

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued January 18, 2007

Decided March 13, 2007

No. 03-1202

SIERRA CLUB,
PETITIONER

v.

ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENT

BRICK INDUSTRY ASSOCIATION, ET AL.,
INTERVENORS

Consolidated with
06-1013

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

James S. Pew argued the cause and filed the briefs for petitioner.

Eric G. Hostetler, Attorney, U.S. Department of Justice, argued the cause for respondent. With him on the brief was *John C. Cruden*, Deputy Assistant Attorney. *Kerry E. Rodgers*, Attorney, U.S. Environmental Protection Agency, entered an

appearance.

Christopher L. Risetto and *Howard L. Gilberg* were on the brief for intervenors the Brick Industry Association, et al. in support of respondent.

Before: GINSBURG, *Chief Judge*, TATEL, *Circuit Judge*, and WILLIAMS, *Senior Circuit Judge*.

Opinion for the Court filed PER CURIAM.

Concurring opinion filed by *Senior Circuit Judge* WILLIAMS.

PER CURIAM: In this case, the Sierra Club challenges the Environmental Protection Agency's air pollution standards for brick and ceramics kilns. Because most of the standards violate the Clean Air Act as interpreted by this Court in *Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855 (D.C. Cir. 2001) (per curiam), and *National Lime Ass'n v. EPA*, 233 F.3d 625 (D.C. Cir. 2000), and because the remaining standards violate the Act's requirements for "work practice standards," we vacate the standards in their entirety and remand for further proceedings consistent with this opinion.

I.

The Clean Air Act, 42 U.S.C. §§ 7401-7671q, directs the Environmental Protection Agency to establish emission standards for "major sources" of hazardous air pollutants listed in the statute. *Id.* § 7412(d)(1). In *Cement Kiln*, we described the Act as follows:

Until 1990, the Clean Air Act . . . required the Environmental Protection Agency to set risk-

based air pollution standards that would provide an “ample margin of safety to protect the public health.” *Id.* § 7412(b)(1)(B); *see also* H.R. REP. NO. 101-490, at 151, 322 (1990). To address problems with the implementation of risk-based regulation, Congress amended the Act in 1990 to require EPA to set the most stringent standards achievable, 42 U.S.C. § 7412(d)(2), that is, standards “based on the maximum reduction in emissions which can be achieved by application of [the] best available control technology.” S.REP. NO. 101-228, at 133 (1989), U.S. Code Cong. & Admin. News at 3385, 3518.

The 1990 amendments included . . . 42 U.S.C. § 7412(d)—which directs EPA to set standards limiting emissions of listed hazardous air pollutants (“HAPs”), *id.* §§ 7412(b), (c)(1)-(2), from major stationary sources. Section 7412(d)(2) provides that:

Emission standards . . . shall require the maximum degree of reduction in emissions of the hazardous air pollutants subject to this section . . . that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing sources

Supplementing this general guidance, Congress imposed minimum stringency requirements—EPA calls them “emission floors”—which “apply without regard to either costs or the other factors and methods listed in section 7412(d)(2).” *Nat’l Lime Ass’n v. EPA*, 233 F.3d 625, 629 (D.C. Cir. 2000) (“*National Lime I*”). For “new sources”— . . . sources on which construction begins after EPA publishes emission standards, 42 U.S.C. § 7411(a)(2)—“[t]he maximum degree of reduction in emissions that is deemed achievable . . . shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source . . .” *Id.* § 7412(d)(3). For existing sources, what EPA deems achievable “shall not be less stringent than[] the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information) . . .” *Id.* As we explained in *National Lime II*, EPA implements these requirements through a two-step process: the Agency first sets emission floors for each pollutant and source category and then determines whether stricter standards, known as “beyond-the-floor” limits, are achievable in light of the factors listed in section 7412(d)(2). 233 F.3d at 629.

Cement Kiln, 255 F.3d at 857-58.

In *Cement Kiln* we considered the Sierra Club’s argument that EPA’s emission floors for hazardous waste combustors violated section 7412(d)(3) of the Act, the provision at issue in

this case. *Id.* at 859. For existing sources, EPA had identified the best-performing 12 percent of sources for which it had information. Among these sources, EPA then identified the median source's emission control technology, which it called the "maximum achievable control technology"—or "MACT control"—as the "average" emission limitation of the best performers. *Id.*; *see* 42 U.S.C. § 7412(d)(3)(A). EPA next identified the worst-performing source using the MACT control and set the floor at the emission level of that source. 255 F.3d at 859. For new sources, EPA followed the same approach, except that instead of using the technology of the median source as the MACT control, it used the technology of the single best-performing source. *Id.*; *see* 42 U.S.C. § 7412(d)(3).

The Sierra Club argued that this technology-based approach violated section 7412(d)(3)'s requirement that floors reflect emissions actually "achieved" or "achieved in practice" by the best-performing sources. 255 F.3d at 861. In response, EPA argued that section 7412(d)(3)'s floor provision "is a gloss" on section 7412(d)(2), which requires that beyond-the-floor emission standards be "achievable" by all sources, based on costs and other factors. *Id.* According to EPA, section 7412(d)(3) incorporates section 7412(d)(2)'s achievability requirement, meaning that emission floors must also be achievable by all sources. *Id.* We rejected EPA's interpretation, finding it to be an impermissible reading of the statute's unambiguous language:

Section 7412(d)(3) . . . limits the scope of the word "achievable" in section 7412(d)(2). While standards achievable by all sources using the MACT control might also ultimately reflect what the statutorily relevant sources achieve in practice, EPA may not deviate from section 7412(d)(3)'s requirement that floors reflect what

the best performers actually achieve by claiming that floors must be achievable by all sources using MACT technology.

Id. (citing *Chevron U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 842-43 (1984) (holding that if Congress has spoken directly to the disputed issue of statutory construction, “that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress”)); *see also Ne. Md. Waste Disposal Auth. v. EPA*, 358 F.3d 936, 955 (D.C. Cir. 2004) (per curiam) (reiterating that floors based on achievability cannot satisfy the statute’s actual achievement requirement). EPA chose not to file a petition for rehearing en banc or to seek Supreme Court review.

Cement Kiln was not the first time this court invalidated an EPA interpretation of section 7412(d)(3). Six months earlier, in *National Lime II*, we considered the Sierra Club’s challenge to EPA’s setting of “no control” floors—that is, no emission floors at all—for certain HAPs emitted by cement plants. 233 F.3d at 633-34. Defending its decision, EPA relied on *Sierra Club v. EPA*, 167 F.3d 658 (D.C. Cir. 1999) (“*Sierra*”), in which we explained that “EPA would be justified in setting the floors at a level that is a reasonable estimate of the performance of the ‘best controlled similar unit’ under the worst reasonably foreseeable circumstances.” *Id.* at 665. Based on *Sierra*, EPA argued that because cement plants used no emission control technology, “no control” floors reasonably estimated variability among the best performers. *National Lime II*, 233 F.3d at 633. We found EPA’s interpretation of the statute untenable:

Nothing in the statute even suggests that EPA may set emission levels only for those listed HAPs controlled with technology. To the contrary, the statute . . . requires EPA to

“promulgate regulations establishing emission standards for each category or subcategory of major sources . . . of hazardous air pollutants listed for regulation.” [42 U.S.C.] § 7412(d)(1).

...

Contrary to EPA’s argument, nothing in *Sierra* relieves it of the clear statutory obligation to set emission standards for each listed HAP. Although *Sierra* permits the Agency to look at technological controls to set emission standards, *see* 167 F.3d at 665, it does not say that EPA may avoid setting standards for HAPs not controlled with technology.

Id. at 633-34. Following the panel decision, EPA filed an unsuccessful petition for rehearing, *Nat’l Lime Ass’n v. EPA*, No. 99-1325 (D.C. Cir. Feb. 14, 2001) (order denying rehearing), but again sought neither en banc nor Supreme Court review.

With this background in mind, we turn to the facts of this case. At issue are EPA’s emission standards for brick and structural clay products (BSCP) kilns and clay ceramics kilns. Over 500 brick kilns and more than 50 ceramics kilns operate throughout the United States. BSCPs include brick, clay pipe, and clay roof tile; ceramics include tile and sanitaryware, such as toilets and sinks. Production of BSCPs and ceramics involves processing common clays and shales and forming and firing shapes. Because transporting clays and shales over long distances is infeasible, kilns are located close to the mines supplying the clays and shales used in their products. BSCPs and ceramics are fired in one of two types of kilns: those that operate continuously, which include “tunnel” and “roller” kilns; and those that operate in batch cycles, known as “periodic”

kilns. EPA divided brick kilns into three subcategories: large tunnel brick kilns, small tunnel brick kilns, and periodic brick kilns. It divided ceramics kilns into four subcategories: large tunnel ceramics kilns, small tunnel ceramics kilns, roller ceramics kilns, and periodic ceramics kilns. Reflecting the different standards set forth in sections 7412(d)(3) and 7412(d)(3)(A), EPA further divided each subcategory into new and existing kilns.

Each year, brick and ceramics kilns emit over 6,440 tons of HAPs, including hydrofluoric acid, hydrochloric acid, and particulate matter containing toxic metals, such as antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium. These HAPs can cause severe respiratory problems, cancer, neurological and organ damage, and adverse reproductive effects. National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing and Clay Ceramics Manufacturing, 68 Fed. Reg. 26,690, 26,692-94 (May 16, 2003) (to be codified at 40 C.F.R. pt. 63).

In 2002, EPA issued a proposed rule setting floors to limit HAP emissions from new and existing brick and ceramics kilns. National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing and Clay Ceramics Manufacturing, 67 Fed. Reg. 47,894 (proposed July 22, 2002) (to be codified at 40 C.F.R. pt. 63). For the subcategories in which few or no kilns use air pollution control devices, EPA proposed floors of “no emissions reductions”—in other words, no floors at all. *Id.* at 47,909, 47,912, 47,916-17. For all remaining subcategories, EPA proposed floors based on the pollution control devices used by the best-performing kilns, i.e., those with the lowest emissions. *Id.* at 47,911, 47,912, 47,917. In their comments on the proposed regulations, industry members insisted that installing the devices used by the best-

performing sources would be technologically and economically infeasible. For its part, the Sierra Club complained that EPA had failed to consider non-technology factors—e.g., fuel type, raw materials, additives and surface coatings, kiln design, and operator training—that contribute to emissions. U.S. Env'tl. Prot. Agency, National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing: Summary of Public Comments and Responses 2-40 (Feb. 28, 2003) (hereinafter “Summary of Public Comments”).

In response to these comments, EPA’s final emission standards set floors for several subcategories based on the pollution control devices used by the second-best performers—not, as EPA had proposed, the best performers—and replaced “no emissions reductions” floors in other subcategories with a so-called “work practice standard” of using clean-burning fuels. 68 Fed. Reg. at 26,699-26,701, 26712-13; *see* 42 U.S.C. § 7412(h) (explaining requirements for setting work practice standards in lieu of emission standards). The Sierra Club filed a petition for reconsideration, but EPA adhered to its standards. National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing, 70 Fed. Reg. 69,655, 69,657 (reconsidered Nov. 17, 2005) (to be codified at 40 C.F.R. pt. 63).

The Sierra Club now petitions for review. *See* 42 U.S.C. § 7607(b)(1) (authorizing petitions for review of EPA’s promulgation of emission standards). The Brick Industry Association and two ceramics producers intervene in support of EPA.

II.

The Sierra Club argues that EPA’s methodology in setting floors for brick and ceramics kilns violates the Clean Air Act’s plain language as interpreted by *Cement Kiln* and *National Lime II*. We agree. See *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 982 (2005) (“A court’s prior judicial construction of a statute trumps an agency construction . . . if the prior court decision holds that its construction follows from the unambiguous terms of the statute.”).

“Achieved,” not “Achievable”

As discussed above, we held in *Cement Kiln* that “EPA may not deviate from section 7412(d)(3)’s requirement that floors reflect what the best performers actually achieve by claiming that floors must be achievable by all sources using MACT technology.” 255 F.3d at 861. In setting the floor for existing large tunnel brick kilns, however, EPA did just that.

Most large tunnel brick kilns that have installed air pollution control devices use dry lime adsorbers (DLA). Others use non-DLA technology, including dry lime injection fabric filters (DIFF), dry lime scrubber/fabric filters (DLS/FF), and wet scrubbers (WS). In its notice of proposed rulemaking, EPA concluded that these non-DLA pollution control devices “represent[ed] the best control[.]” 67 Fed Reg. at 47,907. Because the 94th percentile (the median of the top 12 percent) of the best-performing large tunnel brick kilns used non-DLA technology, EPA—as required by *Cement Kiln*—proposed a floor based on this technology. *Id.* at 47,911. But after receiving “numerous comments from industry representatives” saying that kilns were unable to retrofit with WS because of a lack of sewer access to treat wastewater from the device, or with DIFF or DLS/FF without affecting production, EPA changed

course in its final rule. 68 Fed. Reg. at 26,694. Finding that non-DLA technology would have “potentially significant impacts on the production process,” *id.* at 26,695, and contrary to *Cement Kiln*’s requirement that floors reflect emission levels of the best-performing sources, EPA excluded non-DLA technology from its ranking of best-performing kilns, *id.* at 26,700. It then set the floor for existing large tunnel brick kilns based on DLA. *Id.*

EPA argues that it has “reasonably construe[d] the term ‘best performing’ . . . to allow it to consider whether retrofitting kilns with a particular pollution control technology is technically feasible.” Resp’t’s Br. 27. But EPA cannot circumvent *Cement Kiln*’s holding that section 7412(d)(3) requires floors based on the emission level actually *achieved* by the best performers (those with the lowest emission levels), not the emission level achievable by all sources, simply by redefining “best performing” to mean those sources with emission levels *achievable* by all sources. *See* 255 F.3d at 861. Moreover, EPA’s rationales for excluding kilns equipped with non-DLA technology from its ranking of the best-performing large tunnel kilns (the infeasibility of retrofitting all kilns with certain non-DLA technology and the negative impact other non-DLA technology would have on productivity) amount to nothing more than a concern about ensuring that its floor is achievable by all kilns in the subcategory—precisely the position we rejected in *Cement Kiln*.

III.

EPA’s emission standards run counter to *Cement Kiln* and *National Lime II* in several other respects—all variations on the Agency’s fundamental failure to set floors at the emission levels actually achieved by the best-performing sources.

Variability

In *Cement Kiln* we declared unlawful EPA's method of estimating variability among the best performers by lowering floors to the level of the worst performer using the same technology. We explained:

[W]e are unpersuaded by EPA's claim that to account for the best-performing sources' operational variability, it had to base the floors on the worst performers' emissions. While we have recognized that a given control can experience operational variability, the relevant question here is not whether control technologies experience variability at all, but whether the variability experienced by the best-performing sources can be estimated by relying on emissions data from the worst-performing sources using the MACT control. In this case, the evidence EPA cites to support the MACT approach as a means of accounting for operational variability fails to demonstrate the relevant relationship. Some of the Agency's citations to the record merely contain assertions that "[the] approach . . . fully accounts for normal process variability." The actual variability data EPA cites suggest only that emissions from sources using a given control vary over a wide range, not that the high emission levels achieved by sources at one end of that range reflect levels achieved by sources at the other end, nor that the best-performing sources ever experience a wide range of variability at all.

255 F.3d at 865 (citations omitted).

Here, EPA used the same flawed process to set floors for new large and small tunnel brick and ceramics kilns, as well as for existing large tunnel brick kilns. In its rulemaking, EPA explained that it “used the highest emission level associated with the[] best performers [i.e., all DLA-controlled kilns] to set the emission standard because it was [EPA’s] intent to set emission limits that reflect the performance that the best-controlled sources continually achieve considering variability.” 68 Fed. Reg. at 26,700 (justifying technology-based approach for existing kilns); *see also* Summary of Public Comments at 2-54 (same, with regard to new kilns). Citing a range of emission datapoints from a single DLA-equipped kiln, EPA explained that “[a]ll sources, including the best-controlled sources, have variability in emissions.” 68 Fed. Reg. at 26,700. Because these reasons for using the emission level achieved by the worst-performing kilns to predict the variability of the best performers differ little from the reasons EPA gave in *Cement Kiln*, this element of the Agency’s floor-setting methodology is similarly unlawful.

Defending its approach, EPA points to *Mossville Environmental Action Now v. EPA*, 370 F.3d 1232 (D.C. Cir. 2004), in which we held that floors may legitimately account for variability because “each [source] must meet the [specified] standard every day and under all operating conditions.” *Id.* at 1242. In *Mossville*, however, record evidence demonstrated that the floor reasonably estimated the actual variability of the best-performing source. *Id.* (noting “factual data” that a standard based on the worst-performing sources “reasonably estimates the performance of the top performers”). Here, by contrast, although EPA has some evidence that the best performers experience variability, it has failed to show that the emission levels achieved by the worst performers using a given pollution control device actually predict the range of emission levels achieved by the best performers using that device. Given

Cement Kiln's holding that EPA may not use emission levels of the worst performers to estimate variability of the best performers without a demonstrated relationship between the two, we conclude that the emission floors for new large and small tunnel brick and ceramics kilns, as well as for existing large tunnel brick kilns, violate the Act.

Non-technology Factors

In *Cement Kiln*, we rejected EPA's MACT approach to setting floors given record evidence that factors other than technology affected emissions. 255 F.3d at 863-65. In doing so, we noted our conclusion in *National Lime II* that the MACT methodology, a purely technology-based approach, would satisfy the Clean Air Act "if pollution control technology were the *only* factor determining emission levels of that HAP." *Id.* at 863 (quoting *National Lime II*, 233 F.3d at 633). We were unpersuaded by EPA's twin justifications for refusing to consider the effect of other factors on emissions, namely that the effect proved "impossible to reliably quantify," *id.* at 865, and that "floors must be achievable by all sources using MACT technology," *id.* at 864. We explained:

[I]f factors other than MACT technology do indeed influence a source's performance, it is not sufficient that EPA considered sources using only . . . MACT controls. . . .

Even accepting the proposition that factors affecting source performance . . . are difficult to quantify *when defining the MACT control*, nothing in the statute requires EPA to use the MACT approach. Section 7412(d)(3) requires only that EPA set floors at the emission level achieved by the best-performing sources. If EPA

cannot meet this requirement using the MACT methodology, it must devise a different approach capable of producing floors that satisfy the Clean Air Act.

Id. at 864-65.

EPA's emission standards for existing large tunnel brick kilns and new large and small tunnel brick and ceramics kilns suffer from the same defect (in addition to the defects noted above). In its rulemaking, EPA noted that it had reviewed non-technology pollution prevention techniques—in particular the substitution of fuels and clays with lower amounts of hazardous constituents. It found that fuel type had no appreciable effect on emissions, that transporting clays over long distances was impractical, and that changes in either could affect kilns' ability to duplicate their existing product lines. 68 Fed. Reg. at 26,699. Given these findings, EPA set floors based only on pollution control technology, explaining that “[w]hile we agree that factors other than [technology] type can affect emissions, we do not have the data to determine the specific degree of the effect of factors other than [technology] on emissions, and we believe that, for the BSCP industry, factors other than [technology] use are not viable MACT floor . . . control options.” *Id.* Though acknowledging that at least one non-technology factor, clay type, had an appreciable effect on emissions, EPA has articulated the same justifications it offered in *Cement Kiln* for using technology-based floors, i.e., a lack of data to quantify the effects of non-technology factors and a concern that floors based on clean clay would be unachievable because of the inability of kilns to switch clays. *Id.* These justifications are no more valid here than they were in *Cement Kiln*.

EPA argues that the Clean Air Act's command that it assess the emission “control” or “limitation” “achieved” refers to the

deliberate steps kiln operators take to reduce emissions rather than to the “happenstance” of being located near cleaner clay. Resp’t’s Br. 33-34. Yet we squarely held in *National Lime II* that the Clean Air Act requires neither an intentional action nor a deliberate strategy to reduce emissions. As we explained, “[t]he Clean Air Act requires the EPA to set MACT floors based upon the ‘average emission limitation[s] achieved’; it nowhere suggests that this achievement must be the product of a specific intent.” 233 F.3d at 640 (citation omitted). EPA’s decision to base floors exclusively on technology even though non-technology factors affect emission levels thus violates the Act.

“No Control” Floors

As noted above, in *National Lime II* we found unlawful EPA’s “no control” emission floors for categories in which the best performers used no emission control technology. 233 F.3d at 633-34. As we explained, EPA has a “clear statutory obligation to set emission standards for each listed HAP,” which does not allow it to “avoid setting standards for HAPs not controlled with technology.” *Id.* at 634.

EPA’s failure to set floors for existing small tunnel brick kilns and existing and new periodic brick kilns violates section 7412(d)(3) for precisely the same reason. EPA set “no emissions reductions” floors for existing small tunnel brick kilns because the 94th percentile kiln used no air pollution control technology and because changes in non-technology factors were not “appropriate” or “viable.” 67 Fed. Reg. at 47,909 (explaining EPA’s rationale for “no control” floors, which the Agency later adopted in final rule). EPA also set “no emissions reductions” floors for all periodic brick kilns, explaining that they too use no pollution control technology. *Id.* Other than again claiming that it has no obligation to set floors unless sources take some deliberate action to control emissions, EPA

has failed to offer any reason for distinguishing what it did here from what we invalidated in *National Lime II*.

IV.

This brings us to the one issue in this case controlled by neither *Cement Kiln* nor *National Lime II*, namely EPA's use of so-called "work practice" standards instead of emission floors for the remaining subcategories of kilns. Section 7412(h) of the Clean Air Act provides that "if it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard . . . , the Administrator may, in lieu thereof, promulgate a design, equipment, work practice, or operational standard." 42 U.S.C. § 7412(h)(1). That section further explains that it is "not feasible" to set an emission standard when "the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations." *Id.* § 7412(h)(2)(B).

Invoking section 7412(h), EPA adopted the work practice standard of using clean-burning fuels for existing ceramics kilns and new periodic and roller ceramics kilns. 68 Fed. Reg. at 26,712, 26,713. To justify its use of work practice standards, EPA pointed out that ceramics kilns, like periodic brick kilns, use no pollution control devices and cannot feasibly substitute clays. Rather than setting "no control" floors, however, EPA imposed a clean-burning fuels standard. *Id.* According to EPA, setting a more precise floor based on the emission levels achieved by the use of clean-burning fuels was not feasible given the absence of data necessary to make this calculation. *Id.* at 26,712.

We agree with the Sierra Club that EPA's use of work practice standards instead of emission floors violates section 7412(h). That provision allows EPA to substitute work practice

standards for emission floors only if measuring emission levels is technologically or economically impracticable. Here, EPA never determined that measuring emissions from ceramics kilns was impracticable; it determined only that it lacked emissions data from ceramics kilns. EPA thus had no basis under section 7412(h) for using work practice standards. To be sure, as EPA points out, because ceramics kilns already use clean-burning fuels, the work practice standard would have no impact on their products. For the same reason, of course, it would have no impact on emissions.

V.

For the foregoing reasons, we vacate the emission standards for both brick and ceramics kilns and remand for further proceedings consistent with this opinion. If the Environmental Protection Agency disagrees with the Clean Air Act's requirements for setting emissions standards, it should take its concerns to Congress. If EPA disagrees with this court's interpretation of the Clean Air Act, it should seek rehearing en banc or file a petition for a writ of certiorari. In the meantime, it must obey the Clean Air Act as written by Congress and interpreted by this court.

So ordered.

WILLIAMS, *Senior Circuit Judge*, concurring: I agree entirely with the court's opinion and write only to note a paradox in the relationship between two key provisions of § 112 of the Clean Air Act.

Section 112(d)(2) calls for emissions standards that are the most stringent that the EPA finds to be "achievable," taking into account a variety of factors including cost. 42 U.S.C. § 7412(d)(2); see *Per Curiam* at 3. Section 112(d)(3) provides that the standards "shall not be less stringent" than the emission controls that have been "achieved in practice." 42 U.S.C. § 7412(d)(3); see *Per Curiam* at 4. The "achievable" standards have come to be known as the "beyond-the-floor" standards, see *id.* at 4, 5, meaning, obviously, ones more stringent than the "floors" established under § 112(d)(3). The language thus embodies an assumption that standards based on achievability will be more stringent than ones based merely on past achievement.

What if meeting the "floors" is extremely or even prohibitively costly for particular plants because of conditions specific to those plants (e.g., adoption of the necessary technology requires very costly retrofitting, or the required technology cannot, given local inputs whose use is essential, achieve the "floor")? For these plants, it would seem that what has been "achieved" under § 112(d)(3) would not be "achievable" under § 112(d)(2) in light of the latter's mandate to EPA to consider cost. (Notice that here EPA issued no "beyond-the-floor" standards, and petitioner makes no complaint on that score.) In other words, as applied to some sources, the floor compelled by the statutory language appears to be more stringent than "beyond-the-floor."

If this were all, we might be talking of a statute whose literal words produced a result so "demonstrably at odds with the intentions of its drafters" as to justify judicial surgery. See *United States v. Ron Pair Enterprises, Inc.*, 489 U.S. 235, 242

(1989) (quoting *Griffin v. Oceanic Contractors, Inc.*, 458 U.S. 564, 571 (1982)) (internal quotation marks omitted).

Happily § 112 is not such a statute. Section 112(d)(1) authorizes the Administrator to “distinguish among classes, types and sizes of sources within a category or subcategory,” and the language of subsections 112(d)(2) and (3) pervasively refers to standards for sources in each “*category or subcategory*.” The authority to generate subcategories is obviously not unqualified; at the least it must be limited by the usual ideas of reasonableness. And there is not necessarily any guarantee that, even with suitable subcategorization, every source will be able to achieve standards that meet a lawful application of § 112(d)(3) to reasonably defined subcategories. Nonetheless, one legitimate basis for creating additional subcategories must be the interest in keeping the relation between “achieved” and “achievable” in accord with common sense and the reasonable meaning of the statute.