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## United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued October 20, 2003 De

Decided December 9, 2003

No. 02–1326

SAFE FOOD AND FERTILIZER, ET AL., PETITIONERS

v.

Environmental Protection Agency, Respondent

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

Riyaz A. Kanji argued the cause for petitioners. With him on the briefs were *Melissa Powers*, *Nina A. Mendelson* and *Charles M. Tebbutt*.

Martin F. McDermott, Attorney, U.S. Department of Justice, argued the cause for respondent. With him on the brief was Steven E. Silverman, Attorney, U.S. Environmental Protection Agency.

Bills of costs must be filed within 14 days after entry of judgment. The court looks with disfavor upon motions to file bills of costs out of time. Before: Edwards and Garland, *Circuit Judges*, and Williams, *Senior Circuit Judge*.

Opinion for the Court filed by *Senior Circuit Judge* WILLIAMS.

WILLIAMS, Senior Circuit Judge: Zinc fertilizers can be produced either from virgin materials or recycled byproducts of certain industrial processes. In the rule under review here, the Environmental Protection Agency resolved that Subtitle C of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6901, would not apply to the recycled materials used to make zinc fertilizers, or to the resulting fertilizers themselves, so long as they met certain handling, storage and reporting conditions and (in the case of the fertilizers themselves) had concentration levels for lead, arsenic, mercury, cadmium, chromium, and dioxins that fall below specified thresholds. Petitioners claim that both the materials and the fertilizer are "hazardous wastes" and that therefore the EPA must regulate them under RCRA's Subtitle C.

A material is a "hazardous waste" under RCRA if it is a "solid waste" as defined in 42 U.S.C. § 6903(27) and is "hazardous" as defined in 42 U.S.C. § 6903(5). Both parties agree that the materials are "hazardous" as that word of art is used under RCRA, although (as we shall see) the EPA does not in fact regard them as posing any material hazard if they comply with the conditions specified by the rule. The issue is whether the materials in question are "solid waste." The EPA has concluded that they are not—that so long as they satisfy the stated conditions, they have not been "discarded" as RCRA's definition of solid waste uses the term.

We remand the case for further explanation regarding a narrow issue—the EPA's selection of an exemption level for chromium. In all other respects we affirm.

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The regulatory status quo before adoption of the present rule was as follows: The EPA classified the secondary materials recycled to make zinc fertilizer as "solid waste," and, if "hazardous," as "hazardous waste" subject to RCRA Subtitle C regulation until a final commercial product was produced. 50 Fed. Reg. 614, 646/2-47/2, 666/2-3 (Jan. 4, 1985). In addition, a commercial product derived from a hazardous waste, if used on the land in a manner constituting "disposal," was exempt from other Subtitle C regulation so long as it satisfied the Land Disposal Restriction ("LDR") treatment standards for each hazardous waste in the product. 53 Fed. Reg. 31,138, 31,212 (Aug. 17, 1988); see also 55 Fed. Reg. 22,520 (June 1, 1990) (modifying standards). The EPA imposed this LDR standard on most zinc fertilizers made from recycled hazardous materials, but excepted ones made from the electric arc furnace dust generated in steel production, commonly known by its RCRA designation "K061."

In 1998 the EPA responded to our decision in *Chemical Waste Management v. EPA*, 976 F.2d 2 (D.C. Cir. 1992), by adopting a new rule tightening its general LDR standards. 63 Fed. Reg. 28,556 (May 26, 1998). Several fertilizer manufacturers warned the EPA that application of the new standards would have adverse environmental effects: their products would be driven from the market in favor of the more contaminated—but exempt—K061 fertilizers. As a result, the EPA stayed the application of the 1998 LDR standards to zinc fertilizers and expressed its intention to review the whole issue of fertilizers made from recycled materials in a new rulemaking, see 63 Fed. Reg. 46,332 (August 31, 1998), which it launched in November 2000, see Proposed Rule, 65 Fed. Reg. 70,954, 70,956/2–3 (Nov. 28, 2000).

The new rule eliminates the special exemption for K061 fertilizers from Subtitle C regulation, but provides a broad conditional exemption both for certain hazardous secondary materials used in the production of zinc fertilizers and for the fertilizers themselves. The rule exempts the feedstocks if they are not speculatively accumulated and meet certain storage, record-keeping and notice requirements consistent with use of the feedstocks as valued commodities rather than wastes. It exempts zinc fertilizers made with such feedstocks if fertilizer manufacturers meet certain testing and recordkeeping requirements and if the fertilizers themselves meet maximum concentration levels for six contaminants—lead, arsenic, cadmium, chromium, mercury, and dioxins. Feedstocks failing to meet the feedstock conditions would be subject to regular Subtitle C regulation, and non-compliant fertilizer would be subject to the LDR standards. The EPA reasoned that so long as these materials met the specified conditions they should not be seen as "discarded" within the meaning of RCRA's definition of "solid waste," 42 U.S.C. § 6903(27). Final Rule, 67 Fed. Reg. 48,393/1 (July 24, 2002).

Petitioners, nonprofit organizations opposed to the new rule, filed a challenge pursuant to 42 U.S.C. § 6976(a). They attack the new exemptions as contrary to RCRA's plain meaning and as unreasonable. They also attack an element of the regulatory status quo ante, namely (for fertilizer not qualifying for the new exemption) the 1988 decision allowing fertilizers to comply with RCRA by satisfying the LDRs for each hazardous waste they contain, rather than stricter standards.

Jurisdictional issues. At the outset, the EPA poses two jurisdictional objections. First, it disputes petitioners' standing, arguing that, since fertilizers made from recycled materials are chemically identical to fertilizers made from virgin materials already on the market, petitioners cannot show constitutionally sufficient injury. The EPA also frames the argument as a claim that petitioners' injury is not redressable, because even the complete suppression of recycled fertilizer would leave virgin zinc fertilizer in use, with what the EPA posits are identical effects.

Whatever the merits of the EPA's theory, the facts don't match its premise. The record does not support the claim that contaminant concentrations in recycled fertilizer under the EPA's rule will be literally identical to those in virgin materials. Rather, the rule permits contaminant concentrations in fertilizer from recycled zinc materials at levels higher than the highest concentrations that the record shows for existing fertilizers made from virgin materials. Though the EPA argues that these differences do not have demonstrable health or environmental impacts, a conclusive showing of such impacts isn't necessary for purposes of standing. Here, plaintiffs' merits claim overlaps with their contention on standing: if there were a violation of RCRA and petitioners were exposed to the materials, that fact alone would suggest the probability of an environmental impact rising at least to the modest levels necessary for standing. See, e.g., *United States v. SCRAP*, 412 U.S. 669, 690 n.14 (1973). See also *Ass'n of American Railroads v. Dep't of Transp.*, 38 F.3d 582, 585 (D.C. Cir. 1994) (where plaintiffs' merits claim, if correct, would establish causation for standing purposes, that element of standing is deemed adequately shown).

The EPA's second jurisdictional challenge addresses only the petitioners' attack on the residual rule, which allows fertilizers to satisfy RCRA by meeting the LDR standards. This, the EPA argues, is an impermissible "back-door" challenge to the 1988 rulemaking and is barred by the statutory requirement that petitions for review of RCRA rules be filed within 90 days of promulgation. 42 U.S.C. § 6976(a)(1). We agree.

It was in 1988 that the EPA adopted the rule that fertilizers made with recycled materials could comply with RCRA by meeting the LDR standards. The new rule leaves that principle untouched for fertilizers not qualifying for the new exemption. The EPA could not have been more explicit in the present rulemaking that the agency was "not accepting comment on these past determinations [i.e., the 1988 determination on exclusive use of the LDR standards] or otherwise reopening these issues." Proposed Rule, 65 Fed. Reg. at 70,959/1 n.2. Thus, petitioners can challenge the application of the LDR standards to fertilizers only if they show that the EPA reopened these standards in spite of the agency's explicit efforts not to do so. They make two arguments to support such a reopening claim. Neither is persuasive.

First, petitioners assert that the EPA explicitly reopened the LDR standards when it invited comment on the alternative of "retaining the current [] regulatory structure [i.e., the application of the LDR standards] for hazardous wastes that are used to make zinc fertilizers," 65 Fed. Reg. at 70,964/2. But it is absurd to suppose that every time an agency requests parties to compare the regulatory status quo with specific proposed alternatives, all facets of the status quo become fair game for new challenges. See, e.g., *Amer. Iron* & Steel Inst. v. EPA, 886 F.2d 390, 398 (D.C. Cir. 1989).

Second, petitioners invoke Public Citizen v. NRC, 901 F.2d 147, 152 (D.C. Cir. 1990), for the proposition that an agency, by reconsidering and reinstating an old rule, implicitly opens that rule to fresh challenge even when the agency does not mean to do so. But the predicate of *Public Citizen* is missing. Not only have petitioners failed to show that the EPA reconsidered the role of the LDR rule, but the record sections they cite indicate the opposite: the EPA considered and discussed the continued applicability of the LDR standards to products that would not be exempted under the new rule, but it never addressed the question whether those standards were generally appropriate for fertilizer products. See "EPA's Proposed Regulations for Zinc Fertilizers Made from Recycled Hazardous Secondary Materials: Response to Comments," Docket No. 8 (undated) at 15 (items 11-12), 24 (item 10). Petitioners' challenge to the EPA's use of the LDR standards is therefore barred.

## Merits. RCRA defines "solid waste" to mean

any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and any other *discarded* material.

42 U.S.C. § 6903(27) (emphasis added). Petitioners challenge the EPA's decision that recycled materials complying with the specified conditions are not "discarded" material. We review under the standard principles of *Chevron, U.S.A., Inc. v. Natural Resources Defense Council,* 467 U.S. 837 (1984). Unless the statute resolves the issue, we must uphold the EPA so long as its interpretation is reasonable.

Petitioners assert that, as a matter of plain meaning, the materials in question are "discarded" even though they are recycled in a useful product. They claim that under our cases recycled material destined for immediate reuse within an ongoing industrial process is never considered "discarded," whereas material that is transferred to another firm or industry for subsequent recycling must always be so viewed.

Petitioners misread our cases. We have held that the term "discarded" cannot encompass materials that "are destined for beneficial reuse or recycling in a continuous process by the generating industry itself." Am. Mining Cong. v. EPA ("AMC I"), 824 F.2d 1177, 1186 (D.C. Cir. 1987); see also Ass'n of Battery Recyclers, Inc. v. EPA, 208 F.3d 1047, 1056 (D.C. Cir. 2000). We have also held that materials destined for future recycling by another industry may be considered "discarded"; the statutory definition does not preclude application of RCRA to such materials if they can reasonably be considered part of the waste disposal problem. Am. Petro*leum Inst. v. EPA*, 906 F.2d 729, 740–41 (D.C. Cir. 1990); Am. Mining Cong. v. EPA ("AMC II"), 907 F.2d 1179, 1186-87 (D.C. Cir. 1990). But we have never said that RCRA compels the conclusion that material destined for recycling in another industry is necessarily "discarded." Although ordinary language seems inconsistent with treating immediate reuse within an industry's ongoing industrial process as a "discard," see AMC I, 824 F.2d at 1185, the converse is not true. As firms have ample reasons to avoid complete vertical integration, see generally Ronald Coase, "The Nature of the Firm," 4 Economica 386 (1937), firm-to-firm transfers are hardly good indicia of a "discard" as the term is ordinarily understood.

Petitioners make a second, more specific claim derived from the statutory language. They say that RCRA's definition of solid waste as "any garbage, refuse, sludge from ... [an] air pollution control facility and any other discarded material" includes K061 sludge (which is produced by air pollution control facilities) even if that sludge is not "discarded." Petitioners' reading of the statute is certainly plausible. The enumeration of specific types of solid waste prior to the catch-all "other discarded materials" might mean that the enumerated materials are always "solid waste" for RCRA purposes, regardless of the prevailing understanding of "discarded." But the EPA urges that the phrase "other discarded materials" should be read to mean that the listed materials are solid waste only if they are also "discarded." This reading is also sensible, as well as consistent with the "reverse ejusdem generis" principle occasionally invoked by this court, under which "the phrase 'A, B, or any other C' indicates that A is a subset of C," *United States v. Williams– Davis*, 90 F.3d 490, 508–09 (D.C. Cir. 1996); *Dong v. Smithsonian Institution*, 125 F.3d 877, 879–80 (D.C. Cir. 1997). We cannot find that the statutory text precludes the EPA's reading.

Thus we turn to the question "whether the agency's interpretation of ... 'discarded' [is] permissible, that is, reasonable and consistent with the statutory purpose." AMC II, 907 F.2d at 1186–87 (internal citations and quotation marks omitted). The answer depends on the EPA's reasons for finding that the materials involved here should not be regarded as "discarded" so long as they meet its conditions. The EPA's explanation is that market participants treat the exempted materials more like valuable products than like negatively-valued wastes, managing them in ways inconsistent with discard, and that the fertilizers derived from these recycled feedstocks are chemically indistinguishable from analogous commercial products made from virgin materials.

We need not consider whether a material could be classified as a non-discard exclusively on the basis of the marketparticipation theory. At oral argument EPA counsel rested the agency's case on the combination: market participants' treatment of the materials, together with EPA-required management practices and contaminant limits assuring substantial chemical identity. If this combination is enough to establish that the recycled fertilizers are not "discarded" when used on the land, it follows that feedstocks used to manufacture them are also not "discarded"—and therefore not waste—since the feedstocks are ingredients in a nondiscarded final product. Petitioners principally attack the legal and factual basis for the EPA's identity principle. As a matter of law, petitioners claim—correctly, as far as we know—that no court has yet endorsed the identity principle that the EPA urges. But this is hardly surprising, as petitioners point to no case where the EPA had both proposed the principle and been challenged. The question, apparently of first impression, is whether the identity principle, when used in conjunction with indicators like market valuation and management practices, is a reasonable tool for distinguishing products from wastes. We find that it is. Nobody questions that virgin fertilizers and feedstocks are products rather than wastes. Once one accepts that premise, it seems eminently reasonable to treat materials that are indistinguishable in the relevant respects as products as well.

But, petitioners argue, even if the identity principle could in theory justify exclusion of certain materials from RCRA regulation, its factual predicate is lacking here. The EPA set metal contaminant limits higher—sometimes considerably higher-than the highest level found in the twenty virgin commercial fertilizer samples it used as its benchmark. In most cases, the virgin commercial samples with high contaminant levels were themselves outliers; mean and median contaminant levels in commercial fertilizers were generally much lower than the EPA's ceilings. Compare 67 Fed. Reg. at 48,403/3 with "Metal Concentrations in Zinc Sulfate Monohydrate-Summary of Selected Data," Docket No. 34 (undated) (hereinafter "Data Summary"). We display the specific numbers in the table below. Unless the means for recycled inputs and fertilizers qualifying for the conditional exemption could be expected to be far lower than the EPA's ceilings, a matter on which the record is silent, there seems little reason to expect those means to be absolutely "identical" to those of virgin materials.

But we do not believe that affirmance of the EPA's principle requires literal identity, so long as the differences are so slight as to be substantively meaningless. Here, the apparent differences in the EPA's exclusion ceilings and the contaminant levels in the virgin fertilizer samples lose their significance when put in proper perspective—namely, a perspective based on health and environmental risks.

According to a risk assessment study commissioned by the Fertilizer Institute, which the EPA found "did not differ dramatically" from its own study, 67 Fed. Reg. at 48,405/1, four of the metal contaminants (lead, arsenic, mercury, and cadmium) do not endanger human health or the environment until they are present in concentrations between 20 and 372 times the EPA ceilings, *id*. Viewed in that light, the differences between the EPA's criteria and the contaminant concentrations found in virgin commercial fertilizers are not so large as to undermine the EPA's application of its identity principle.

		Virgin Commercial	Virgin	Fertilizer
	EPA	Sample	Commercial	Institute
	Exclusion	Arithmetic	Sample	Risk
Contaminant	Limit	Mean	Maximum	Threshold
Arsenic	10.7	3.7	20	3,976
Cadmium	49.7	15.6	48	2,947
Chromium	21.3	2.0	8	Not reported
Lead	99.4	25.3	89	16,437
Mercury	10.7	1.7	10	213

Comparison of EPA Limit and Virgin Commercial Samples for Fertilizer with 35.5% Zinc Content

(Sources cited above; values given in parts per million ("ppm")).

Petitioners note that the EPA said of the study underlying the Fertilizer Institute's proposed standards that "[a]s with other similar risk assessments, including EPA's ..., a number of simplifying assumptions and models were used to address data gaps or other uncertainties inherent in that analysis." *Id.* Petitioners therefore suggest that the EPA could give the study no weight. But the EPA made clear that while a technical judgment that the Fertilizer Institute findings were "accurate indicators of potential risks" would require "additional data and more rigorous analysis," *id.*, it by no means wrote the risk assessments off as useless. Rather, it found them a good enough benchmark for setting technology-based limits at levels that were tiny fractions of the risk thresholds. The EPA said that its proposed exemption limits were "considerably below levels that we estimate (albeit roughly) to be safe for humans and ecosystems." *Id.* Petitioners have pointed us to nothing in the record, and we have found nothing on our own, impugning the risk assessments or otherwise undermining the EPA's determination.

Although the EPA used a somewhat different method for setting the exclusion level for dioxins, we conclude that the above logic also supports that limit. Instead of basing the limit on concentration levels found in virgin materials, the EPA set a limit of 8 parts per trillion ("ppt"), similar to the average background dioxin concentration in soil. The EPA noted that the limited data on commercial zinc fertilizers suggest that virgin fertilizers generally have much lower dioxin concentrations, usually under 1 ppt. 67 Fed. Reg. at 48,406/3. But it observed that prior risk assessments indicated that dioxin did not pose a risk at the low concentrations in ordinary soil, 65 Fed. Reg. at 70,972/3; 67 Fed. Reg. 48,406/2, and that none of the commentators who proposed more stringent dioxin limits questioned the EPA's basic risk findings on the subject, id. at 48,406/3. In the absence of any indication of health and environmental risks, it was hardly unreasonable for the EPA to treat 8 ppt and 1 ppt as "identical" enough to support a finding that recycled materials with 8 ppt dioxin are products rather than "discarded" wastes.

The analysis is somewhat different, however, for chromium. While the original Fertilizer Institute study apparently included chromium, see letter from Fertilizer Institute to EPA, dated February 26, 2001, at 9 n.9, the summary of the study's results actually submitted to the EPA did not include a proposed chromium risk threshold comparable to those for lead, arsenic, mercury, and cadmium, *id.* at 11, and the EPA did not report any such risk threshold in its final rulemaking notice, 67 Fed. Reg. at 48,405/1. Though the EPA risk study included an analysis of chromium, the results of this study are not easily translatable by lay judges into a form comparable with the proposed exclusion ceiling.

Furthermore, the difference between the EPA's proposed chromium threshold and the chromium concentrations found in the existing products reported by the EPA is particularly striking. The EPA set its chromium exclusion level at 21.3 ppm for fertilizer with 35.5% zinc content, 67 Fed. Reg. at 48,403/3. Of the twenty commercial virgin fertilizer samples reported by the EPA, six included test results for chromium. Of these six, one had a chromium concentration of 8 ppm; the other five all had chromium concentrations of less than 1 ppm. Data Summary. The EPA's chromium exclusion level thus appears to be more than double the highest virgin commercial sample, ten times the commercial sample mean, and twenty times the commercial sample median. Given that the EPA has not pointed to anything in the record indicating that these differences in chromium concentrations are trivial from a health and environment perspective, we cannot affirm on the basis of the identity principle. We therefore remand to the agency for an explanation as to whether the differences that its rule allows are irrelevant when considered in light of possible effects on human health or the environment.

Independent of the statutory argument, petitioners claim that the EPA acted arbitrarily and capriciously by failing to explain adequately its decision, which they characterize as a choice of technology-based exclusion thresholds rather than ones minimizing risks to human health and the environment. Petitioners also claim that the EPA failed to explain its decision not to set thresholds for other hazardous heavy metals. As to the first, the EPA in fact explained that its technology-based exclusion limits "are considerably below levels . . . safe for humans and ecosystems," and that setting stricter limits would yield no substantial environmental benefits. 67 Fed. Reg. 48,405/2–3. This conclusion is adequately supported by evidence in the record. As to the decision not to set limits for additional metals, the EPA explained that the commenters proposing such limits failed to provide data indicating the specified metals' presence in zinc fertilizers. 67 Fed. Reg. 48,405/3.

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The case is remanded to the EPA for clarification of its exemption level for chromium (and any modifications that may prove appropriate). Otherwise, the petition for review is denied.

So ordered.