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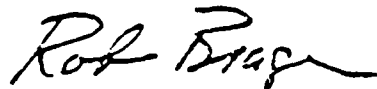
FEDERAL EXPRESS

Ladies and Gentlemen:

Enclosed is a draft of the Vinyl Institute's brief in NRDC v. EPA, No. 85-1150, which is before the United States Court of Appeals for the District of Columbia Circuit en banc. I apologize for the delay, but many of the arguments in the brief are original, and required a substantial amount of time to develop. Because the brief is due on Monday, please try to give me your comments by Friday in order to incorporate them into the final product. I will be in the office on Sunday, however, and can also discuss comments then. Please call me with your suggestions as soon as you are able.

I apologize again for any inconvenience caused by the abbreviated timetable.

Sincerely,



Rob Brager

RB/bjd
Enc.
754F

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UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

DRAFT

PROOFED

UNPROOFED ✓

BY DATE 4/9/87

No. 85-1150

NATURAL RESOURCES DEFENSE COUNCIL, INC.,

Petitioner,

v.

U.S. ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents,

and

VINYL INSTITUTE, a Division of
The Society of the Plastics Industry, Inc.

Intervenor.

On Petition for Review of an Order
of the Environmental Protection Agency

BRIEF FOR INTERVENOR-RESPONDENT
VINYL INSTITUTE ON REHEARING EN BANC

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ISSUE PRESENTED

Whether Section 112 of the Act, 42 U.S.C. § 7412, permits EPA to consider cost and technological feasibility in setting mission standards for hazardous air pollutants.^{1/}

Intervenor's Rule 8(c) statement, the statements of related cases, jurisdiction, and statutes, the full statement of the case, and the references to parties and rulings, are given in Intervenor's opening brief.^{2/}

STATEMENT OF THE CASE

Vinyl chloride ("VC") is a gas used almost exclusively to produce polyvinyl chloride ("PVC"), a nontoxic plastic that is fabricated into blood transfusion bags and tubing, other medical devices, phonograph records, water and wastewater

^{1/} Because this case involves withdrawal of proposed amendments to an existing standard, a second issue is presented, namely:

Whether Section 112 permits EPA to consider cost and technological feasibility in withdrawing proposed amendments to existing emission standards.

This issue is addressed in Section II of the Argument.

^{2/} Since the filing of that brief, EPA has promulgated amendments to the Vinyl Chloride Standard, 51 Fed. Reg. 34,904 (1986), and the Society of the Plastics Industry ("SPI") has challenged those amendments. See SPI v. EPA, No. 86-1640.

pipes, and many other items.^{3/} The manufacture of vinyl chloride and polyvinyl chloride results in the emission of some VC to the atmosphere; EPA found that eliminating emissions is not possible.^{4/} Although VC is highly reactive to sunlight, with a half-life of approximately six hours,^{5/} at high levels of exposure over long periods of time, it may cause an

3/ For some of these items--i.e., blood transfusion equipment and phonograph records--there are no alternatives to PVC. Standard Support and Environmental Impact Statement ("SSEIS"): Emission Standard for Vinyl Chloride (Oct. 1975) at pp.7-70 (Table 7-3); Certified List of Documents ("C.L.") A-3.

4/ See, e.g., 40 Fed. Reg. 59,532, 59,535 (1975); 50 Fed. Reg. 1182, 1183 (1985).

5/ See Scientific and Technical Assessment Report on Vinyl Chloride and Polyvinyl Chloride, (1975), at 8-10; C.L. _____. NRDC's Brief at 2-3 asserts that "nearly 155 tons of VC gas escape from the typical polyvinyl chloride plant, causing widespread public exposure." This hyperbole should be ignored by the Court for two reasons. First, VC is emitted at very low levels of concentration, dissipates rapidly, and becomes inert shortly after the emissions occur. As petitioner is well aware, for these reasons, a yearly poundage figure has no correlation to exposure.

Moreover, as the footnote to NRDC's assertion indicates, the figure is the result of EPA's projection of leaks. Petitioner is well aware that the 1977 proposed amendments had nothing to do with leaks, and that promulgation of those amendments would not impact the amount of VC that leaks from PVC plants. See 42 Fed. Reg. 28,154-59 (J.A. 40-45), and 50 Fed. Reg. at 1182-86 (J.A. 46-50). Additionally, amendments to the leak detection and elimination program were proposed in 1985 and promulgated in 1986. See Fed. Reg. at 1190-92, 1197 (proposal) (J.A. 54-56, 61); 51 Fed. Reg. 34,904, _____ (1986) (promulgation). NRDC has not challenged those regulations and instead disingenuously uses a number it knows to be irrelevant to falsely create the impression that current VC emissions pose a health hazard.

xtremely rare type of liver cancer.^{6/} Consequently, EPA decided that uncontrolled emissions of vinyl chloride presented a significant risk to public health, and that major sources of VC emissions should be regulated under Section 112.

The vinyl chloride standard ("Standard") is based on a worst case analytical model which assumes that carcinogens have no cognizable threshold^{7/} and that unless and until a threshold is determined, any emission must be presumed to present some, albeit unknowable, health risk.^{8/} In the face of this health uncertainty, the Agency evaluated the degree to which the best available control technology ("BACT") could reduce VC emissions, and concluded that emissions could be reduced by 95 percent.^{9/} EPA then extrapolated the worst

6/ 40 Fed. Reg. at 59,532. As EPA has acknowledged, "no community cases of angiosarcoma have been verified as being caused by ambient exposure to vinyl chloride. Thus there is no proof that vinyl chloride ambient concentrations cause cancer, teratogenesis and mutagenesis." 2 SSEIS at 2-13; C.L. A-9.

7/ A pollutant's threshold is the level of exposure at which it has no adverse effects. It is impossible to determine the threshold for carcinogens because of the enormous size of the control group necessary. For example, EPA has determined that the risk of getting cancer from VC is approximately 1 in 20 million. See nn. __ & __ and accompanying text. A study designed to prove a lower risk would require 40 million laboratory animals. Because obtaining such data is impossible, VC has no known threshold.

8/ 40 Fed. Reg. at 59,534 ("[I]t is EPA's position that for a carcinogen it should be assumed, in the absence of strong evidence to the contrary, that there is no atmospheric concentration that poses absolutely no public health risk").

9/ 40 Fed. Reg. at 59,543.

case risk posed by these projected emissions and determined that BACT would reduce the risk of contracting liver cancer from VC emissions to approximately 1 in 20 million.^{10/}

Accordingly, as the current Administrator has found, "the VC Standard protects the public with an ample margin of safety."^{11/}

The Environmental Defense Fund challenged the Standard, and in March of 1977 the lawsuit was settled. As part of the settlement, EPA agreed to propose amendments to the Standard

^{10/} See Wilson, Comment on Proposed Rules for Vinyl Chloride Emissions (1977) at 9 (EPA's risk assessment is 5×10^{-8} , or 1-20,000,000); C.L. _____. The 1 in 20 million risk level means that no one is expected to be harmed, not that 1 in 20 million people will die. As aptly stated by a sister agency:

This computed level of risk is an upper bound level. It is not an actuarial risk. An actuarial risk is the risk determined by the actual incidence of an event. In contrast, the computed risk is a projection based on certain assumptions that enable the agency to estimate a risk that is too small to actually be measured. The agency uses conservative assumptions to ensure that the computation does not understate the risk.

FDA emphasizes that the 1 in 1 million level of risk does not mean that 1 in every 1 million people will contract cancer as a result. Rather, in all likelihood, no one will contract cancer as a result of this exposure. The 1 in 1 million level represents a 1 in 1 million increase in risk over the normal risk of cancer in a lifetime--not annual--risk.

50 Fed. Reg. 51,551, 51,557 (Dec. 18, 1985).

^{11/} 51 Fed. Reg. 34,904, 34,907 (1986).

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that would, if promulgated, reduce the 10 ppm standard to 5 ppm. EPA stated that the technology installed by the regulated community in response to the 1976 Standard would be able to achieve the proposed 5 ppm limitation.^{12/}

In the following eight years, EPA thoroughly reviewed the Standard and concluded that there was no toxicology data that would justify changing the risk estimate for VC, that the Standard required the greatest emission reduction achievable, and that, for the most part, actual emissions were far below 10 ppm, although 10 ppm was the lowest emission level that could be "consistently achieved."^{13/} Accordingly, EPA decided to keep the standard at 10 ppm, and withdrew the 1977 proposed amendments.^{14/} This lawsuit followed.

SUMMARY OF ARGUMENT

[To be derived from the Argument]

^{12/} 42 Fed. Reg. 28,154, 28,154-155 (1977) ("The purpose of the proposed amendment is to force owners and operators to maximize the effectiveness of existing control systems.").

^{13/} 50 Fed. Reg. at 1183-84. To assure that the 10 ppm standard is met at all times, industry must keep actual emissions far below this level. See 51 Fed. Reg. 34,904, 34,907 (1986) ("Even though the limit on maximum emissions of VC is set at 10 ppm, the average and most short term emissions [are] considerably lower than this level"). See also *infra* pp. ____.

^{14/} 50 Fed. Reg. at 1184.

ARGUMENT

- I. SECTION 112 PERMITS THE ADMINISTRATOR TO CONSIDER COST AND TECHNOLOGICAL FEASIBILITY WHEN SETTING EMISSION STANDARDS SO LONG AS THE STANDARDS PROVIDE THE PUBLIC WITH AN AMPLE MARGIN OF SAFETY.

Section 112 is part of a comprehensive scheme to regulate toxic air pollutants which includes not only Section 112, but also Sections 108-110. Section 112 provides a multi-step process that requires the Administrator to make a number of judgments. First he must decide whether to regulate a pollutant under Section 112--an issue raised in the radionuclides litigation^{15/} but not in dispute here. Then he must set a standard that provides an ample margin of safety to protect the public health.^{16/} The issue in this case is not whether Section 112 emission standards must be health based--they must--or whether the statutory standard may be compromised by considerations of economic or technological feasibility--it may not--but whether the Administrator may

^{15/} See *NRDC v. Thomas* and consolidated cases, No. 84-1387. The determination whether to regulate a given pollutant has historically been based on whether the pollutant causes pollution that poses a significant risk to the public health. See, e.g., *Ethyl Corp. v. EPA*, 541 F.2d 1, 12-13 (D.C. Cir.), cert. denied, 426 U.S. 741 (1976).

^{16/} Section 112(b)(1)(B) authorizes the Administrator to establish an emission standard "at the level which in his judgment provides an ample margin of safety to protect the public health from such hazardous air pollutant." 42 U.S.C. § 7412(b)(1)(B).

consider feasibility during the rulemaking process for sound administrative reasons. We believe he can.

A. Since Enactment of Section 112, the Administrator Has Exercised His Authority to Consider Cost and Technological Feasibility and Nothing in That Section or Its Legislative History Precludes Such Consideration.

Since the first emission standards were proposed in 1971, the Agency has interpreted Section 112 to permit limited consideration of cost and technological feasibility. See, e.g., 36 Fed. Reg. 29,239 (1971) (Asbestos, beryllium and mercury standards "are based on information derived from many sources, including health effects level, methodology, technical analysis of control capability, and consideration of economic impact"). EPA has done so to address the administrative issues resulting from the unique source-specific nature of regulation under Section 112. These issues include: selecting the appropriate type of emission standard; ensuring that the standards selected will provide an ample margin of safety; mitigating the possible unintended adverse consequences, including adverse health effects, of source-specific regulation; and codifying regulations so they are understandable and susceptible to evenhanded enforcement. This

16 year history should not lightly be cast aside by the Court.^{17/}

Although Section 112 establishes a single clear statutory goal--protecting the public health from hazardous pollutants--it does not set forth the regulatory means of doing so. From this silence, NRDC infers that the Administrator may not consider cost and technological feasibility, even if he does so without impairing his ability to achieve the statutory objective and for administratively sound reasons. The only plausible inference from Congress' silence, however, is that the Administrator may consider all reasonable factors to achieve his statutory goal.^{18/}

^{17/} Because EPA's construction of Section 112 to permit attainment of an ample margin of safety in an administratively sound manner "was made contemporaneously with the passage of the Act, and has been consistently adhered to since" it is entitled to substantial deference. See National Wildlife Federation v. Gorsuch, 693 F.2d 156, 167 (D.C. Cir. 1982).

^{18/} See Chevron U.S.A. v. NRDC, 467 U.S. 837, 843, 845 (1984) ("if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute," i.e. whether the choices made by the Administrator are "reasonable"). NRDC erroneously argues that, because Congress did not specifically empower EPA to consider feasibility, the Agency is precluded from doing so. The cases cited by petitioner, however, were brought by industry groups who asserted that the regulatory agencies in question were required to consider feasibility. See American Textile Manufacturers Inst. v. Donovan, 452 U.S. 490, 510 (1981); Union Electric Co. v. EPA, 427 U.S. 246, 257 n.5 (1976). In those cases the Court merely held that the respective agencies were not required to consider feasibility, not that they could not do so. See also NRDC v. EPA, 804 F.2d 710, 727 (D.C. Cir. 1986) vacated Jan. 28, 1987.

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As both the majority^{19/} and the dissent^{20/} recognized, Section 112's legislative history is not illuminating. That legislative history emphasizes Section 112's health-based objective without any discussion of the factors to be considered in achieving that goal. Accordingly, in the absence of compelling legislative history to the contrary, the Administrator's selection of factors must be upheld unless his choices were unreasonable. Chevron U.S.A. v. NRDC, 467 U.S. at 845.

NRDC's Brief has but one theme: that consideration of cost and technological feasibility is per se unreasonable because the public health inevitably will be sacrificed.^{21/} Petitioner does not show where or how the Administrator compromised the public health by considering feasibility; NRDC merely presumes that such consideration must lead--and therefore has led--to the Administrator's abdication of responsibility. Similarly, NRDC has not even attempted to demonstrate that the VC Standard fails to provide the public with an ample margin of safety; petitioner merely assumes that, because the Administrator considered feasibility, a health

^{19/} NRDC v. EPA, 804 F.2d at 716-19.

^{20/} Id. at 732-34.

^{21/} See, e.g., NRDC Brief at 4, 12 (Consideration of feasibility "compromise[s] public health protection").

hazard exists.^{22/} NRDC has confused the relationship between feasibility and safety because of its misunderstanding of Sections 108-110 of the Act and the case law thereunder. Accordingly, it is to this authority we now turn.

B. The Structure of Sections 108-110 of the Act and the Case Law Thereunder Support Limited Consideration of Technological Feasibility.

In substance, NRDC argues that if EPA cannot take feasibility into account under Section 109 which requires a standard to provide "an adequate margin of safety," it certainly cannot do so under Section 112 which requires a standard with an "ample margin of safety." This semantically appealing syllogism fails to take into account the structure of the Clean Air Act and the relationship between Section 112 and Sections 108-110. Hazardous pollutants can be regulated either by generic rule and facility-specific permit under Sections 108-110, or by source under Section 112.^{23/} For the pollutants in the former category, regulatory responsibility is

^{22/} Id. at 6 & 30.

^{23/} Air emissions of any kind are air pollutants. 42 U.S.C. § 7202(g). Generally, pollutants are regulated under Sections 108-110 or Section 112; a pollutant regulated under Sections 108-110 is by definition excluded from regulation under Section 112. See 42 U.S.C. § 7412(a). Other CAA provisions regulate air pollution by source, not by pollutant, and for esthetic, not public health, reasons. See, e.g., §§ 7411 (new source performance standards), 7470-79 (prevention of significant deterioration of air quality).

divided between EPA and the states; EPA determines the appropriate level of emissions and the states determine how to achieve that level. For hazardous air pollutants regulated under Section 112, complete regulatory authority--i.e., the authority to determine both the appropriate level and the means of achieving that level--is vested in the Agency.

After EPA decides to regulate a pollutant under Section 109, the Agency's single objective is to establish air quality standards based solely on the criteria set forth by Congress in Section 108;^{24/} nonenumerated criteria, such as cost and technological feasibility, may not be considered. See Lead Industries Ass'n v. EPA, 647 F.2d 1130, 1147-50 (D.C. Cir.), cert. denied, 449 U.S. 1042 (1980). However, achievement of the standards set by the Agency is accomplished through state implementation plans ("SIPs") that are drafted by the states and reviewed for environmental soundness by EPA pursuant to Section 110. See 42 U.S.C. § 7410(a)(1).^{25/}

^{24/} Section 109 requires that emissions of generically regulated pollutants be reduced and maintained at levels that "in the judgment of the Administrator, based on [the] criteria [set forth in Section 108], and allowing an adequate margin of safety, are requisite to protect the public health." 42 U.S.C. § 7409(b)(1).

^{25/} Cost and technological feasibility may not be considered by the Agency when conducting its Section 110 review because EPA only has the limited authority to ensure, through application of specific criteria enumerated in Section 110(a)(2), that the SIPs achieve the general emission levels established under Section 109. Union Electric Co. v. EPA, 427 U.S. 246, 261-66 (1976).

B cause the states have the authority to determine how those levels are to be achieved, they may consider cost and technological feasibility when drafting their SIPs. Union Electric, 427 U.S. at 266. Likewise, when EPA drafts SIPs for states pursuant to Section 110(c) because the states' SIPs are environmentally unsatisfactory, the Agency may also consider cost and technological feasibility. Otherwise, EPA's SIPs could be attacked as arbitrary and capricious. See South Terminal Corporation v. EPA, 504 F.2d 646, 676 (1st Cir. 1974) ("Economic considerations may play some role [] in EPA's selection among alternative means to achieve its clean air goal [I]t could be arbitrary and capricious for the Agency to reject obviously less burdensome but equally effective controls in favor of more expensive or onerous ones").

For hazardous air pollutants regulated pursuant to Sections 112, the Act combines the responsibilities and obligations shared by EPA and the states under Sections 108-110, and confers complete authority on the Agency. Like Section 109, Section 112 contains a "margin of safety" requirement that all emission standards must satisfy. However, the authority conferred on the states under Section 110 to determine the means of limiting emissions is conferred upon the Agency under Section 112. Proper exercise of such authority may entail consideration of numerous factors, including cost and technological feasibility, as long as such

consideration does not "substantially interfere with the primary Congressional purpose" of providing the public with an ample margin of safety. Union Electric, 427 U.S. at 266. Consequently and unlike Section 109, Section 112 neither lists nor purports to limit the factors that the Administrator may consider when exercising his judgment in setting the standard. Indeed, it is inconsistent with the structure of the Act and unreasonable to assume that the Agency cannot consider factors under Section 112 that the states may consider under Section 110.

C. Precluding Consideration of Technological Feasibility Could Hinder Administration of Section 112.

Section 112 provides the Administrator with the authority to consider cost and technological feasibility as long as the statutory goal of providing the public with an ample margin of safety is not compromised. As shown by the examples below, depriving the Administrator of this authority could hinder administration of Section 112.

1. The Administrator may consider technological feasibility to select the appropriate types of emission standards.

The Administrator's ability to prescribe emission standards under Section 112 requires that he understand the methods by which air pollution may be limited.

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To take one example from the VC and PVC manufacturing processes, it is not feasible to limit by concentration VC emissions from equipment that periodically must be opened. Even if the gas in the equipment is purged, and virtually all of the pollutant is removed prior to opening,^{26/} the concentration of the gas remaining in the equipment would be unchanged.^{27/} By evaluating feasibility, the Administrator learned that the best way to control emissions from opened vessels is by purging their contents prior to opening. Hence, the Administrator imposed this requirement and regulated emissions of the remaining gas by quantity rather than concentration of VC. NRDC does not explain how EPA could choose the appropriate means of limiting emissions--e.g. by concentration, rate or quantity^{28/}--without considering the feasibility of control

^{26/} A complete purge might cause the equipment to implode.

^{27/} For example, if the gas in a holding tank is 10% VC and the tank holds 1,000 pounds of gas, there will be 100 pounds of VC in the tank. If 98% of the gas is removed from the tank before opening, as is required by 40 C.F.R. § 61.65(b)(6)(i), there will be only 2 pounds of VC remaining in the tank. The gas remaining in the tank will still be 10% VC, however, because there is no practicable way to purge VC without also purging the non-VC gas in the holding tank. Accordingly, it is not feasible to control emissions from opened equipment by concentration of VC, although it is feasible to control such emissions by quantity.

^{28/} Section 302(k) defines "emission standard" as a requirement that "limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction." 42 U.S.C. § 7602(k).

technology. Nevertheless, under petitioner's theory of Section 112, this is precisely what the Administrator would be required to do.^{29/}

Section 112(e)(1) also specifically permits the Administrator to promulgate operational standards whenever "it is not feasible to prescribe or enforce an emission standard for control of a hazardous air pollutant" 42 U.S.C. § 7412(e)(1). Thus, under Section 112(e), the Administrator is required to determine, as a threshold matter, whether it is feasible to prescribe an emission standard.^{30/} Because operational standards under Section 112(e)(1) are

^{29/} Because technological factors may be important, Section 112(b)(2) of the Act directs the Administrator to "issue information on pollution control techniques for air pollutants subject to the provisions of [Section 112]." 42 U.S.C. § 7412(b)(2). Such information typically is gathered from industry pursuant to Section 114 of the Act, 42 U.S.C. § 7414. Other sections of the Act require that similar information be gathered by EPA and issued to the relevant regulatory entities, i.e., the states. See 42 U.S.C. § 7408(b)(1). Section 112(b)(2) does not require issuance to the states, however, because EPA alone is authorized to perform source-specific regulations under Section 112, and only EPA can make use of the information generated under Section 112(b)(2).

^{30/} The dissent attacks EPA for employing a feasibility test without going through the process prescribed in Section 112(e), and infers from this that EPA has waived application of a strict standard. *NRDC v. EPA*, 804 F.2d at 730. EPA could not possibly have applied that subsection, however, because the Standard was promulgated--and the amendments at issue here were proposed--prior to enactment of Section 112(e). The inference drawn by the dissent must be rejected.

disfavor d,^{31/} Section 112(e)(4) also requires that operational standards be repromulgated as emission standards "whenever it becomes feasible to promulgate and enforce such standard[s]" 42 U.S.C. § 7412(e)(4). Accordingly, by the very terms of the statute, the Agency is required to consider feasibility when prescribing operational standards under Section 112(e) and emission standards under Section 112(b).^{32/}

^{31/} See Adamo Wrecking Co. v. U.S., 434 U.S. 275, 289 (1978) (Congress promulgated Section 112(e) "to allow the use of work practice standards 'in a very few cases'" and stated its "strong preference for numerical emission limitations" [cite omitted]).

^{32/} The dissent misunderstands the nature of Section 112() (1) when it asserts: "If feasibility were generally a permissible consideration, congressional concerns over the feasibility of standards for some types of pollutants would have been unnecessary." (Emphasis added.) Often--as with VC--portions of a regulation under Section 112 will consist of numerical emission standards by point source, and portions will consist of operational standards, also by point source. The basis for decision is not the type of pollutant, but the source of pollution; emissions from some point sources may be ducted to incinerators (i.e., equipment used to form and purify VC, 40 C.F.R. § 61.63(a)) while others may not (e.g., leaks from relief valves, 40 C.F.R. § 61.65(b)(4)). It is the type of emission source, not the type of pollutant, that controls whether numerical or operational standards should be prescribed under Section 112.

2. The Administrator may consider technological feasibility to help ensure that an ample margin of safety is attained.

NRDC appears to believe that the Administrator's sole obligation is to select a single numerical emissions limit. Implementation of Section 112 is more complex, however. Not only must the emission limitations set by the Administrator provide an ample margin of safety, but the Administrator must be reasonably certain that the limitations are attainable; otherwise, continued operations could jeopardize public health. Indeed, administrative confidence that the standard can be met is essential under Section 112 because the more toxic the pollutant, the greater the need for certainty.

Evaluation of feasibility is critical if the Administrator is to have any confidence that emissions standards are attainable. In the context of vinyl chloride, for example, consideration of technological feasibility enabled the Agency to develop a comprehensive regulatory scheme^{33/} and be

^{33/} The Standard regulates "each emission source in ethylene dichloride-vinyl chloride and polyvinyl chloride plants," 40 Fed. Reg. at 59,536. There are more than 20 point sources that are regulated by the Standard, namely: equipment used in ethylene dichloride purification (40 C.F.R. § 61.62(a)); oxychlorination reactors (40 C.F.R. § 61.62(b)); equipment used in vinyl chloride formation and purification (40 C.F.R. § 61.63(a)); PVC reactors (40 C.F.R. § 61.64(a)(2)); strippers (40 C.F.R. § 61.64(b)); sources following strippers (40 C.F.R. § 61.64(e)); mixing, weighing, and holding containers (40 C.F.R. § 61.64(c)); VC recovery systems (40 C.F.R. § 61.64(d)); relief valves (40 C.F.R. §§ 61.65(a), 61.65(b)(4)); loading and

(Footnote Continued)

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confident that the theoretical projections of reduced VC missions could be achieved in practice. Rather than risk substantial unanticipated emissions due to the inability of untested technology to perform as promised, the Agency relied on control equipment that, because it had been used elsewhere in industry, could be counted on to significantly reduce VC emissions.^{34/} Because EPA could know with reasonable

33/ (Continued Footnote)

unloading lines (40 C.F.R. § 61.65(b)(1)); slip gauges (40 C.F.R. § 61.65(b)(2)); pumps, compressors, and seals (40 C.F.R. § 61.65(b)(3)); opened equipment (40 C.F.R. § 61.65(b)(6)); and inprocess wastewater (40 C.F.R. § 61.65(b)(9)). The Standard also separately regulates leaks (40 C.F.R. § 61.65(b)(8)).

34/ The dissent argues that EPA's use of BACT violated the Act's policy of "technology forcing." *NRDC v. EPA*, 804 F.2d at 729-30. To the extent the dissent was referring to reliance on BACT in promulgating the 1976 Standard, the assertion is incorrect; the Standard required the use of pollution control technology that, although used elsewhere in industry, was, for the most part, never before used at VC or PVC plants. Indeed, the technology forcing aspects of the 1976 Standard cannot be understated; according to EPA, it cost industry \$765.7 million to comply with the standard for the period 1977-1986 (in 1977 dollars), and it will cost industry \$1.2 billion for the period 1981-1990. See, EPA, The Cost of Clean Air and Water, Report to Congress, Table A.5.2.4 (May, 1984). This cost was borne by only 57 plants, at an average of \$15-20 million per plant. The technology forcing aspects of the 1976 Standard are obvious.

To the extent the dissent was referring to the Agency's withdrawal of the 1977 proposed amendments, they were not intended to be technology forcing in nature; this goal had already been accomplished by the 1976 Standard. See 50 Fed. R. g. at 29,154-155. Moreover, amendments to a valid standard need not be technology forcing. See *NRDC v. Train*, 421 U.S. 60, 91 (1975) ("so long as the national standards are being attained and maintained, there is no basis in the present Clean Air Act for forcing further technological developments").

certainly the upper limit of post-regulation VC exposure, the Agency could also know with reasonable certainty that the Standard would provide an ample margin of safety.

NRDC has proposed no administratively sound alternative to limited consideration of feasibility. Of course, a total ban on emissions of all suspected carcinogens--including VC--would reduce the risk to zero, and Petitioner may be seeking just that. Zero risk, however, is not required by Section 112,^{35/} and as the Administrator found, absent zero risk, BACT provides the most stringent standard possible.^{36/}

Alternatively, EPA could promulgate a generic regulation establishing a level of risk that in the Administrator's judgment would achieve the statutory objective, such as the one

^{35/} Section 112 requires "an ample margin of safety," not zero risk. As the Supreme Court has held:

"[S]afe" is not the equivalent of "risk-free." There are many activities that we engage in every day--such as driving a car or even breathing city air--that entail some risk of accident or material health impairment; nevertheless, few people would consider these activities "unsafe."

Industrial Union Dept. AFL-CIO v. API, 448 U.S. 607, 642 (1980). Perhaps for this reason, even the panel dissent rejected NRDC's zero risk argument. See NRDC v. EPA, 804 F.2d at 735-36. Apparently, NRDC does not now argue that Section 112 requires zero risk as a matter of law.

^{36/} 40 Fed. Reg. at 59,534. As the Administrator stated when he proposed the VC Standard: [T]he best available technology approach will "produce the most stringent regulation of [VC] short of complete prohibition."

in a million theoretical risk used by the Food and Drug Administration.^{37/} There is nothing in the legislative history to suggest Congress intended such a procedure, however, and requiring a generic regulation is contrary to judicial precedent.^{38/} Moreover, if such a regulation were promulgated, absent consideration of feasibility the Administrator would have to rely on the regulated community to determine how to achieve the prescribed level; he would have no data upon which to base point source-specific regulations. Such action would be analogous to rulemaking under Section 109^{39/} without any regulatory entity authorized to select "the appropriate mix of pollution controls" as provided by Section 110.^{40/} Cf. Union Electric, 427 U.S. at 266. Section 112 does not restrict the Administrator in this manner.

37/ See supra n. ____.

38/ The level of acceptable risk need not be one number, but must be within a "zone of reasonableness." See, e.g., American Petroleum Institute v. Costle, 665 F.2d 1176, 1186-87 (D.C. Cir. 1981), cert. denied, 455 U.S. 1034 (1982); Lead Industries, 647 F.2d at 1162-63; Hercules Corp. v. EPA, 598 F.2d 91, 114 (D.C. Cir. 1978). This is especially true when the threshold is unknown. Demolition Contractors, 565 F.2d at 751.

39/ Section 109 requires the Agency to determine the single safe level of the pollutant in the ambient air. See, e.g., Lead Industries, 647 F.2d at 1145 (ambient air quality standard for lead is 1.5 ug Pb/m³).

40/ The Act does not confer upon the states the authority to determine the mix of pollution controls necessary to comply with Section 112. If, as NRDC argues, EPA lacks the authority to do so, the industry would be left to determine for itself how to reduce or maintain emissions at the requisite level.

3. The Administrator may consider technological feasibility to minimize the unintended adverse consequences of regulation.

Consideration of technological feasibility also permits the Administrator to avoid the unintended adverse consequences of regulation. In National Association of Demolition Contractors v. EPA, 565 F.2d 748, 753 (D.C. Cir. 1977), this Court held that EPA could consider the feasibility of pollution control techniques for this very reason. In that case, NADC challenged a regulation requiring its members to wet asbestos insulation and fireproofing during asbestos removal when the temperature was above freezing. NADC argued that temperature was an impermissible regulatory criteria under Section 112 because it bore no relationship to public health effects from asbestos emissions, and since wetting was not required at subfreezing temperatures, it should not be mandated at all. EPA defended the asbestos standard on the grounds that the health effects from asbestos emissions were uncertain and that best available control methods--which varied with temperature--would provide an ample margin of safety. Id. at 751-53.

This Court agreed with EPA. It held that the Administrator could consider the infeasibility of a pollution control technique in the context of determining the level of asbestos emissions sufficient to provide the public with an ample margin of safety. Moreover, this Court specifically affirmed EPA's decision to regulate emissions of asbestos--another apparent

nonthreshold pollutant--based on best available control methods, stating at 753:

Protection of the public with "an ample margin of safety" may necessitate use of different control measures, including use of the "best available control methods," in different conditions The Administrator was not convinced that the drastic measure of complete prohibition of demolition in subfreezing temperatures, for purposes of ensuring worker safety, was justified But in view of the unreliability of available tests . . . the Administrator's choice to employ alternative methods was well within the bounds of his discretion.

Concomitant with the authority under Section 112 to directly regulate industry is the authority to prescribe the "mix of pollution controls"^{41/} necessary to minimize the negative impact of such regulation. This gives EPA the authority to tailor the mix of controls to protect worker safety, Demolition Contractors;^{42/} to select "less burdensome but equally effective controls in favor of more expensive or onerous ones," South Terminal, 504 F.2d at 676; and, presumably, to minimize other adverse impacts of regulation, as

41/ Cf. Union Electric, 427 U.S. at 266.

42/ Such action by the Administrator (but not by the states) under Sections 108-110 would have been impermissible, of course, precisely because it involved consideration of feasibility. See Union Electric, 427 U.S. at 262-66; Lead Industries, 647 F.2d at 1147. Demolition Contractors underscores the practical differences between generic regulation by EPA under Sections 108-110 and regulation under Section 112.

long as the standard ultimately established provides the public with an ample margin of safety.^{43/}

4. The Administrator may consider technological feasibility to resolve enforcement issues.

Because regulations promulgated under Section 112 are directly applicable to industry, the Administrator should be permitted to consider enforcement issues when setting emission

43/ Demolition Contractors requires affirmance of the panel decision. As in Demolition Contractors, the Administrator found when he promulgated the VC Standard that the adverse impact from complete prohibition--in this instance the introduction of untested and unregulated substitute chemicals and the potential shortage of necessary and desirable products, such as blood transfusion equipment--warranted less drastic action. As in Demolition Contractors, when faced with an uncertain health risk and compelling reasons to avoid complete prohibition, the Administrator reasonably took the most conservative approach possible, and relied on the best available control measures to regulate emissions under Section 112. As in Demolition Contractors, the Administrator's decision to do so with VC was "well within the bounds of his discretion," and should be affirmed. Cf. Adamo Wrecking Co. v. United States, 434 U.S. at 289 (work practice standard promulgated prior to enactment of Section 112(e) was not an enforceable emission standard because it did not provide a numerical limitation on emissions).

NRDC may argue that Demolition Contractors lacks precedential value because EPA did not specifically find that the asbestos standard provided an ample margin of safety to protect the public health. As Judge Wright stated for this Court en banc, however, such an assertion would be . . . "spurious. It is well established that ultimate findings do not have to be expressed at all, let alone be expressed in the language of the statute. Rather, absent compelling countervailing considerations, an ultimate finding will be implied from the action taken." Ethyl Corp. v. EPA, 541 F.2d at 12.

standards.^{44/} For example, enforcement considerations might dictate setting emission standards at levels that are consistently achievable (i.e., 10 ppm) rather than almost always achievable (i.e., 5 ppm), especially if doing so would have no significant impact upon actual emissions. In light of the Act's strict liability standard, the severe penalties (up to \$25,000 per day) associated with noncompliance,^{45/} the direct nexus between an emission standard and a substantive obligation, and the possibility of citizens' suits,^{46/} there is no basis for striking down as unreasonable the Agency's consideration of enforcement issues.

The administrative record indicates that enforcement considerations lie at the heart of the Administrator's decision to withdraw the proposed amendments to the VC Standard. The Agency's TRW Report, which reviewed the history of industry's compliance with the VC Standard, states that incineration is the most prevalent form of emission control; that most incinerator emissions are less than 1 ppm; that incinerator test results "showed average VC concentrations of 0.26 ppm";

^{44/} Section 112(e)(1) permits the Administrator to prescribe operational standards when he finds that it would not be feasible to enforce emission standards. Accordingly, the Administrator may consider enforcement matters in setting emission standards under Section 112.

^{45/} See 42 U.S.C. § 7413(b).

^{46/} See 42 U.S.C. § 7604.

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and that according to EPA personnel "[c]ontinuous monitoring of incineration stacks and compliance tests have shown VC levels ranging from 'nondetectable at 0.1 ppm' to 'less than 10 ppm.'"^{47/} Thus, EPA concluded that "even though the maximum emissions of VC is set at 10 ppm, the average and most short-term emissions will be considerably lower than this level," and that "lowering the emission limit on maximum mission rates would not significantly reduce the average emissions."^{48/} As the Agency recognized, occasional missions between 5 ppm and 10 ppm are caused by uncontrollable "emission fluctuations . . . [and] result in little reduction in mass emissions of VC."^{49/} Accordingly, the Administrator's decision to consider enforcement issues and maintain the standard at "the lowest level of control which has consistently been achieved"^{50/} cannot properly be characterized as unreasonable.^{51/}

^{47/} TRW Report, pp.4.7-4.10.

^{48/} 51 Fed. Reg. at 34,907.

^{49/} 50 Fed. Reg. 1182, 1184 (1985).

^{50/} Id.

^{51/} The dissent asserts that "[t]he lack of available technology is used to justify the waiver of a strict standard itself, across the board." NRDC v. EPA, 804 F.2d at 730 (emphasis in original). The record simply does not support this assertion. The 1976 Standard is extremely strict; as shown above, unless the best available pollution control equipment is operated at maximum efficiency, the standard

(Footnot Continued)

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D. Th Court Should Uphold th Vinyl Chloride Standard Because the Administrator's Consideration of Cost and Technological Feasibility Did Not Interfere with His Ability to Provide an Ample Margin of Safety to Protect the Public Health.

Because the Administrator promulgates source-specific regulations under Section 112, he must have the same authority--and be subject to the same limitations--accorded both EPA and the states under Section 110. Consequently, the Administrator may consider cost and technological feasibility as long as such consideration does not "substantially interfere with the primary congressional purpose" of providing an ample margin of safety to protect the public health.^{52/} Cf. Union Electric, 427 U.S. at 266, 269; South Terminal, 504 F.2d at 676; see also National Coalition Against the Misuse of Pesticides v. Thomas, 809 F.2d 875, 881-82 (D.C. Cir. 1987)

51/ (Continued Footnote)

cannot be achieved. For this reason, a stricter standard would serve but one purpose: to deem as violations of the Act missions of more than 5 but less than 10 ppm even though such episodic emissions are the result of "emissions fluctuations" not within the control of the plant. There would be no utility to deeming such emissions as violations because the quantitative difference--and thus the difference for health purposes--is insignificant. See 51 Fed. Reg. at 34,907.

52/ As a factual matter, the only issue before the Court is whether EPA may consider cost and technological feasibility in withdrawing the proposed amendments to the 1976 Standard; the Court lacks jurisdiction to determine whether EPA was permitted to consider cost and technological feasibility in setting the original Standard. See NRDC v. EPA, 804 F.2d at 713; Brief of Vinyl Institute at pp.16-24.

(statute requiring EPA to prohibit use of pesticides "to the extent necessary to protect the public health" may permit the Agency to consider nonenumerated, nonhealth factors, as long as EPA "principally [] attend[s] to the specifically enumerated factors in the statute"); Hercules Corp. v. EPA, 598 F.2d at 114 ("[T]he fact that EPA considered evidence about feasibility does not require that the regulations [under Section 307(b)(2) of the Clean Water Act] be vacated").

As shown above, consideration of cost and technological feasibility will not, as NRDC claims, necessarily interfere with the primary congressional purpose of providing the public with an ample margin of safety; whether the Administrator has relied on feasibility to the detriment of public health is a matter for this Court to determine on a case by case basis.^{53/}

^{53/} NRDC erroneously contends that consideration of technological feasibility necessarily compromises the public health by constantly referring to "cost or feasibility tests." See, e.g., NRDC Brief at 3, 4, 5, 6, 9, 11, and 12. The dissent does so by suggesting that "[i]t makes no sense to allow the Administrator greater latitude in the establishment of standards for pollutants Congress explicitly recognized as highly dangerous than he is allowed in the regulation of less dangerous pollutants." NRDC v. EPA, 804 F.2d at 731. The dissent's failure to see the public health benefits to employing BACT--especially in light of Demolition Contractors--is puzzling. Nevertheless, if the public health is compromised as a result of EPA's consideration of feasibility--or any other factor, for that matter--the Agency action could be set aside by the Court. Protection of the public health need not render consideration of technological feasibility per se invalid.

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Because the VC Standard provides an ample margin of safety, the Administrator's consideration of feasibility in this case did not adversely impact on the statutory objective.

Accordingly, NRDC's petition for review should be denied.

II. BECAUSE THE 1976 VC STANDARD PROVIDES AN AMPLE MARGIN OF SAFETY, THE ADMINISTRATOR WAS FREE TO CONSIDER COST AND TECHNOLOGICAL FEASIBILITY IN WITHDRAWING THE 1977 PROPOSED AMENDMENTS.

The administrative record demonstrates that the 1976 Standard provides an ample margin of safety to protect the public health.^{54/} Additionally, the data generated by EPA since 1976 demonstrate that the actual exposure levels are substantially lower than the levels projected in 1976 (and upon which the 1975 risk assessment was based). If EPA evaluated the health risk based upon actual rather than permitted missions, the risk would be several orders of magnitude lower

^{54/} When standards are initially set, a reviewing court must determine that consideration of cost and technological feasibility did not "substantially interfere with the primary congressional purpose" of providing an ample margin of safety to protect the public health. See Union Electric, 427 U.S. at 266. This issue is not present when the Administrator decides to withdraw proposed amendments; obviously, a decision not to amend a standard that already provides an ample margin of safety cannot interfere with Section 112's primary congressional purpose of protecting the public health. Because the 1976 VC Standard provides an ample margin of safety, NRDC cannot logically claim that the decision not to amend that standard violates Section 112.

than 1 in 20 million,^{55/} even without discounting for VC's lack of persistence in the environment. The data accumulated by EPA over the past 10 years support the Administrator's conclusion that "the VC Standard protects the public health with an ample margin of safety."^{56/}

The validity of the Standard has not been and cannot be disputed. The issue presented here is whether the Administrator may consider cost and technological feasibility when withdrawing proposed amendments to a standard that already provides an ample margin of safety to protect the public health. Under Hercules Corp. v. EPA, 598 F.2d at 114 n.5, this question must be answered in the affirmative. In that action, Velsicol contended that EPA set a Clean Water Act ("CWA") standard based on feasibility criteria, and then justified it with evidence related to the six factors enumerated in Section 307(a)(2) of the CWA. EPA admitted that it had considered feasibility after following the prescribed six-step procedure, and asserted that it was permitted to do so. The Hercules court agreed with EPA, stating at 114 n.5 and accompanying text:

^{55/} Because the risk assessment is based on a linear model, reduction in exposure would have a direct relationship to reduction of risk. See n.____, supra. Since actual emissions are several orders of magnitude lower than those permitted by the Standard, the actual risk is several orders of magnitude lower than the risk assessed by EPA in 1976.

^{56/} 51 Fed. Reg. at 34,907.

We have concluded that section 307(a) does not include feasibility as a factor for consideration. However, the fact that EPA considered evidence about feasibility does not require that the regulation be vacated. It is apparent that EPA calculated its endrin standards using health-based, not feasibility-related, evidence[;] EPA calculated its standard using the six-step procedure before it turned to consideration of feasibility.

In the instant case, the Administrator determined that the VC Standard provided an ample margin of safety when he promulgated the Standard in 1976. Thus, even assuming EPA withdrew those proposed amendments based on feasibility,^{57/} and assuming arguendo that such consideration would be impermissible in the context of initially setting emission standards,^{58/} the Administrator's decision to withdraw the 1977 proposed amendments should still be affirmed.

^{57/} As set forth in Section I.B.4, supra, the Vinyl Institute believes that enforcement considerations, not feasibility per se, provided the basis for EPA's withdrawal of the 1977 proposed amendments.

^{58/} As set forth in Section I, the Vinyl Institute believes feasibility may be considered by the Administrator as long as this does not interfere with promulgation of a standard that provides the public with an ample margin of safety.

CONCLUSION

For the foregoing reasons, this Court should affirm EPA's decision to withdraw the 1977 proposed amendments to the Vinyl Chloride Standard.

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