Administrative Law - Occupational Safety and Health Act - In Prescribing Permissible Limits for Employee Exposure to Coke Oven Emissions Secretary of Labor Was Not Authorized to Place Affirmative Duty on Employers to Research and Develop New Technology to Meet Those Limits

John Stemplewicz

Follow this and additional works at: https://digitalcommons.law.villanova.edu/vlr

Part of the Administrative Law Commons, and the Labor and Employment Law Commons

Recommended Citation
Available at: https://digitalcommons.law.villanova.edu/vlr/vol24/iss2/2
Several coke manufacturers and their trade associations filed petitions for review in the United States Court of Appeals for the Third Circuit, challenging a health standard promulgated by the Secretary of Labor (Secretary) pursuant to the Occupational Safety and Health Act (Act). The standard established certain controls and procedures to reduce employee exposure to toxic coke oven emissions to a specified maximum limit. Additionally, if the prescribed controls did not reduce emission concentrations to the permissible limit, employers were required to provide respirators and to research, develop, and implement any other engineering and work practice controls necessary to curtail excess emissions.

1. American Iron and Steel Inst. v. Occupational Safety & Health Administration, 577 F.2d 825, 827 (3d Cir. 1978). For the names of the manufacturers and trade associations involved in this action, see id. at 827 n.1.
2. 29 U.S.C. §§ 651-678 (1976). Judicial review of a standard issued by the Secretary is provided for under § 6(f) of the Act. Id. § 655(f). See generally notes 30-43 and accompanying text infra.
3. 577 F.2d at 827. Coke, which is used by steel manufacturers as a fuel in blast furnaces and foundries, is produced by the destructive distillation of coal in a coke oven battery. Id. at 828.
4. 29 C.F.R. § 1910.1029(c) (1977). The standard requires employers to insure that no employee in the regulated area is exposed to coke oven emissions at concentrations greater than 0.15 milligrams of the benzene soluble fraction of total particulate matter (BSFTPM) per cubic meter of air (0.15 mg/m^3) present during the production of coke, averaged over an eight hour period. Id. See 577 F.2d at 827.
5. 29 C.F.R. § 1910.1029(f) (1977). See 577 F.2d at 827. With respect to existing coke oven batteries, employers were required to implement specified engineering and work practice controls necessary to curtail excess emissions.
In challenging the promulgated standard, petitioners made three principal claims: 1) that the prescribed exposure limit was invalid under the statute because there was no substantial evidence of a health related need for that limit and no evidence to support its feasibility; 2) that the Secretary had exceeded his statutory authority by combining a performance standard with specific engineering and work practice control requirements, and by requiring employers to conduct open ended research to develop any necessary control technology to curtail emissions above the prescribed limit; and 3) that there was no substantial evidence to support the various mandated controls and procedures.

The United States Court of Appeals for the Third Circuit rejected all but one of petitioners' principal claims, denying the petition and affirming the coke oven emissions standard with exceptions. The court held, inter

controls as soon as possible, but not later than January 20, 1980, except to the extent that they could establish that such controls were not feasible. 29 C.F.R. § 1910.1029 (f)(1)(i)(a) (1977). If after implementing the specified controls, or after January 20, 1980, whichever was sooner, the permissible exposure limit were still exceeded, employers were required to research, develop, and implement any other engineering and work practice controls necessary to reduce exposure to or below the permissible limit, except to the extent that they could establish that such controls were not feasible. Id. § 1910.1029(f)(1)(i)(b). Employers were not permitted to rely upon respirators to achieve the permissible exposure limit except in certain temporary situations specified in the standard. Id. § 1910.1029(g).

6. 577 F.2d at 827-28. In December 1976, the American Iron and Steel Institute and the American Coke and Chemicals Institute applied to the Secretary for a stay of the effective date of certain of the standard's provisions or for alternative relief. Id. at 830. When the Secretary denied that petition in January 1977, petitioners filed a motion in the United States Court of Appeals for the Third Circuit for a stay. Id. After granting an interim stay pending decision on the motion, the court denied the motion on February 18, 1977, and vacated the interim stay. Id. Petition for review of the standard then followed. Id.

7. Id. at 827-28. With respect to the third claim, petitioners argued that there was no substantial evidence to support the need for quarterly monitoring of employee exposure, for the prescribed protective clothing and hygiene facilities, for the extent of the area to be regulated, or for the required engineering controls and work practices. Id. at 828.

Petitioners also contended that the Secretary failed to comply with minimum due process requirements for rulemaking by not providing adequate notice of the standard. Id. n.3. The court found no support for this contention in the record. Id.

The court also rejected the argument of petitioner CF&I Steel Corporation that the Secretary acted capriciously in adopting a nationwide coke oven standard without considering evidence that environmental factors in Colorado shield CF&I's workers from the carcinogenicity of coke oven emissions. Id. The court found a rational basis for the decision of the Secretary. Id.

Finally, Republic Steel Corporation argued in its brief that respirators should be used in an effort to comply with the permissible exposure limit. Id. The court did not reach that argument since the Secretary's brief conceded that respirators, although not a first choice measure for reducing employee exposure, could be used until engineering controls and work practices were fully implemented, or where those controls could not reduce exposure to the prescribed limit. Id.

8. The case was heard by Judges Rosenn and Higginbotham, and District Judge Van Artsdalen of the United States District Court for the Eastern District of Pennsylvania, sitting by designation. Judge Rosenn wrote the opinion.

9. 577 F.2d at 841. Aside from the technology-forcing provisions, two other aspects of the standard were not affirmed. The court struck down the provision relating to a quantitative fit test for respirators since the Government conceded that the provision was unsupported and would not be enforced. Id. at 839. See 29 C.F.R. § 1910.1029(g)(4)(i) (1977). The Third Circuit also remanded the petition for review insofar as it applied to noncoke oven employers. 577 F.2d at 840. The court expressed serious reservations concerning the Department of Labor's broad construction of the standard's applicability to independent contractors. Id.
that the standard met the technological and economic feasibility requirements of the Act,\textsuperscript{10} but that the Secretary could not place an affirmative duty on employers to research and develop new technology.\textsuperscript{11} \textit{American Iron and Steel Institute v. Occupational Safety and Health Administration, 577 F.2d 825} (3d Cir. 1978) (AISI).

The Occupational Safety and Health Act of 1970 was enacted "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources."\textsuperscript{12} The Act authorized the Secretary of Labor to promulgate and enforce occupational safety and health standards.\textsuperscript{13} It also provided the procedural\textsuperscript{14} and substantive framework for exercising this regulatory power upon determination that a standard should be promulgated.\textsuperscript{15}

Section 6(b)(5) of the Act established the significant substantive limitations which guide the Secretary in the exercise of his rulemaking authority.\textsuperscript{16} In connection herewith, technological and economic feasibility

\begin{footnotes}
\textsuperscript{10} 577 F.2d at 535-37. Furthermore, the court found that the Secretary's effort to meet a perceived health need by establishing an exposure limit to coke oven emissions was proper, \textit{id.} at 832, that the Secretary could combine a performance standard with specific required engineering and work practice controls, \textit{id.} at 838, and that there was substantial evidence to support the various mandated controls and procedures. \textit{id.} at 839.


\textsuperscript{13} See 29 U.S.C. § 655 (1976). This regulatory power extends over all businesses affecting interstate commerce. \textit{id.} § 651(b)(3). Section 6(b) of the Act covers the promulgation, modification, or revocation of permanent standards. \textit{id.} § 655(b). In addition, § 6(c) makes provision for promulgation of emergency temporary standards which the Secretary may issue without notice or a hearing, but only where needed to protect employees from grave danger from new hazards. \textit{id.} § 655(c). The Secretary must publish a permanent standard within six months after publication of the emergency standard. \textit{id.}

\textsuperscript{14} See \textit{id.} § 655. The Secretary may, at his discretion, appoint an advisory committee to examine the particular health or safety problem and recommend a specific standard. \textit{id.} § 655(b)(1). Within a certain period, the Secretary must issue a standard or make a determination that one should not be issued. \textit{id.} § 655(b)(4). In either case, he must state the reasons for the action taken. \textit{id.} § 655(c). This statement must be sufficient to allow interested persons to know the basis of the Secretary's determination and to prevent, in subsequent judicial review, "the use of post hoc rationalizations that do not necessarily reflect the reasoning of the agency at the time the standard was issued." Dry Color Mfrs. Ass'n v. Department of Labor, 486 F.2d 98, 106 (3d Cir. 1973). The rules of procedure followed by the Secretary in promulgating, modifying, or revoking standards are set forth in 29 C.F.R. § 1911 (1977).

\textsuperscript{15} The determination that a standard should be promulgated may be based upon information developed by the Secretary or obtained from outside sources. See 29 U.S.C. § 655(b)(1) (1976).

\textsuperscript{16} \textit{id.} § 655(b)(5). For the text of this provision, see note 17 infra. For a detailed discussion of the development by the federal courts of substantive limitations on the Secretary's rulemaking authority, see Taylor, \textit{Reasonable Rulemaking Under OSHA: Is it Feasible?}, 9 ST. MARY'S L.J. 215 (1977).
\end{footnotes}
requirements have been of particular concern in judicial proceedings involving review of OSHA standards. While it seems clear that the Secretary must consider technological feasibility, the propriety of weighing employee safety against economic consequences has been challenged. In AFL-CIO v. Hodgson, the United States Court of Appeals for the District of Columbia Circuit held that the factors entering into the Secretary’s conclusions could properly include problems of economic feasibility. The Hodgson court, however, qualified the concept of economic feasibility to allay fears that it would be used by recalcitrant employers or industries as a means of avoiding the reforms contemplated by the Act.

This view was adopted by the Third Circuit in AFL-CIO v. Brennan, which involved the Secretary’s decision to eliminate a safety stan-

17. Section 6(b)(5) of the Act provides:
   The Secretary, in promulgating standards dealing with toxic materials or harmful physical agents under this subsection, 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 dealt with by such standard for the period of his working life. Development of standards under this subsection shall be based upon research, demonstrations, experiments, and such other information as may be appropriate. In addition to the attainment of the highest degree of health and safety protection for the employee, other considerations shall be the latest scientific data in the field, the feasibility of the standards, and experience gained under this and other health and safety laws. Whenever practicable, the standard promulgated shall be expressed in terms of objective criteria and of the performance desired.

18. Section 6(f) of the Act provides:
   Any person who may be adversely affected by a standard issued under this section . . . may file a petition challenging the validity of such standard with the United States court of appeals for the circuit wherein such person resides or has his principal place of business, for a judicial review of such standard.


21. 499 F.2d 467 (D.C. Cir. 1974). In Hodgson, labor unions sought review of an OSHA standard regulating concentrations of asbestos dust in industrial workplaces. Id. at 470.

22. Id. at 477. After considering the legislative history of the feasibility requirement, the court stated: "Congress does not appear to have intended to protect employees by putting their employers out of business—either by requiring protective devices unavailable under existing technology or by making financial viability generally impossible." Id. at 478.

23. Id. at 478. The court stated:
   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.

24. 530 F.2d 109 (3d Cir. 1975). The Brennan court characterized an economically infeasible standard as one which would cause 'massive economic dislocation.' Id. at 123. The court felt
standard for mechanical power presses, delineated the Secretary’s mandate to consider technological, as well as, economic feasibility.\textsuperscript{25} The court held that the Secretary could, consistent with the Act, consider technological feasibility in formulating a standard.\textsuperscript{26} Relying heavily upon the Second Circuit’s decision in \textit{Society of the Plastics Industry v. Occupational Safety and Health Administration},\textsuperscript{27} however, the \textit{Brennan} court noted that the Act must be viewed, at least to a limited extent, as a technology-forcing piece of legislation, and that the Secretary must consider technology which “looms on today’s horizon.”\textsuperscript{28} The principal case is the first to decide the issue of whether such “technology-forcing” considerations under the Act can be interpreted as affirmative requirements to research and develop new technology.\textsuperscript{29}

Pursuant to section 6(f) of the Act, reviewing courts must dismiss challenges to OSHA standards when those standards are “supported by substantial evidence in the record considered as a whole.”\textsuperscript{30} This mandate has led to what Mr. Justice Clark has termed “the unique nature of the court’s role under OSHA.”\textsuperscript{31} Traditionally, the “substantial evidence” test\textsuperscript{32} had been that such a standard would likely be evaded by so many industry members that it would prove to be unenforceable. \textit{Id.}

\textsuperscript{25} \textit{Id.} at 120-22.

\textsuperscript{26} \textit{Id.} at 121.

\textsuperscript{27} 509 F.2d 1301 (2d Cir.), \textit{cert. denied}, 421 U.S. 992 (1975). In \textit{Society of Plastics}, manufacturers of vinyl chloride and related products sought review of an OSHA standard governing employee exposure to concentrations of vinyl chloride gas. 509 F.2d at 1303. Petitioners urged that they would never be able to reduce exposure to the permissible level through engineering means. \textit{Id.} at 1308. They argued, \textit{inter alia}, that the Secretary’s standard was not technologically feasible. \textit{Id.} at 1303, 1308-10. Disagreeing, the court stated:

“We cannot agree with petitioners that the standard is so clearly impossible of attainment. It appears that they simply need more faith in their own technological potentialities, since the record reveals that, despite similar predictions of impossibility regarding the emergency 50 ppm standard, vast improvements were made in a matter of weeks, and a variety of useful engineering and work practice controls have yet to be instituted. In the area of safety, we wish to emphasize, the 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 developed. 

\textit{Id.} at 1309.

\textsuperscript{28} 530 F.2d at 121. Nevertheless, the court was satisfied with the Secretary’s determination. \textit{Id.} at 121-22. His finding that compliance with the particular safety standard at issue was not technologically feasible in the “near future” necessarily implied, according to the court, “consideration both of existing technological capabilities and imminent advances in the art.” \textit{Id.} at 122.

It has also been recognized that infeasibility may not become evident until after a good faith effort has been made toward compliance. Atlantic & Gulf Stevedores v. Occupational Safety & Health Review Comm’n, 534 F.2d 541, 550 (3d Cir. 1976), \textit{noted in} the Third Circuit Review, 22 \textit{Vill. L. Rev.} 849 (1977).

\textsuperscript{29} \textit{But see} notes 73-77 and accompanying text \textit{infra} for a discussion of the possibility that the Second Circuit has also decided this issue.


thought more appropriate for the review of formal adjudications or rulemaking where fact finding methods similar to those used at trials were employed. Since OSHA standards are products of informal procedures embodying both findings of fact and legislation of policy, however, they have not been considered amenable to evidentiary review.

Nevertheless, no court has read the statutory mandate of section 6(f) as restricting judicial review to factual determinations while affording absolute deference to the Secretary's policy decisions. Initially it was held that the reviewing court had the duty to subject all of the Secretary's findings, both of fact and of policy, to the substantial evidence test. That approach,

denied, 420 U.S. 973 (1975), the Third Circuit described the application of a substantial evidence test to quasi-legislative informal rulemaking as "an intriguing problem which is just beginning to generate what we suspect, an extensive literature." 503 F.2d at 1158. For an excellent survey of this problem, see Taylor, supra note 16, at 521-33.

32. See Universal Camera Corp. v. NLRB, 340 U.S. 474, 477 (1951). Substantial evidence "means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." Id., quoting Consolidated Edison Co. v. Labor Bd., 305 U.S. 197, 229 (1938). Accordingly, "it must be enough to justify, if the trial were to a jury, a refusal to direct a verdict when the conclusion sought to be drawn from it is one of fact for the jury." 340 U.S. at 477, quoting Labor Bd. v. Columbian Enameling & Stamping Co., 306 U.S. 292, 300 (1939).

33. See Administrative Procedure Act, § 706, 5 U.S.C. § 706 (1976), which sets forth in general terms the scope of judicial review of the actions of federal agencies, and, in particular, requires that rules developed under formal procedures be supported by substantial evidence. Id. § 706 (2)(E). Formal rulemaking involves evidentiary hearings which are adversary in nature. 29 U.S.C. §§ 556-557 (1976). Such procedures apply when the statute which gives the agency authority to make rules requires that they be made "on the record after opportunity for an agency hearing." Id. § 559(e). See AFL-CIO v. Hodgson, 499 F.2d 407, 473 & n. 13 (D.C. Cir. 1974).


The Hodgson court noted that the Occupational Safety and Health Act is self-contained in the sense that it does not depend upon the Administrative Procedure Act, 5 U.S.C. §§ 701-706 (1976), for specification of procedures to be followed. 499 F.2d at 472. OSHA's procedures, however, were intended to be of the informal type authorized by the APA. See S. Rep. No. 1282, 91st Cong., 2d Sess. 6, reprinted in [1970] U.S. CODE CONG. & AD. NEWS 5177, 5204. The standard of judicial review normally associated with informal rulemaking is the "arbitrary and capricious" test. See 5 U.S.C. § 706(2)(A) (1976). The Hodgson court stated that, under this test, ["t]he paramount objective is to see whether the agency, given an essentially legislative task to perform, has carried it out in a manner calculated to negate the dangers of arbitrariness and irrationality in the formulation of rules for general application in the future." AFL-CIO v. Hodgson, 499 F.2d 467, 475 (D.C. Cir. 1974), quoting Automotive Parts & Accessories Ass'n v. Boyd, 407 F.2d 330, 338 (D.C. Cir. 1968). Nevertheless, the United States Supreme Court has noted that, even under the arbitrariness standard, it is the duty of the reviewing court to conduct "a thorough, probing, in-depth review." Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 415 (1971).


36. See Synthetic Organic Chem. Mfrs. Ass'n v. Brennan, 503 F.2d 1155, 1159 (3d Cir. 1974), cert. denied, 420 U.S. 973 (1975) (SOCMA I). The SOCMA I court noted that § 6(e) of the Act requires that the Secretary publish a statement of reasons for his actions in the Federal Register. 503 F.2d at 1160, citing 29 U.S.C. § 655(e) (1976). The court pointed out that since the Secretary's actions include both findings of fact and policy determinations, the requirement of a statement of reasons suggests that both factual and policy elements may be subjected to judicial review. 503 F.2d at 1160.

37. Associated Indus. of N.Y. State, Inc. v. United States Dep't of Labor, 487 F.2d 342, 354 (2d Cir. 1973). On petition for review of an OSHA standard setting minimum lavatory require-
however, proved untenable when courts began to review OSHA standards dealing with the complex subject of employee exposure to carcinogenic agents. Thereupon the D.C. Circuit enunciated a new standard of review in Hodgson, which now seems to be the prevailing view. The Hodgson court held that the Secretary's findings of fact had to be supported by substantial evidence, but that his policy judgments need only be supported by the finding of a rational basis for the decision. In Synthetic Organic Chemical Manufacturers Association v. Brennan (SOCMA I), The Third Circuit incorporated this fact-policy distinction into a five step test for judicial review of OSHA standards. At the outset, the Third Circuit's panel in AISI cited SOCMA I as establishing the proper scope of review of the coke oven emissions standard. Turning to the merits, the court found the Secretary's factual determination that no absolutely safe level of exposure to coke oven emissions

39. 499 F.2d at 475-76. As Judge McGowan stated:
What we are entitled to at all events is a careful identification by the Secretary, when his proposed standards are challenged, of the reasons why he chooses to follow one course rather than another. Where that choice purports to be based on the existence of certain determinable facts, the Secretary must, in form as well as substance, find those facts from evidence in the record. By the same token, when the Secretary is obliged to make policy judgments where no factual certainties exist or where facts alone do not provide the answer, he should so state and go on to identify the considerations he found persuasive. Id. In Hodgson, the court found that the Secretary's decision to set a relatively low permissible limit of exposure to asbestos dust rested "on an essentially legislative policy judgment." Id. at 475.
41. 499 F.2d at 475-76. The five steps outlined by the court were:
(1) determining whether the Secretary's notice of proposed rulemaking adequately informed the interested persons of the action taken;
(2) determining whether the Secretary's promulgation adequately sets forth reasons for his action;
(3) determining whether the statement of reasons reflects consideration of factors relevant under the statute;
(4) determining whether presently available alternatives were at least considered; and
(5) if the Secretary's determination is based in whole or in part on factual matters subject to evidentiary development, whether substantial evidence in the record as a whole supports the determination.

503 F.2d at 1160.
43. The five steps outlined by the court were:
(1) determining whether the Secretary's notice of proposed rulemaking adequately informed the interested persons of the action taken;
(2) determining whether the Secretary's promulgation adequately sets forth reasons for his action;
(3) determining whether the statement of reasons reflects consideration of factors relevant under the statute;
(4) determining whether presently available alternatives were at least considered; and
(5) if the Secretary's determination is based in whole or in part on factual matters subject to evidentiary development, whether substantial evidence in the record as a whole supports the determination.

503 F.2d at 1160.
could be established was supported by substantial evidence in the record. In declining to consider these findings dispositive, the court then considered whether the Secretary, in setting the lowest possible exposure limit, had properly considered the feasibility of that limit.

In attacking these limits, petitioners had questioned the validity of the tests relied upon by the Secretary and of the recorded data. In addition, petitioners had argued that section 6(b)(5) requires actual technological feasibility, and that the Secretary had placed too much faith in new and innovative techniques. The court observed, however, that the emission level established by the Secretary was not a factual determination which would have to be supported by substantial evidence in the record, and rejected petitioners' claims.

The AISI court also found that the data relied upon by the Secretary indicated numerous instances where the exposure level had been maintained within the permissible range, and thus concluded that the Secretary's determination of technological feasibility was at least a "reasoned decision." Similarly, the Third Circuit upheld the exposure limit as economically feasible. In spite of the virtually unchallenged claims of adverse financial impact on the coke industry, the court relied on Brennan and determined

45. 577 F. 2d at 832. Since the perceived health need was based upon factual determinations supported by substantial evidence, the court concluded that the Secretary's effort to meet that need by establishing an exposure limit to coke oven emissions was proper. Id.

46. Id.

47. Id. at 833. The Secretary relied primarily on tests conducted at the U.S. Steel Corporation's plant at Fairfield, Alabama, which is considered the newest and cleanest coke oven battery operating in the United States. Id. Since only one third of the sample readings were below the 0.15 mg/m³ BSIPTM level, petitioners had argued that it would be difficult for the best batteries to meet the prescribed limits and almost impossible for the older ones to do so. Id. Petitioners had also claimed that the data was invalid because it did not take into account varying climatic conditions which affect coke oven batteries. Id.

48. Id. at 833. According to expert testimony, major new developments in coke production take a minimum of 10 years to implement. Id.

49. Id.

50. Id.

51. Id. at 834-35.

52. Id. at 835. Mindful of the substantial evidence requirement, the Secretary, in developing standards, employs a number of procedural techniques characteristic of formal rulemaking in order to provide a reviewable record. See 499 F.2d at 467, 474. For example, when a hearing is held on objections to proposed rulemaking, cross-examination is permitted, and a verbatim transcript is maintained. 29 C.F.R. § 1911.15 (1977). In the principal case, the Secretary relied upon tests at Fairfield, Alabama, and five other coke plants, and contracted with a consulting firm which concluded that the proposed controls were technologically feasible. 577 F.2d at 834, 835 n.8a.

53. 577 F. 2d at 837.

54. The Secretary had contracted with a consulting firm to analyze the financial impact on the industry. Id. at 836. He also relied on a study commissioned by the AISI. Id. Estimates of the total annual cost to the coke industry ranged from $240,000,000 to $1,280,000,000. Id. OSHA's inflationary impact statement estimated a decline of 13% in earnings per share in the industry as a result of compliance with the standard. Id.

55. See note 24 supra.
that the limit implemented by the Secretary would not cause the “massive dislocation” characteristic of an economically infeasible standard.  

Having upheld the validity of the permissible emissions exposure limit, the Third Circuit turned to the other challenged aspects of the coke oven standard. Petitioners’ argument that the Secretary had no authority to impose a “double-barrelled” standard which combined a performance requirement with specifically mandated practices and controls was held to be without support either in the language of the statute or in prior cases. The court, however, invalidated the provision in the standard requiring employers to “research, develop and implement any other engineering and work practice controls necessary to reduce exposure to or below the permissible exposure limit” if, after implementing the required controls, that exposure limit had not been met. In so doing, the court adopted petitioners’ argument that the Act did not authorize a requirement to engage in unlimited research and development and rejected the Government’s claim that the requirement was valid “technology-forcing.” Although the court had held in Brennan that an OSHA standard could be based upon technology that was not yet fully developed, it declined in the instant case to interpret the Act as authorizing the Secretary to require that employers research and develop new technology.

Finally, the court found that the various mandated controls challenged by petitioners were supported by substantial evidence, and that the proposed standard gave petitioners sufficient notice of the controls and procedures.
dures required in the standard. According to the court, the petitions for review and affirmed the coke oven emissions standard with exceptions.

AISI was the first case to test the coke oven emissions standard, but was the fourth of four major challenges to permanent OSHA standards regarding toxic substances which substantially vindicated the Secretary's actions. In upholding the permissible exposure limit and the various mandated controls, the court's application of a deferential, rational basis test to policy judgments and insistence upon substantial evidence to support factual determinations was clearly in accord with the prior cases. Furthermore, the court's approval of the "double-barreled" approach of combining a performance standard with specific required controls is fully supported by the language of the statute.

It is submitted that the most significant aspect of the AISI decision was the invalidation of the requirement to research, develop, and implement new technology if the permissible exposure limit could not otherwise be met. The court, however, did not cite the statutory provisions which would possibly support the Secretary's position on this issue and did not

66. Id. at 839-40.
67. Id. at 840-41. See notes 8-11 and accompanying text supra.
68. See Society of the Plastics Indus. v. OSHA, 509 F.2d 1301 (2d Cir.), cert. denied, 421 U.S. 992 (1975) (vinyl chloride); Synthetic Organic Chem. Mfrs. Ass'n v. Brennan, 503 F.2d 1155 (3d Cir. 1974), cert. denied, 420 U.S. 973 (1975) (ethyleneimine); AFL-CIO v. Hodgson, 499 F.2d 467 (D.C. Cir. 1974) (asbestos dust). In Hodgson, the court affirmed the asbestos standard but remanded for reexamination of the uniform application of the effective date and the retention period for monitoring records. 499 F.2d at 488. In SOCMA I, the ethyleneimine standard was affirmed, but the provision relating to research laboratories was vacated and remanded due to a notice problem. 503 F.2d at 1160.
69. See notes 39-41 and accompanying text supra.
70. See note 58 and accompanying text supra. Dr. Eula Bingham, Assistant Secretary of Labor for OSHA, told a meeting of the National Advisory Committee on Occupational Safety and Health that the coke oven standard was the only one to embody control technology. 361 EMPL. SAFETY & HEALTH GUIDE (CCH) 3 (April 11, 1978). She said that the work was done by the United Steelworkers union and added that technology development should not be a government function. Id.
71. See note 58 and accompanying text supra.
72. See notes 59-64 and accompanying text supra.
73. Section 6(b)(5) of the Act requires that the Secretary, in promulgating standards dealing with toxic materials, consider the latest scientific data in the field and that such standards "be based upon research, demonstration, experiments, and such other information as may be appropriate." 29 U.S.C. § 655(b)(5) (1976). This was noted by the court. 577 F.2d at 838. However, the court also might have noted that the purpose of the Act is to try to assure safe and healthful working conditions (1) by encouraging employers and employees in their efforts to reduce the number of occupational safety and health hazards at their places of employment, and to stimulate employers and employees to institute new and to perfect existing programs for providing safe and healthful working conditions;

... (5) by providing for research in the field of occupational safety and health, including the psychological factors involved, and by developing innovative methods, techniques, and approaches for dealing with occupational safety and health problems;... 29 U.S.C. § 651(b) (1976). The counterargument to the use of the above provision to support
meaningfully distinguish the instant case from *Society of Plastics*. Such a
distinction would have been apposite here since there is language in *Society of Plastics* which seems to interpret the Act as authorizing the Secretary to engage in open ended "technology-forcing." Though there are some differences between the vinyl chloride standard involved in *Society of Plastics* and the *AISI* coke oven emissions standard, the vinyl chloride standard certainly contemplated the development of new technology by industry to meet the exposure limit, and, in establishing the coke oven standard, the Secretary relied heavily upon the *Society of Plastics* holding. It should be noted, however, that the Third Circuit's position on the "technology-forcing" issue may be consistent with a narrow reading of *Society of Plastics* that views the latter's technology-forcing mandate as dicta.

open-ended technology-forcing is that the Act gave the Department of Health, Education, and Welfare the authority and responsibility to conduct research in the area of occupational health, id. § 669, and established the National Institute for Occupational Safety and Health to carry out that function. Id. § 671. See *Brief for All Petitioners Other Than Republic Steel Corporation and CF&I Steel Corporation* at 25-26, American Iron and Steel Inst. v. Occupational Safety and Health Administration, 577 F.2d 825 (3d Cir. 1978).

74. See notes 27 & 28 and accompanying text supra. In *Society of Plastics*, Justice Clark stated that the Secretary "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." 509 F.2d at 1309 (emphasis added) (citations omitted).

75. The vinyl chloride standard prescribed an exposure limit of 1 ppm averaged over any eight hour period. 29 C.F.R. § 1910.1017(c) (1977). "Feasible engineering and work practice controls" were required to be implemented immediately and to be supplemented as necessary by the use of respirators in reducing exposure to at or below the prescribed limit. Id. § 1910.1017(f)(1)-(2). The vinyl chloride standard, however, contains no provision specifically requiring the development of new technology where necessary, as does the coke oven standard. Id. § 1910.1029(f)(1)(i)-(b). See 577 F.2d at 830.

76. See 39 Fed. Reg. 35,890, 35,892 (1974). In his statement of reasons which accompanied promulgation of the vinyl chloride standard, the Secretary stated:

> We agree that the PVC and VC establishments will not be able to attain a 1 ppm TWA level for all job classifications in the near future. We do believe, however, that they will, in time, be able to attain levels of 1 ppm TWA for most job classifications most of the time. It is apparent that reaching such levels may require some new technology and work practices. It may also be necessary to utilize technology presently used in other industries.

Id.


78. See 509 F.2d at 1309. The language in *Society of Plastics* would seem to approve of open-ended technology-forcing by OSHA. See notes 27 & 28 and accompanying text supra. This language may have been dicta, however, since the court, in upholding the vinyl chloride standard, stressed existing techniques and the use of respirators without further mention of any need for innovation. 509 F.2d at 1309-10. The Third Circuit in *Brennan* agreed with the Second Circuit "that, at least to a limited extent, OSHA is to be viewed as a technology-forcing piece of legislation." 530 F.2d at 121 (footnote omitted) (emphasis added). In *Brennan*, the Secretary had rejected an alternative to a proposed safety standard. 530 F.2d at 118. The court stated that the Secretary could not dismiss such an alternative as infeasible "when the necessary technology looms on today's horizon." Id. at 121. The *AISI* court applied the corollary of the *Brennan* position by holding that a standard which required the implementation of technology "looming on today's horizon" could be feasible. 577 F.2d at 838.
It is also submitted that the court did not adequately explain its finding that OSHA's mandate requiring employers to research and develop new technology was impermissible under the Act. It did not state whether it interpreted the Act as so restricting the Secretary's power, or whether it considered the grant of such power to require unambiguous expression of congressional intent. It may be significant that the court expressly rejected the opportunity to invalidate this provision on the more narrow grounds of vagueness.

The immediate and most significant impact of AISI derives from the fact that it upheld the coke oven emissions standard. The decision also continues the trend of the federal appellate courts of subjecting the Secretary's factual determinations to the substantial evidence test while affording greater deference to the quasi-legislative aspects of his decisions. The AISI decision should thus strengthen OSHA's position in the difficult task of formulating health standards and notify affected industries of the extent of OSHA's authority.

In striking down the open ended research and development provisions, the AISI court created a possible conflict between the Second and Third Circuits. Furthermore, the limitations imposed by the Third Circuit on

79. See note 5 and accompanying text supra.
80. 577 F.2d at 838. See notes 59-64 and accompanying text supra. "Moreover," the AISI court added, "the speculative nature of the research and development provisions renders any assessment of feasibility practically impossible." 577 F.2d at 838. The Secretary has admitted that "some employers who implement all of the required engineering controls and work practices may have to expend additional funds to research, develop, and implement new technology in order to meet the permissible exposure limit. Cost figures for these elements are too speculative to estimate." 41 Fed. Reg. 46,742, 46,749 (1976).
81. 577 F.2d at 838. The standard required that, if the exposure limit could not be met using existing technology, "employers shall research, develop, and implement any other engineering and work practice controls necessary to reduce exposure to or below the permissible limit except to the extent that the employer can establish that such controls are not feasible." 29 C.F.R. § 1910.1029(f)(1)(ii)(b), (f)(1)(ii)(b), (f)(1)(iii)(b) (1977). Employers were also required to "develop a detailed written program and schedule for the development and implementation of any additional engineering controls and work practices necessary to reduce exposure to or below the permissible exposure limit." Id. § 1910.1029 (f)(6)(iii). Petitioners argued that this gave individual employers no indication of the scope of the program they would have to undertake or of the deadline they would have to meet, and that it provided no guidance to the OSHA regional offices that would be called upon to enforce the requirement. BRIEF FOR PETITIONER REPUBLIC STEEL CORPORATION at 53-56, American Iron and Steel Inst. v. Occupational Safety and Health Administration, 577 F.2d 825 (3d Cir. 1978).
82. Union safety specialists called it "the biggest victory for labor since the courts upheld the Occupational Safety & Health Administration's vinyl chloride standard a few years ago." AFL-CIO NEWS, April 8, 1978, at 2.
83. See notes 30-43 and accompanying text supra.
84. It has been argued that heavy criticism of OSHA from both labor and management suggests not that OSHA must be doing something right, but that it is doing nothing right. Page & Munsing, Occupational Health and the Federal Government: The Wages Are Still Bitter, 38 LAW AND CONTEMP. PROB. 651, 667 (1974).
85. Lack of industry initiative may be a significant factor when OSHA standards are challenged: "Indeed, the record shows what can only be described as a course of continued procrastination on the part of the industry to protect the lives of its employees." Society of the Plastics Indus. v. OSHA, 509 F.2d 1301, 1305 (2d Cir.), cert. denied, 421 U.S. 992 (1975).
86. See notes 72-78 and accompanying text supra.
OSHA's technology-forcing power may jeopardize the protection of the workplace from newly discovered hazards.\textsuperscript{87} Moreover, although differences in subject matter, legislative purpose, and statutory language may render any comparison between the Occupational Safety and Health Act and the Clean Air Act somewhat tenuous,\textsuperscript{88} it should be noted that the United States Supreme Court has rejected the Third Circuit's position on the technology-forcing character of the Clean Air Act, which had restrictive implications similar to the AISI holding.\textsuperscript{89}

In view of the vagueness of the technology-forcing provisions in the coke oven standard and the effectiveness of existing technology in dealing with the hazards to coke oven employees, the AISI court's position seems justifiable in the instant case. Whether it will survive more compelling circumstances remains to be seen.

\textit{John Stemplewicz}

\textsuperscript{87} As stated in the legislative history of the Act: "It is estimated that every 20 minutes a new and potentially toxic chemical is introduced into industry. New processes and new sources of energy present occupational health problems of unprecedented complexity." S. REP. No. 1282, 91st Cong., 2d Sess. 2, \textit{reprinted} in [1970] \textit{U.S. CODE CONG. & AD. NEWS} 5177, 5178.

\textsuperscript{88} Unlike the Occupational Safety & Health Act, 29 U.S.C. §§ 651-678 (1976), the Clean Air Act contains no express requirement of feasibility in the sections providing for the promulgation of ambient air standards and the approval of state plans to meet those standards. 42 U.S.C. §§ 7409-7410 (1970).

\textsuperscript{89} See Union Elec. Co. v. EPA, 427 U.S. 246 (1976). In that case, the Court held that the Administrator of the EPA may not consider claims of technological or economic infeasibility in evaluating state plans for meeting primary ambient air quality standards, and, therefore, that a court reviewing an approved plan cannot set it aside on those grounds. \textit{Id.} at 265-66. The Third Circuit's position on that issue had been to the contrary. \textit{See Duquesne Light Co. v. EPA}, 522 F.2d 1186 (3d Cir. 1975), \textit{vacated and remanded}, 427 U.S. 902 (1976); St. Joe Minerals Corp. v. EPA, 508 F.2d 743 (3d Cir. 1975), \textit{vacated and remanded}, 425 U.S. 987 (1976); Duquesne Light Co. v. EPA, 481 F.2d 1 (3d Cir. 1973); Getty Oil Co. v. Ruckelshaus, 467 F.2d 349 (3d Cir. 1972), \textit{cert. denied}, 409 U.S. 1125 (1973).