorical or "generic" standards.¹⁹⁴ The purpose of such generic standards is to allow OSHA to establish in one rulemaking proceeding a single standard that could be applied to an entire category of toxic substances, thereby eliminating the need to set standards on a case-by-case basis.¹⁹⁵ While the Court did not suggest that OSHA may not use a generic policy to prove an identical fact regarding a group of related materials,¹⁹⁶ the Court's approach implicitly rejects the use of such policies in instances where the agency lacks the data necessary to support a determination of significant risk as required by the Act.¹⁹⁷ For this reason, OSHA should avoid reliance on categorical assumptions concerning the lack of a safe exposure level or the probability of harm where the data is simply insufficient to demonstrate the validity of such a claim.

At the same time, the Court's treatment of this case should not be read as an attempt to curtail OSHA's authority to regulate in areas of scientific uncer-

¹⁸⁹ Both the plurality opinion and the Chief Justice's concurring opinion argue that the mere possibility of harm does not justify an OSHA standard. *Id.* at 2869, 2875.

¹⁹⁰ *Id.* at 2869.

¹⁹¹ *Id.* at 2860, 2870.

¹⁹² See text and notes at note 10 *supra*.

¹⁹³ 45 Fed. Reg. 5013 (1980).

¹⁹⁴ *Id.*

¹⁹⁵ 45 Fed. Reg. 5013 (1980). OSHA cited "administrative feasibility" as the reason for adopting generic policies. It argues that "the necessity to resolve basic scientific policy issues anew, in each rulemaking, has increased the burden on the Dept. of Labor and the scientific community. . . ." *Id.*

¹⁹⁶ The plurality does not address the issue of how such generic policies may be used to set standards. Justice Powell, however, notes: "[A]lthough I would not rule out the possibility that the necessary findings could rest in part on generic policies properly adopted by OSHA, no properly supported agency policies are before us in this case." 100 S.Ct. at 2875.

¹⁹⁷ *Id.* at 2871. A lack of reliable data, while relevant to the issue of how the risk must be quantified, does not relieve the necessity of finding a significant risk. In the words of Justice Stevens: "[A]lthough the agency has no duty to calculate the exact probability of harm, it does have an obligation to find that a significant risk is present before it can characterize a place as unsafe." *Id.*

tainly. The Court expressly took a liberal view of OSHA's authority to regulate on the basis of "the best available evidence," declaring that it will allow OSHA to act when the available data is conflicting and uncertain.¹⁹⁸ In prior cases involving this problem OSHA had relied on expert testimony to support its interpretation of the data.¹⁹⁹ The Court's decision clearly endorses this use of expert testimony.²⁰⁰ Similarly, the Court took a liberal view of the need to quantify risk.²⁰¹ The Court seems interested primarily in having the agency consider all the available data and make its best estimation of the magnitude of the risk involved before it decides to act.²⁰² This approach suggests that when the risk can be quantified, OSHA should do so, and the Secretary should then rely on this estimate of harm to determine whether a significant risk is present. When the available data makes exact quantification of the risk impossible,²⁰³ however, OSHA may use the extant data to produce a range of estimates regarding the magnitude of the risk involved. In some cases, the Secretary may be able to determine that the range itself demonstrates that it is more likely than not that a significant risk is present. Alternatively, where the degree of risk is less certain, OSHA could use these estimates to rank toxic substances in terms of their probable risk of harm.²⁰⁴ This ranking would allow the Secretary to set priorities in regulating substances based on risk, and to find that the risk of harm posed by certain substances is, relative to other risks, significant. Since this comparative approach involves reliance on the best evidence available to quantify risk, it would seem to comply with the requirement that OSHA must quantify the risk sufficiently to allow the Secretary to characterize it as significant in an understandable way.²⁰⁵

Finally, as for the fear that the threshold requirement allows a reviewing court to substitute its own judgment of significance for that of OSHA, the opinions in this case gave no indication that the Court intends to take that course.

¹⁹⁸ See text and notes at notes 127-31 *supra*.

¹⁹⁹ 100 S.Ct. at 2871 n.64.

²⁰⁰ *Id.* at 2872. See note 201 *infra*.

²⁰¹ *Id.* Justice Stevens characterized the situation as follows: "[S]o long as they are supported by a reputable body of thought, the agency is free to use conservative assumptions in interpreting the data, risking error on the side of over-protection. . . ." 100 S.Ct. at 2871.; see also text at note 129 *supra*.

²⁰² 100 S.Ct. at 2871 n.62 (plurality quoting from dissenting opinion at 2896). "Factual determinations can at most define the risk in some statistical way; the judgment whether that risk is tolerable cannot be based solely on a resolution of facts." *Id.*

²⁰³ Because of a lack of scientific data regarding the long-term effects of exposure to toxic substances at low exposure levels, it is often necessary to estimate the probable effect on health from studies involving short-term exposure at high exposure levels. Often it is impossible to predict the health effects of a given exposure level with precision. See Leape, *Quantitative Risk Assessment in the Regulation of Environmental Carcinogens*, 4 HARV. ENV'T'L L. REV. 86 (1980). See also McGarity, note 109 *supra*.

²⁰⁴ In the summary accompanying its generic policy for carcinogens OSHA noted that risk assessment techniques can be used to establish priorities among the carcinogens it intends to regulate. 45 Fed. Reg. 5200-01 (1980).

²⁰⁵ 100 S.Ct. at 2866; see text at note 129 *supra*.

The Chief Justice, in particular, stressed that the court is not free to engage in substantive revision of agency policy.²⁰⁶ This suggests that the Secretary's determination of significance would be upheld as long as he or she had acted reasonably and in accordance with the requirements of the Act.²⁰⁷

IV. THE UTILITY OF THE REQUIREMENT OF SIGNIFICANT RISK

A. *Depreciating the Value of a Cost-Benefit Approach*

The Supreme Court's decision in this case consisted of a number of divergent opinions and a bare judgment, which carefully avoided any determination whether the OSH Act requires OSHA to weigh the costs and benefits of its standards.²⁰⁸ Nevertheless, adoption of the plurality position, which requires the Secretary of Labor to make a threshold finding of significant risk before issuing an OSHA standard, can keep OSHA from exceeding its statutory authority, while allowing it to protect employees from industrial hazards in an effective manner. Successful application of this standard should undermine support for the more controversial cost-benefit approach. Subsequent court decisions ought to adopt this result because the significant risk requirement, in contrast to cost-benefit analysis, is consistent with the basic purpose of the OSH Act,²⁰⁹ and is the more practical approach to occupational health and safety.²¹⁰

A cost-benefit requirement would broaden the meaning of economic feasibility in Section 6(b)(5) of the Act²¹¹ to require the Secretary of Labor to find that the anticipated costs of a standard are reasonable in light of its expected benefits.²¹² Yet, the cost-benefit approach goes far beyond a determination of feasibility. In effect, it requires a determination of cost-effectiveness. It is one thing to say that a standard is not feasible if it threatens the viability of the regulated industry.²¹³ It is quite another to determine that a standard, which imposes little cost, is not feasible because it is expected to save too few

²⁰⁶ 100 S.Ct. at 2875.

²⁰⁷ The D.C. Circuit Court of Appeals recently took this approach in *United Steelworkers of America AFL-CIO v. Marshall*, No. 79-1048 (D.C. Cir. August 15, 1980), in which it lifted a March 1979 stay against the enforcement of an OSHA standard for lead exposure. The Court held that the significant risk requirement was satisfied since OSHA did not rely on categorical assumptions, but rather on evidence concerning the specific effects of lead exposure at several different levels. *Id.* at 106. The Court held that the standard was valid because it fell within the "zone of reasonableness" established by the evidence of a significant risk of material harm. *Id.* at 129.

²⁰⁸ 100 S.Ct. 2863. See note 38 *supra*.

²⁰⁹ See note 3 *supra*.

²¹⁰ See text and notes at notes 219-21 *infra*.

²¹¹ 29 U.S.C. § 655(b)(5) (1976). See note 24 *supra*.

²¹² See Brief for Respondents at 3-4, *Indus. Union Dept. AFL-CIO v. A.P.I.*, 100 S.Ct. 2844 (1980).

²¹³ This is the position taken by the D.C. and Third Circuit Courts of Appeals. See text and notes at notes 71-85 *supra*.

lives to justify that cost.²¹⁴ Neither the language of the Act,²¹⁵ nor its legislative history,²¹⁶ indicates that Congress intended to restrict the protections afforded by OSHA standards by requiring them to be cost-effective.

The notion that economic cost to an industry can, or should, be weighed against the value of its employees' health is not only foreign to the language and purpose of the OSH Act, but it also attempts to conceal a value judgment behind the impersonal facade of objective analysis. Health does not translate easily into dollars, particularly when the dollars held by one party are weighed against the health of another.²¹⁷ Also, because the determination of cost-effectiveness will have a direct prospective impact on the safety of employees, it is distinguishable from an attempt to value the health of another made in the context of a personal injury recovery. Simply stated, cost-benefit analysis of individual OSHA standards involves pricing the physical well-being of healthy employees and determining whether that well-being is worth preserving after considering the likely impact of protective measures on the financial interests of the industry involved. There is nothing analytically objective about such a determination, and the criteria for making it are not found in the OSH Act.²¹⁸

The cost-benefit approach inevitably would raise questions as to how far the courts are willing to go in restricting the regulatory options open to OSHA when it is faced with a significant risk of material harm to employees. There obviously will be difficulties in determining the value of human lives and

²¹⁴ See text and notes at notes 90-98 *supra*.

²¹⁵ Other statutes use language such as "unreasonable risk . . . taking into account the economic, social and environmental costs" when they require cost-benefit analysis. Toxic Substances Control Act, 15 U.S.C. § 2605a (1976). See Consumer Product Safety Act, 15 U.S.C. § 2056(a).

²¹⁶ As Justice Rehnquist noted, the legislative history does not support the notion that the feasibility provision provides a means of weighing the costs and benefits of a standard. 100 S.Ct. at 2883. In fact, Senator Dominic's comments on § 6(b)(5) support the notion that "feasible" was intended to be read as "achievable." See note 65 *supra*. The dissenting opinion by Justice Marshall takes this same view. *Id.* at 2902-03.

²¹⁷ The problem of translating health benefits into dollars is not present when comparing two standards, each having identical benefits but imposing different costs. Such a comparison, however, does not determine which standard is feasible, but merely indicates which is more cost-efficient.

²¹⁸ The legislative history of the OSH Act contains ample evidence of a congressional concern for keeping the criteria for setting standards separate from considerations of the standard's impact on an industry's profits. Senator Eagleton, for instance, expressed the view that costs imposed by OSHA standards are "reasonable and necessary costs of doing business." LEGISLATIVE HISTORY, *supra* note 62, at 1150. He added: "Whether we, as individuals, are motivated by a simple humanity or by simple economics, we can no longer permit profits to be dependent upon an unsafe or unhealthy worksite." *Id.* at 1150-51.

Consistent with the desire to prevent economic considerations from compromising efforts to improve safety, an amendment attached to the OSH Act provided that businesses encountering hardship in their attempt to comply with OSHA standards could receive assistance under § 7(b) of the Small Business Act, 15 U.S.C. § 636 (1976). See LEGISLATIVE HISTORY, *supra* note 62, at 197, 310, 996, 1080, 1206 and 1257. See also § 202 of the Public Works and Economic Development Act, 42 U.S.C. § 3142.

various health impairments.²¹⁹ Beyond this, it will also be necessary to weigh the value of lives and health preserved in the future against present economic costs.²²⁰ This matter is even further complicated by the variables involved in an estimation of costs. Often, new technology and other efficiencies are developed and applied when an industry is forced to comply with an OSHA standard.²²¹ Since such reductions in cost are not foreseeable before the standard is promulgated, it is difficult to imagine how they could be accounted for in weighing the costs and benefits of a proposed standard.

The cost-benefit approach, therefore, is likely to be unworkable if applied to OSHA standards. If cost-benefit analysis of individual standards is required, the Secretary may be compelled to adopt a less effective, though less expensive, remedy when the cost-effectiveness of a more ambitious approach cannot be determined. In the worst case, the Secretary may be deterred from acting altogether when faced with a serious health hazard but only a speculative or very expensive way of attempting to control it. In passing the OSH Act Congress sought to minimize the ways in which cost could compromise employee safety.²²² Any attempt to balance an employer's cost against its employees' safety is clearly incompatible with that congressional purpose.

B. Significant Risk and the OSH Act's Pragmatic Structure

In contrast to the cost-benefit approach, the threshold requirement of significant risk is consistent with the OSH Act's purpose of achieving, insofar as possible, a safe working environment for every American employee.²²³ At the same time, it can prevent costly regulatory intrusions into industrial activities that involve minimal risks. The threshold requirement essentially forces the Secretary to consider whether a substance in the work environment, at currently permissible exposure levels, is likely to pose a significant threat to employee safety. When there is a significant risk of material harm, the Secretary is empowered to set an OSHA standard. When the risk is not significant, the Secretary is without authority to act.

This approach mirrors Congress's desire to structure the OSH Act so that it achieves the greatest protection for employees, without requiring a degree of safety that is unattainable. This congressional desire is evidenced in the Act's

²¹⁹ See generally, Fried, *The Value of Life*, 82 HARV. L. REV. 1415 (1969).

²²⁰ In his concurring opinion, Justice Rehnquist recognized this difficulty. 100 S.Ct. at 2879.

²²¹ Often the reductions in cost prove to be dramatic. For instance, industry representatives argued that OSHA's vinyl chloride standard would result in serious economic harm. Yet, due to the introduction of new technology, no such harm occurred. See Doniger, *Federal Regulations of Vinyl Chloride: A Short Course in the Law and Policy of Toxic Substance Control*, 7 ECOL. L. Q. 497, 561 (1978).

²²² See note 201 *supra*.

²²³ See note 3 *supra*.

legislative history,²²⁴ and is reflected in the requirements of section 6(b)(5)²²⁵ that the harm is "material" and that standards be "feasible." Both of these requirements indicate that there are practical limitations on the government's ability to mandate absolute safety in the work environment.

The threshold requirement is also a product of the Court's view that the authority to set standards regulating industrial activity without regard to the degree of risk involved goes far beyond what is needed to effectuate the OSH Act's purpose of achieving safety in the work environment. To consider all risks, however remote, as unacceptable, would allow virtually all industrial activities to be characterized as unsafe. This approach, in turn, would permit the Secretary to issue standards that have little or no appreciable impact on employee health or safety — precisely the result Congress sought to avoid in structuring the OSH Act.²²⁶

For several reasons the threshold requirement of significant risk ought to prevent many unnecessary regulations and encourage an efficient allocation of health and safety resources.²²⁷ The presence of a significant risk would indicate hazards in the workplace that pose a real threat to employee health and safety. By channeling OSHA's regulatory efforts into such areas of significant risk, the threshold requirement should ensure that those efforts are not wasted on situations where the degree of safety can only be marginally improved. This more focused approach would result in a greater degree of health and safety for workers. In addition, the threshold requirement would keep the burden of proof on the agency to demonstrate the need for its standard.²²⁸ This should impede any attempt to regulate on the basis of policies that simply assume the need for stricter standards.²²⁹ The effect, however, will not be so drastic as to cause agency paralysis.²³⁰ Instead, it is likely that OSHA will consider more carefully its choice of substances to regulate, concentrating on those for which it has ample evidence to characterize the risk as significant in a quantitative or

²²⁴ Before the language of § 6(b)(5) was restricted to "material" impairment of health Senator Dominic observed: "It is unrealistic to attempt, as this section apparently does, to establish a utopia free from any hazards. Absolute safety is an impossibility and it will only create confusion in the administration of this act for the Congress to set unattainable goals." LEGISLATIVE HISTORY, *supra* note 62, at 480. In offering the amendment containing the final version of § 6(b)(5) Senator Dominic remarked:

What we were trying to do in the bill unfortunately, we did not have the proper wording . . . was to say that when we are dealing with toxic agents or physical agents, we ought to take such steps as are *feasible and practical* to provide an atmosphere within which a person's health or safety would not be affected. (emphasis added).

LEGISLATIVE HISTORY, *supra* note 62, at 502.

²²⁵ 29 U.S.C. § 655(b)(5) (1976). See note 24 *supra*.

²²⁶ See note 65 *supra*.

²²⁷ A concern for the efficient allocation of health and safety resources is generally professed by those advocating a cost-benefit approach. See text and notes at notes 39, 148-50 *supra*; see also *RMI v. Secretary of Labor*, 594 F.2d 566, 572 (6th Cir. 1979).

²²⁸ See text at notes 122-24 *supra*.

²²⁹ See text at note 188 *supra*.

²³⁰ See note 130 *supra*.

relative manner.²³¹ Although the need to determine the degree of risk posed by a hazard may increase OSHA's costs in time and resources devoted to the regulation of any given substance,²³² the reduction of expensive regulatory schemes, directed at areas where there is little or no gain to be realized, should result in savings that more than offset the added costs to the agency.

Since the Secretary is required to characterize the risk as significant in an understandable way,²³³ the threshold requirement will put interested parties on notice with respect to the degree of risk that the Secretary of Labor considers significant enough to regulate. If the Secretary proposed a regulation which, although valid, could result in a serious misallocation of the resources available to improve health and safety,²³⁴ a congressional response, in the form of amendatory legislation, is available. In passing the OSH Act, Congress placed a premium on safety.²³⁵ If a judgment is to be made now that certain health and safety improvements are not worth their price, it should be made by Congress and not by politically insulated agencies or courts.

CONCLUSION

The threshold requirement of significant risk adopted by the Court in *Industrial Union Department AFO-CIO v. American Petroleum Institute* can be used to curb the Secretary of Labor's discretion in determining the need for an OSHA standard, while allowing him to make full use of OSHA's expertise in fashioning remedies for serious industrial hazards. This requirement will force OSHA to consider the magnitude of the risks more carefully, thereby focusing its efforts on areas in which greater benefits are possible. At the same time, since this approach does not require any form of cost-benefit analysis, the Secretary should be free to choose the most protective remedy achievable without causing widespread harm to the affected industry.

By emphasizing the significance of the risk rather than the cost-effectiveness of the remedy, the threshold requirement is a more practical means of keeping the Secretary of Labor within the limits of his statutory authority than the cost-benefit approach. In particular, it will avoid the difficulty of placing a value on human life inherent in any effort to balance the financial interests of an industry against the health and safety of its employees. In so doing, it more faithfully adheres to the basic purpose of the OSH Act, which, while not requiring absolute safety, nevertheless places the safety of employees far above considerations of cost-effectiveness.

THOMAS P. DALE

²³¹ See text and notes at notes 202-05 *supra*.

²³² See note 111 *supra*.

²³³ See text at note 129 *supra*.

²³⁴ See note 227 *supra*.

²³⁵ See note 3 *supra*.