

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 85-1150

NATURAL RESOURCES DEFENSE COUNCIL, INC.,

Petitioner,

v.

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

Respondents,

and

THE 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
THE VINYL INSTITUTE ON REHEARING EN BANC

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Intervenor's Rule 8(c) statement, the statements of related cases, jurisdiction, and statutes, the statement of the case, and the references to parties and rulings, are given in Intervenor's opening brief.^{1/}

ISSUE PRESENTED

Whether Section 112 of the Clean Air Act ("Act" or "CAA"), 42 U.S.C. § 7412, permits EPA to consider cost and technological feasibility in setting emission standards for hazardous air pollutants.^{2/}

INTRODUCTION

Section 112 of the Clean Air Act requires the Administrator to make a number of judgments. First he must decide whether or not to regulate a pollutant under Section 112--an issue before

^{1/} Since the filing of that brief, the Environmental Protection Agency ("EPA" or "Agency") has promulgated amendments to the vinyl chloride standard ("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. Petitioner Natural Resources Defense Counsel ("NRDC") has not done so.

^{2/} Because this case involves the withdrawal of proposed amendments to an existing standard, a narrower statement of the issue presented is:

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.

this Court in the radionuclides litigation^{3/} but not in dispute here. Then he must set a 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). There are at least two strategies that would enable the Administrator to provide an ample margin of safety.

One strategy the Administrator could have used to determine how to provide an ample margin of safety was promulgation of a generic rule which requires that significant health risks be reduced to a level that meets the statutory mandate.^{4/} Th

3/ 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. 941 (1976). In radionuclides, the Administrator decided that several industry sources of radionuclides did not pose a significant risk and therefore decided not to regulate them. The Administrator looked at costs and determined that the cost of regulation was overwhelming and the corresponding benefit to public health insignificant. Although his decision was not based on costs, he did consider them and we submit properly so. Costs, however, played an insignificant role in development of the vinyl chloride standard; consequently and because of space limitations, we will not address this issue further. We urge this Court not to rule on the question of cost considerations under § 112 until it has heard the radionuclides litigation.

4/ Zero risk is not required by Section 112. 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

(Footnote Continued)

Food and Drug Administration ("FDA") has apparently followed this course, and defines a 1 in 1 million risk as safe.^{4/} A generic rule would satisfy Section 112 as long as it was within a "zone of reasonableness";^{5/} and emission standards implementing such a rule could be based on consideration of a

4/ (Continued Footnote)

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). See also Ethyl Corp., 541 F.2d at 18 n.33. Indeed, if zero risk were required, the Administrator would have no need to exercise any judgment in setting emission levels, which is specifically what Section 112 requires him to do. Perhaps for this reason, even the panel dissent rejected NRDC's zero risk argument. See NRDC v. EPA, 804 F.2d 710, 735-36 (D.C. Cir. 1986) vacated Jan. 28, 1987. This issue is addressed at length in the amicus brief filed by The Chemical Manufacturers Association.

5/ FDA has concluded that "a risk level on the order of 1 in 1 million for cancer constitutes a de minimis level of risk, and [the Agency's] use of that level of risk in other regulatory context is consistent with that conclusion" 50 Fed. Reg. 51,551, 51,557 (1985) (methylene chloride). For other instances when a 1 in 1 million risk level was used by FDA, see 44 Fed. Reg. 17,070, 17,093 (1979) (residues in edible animal tissues) and 47 Fed. Reg. 14,138 (1982) (D&C Green No. 6). See generally 47 Fed. Reg. 14,464 (1982) (proposed FDA carcinogen policy) and Scott v. FDA, 728 F.2d 322 (6th Cir. 1984) (affirming FDA's application of its carcinogen policy in clearing D&C Green No. 5). As this Court has held, FDA may disregard such de minimis risks. See Monsanto Co. v. Kennedy, 613 F.2d 947, 954-5 (D.C. Cir. 1979).

6/ Hercules Inc. v. EPA, 598 F.2d 91, 106-7, 115-17 (D.C. Cir. 1972).

variety of factors, including cost and technological feasibility,^{7/} as long as the generic rule was satisfied.

All Administrators have chosen to use a second strategy and have decided to develop emission standards on a case by case basis. Each Section 112 rulemaking has therefore required the Administrator to determine, at a minimum:

- (1) the extent to which the health risk from a pollutant must be reduced in order to provide the public with an ample margin of safety; and
- (2) the means of limiting emissions in setting a standard to achieve this reduced health risk.

This Court has asked whether the Administrator can consider technological feasibility. We submit that such consideration may be essential in developing a standard. Furthermore, this circuit has already approved limited consideration of feasibility in two cases. In Hercules Inc. v. EPA, 598 F.2d 91, 111-14 (D.C. Cir. 1978), the Court permitted secondary consideration of feasibility under Section 307(b)(2) of the Clean Water Act ("CWA"), even though that section enumerates only non-feasibility criteria by which the Agency must regulate toxic water pollutants. The Court held that as long as the

^{7/} See Id. at 111-14 (as long as standard is health based and within "zone of reasonableness," secondary consideration of feasibility is not precluded); National Association of Demolition Contractors, Inc. v. Costle, 565 F.2d 748, 753 (D.C. Cir. 1977) (Administrator properly considered available control methods under Section 112 to provide ample margin of safety without posing threat to worker safety).

promulgated standard is health based and within a "zone of reasonableness," other factors (such as inducing industry and environmentalists to accept standards based on health data) justified limited consideration of feasibility.^{8/} In National Association of Demolition Contractors, Inc. v. Costle, 565 F.2d 748, 753 (D.C. Cir. 1977), this Court specifically approved consideration of technological feasibility to mitigate the unintended adverse consequences of regulation. In that action, the Administrator evaluated the best methods available to control asbestos emissions from building renovation and demolition, and determined that these methods provided the public health with an ample margin of safety.

The administrative process used to set the VC Standard was similar to that affirmed by the Court in Demolition Contractors. Id. at 750-51. EPA first determined that high concentrations^{9/} of vinyl chloride ("VC") over long periods

8/ Dictum in Hercules suggests that the Court relied on the timing of the Administrator's consideration of feasibility. Id. at 114 n.45 and accompanying text. We assume, however, that the Court did not intend to put the Administrator in a temporal straitjacket, but rather that timing was but one of many factors the Court would look to when determining whether the Administrator's action was arbitrary and capricious.

9/ NRDC's Brief at 2-3 asserts that "nearly 155 tons of VC gas escape from the typical polyvinyl chloride ("PVC") plant, causing widespread public exposure." This contention should be ignored by the Court. VC is emitted at very low levels of concentration from spatially separated sources, rapidly dissipates to even lower concentrations, and becomes inert shortly after the emissions occur. For these and other reasons, a yearly poundage figure has no correlation to exposure.

of time may cause an extremely rare type of liver cancer.^{10/} EPA applied this finding to a conservative analytical model that is designed to overestimate actual risk, and assumes that carcinogens have no cognizable threshold^{11/} and that until a threshold is determined, any emission must be presumed to present some small, albeit unknowable, health risk.^{12/} In the face of this uncertain health risk, the Agency evaluated the degree to which VC emissions could be reduced if the best available control technology ("BACT") were imposed, and concluded that emissions would be reduced by 95 percent.^{13/} EPA then extrapolated the risk posed by these projected controlled emissions and determined that BACT would reduce th

^{10/} 40 Fed. Reg. 59,532 (1975) (Joint Appendix ("J.A.") at 2). As EPA has acknowledged, however, "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; (Certified List ("C.L.") A-9).

^{11/} A pollutant's threshold is the level of exposure at which it has no adverse health effects. EPA cannot determine the threshold for carcinogens primarily because of the enormous size of the control group necessary. For example, EPA has determined that the theoretical risk of getting cancer from VC is approximately 1 in 20 million. See n.14 and accompanying text. A study designed to prove a lower risk would require more than 40 million laboratory animals. Because obtaining such data is impossible, VC has no known threshold.

^{12/} 40 Fed. Reg. at 59,534 (J.A. at 4) ("[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").

^{13/} 40 Fed. Reg. at 59,543 (J.A. at 13).

risk of contracting liver cancer from VC emissions to approximately 1 in 20 million.^{14/} The Agency then promulgated a standard to accomplish this reduction and achieve the statutory mandate. Subsequent review over the past nine years^{15/} has led the current Administrator to conclude that

14/ 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) (J.A. at 105). The 1 in 20 million risk level is not a prediction of actual harm, but an upperbound estimate of the increased risk to the general population. It does not mean 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. at 51,557 (1985).

15/ Between 1977 and 1985, EPA thoroughly reviewed the Standard and concluded that no toxicology data justified changing the risk estimate for VC; that the Standard required the greatest emission reduction achievable; and that although actual emissions, taken as a whole, were far below the total amount permitted by the Standard, on an hourly basis the Standard was set at the lowest emission level that could be consistently achieved.

"the VC Standard protects the public with an ample margin of safety."^{16/} Accordingly, EPA decided to withdraw amendments proposed in 1977.^{17/}

SUMMARY OF ARGUMENT

The issue in this case is neither whether a Section 112 emission standard must be health based--it must--nor whether the statutory standard may be compromised by considerations of technological feasibility--it may not--but is whether Section 112 permits the Administrator to consider feasibility during the rulemaking process to ensure rational rulemaking. As set forth in Section I.A. of the Argument, sound administration of Section 112 may require the Administrator to consider technological feasibility when determining the means of limiting emissions. Section I.B. demonstrates that the structure of the Act and the case law thereunder support the Administrator's consideration of technological feasibility. Section I.C. shows that the Administrator's interpretation of the Act is reasonable. Section I.D. demonstrates that the Court should uphold the VC Standard because it provides the public with an ample margin of safety. As set forth in Section II, because the 1976 Standard provides an ample margin

^{16/} 51 Fed. Reg. 34,904, 34,907 (1986).

^{17/} 50 Fed. Reg. 1183-84 (1985) (J.A. at 48).

of safety, the Administrator was free to consider cost and technological feasibility in withdrawing proposed amendments to the Standard.

ARGUMENT

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

A. By Considering Technological Feasibility, the Administrator May Rationally Regulate Hazardous Air Pollutants.

Section 112 of the Clean Air Act permits the Administrator to consider technological feasibility as long as the statutory goal of providing the public with an ample margin of safety is not compromised. This authority is derived from both the structure of the Act, see infra subsection B, and "the administrative discretion inherent in the statutory scheme." Monsanto Co. v. Kennedy, 613 F.2d 947, 955 (D.C. Cir. 1979). There are at least four reasons why the Administrator should be permitted to take technological feasibility into account when setting standards under Section 112.

1. Selection of appropriate standards.

Section 112 provides two types of standards, emission standards and nonnumerical standards. Emission standards are promulgated under Section 112(b)(1)(B), and consist of

"quantitative limit[s] on emissions." Adamo Wrecking Co. v. U.S., 434 U.S. 275, 286 (1978). Nonnumerical standards are promulgated under Section 112(e), and require that specific actions be taken to provide an ample margin of safety. Id. Although the VC Standard contains both emissions and nonnumerical standards, this case primarily involves interpretation of Section 112(b) because the VC Standard was promulgated--and the amendments at issue here were proposed--prior to enactment of Section 112(e).

NRDC appears to believe that the Administrator's sole duty under Section 112(b) is promulgation of a single ambient air quality standard. Although the Administrator may decide to promulgate emission standards in this manner, Section 112(b) does not require him to do so. Indeed, such a standard may be impracticable for many reasons, including the clustering of plants,^{18/} the existence of multiple emission sources at a single facility, or the inability of measuring devices to detect pollutants in the trace amounts found in the ambient air.^{19/} To address these and other problems, the Agency may

^{18/} For example, if many plants are clustered in a small area or are contiguous, atmospheric conditions could cause an emission exceedance at one plant that might be detected on another plant's monitor. It would be extremely difficult to correctly ascribe responsibility for the exceedance, and in all likelihood, the plant in compliance would be held accountable.

^{19/} NRDC apparently believes that a "no measurable emissions" standard is required by Section 112. Not only is such a

(Footnote Continued)

instead decide, as it did with VC, to prescribe discrete emission standards for specific point sources at each regulated facility and to measure emissions at these point sources.^{19/}

If NRDC is correct and the Administrator cannot consider technological feasibility, however, regulation of point sources would be impossible. The Administrator would have no basis for selecting the appropriate type of Section 112(b) emission standard--e.g., a standard based on "the quantity, rate, or concentration of emissions"^{21/}--applicable to the specific point source.^{22/} Unless Section 112(b) denies the

19/ (Continued Footnote)

standard not required, see supra n.4, but it would merely shift the feasibility issue from pollution control to pollution detection. For example, different types of detection equipment may be considered feasible, depending upon whether EPA wants sensitivity (e.g., readings to the lowest possible concentration) or accuracy (e.g., the ability both to discriminate between VC and other hydrocarbons and to make accurate readings). By necessity, the Agency would be required to consider feasibility in selecting the appropriate method of monitoring.

20/ The Standard regulates each "emission sources in ethylene dichloride-vinyl chloride and polyvinyl chloride plants," 40 Fed. Reg. at 59,536 (J.A. at 6). There are more than 20 specific point sources that are regulated by the Standard. See 40 C.F.R. §§ 61.62-61.65.

21/ Section 302(k) defines "emission standard" as a requirement that "limits the quantity, rate, or concentration of emissions" 42 U.S.C. § 7602(k).

22/ To take one example from the VC and PVC manufacturing processes, it is not feasible to limit by concentration VC emissions from equipment that must be opened. Even if virtually all of the gas (and thus virtually all of the VC) is

(Footnote Continued)

Administrator the authority to select point source mission standards, he must be permitted to consider feasibility.

Additionally, if the Administrator has the authority to regulate clusters of plants, he must be permitted to allocate the regulatory burden to those plants. Emission limitations can be achieved in numerous ways, i.e., with substantial emission controls at some plants but little control at others; with no controls at some plants and the closing of others; or with specific emission limitations imposed on all plants. If the Administrator has the authority to allocate regulatory burdens, and prescribe the "mix of control devices"^{23/} necessary to achieve the emission limitation, he must be able to consider the technologically feasible way of doing so. Otherwise, different companies would have to determine jointly the means of compliance; there would be no regulatory agency

22/ (Continued Footnote)

evacuated prior to opening (removal of all of the gas might cause the equipment to implode), evacuation of the gas would not change the concentration of the gas remaining in the equipment. To ensure that a sufficient amount of vinyl chloride is removed from equipment prior to opening, the Administrator would have to measure emissions from opened equipment by the quantity rather than the concentration of the remaining vinyl chloride. By evaluating feasibility, the Administrator was able determine how best to prescribe point source emission standards and thus control emissions from opened equipment by regulating the quantity rather than concentration of VC.

23/ Cf. Union Electric Company v. EPA, 427 U.S. 246, 266 (1976), and infra Section I.B.

with authority to settle disputes and no method by which individual companies could be held accountable. Congress could not have intended such a gap in the regulatory framework.

Finally, Section 112(e)(1) specifically permits the Administrator to promulgate non-numerical 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, as a threshold matter, the Administrator is required to determine whether it is feasible to prescribe an emission standard.^{24/} Because operational standards under Section 112(e)(1) are disfavored,^{25/} 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). By the very terms of the statute, the Agency is permitted to consider

^{24/} 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.

^{25/} 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 limited cases'" and stated its "strong preference for numerical emission limitations" [cite omitted]).

feasibility when prescribing operational standards under Section 112(e) and emission standards under Section 112(b).^{26/} For all of these reasons, the Administrator was directed by Congress to gather information regarding pollution control techniques and may consider such information when setting emission standards under Section 112.^{27/}

2. Ensuring that an ample margin of safety is attained.

Not only must the Administrator set emission limitations that provide the public with an ample margin of safety, he must also be reasonably certain that the goal is attainable. Indeed, the more hazardous the pollutant, the greater the need

^{26/} The dissent misunderstands the nature of Section 112(e)(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 deciding what type of regulation to use 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.

^{27/} 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).

for concrete assurances that emissions can be reduced to a safe level. Evaluation of feasibility--and the reliability of alternative emission reduction methods---may be a critical part of this process.

In the context of vinyl chloride, for example, consideration of technological feasibility enabled the Agency to be confident that the theoretical projections of reduced VC emissions could consistently 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 had been used elsewhere in industry and could be counted on to significantly reduce VC emissions.^{28/} Because EPA could estimate with reasonable

^{28/} 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, 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).

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. Reg. at 1184 (J.A. at 48). Moreover, amendments to a valid standard need not be technology forcing. Cf. Train v. NRDC, 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 regulated VC emissions, the Agency could also know with reasonable certainty that the Standard would provide an ample margin of safety.

3. Mitigating 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. Costle, 565 F.2d at 753, 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 criterion 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 and affirmed the Agency'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.

The Court approved use of BACT in Demolition Contractors to mitigate the unintended adverse effects of regulation, namely, the threat to worker safety posed by wetting asbestos in subfreezing temperatures.^{29/}

29/ Petitioner may argue that Demolition Contractors was overruled sub silentio in Adamo, 434 U.S. at 289. Such a contention would be without merit. The Court in Adamo held that it had jurisdiction to determine the work practice standards were not emission standards within the meaning of Section 112(b)(1)(B). The jurisdictional ruling was predicated on the criminal nature of Adamo and the strict construction required thereby. Id. at 282-84. Accord, U.S. v. Ethyl Corp., 761 F.2d 1153, 1156 (5th Cir. 1985), cert. denied 106 S. Ct. 830 (1986) ("the Court rested its holding in Adamo on the nature of a criminal prosecution"). Demolition Contractors was a civil suit, however, and Adamo therefore is not controlling. See Ethyl, 761 F.2d at 1156.

Moreover, Adamo addressed the narrow issue of whether a work practice standard is an emission standard within the meaning of Section 112(b)(1)(B). The Court did not purport to address the issue adjudicated in Demolition Contractors, namely, whether use of BACT can satisfy the ample margin of safety requirement. Accordingly, Demolition Contractors is still good law.

4. Resolving enforcement issues.

The Administrator should also be permitted to consider enforcement issues when setting emission standards.^{30/} For example, enforcement considerations might dictate setting emission standards at levels that are consistently achievable rather than almost always achievable if each level provides an ample margin of safety. In light of the Act's strict liability standard, the severe penalties (up to \$25,000 per day) associated with noncompliance,^{31/} and the possibility of citizens' suits,^{32/} enforcement issues are reasonable factors for the Administrator to consider in setting emission standards.

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. After reviewing EPA compliance data,^{33/} the Agency concluded that

^{30/} 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.

^{31/} See 42 U.S.C. § 7413(b).

^{32/} See 42 U.S.C. § 7604.

^{33/} 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"; and that according to EPA personnel "[c]ontinuous

(Footnote Continued)

"even though the limit on maximum emissions of VC is set at 10 ppmv, the average and most short-term emissions will be considerably lower than this level,"^{34/} and that emissions between 5 ppm and 10 ppm are caused by uncontrollable "emission fluctuations . . . [and] result in little reduction in mass emissions of VC."^{35/} Accordingly, the Administrator's decision to consider enforcement issues and maintain the standard at "the lowest level of control which has been consistently achieved"^{36/} was reasonable.^{37/}

33/ (Continued Footnote)

monitoring of incineration stacks and compliance tests have shown VC levels ranging from 'nondetectable at 0.1 ppm' to 'less than 10 ppm.'" pp.4.7-4.10 (C.L. A-25).

34/ 51 Fed. Reg. at 34,907.

35/ 50 Fed. Reg. 1182, 1184 (J.A. at 46).

36/ Id.

37/ 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 withdrawal was not based on technological considerations, since 5 ppm is almost always achieved, but was premised on enforcement issues as set forth above. See 51 Fed. Reg. at 34,907.

- B. EPA Has the Same Authority to Consider Technological Feasibility Under Section 112 That the States Have, and at Times Even EPA Has, Under Section 110.

NRDC argues that if EPA cannot consider feasibility under Section 109, which requires that air quality standards provide "an adequate margin of safety," the Agency certainly cannot do so under Section 112, which requires that emission standards provide an "ample margin of safety." This semantically appealing syllogism ignores the structure of the Clean Air Act, the difference between air quality standards and emission standards, and the relationship between Section 112 and Sections 108-110. The emission of hazardous air pollutants can be regulated either by a single ambient air quality standard and specific plant permit under Sections 108-110, or by emission source under Section 112.^{38/} For pollutants^{39/} in

^{38/} The regulatory scheme is not determined by the hazardous nature of the pollutant. The Agency regulates hazardous pollutants under Sections 108-110 when the pollutant is ubiquitous. See, e.g., Lead Industries Ass'n v. EPA, 647 F.2d 1130, 1136, 1140 (D.C. Cir.) cert. denied 449 U.S. 1042 (1980) ("high level lead exposure [causes] . . . delirium, mania, convulsions, paralysis, coma, and death"). When the impact of the pollutant is geographically limited, EPA regulates under Section 112. Accordingly, the Agency decided to regulate VC under Section 112 because "vinyl chloride is a localized problem and because the NAAQS/SIP process is time consuming and complex." 1 SSEIS at 2-10 (C.L. A-3).

^{39/} Air emissions of any kind are air pollutants. 42 U.S.C. § 7602(g). Generally, pollutants are regulated under Sections 108-110 or Section 112. Other CAA provisions regulating air pollution by source are found at 42 U.S.C. § 7411 (new source performance standards), and 42 U.S.C. §§ 7470-79 (prevention of significant deterioration of air quality).

the former category, regulatory responsibility is divided between EPA and the states; EPA determines the acceptable ambient concentration of the pollutant, and the states determine how to achieve that concentration. 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 only objective is to establish a single numerical air quality standard based solely on the criteria set forth by Congress in Section 108;^{40/} 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). That standard is achieved 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) .^{41/} Because the

^{40/} 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).

^{41/} Cost and technological feasibility may not be considered by the Agency when conducting its Section 110 review because EPA

(Footnote Continued)

states have the authority to determine how the ambient concentration is to be achieved, they may also consider cost and technological feasibility when drafting their SIPs. Union Electric Co. v. EPA, 427 U.S. 246, 266 (1976). Likewise, when EPA drafts SIPs for states pursuant to Section 110(c) because the states' SIPs are environmentally unsatisfactory, the Agency may consider cost and technological feasibility. See South Terminal Co. 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

41/ (Continued Footnote)

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).

safety"^{42/} 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. See also National Coalition Against the Misuse of Pesticides v. Thomas, 809 F.2d 875, 881-82 (D.C. Cir. 1987) (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

42/ Section 109 requires that the margin of safety be "adequate," while Section 112 requires that the margin be "ample." This distinction relates to the degree of protection to be provided from "hazards which research has not yet identified." See Environmental Defense Fund v. EPA, 598 F.2d 62, 81 (D.C. Cir. 1978). Where an ample margin of safety is required, the degree of protection "[is] to be greater than 'normal' or 'adequate.'" Id. The distinction between "ample" and "adequate" relates to the degree to which health risk must be minimized, not to the factors that may be considered in satisfying the statutory mandates. If anything, the Administrator should be given greater flexibility when an ample margin of safety is required. As this Court has stated: "Addition of a generous measure--'ample'--is Congress' recognition that the EPA would need great latitude in meeting its responsibility." Id.

factors in the statute"); Hercules, 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"). Indeed, it is inconsistent with the structure of the Act and unreasonable to assume that Congress intended to prohibit Agency consideration of factors under Section 112 that the states may consider under Section 110.

- C. The Court Should Uphold the Vinyl Chloride Standard Because the Administrator's Consideration of Technological Feasibility Did Not Interfere with His Ability to Provide an Ample Margin of Safety to Protect the Public Health.
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As shown above, 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.^{43/} Cf. Union Electric, 427 U.S. at 266, 269. As shown above, consideration of 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

^{43/} 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.

feasibility to the detriment of public health is a matter for this Court to determine on a case by case basis.^{44/}

Because the VC Standard provides an ample margin of safety, the Administrator's consideration of feasibility in this case did not adversely affect the statutory objective. Accordingly, NRDC's petition for review should be denied.

D. 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.^{45/} EPA

^{44/} NRDC erroneously contends that consideration of technological feasibility necessarily compromises the public health by constantly referring to "cost and 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 invalid per se.

^{45/} 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").

has done so to address administrative issues resulting from its mandate to implement Section 112. This 16 year history should not lightly be cast aside by the Court.^{46/}

Indeed, as shown above, Section 112 establishes a single statutory goal--protecting the public health from hazardous pollutants--but does not set forth the regulatory means of doing so. From this silence, NRDC urges this Court to infer that the Administrator may never consider cost and technological feasibility, even if he does so for administratively sound reasons while providing an ample margin of safety. As the Supreme Court has held, however, the most plausible inference from Congress' silence is that the Administrator may consider any reasonable factor to achieve his statutory goal.^{47/}

46/ 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).

47/ See Chevron U.S.A. Inc. 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 are inapposite; they 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

(Footnote Continued)

Finally, as both the pan 1 majority^{48/} and the dissent^{49/} recognized, Section 112's legislative history is not illuminating. The legislative history emphasizes Section 112's health-based objective without any discussion of factors that may be considered in achieving that goal. Because of the absence of statutory language or compelling legislative history to the contrary, the Administrator's selection of factors must be upheld. Chevron U.S.A. v. NRDC, 467 U.S. 837, 845 (1984).

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. Additionally, the data generated by EPA since 1976 demonstrate that the actual exposure levels are substantially lower than the levels projected in 1976 (upon which the 1975 risk assessment was based). If EPA evaluated the health risk based upon actual rather than permitted

47/ (Continued Footnote)

(1981); Union Electric, 427 U.S. at 257 n.5. 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 at 727.

48/ NRDC v. EPA, 804 F.2d at 716-19.

49/ Id. at 732-34.

emissions, the risk would be several orders of magnitude lower than 1 in 20 million.^{50/} 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."^{51/}

The validity of the Standard is not at issue;^{52/} the question 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, 598 F.2d at 114 n.45, this question must be answered in the affirmative. In that action, Velsicol contended that EPA set a Clean Water Act 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

^{50/} Because the risk assessment is based on a linear model, reduction in exposure would have a direct relationship to reduction of risk. See supra n.14. 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.

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

^{52/} Petition for review must be filed within 60 days from the date notice of promulgation appears in the Federal Register. See 42 U.S.C. § 7607(b)(1).

permitted to do so. The Hercules court agreed with EPA, stating at 114 n.45 and accompanying text:

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, and NRDC points to no data in the record--because there is none--which suggests that this assessment was wrong. Thus, even assuming EPA withdrew those proposed amendments based on feasibility, and assuming arguendo that such consideration would be impermissible in the context of initially setting emission standards, the Administrator's decision to withdraw the 1977 proposed amendments should still be affirmed because in doing so he did not compromise the public health or violate the statutory standard.

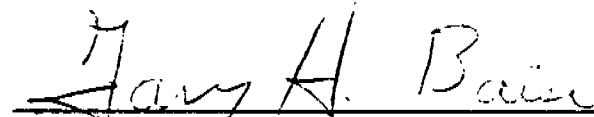
CONCLUSION

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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