

**IN RE MICRONUTRIENTS INTERNATIONAL, INC.**

CERCLA §106(b) Petition Nos. 94-1, 94-2, 94-3, and 94-4

***FINAL DECISION***

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Decided March 25, 1996

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**Syllabus**

Seven petitioners have filed claims for reimbursement of costs they incurred in addressing the contamination of the Micronutrients International, Inc. Superfund Site in Tooele County, Utah ("MII Site"). The petitioners supplied electric arc furnace dusts, generated as waste by-products of the electric melting of metals, to the operators of the Site, allegedly in the expectation that the Site operators would incorporate the dusts into a fertilizer additive. Instead, thousands of tons of unprocessed or partially processed dusts were simply left on the ground in open piles at the MII facility, leading to the contamination of the soil with toxic metals. After MII ceased operations the petitioners agreed, under a consent order issued by U.S. EPA Region VIII in January 1986, to remove the waste piles from the Site and to ensure the disposal of the wastes at an appropriate facility. In March 1991, Region VIII issued a unilateral administrative order directing the petitioners to participate in "Phase II" of the Site's cleanup, addressing residual soil contamination and monitoring for ground water contamination.

One petitioner, Bethlehem Steel Corporation, has filed a claim for reimbursement of the costs incurred in connection with its consensual participation in the original, "Phase I" removal action. Bethlehem also has filed a claim, as have the other six petitioners, for reimbursement of costs incurred in connection with "Phase II" of the cleanup. All of the claims are premised on the petitioners' contention that they are not liable, under CERCLA § 107(a)(3), as arrangers for treatment or disposal of hazardous substances at the MII Site. The petitioners claim that they are not liable because their transactions with the operators of the MII Site were sales of a "useful product," and therefore could not have been arrangements for disposal or treatment of hazardous substances.

The petitioners also contend that even if they are subject to liability under CERCLA in connection with the cleanup of the MII Site, their liability is not joint and several because the environmental harm that occurred at the Site is divisible. Liability for contamination of the Site should, they contend, be apportioned on the basis of the weight of the various waste materials contributed to the Site by each petitioner and (allegedly) by six other generators who are not parties to this proceeding. According to the petitioners, such an apportionment should result in each petitioner being reimbursed for 20.48% of the costs that it incurred in connection with the cleanup of the Site.

In addition to the issues of liability and of divisibility of harm, the petitions also present threshold issues concerning the recoverability of "Phase I" costs incurred by Bethlehem Steel under the January 1986 consent order, and concerning the timeliness of the petition for reimbursement of "Phase II" costs jointly submitted by Armco, Inc., Atlantic Richfield Company, Chaparral Steel Company, NUCOR Corporation, and TAMCO Steel ("Armco petitioners").

Held: The petition for reimbursement of Phase II costs submitted by the Armco petitioners is timely. Region VIII failed to inform the petitioners that it regarded the Phase II action as having been "completed," for purposes of calculating the sixty-day filing period under CERCLA § 106(b)(2), as of the date of the Region's acceptance of a Removal Action Final Report submitted by the petitioners' contractor at the Site. Because the Region did not make that interpretation known to the Armco petitioners at a relevant time, we are unwilling to reject the Armco petitioners' contrary interpretation — which is not inconsistent with the plain language of the Region's cleanup order — that statutory "completion" did not occur until the Armco petitioners submitted a Notice of Completion.

The costs incurred by Bethlehem Steel under the Phase I consent order are not recoverable because the consent order contains an express waiver of Bethlehem's right to seek recovery of its costs from the Superfund.

On the merits, the Board holds that the petitioners' transfers of electric arc furnace dust, a RCRA hazardous waste, to the operators of the MII Site were not sales of a useful product but were arrangements for treatment or disposal of hazardous substances contained in the dust. The so-called "useful product" defense to liability under CERCLA § 107(a)(3) applies only to products that are manufactured for the purpose of sale, and that remain, as of the time of their transfer by the alleged CERCLA "arranger," capable of being used for their normal purpose without further processing. The substances at issue here, in contrast, were wastes as of the time they were created and were wastes as of the time of their transfer by the petitioners to the operators of the MII Site. They had not been manufactured for the purpose of sale, they were not useful for any purpose in the state in which they were transferred by the petitioners, and the petitioners simply needed to get rid of them whether they could sell them or not.

Finally, petitioners have failed to demonstrate the divisibility of the harm that occurred at the MII Site, and they are therefore jointly and severally liable for the costs of cleaning up the Site.

***Before Environmental Appeals Judges Ronald L. McCallum and Edward E. Reich.***

***Opinion of the Board by Judge McCallum:***

**I. BACKGROUND**

Petitioners in this action are six steel manufacturers<sup>1</sup> and the former operator of a zinc smelter,<sup>2</sup> all of whom generated emission control dusts or "flue dusts" as waste by-products of the electric melting of metals. The dusts contained a variety of "hazardous substances" as defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. § 9601(14), including such substances as arsenic, cadmium, chromium and lead. In addition, to the extent that the dust was derived from the primary production of steel in electric furnaces, the

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<sup>1</sup> Bethlehem Steel Corporation, Marathon Steel Company, Armco, Inc., Chaparral Steel Company, NUCOR Corporation, and TAMCO Steel.

<sup>2</sup> Atlantic Richfield Company.

dust was itself a listed hazardous waste (number K061) under the Resource Conservation and Recovery Act of 1976 (RCRA)<sup>3</sup> and therefore a “hazardous substance” under CERCLA.<sup>4</sup>

Petitioners at various times sold (and, in some instances, gave) these hazardous dusts to Micronutrients International, Inc. (MII), allegedly in the expectation that MII would subject the dusts to a process involving the addition of sulfuric acid and water; that the sulfuric acid would react with the zinc in the flue dusts to produce zinc sulfate; and that MII would sell the entirety of the resulting material, now containing zinc in the form of zinc sulfate, for use as a fertilizer additive.<sup>5</sup> But when MII ceased operations during 1983, it was discovered that large quantities of unprocessed or “virgin” dusts from these suppliers, and of “off-spec” fertilizer additive material, had been left in uncontrolled and uncovered piles at MII’s processing facility in Tooele County, Utah (the “MII Site”).<sup>6</sup>

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Electric arc furnace dust, which is also known by its hazardous waste designation code “K061,” is collected by emission control devices when steel is manufactured. EPA listed K061 as a hazardous waste under RCRA primarily because it contains high concentrations of hexavalent chromium, lead, and cadmium. However, K061 also contains substantial quantities of other metals, including antimony, arsenic, barium, beryllium, mercury, nickel, selenium, silver, thallium, vanadium, and zinc.

*Steel Manufacturers Ass’n v. EPA*, 27 F.3d 642, 645 (D.C. Cir. 1994). With the exception of barium and vanadium, all of the constituents of K061 identified by the court in the foregoing description have been designated as CERCLA “hazardous substances,” as has K061 itself. See 40 C.F.R. § 302.4 (Table).

<sup>4</sup> See CERCLA § 101(14) (defining “hazardous substance” to include, *inter alia*, “any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C. § 6921]”). The Solid Waste Disposal Act (SWDA), 42 U.S.C. §§ 6901-6992k, was amended by RCRA in 1976. We will refer to these provisions as RCRA. For all purposes relevant to this opinion the two designations, SWDA and RCRA, are interchangeable.

<sup>5</sup> For a brief discussion of practices of this kind, see *Land Disposal Restrictions for First Third Scheduled Wastes; Proposed Rule (Preamble)*, 53 Fed. Reg. 11,742, 11,753 (1988) (“Electric arc furnace dust is frequently recycled by being used as an ingredient in fertilizers, the end result being that the dust is placed directly on the land when the fertilizer is applied. Under the Agency’s rules, both the electric arc furnace dust and the resulting waste-derived fertilizer are hazardous wastes (see 40 CFR 261.2(c)(1)). The recycling activity is an example of the ‘use constituting disposal’ category of recycling.”).

<sup>6</sup> Background facts underlying the petitioners’ claims are also set forth in the opinion of the district court in *Anaconda Minerals Co. v. Stoller Chemical Co.*, 773 F. Supp. 1498 (D. Utah 1991), *aff’d*, 990 F.2d 1175 (10th Cir. 1993), which addresses certain insurance coverage issues arising from the cleanup of the MII Site.

In 1983, the State of Utah and the U.S. Environmental Protection Agency notified these petitioners of their potential responsibility under CERCLA to participate in a cleanup of the Site. In January 1986, the petitioners agreed to remove the waste piles from the Site to an approved disposal facility, under the terms of a consent order executed by the petitioners and by U.S. EPA Region VIII. That "Phase I" removal action was conducted between January and March of 1986.<sup>7</sup> Later, on March 28, 1991, Region VIII issued a unilateral administrative order (effective as of April 11, 1991) requiring the petitioners to undertake an additional, "Phase II" action to address residual contamination by conducting soil and ground water sampling; excavating, consolidating and capping the contaminated soils; and performing certain long-term inspection and monitoring activities.

Before us now are four petitions for reimbursement submitted pursuant to CERCLA section 106(b)(2), in which the petitioners seek to establish their non-liability under CERCLA and to recover the money they have expended in cleaning up the MII Site. Petition No. 94-1, submitted by Bethlehem Steel during May 1990, seeks to recover Bethlehem's costs of compliance with the Phase I consent order. Petition No. 94-2, submitted by Marathon Steel during December 1992, and Petition No. 94-3, submitted by Bethlehem Steel during December 1992, seek to recover costs incurred by Marathon and by Bethlehem in connection with the Phase II order. Petition No. 94-4, submitted jointly by Armco, Inc., Atlantic Richfield, Chaparral Steel, NUCOR Corp. and TAMCO Steel during March 1993, seeks to recover the costs incurred by those parties in connection with the Phase II order. Each petitioner also argues, in the alternative, that even if it is found to be liable it should recover 20.48 percent of the total costs it has incurred because (1) the harm that occurred at the Site is divisible as a matter of law, and (2) parties other than the petitioners allegedly supplied, in the aggregate, 20.48 percent (by weight) of the wastes removed from the Site.

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<sup>7</sup> Specifically, the on-site cleanup activities undertaken pursuant to the Phase I consent order were completed on or about March 3, 1986. An "investigation and evaluation plan of study" was not completed until August 1986. A "community relations plan" was later submitted to EPA by the Phase I respondents during April 1987. Finally, two other reports — a risk assessment report containing proposed "action levels" and an "investigation and evaluation report" — were described in an amendment to the Phase I consent order executed by the petitioners during August 1988. It appears that the risk assessment report was complete as of September 1, 1988. It is not clear when the "investigation and evaluation report" was prepared or completed, although Bethlehem Steel — the only party seeking to recover costs for Phase I work — identifies March 30, 1990 as the date of completion.

The Board issued a Preliminary Decision dated February 1, 1996, in which it proposed to deny the petitions for reimbursement. The parties submitted comments in response to the Preliminary Decision on March 6, 1996. Having considered the comments of the parties and their other submissions in support of, and in opposition to, the petitions for reimbursement, the Board issues this Final Decision.

## II. DISCUSSION

### A. Timeliness

Section 106(b)(2)(A) of CERCLA allows the respondents under a § 106(a) administrative order, such as these petitioners, to petition for reimbursement of their costs "within 60 days after completion of the required action" — *i.e.*, within sixty days after completion of the action required by the § 106(a) order. In the case before us, three separate petitions were filed in connection with the "Phase II" activities undertaken at the MII Site pursuant to EPA's March 28, 1991 unilateral administrative order: Petition No. 94-2, submitted by Marathon Steel; Petition No. 94-3, submitted by Bethlehem Steel; and Petition No. 94-4, submitted jointly by Armco, Atlantic Richfield, Chaparral Steel, NUCOR, and TAMCO Steel.<sup>8</sup> Petition Nos. 94-2 and 94-3 were

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<sup>8</sup> The fourth petition at issue in these proceedings, Petition No. 94-1, concerns "Phase I" removal activities undertaken by Bethlehem Steel before EPA's issuance of the March 28, 1991 unilateral administrative order. That petition must be rejected, however, because Bethlehem knowingly bargained away any right to seek recovery of Phase I costs from the Superfund in the text of the Phase I consent order. Paragraph XVII.A of the consent order states:

Respondents agree not to make any claims pursuant to section 112 of CERCLA, 42 U.S.C. § 9612 (1982) directly or indirectly against the Fund for expenses incurred in complying with this Consent Order.

The reason that this waiver of reimbursement does not specifically refer to CERCLA section 106(b)(2) is, quite simply, that the latter section did not yet exist when the consent order was executed. Section 106(b)(2) was not enacted until October 17, 1986, and until that time "the sole procedure for making claims against Superfund was found in § 112." *Wagner Seed Co. v. Bush*, 946 F.2d 918, 929 (D.C. Cir. 1991) (dissenting opinion), *cert. denied*, 503 U.S. 970 (1992). Congress's later enactment of a new procedure for making claims against the Fund should not undo what the parties quite evidently intended as a comprehensive waiver of any such claims.

In response to the Board's Preliminary Decision, Bethlehem denies that it intended to waive any claim for Phase I reimbursement by executing the Phase I consent order. *See* March 4, 1996 Letter from Mark E. Shere to the Environmental Appeals Board. However, we find Paragraph XVII.A to be a clear waiver albeit, for the reasons discussed above, one not specifically referencing § 106(b).

Region VIII has also objected to Bethlehem's claim for reimbursement of Phase I costs on the grounds that § 106(b) does not operate retroactively to authorize reimbursement of costs

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submitted to EPA during December 1992, but the other Phase II petition (No. 94-4) was not submitted to EPA until March 1993, roughly three months later. The different filing dates, moreover, do not reflect the performance of any additional or different work by the later-filing parties; the cleanup work required of each party was the same, and the work appears to have been performed by a single contractor acting on behalf of all of the participating respondents. Therefore, pointing to the unexplained three-month interval between the filing of the first two Phase II petitions and the filing of the third, Region VIII argues that the later-filed petition, Petition No. 94-4, should be dismissed as untimely.

In response, the March 1993 petitioners assert that the “required action” under the Phase II order includes the action described in paragraph XVIII.A of the order, titled “Termination and Satisfaction.” Paragraph XVIII.A states that “[r]espondents shall submit a written Notice of Completion to EPA upon completion of all Work described in this Order indicating that, in Respondents’ opinion, the tasks required by the Order have been completed.” Paragraph XVIII.A further provides that the Notice of Completion must include a certification, signed by an authorized representative of the respondent, attesting to the truthfulness, accuracy and completeness of the information contained in the Notice. The March 1993 petitioners contend that “[t]he effective date for completion for purposes of filing this Petition is the date of filing of the Notice of Completion, [which is] Petitioners’ final task or ‘required action.’” *Armco, Inc., et al. Petition for Reimbursement*, at 6. These petitioners submitted their Notice of Completion and filed their reimbursement petition simultaneously, and they therefore insist that the petition was timely filed. *Id.*

Region VIII argues that it makes no sense for statutory “completion” to await the occurrence of an event, like submission of a Notice of Completion, that is solely within the control of the petitioning party and that bears no necessary relation to the completion of the underlying cleanup work. As the Region further points out, equating “completion of the required action” with the date of submission of a Notice

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incurred under an order (such as the Phase I consent order) issued before § 106(b) was enacted. In support of its contention that § 106(b) does not apply retroactively to orders issued before its enactment, the Region cites *Bethlehem Steel Corp. v. Bush*, 918 F.2d 1323 (7th Cir. 1990); *Wagner Seed, supra*, 946 F.2d at 925 (majority opinion); and *Gary Steel Supply Co. v. Reagan*, 711 F. Supp. 471 (N.D. Ill. 1989), all of which so hold. We see no error in the Region’s conclusion that § 106(b) operates prospectively only — a conclusion that was found reasonable and worthy of deference in the cases cited by the Region, and that apparently reflects a consistent Agency interpretation of CERCLA. We find it unnecessary to reach the retroactivity issue, however, given Bethlehem’s affirmative waiver of any right to seek reimbursement of its Phase I costs.

of Completion could make the section 106(b) claims process extraordinarily difficult to administer:

The 60 day time period set by section 106(b) was not intended to be subject to manipulation by parties petitioning for reimbursement. Had Petitioners waited a year or more to submit their Notice of Completion, using their logic they could have still submitted a Petition for Reimbursement within 60 days of that date. Allowing the Petitioners to use the Notice of Completion date as the 60 day trigger thus makes a sham of the time requirement of section 106(b). This should not be permitted to occur.

Response to Petition for Reimbursement No. 94-4, at 4.

We share the Region's concern over the apparent arbitrariness and manipulability of the "completion" event advocated by the March 1993 petitioners. Indeed, if the Region had notified the participants in this cleanup, based on a reasonable interpretation of its own order, that the Phase II action would be regarded as "complete" at a particular meaningful time or with reference to an ascertainable event, we would be disinclined to interfere with the Region's determination. In this case, however, the Region never provided such notice. Rather, the record shows that the Region was itself uncertain as to when "completion" of the Phase II action would occur for section 106(b)(2) purposes, and did not come forward with an answer to that question on which the petitioners could confidently rely.<sup>9</sup> Under those circumstances, the petitioners were left to formulate their own interpretation of the Region's order and to act on the basis of that interpretation. The petitioners' argument equating "completion of the required action"

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<sup>9</sup> The uncertainty arises from the inclusion, in the Phase II order, of thirty-year cap inspection and ground water monitoring requirements and the Region's efforts to ensure the enforceability of those requirements. Thus, when the petitioners collectively submitted to Region VIII a "Removal Action Final Report" in September 1992, the Region initially responded with an October 29, 1992 letter indicating "acceptance" of the final report; it was the Region's acceptance letter that Bethlehem and Marathon chose, not implausibly, to treat as the event signaling "completion" of Phase II. But in January 1993 the Region issued a letter to Bethlehem and Marathon emphasizing the long-term inspection and monitoring requirements of the Phase II order and concluding that, in light of those outstanding requirements, "EPA's approval of the Final Report should not . . . be construed to imply that all the tasks required under the Order have been fulfilled." A similar letter was sent to the March 1993 petitioners shortly after the Region's receipt of their petition. Indeed, the Region continued to maintain as recently as March 1995 that all of the petitions relating to the Phase II order should be dismissed as premature because the Phase II tasks have not yet been completed. The Region abandoned that contention in its March 16, 1995 Motion to Amend Responses to Petitions for Reimbursement.

with the submission of their Notice of Completion, although not particularly compelling, is not inconsistent with the plain language of the Region's order and is sufficiently reasonable to be respected. Accordingly, the Board finds that Petition No. 94-4 is properly before it, and the Board will address the petition on its merits.

B. *Liability.*

CERCLA authorizes the recipients of § 106(a) orders to petition for reimbursement of their reasonable response costs from the Hazardous Substance Superfund. In order to obtain reimbursement, a petitioner:

[S]hall establish by a preponderance of the evidence that it is not liable for response costs under section [107(a)] \* \* \* and that costs for which it seeks reimbursement are reasonable in light of the action required by the relevant order.

CERCLA § 106(b)(2)(C). In addition, a petitioner who is liable under § 107(a) may nevertheless recover its costs to the extent that it can demonstrate that the Agency's decision in selecting the ordered response action was arbitrary and capricious or otherwise not in accordance with law. *Id.* § 106(b)(2)(D). *See generally In re Tamposi Family Investments*, 6 E.A.D. 106, 109 (EAB 1995). The claims before us in the present case are based on assertions of non-liability, pursuant to CERCLA § 106(b)(2)(C), rather than on challenges to the Agency's selection of a response action.

CERCLA imposes strict liability for the costs of cleaning up a contaminated site where it is determined that: (1) the site is a "facility," as that term is defined in 42 U.S.C. § 9601(9); (2) there has been a release or threatened release of a hazardous substance from the site; (3) the release or threatened release has caused the incurrence of response costs; and (4) the allegedly liable party falls within one of the categories of responsible persons described in CERCLA § 107(a)(1)-(4), 42 U.S.C. § 9607(a)(1)-(4). *See, e.g., FMC Corp. v. Aero Industries, Inc.*, 998 F.2d 842, 845 (10th Cir. 1993). Petitioners in this action raise no issue concerning the first three listed elements of CERCLA liability. They challenge only the determination by EPA Region VIII that they are liable as responsible persons under CERCLA § 107(a).

CERCLA § 107(a)(3), relied on by Region VIII to support the issuance of the challenged administrative order to these petitioners, describes a category of responsible persons that includes "any person who by contract, agreement, or otherwise arranged for the disposal or



treatment \* \* \* of hazardous substances owned or possessed by such person, by any other party or entity, at any facility \* \* \* owned or operated by another party or entity and containing such hazardous substances.” It is undisputed that each of these petitioners owned or possessed hazardous substances that were sent to the operators of the MII Site and that the MII Site was later found to contain. We need only consider whether the petitioners “arranged for disposal or treatment” of their hazardous substances by supplying them to the operators of the MII Site.

With respect to that question, each of the petitioners relies on an identical contention. Each argues that it did not, by supplying flue dust to the operators of the MII Site, “arrange for disposal or treatment” of hazardous substances at the Site, but instead sold a “useful product” for whose improper disposal, by MII, it should not be held accountable.

The “useful product” doctrine on which petitioners seek to rely was developed in cases involving the sale of an object or a material that was, at the time of the sale, a product rather than a waste or a by-product. In those transactions — involving, for example, sales of electrical transformers containing polychlorinated biphenyls, sales of wood treatment chemicals, and sales of fireproofing and insulation materials containing asbestos — the products in question were sold for the purpose for which they had been manufactured. And under those circumstances, the courts have refused to allow the owners and operators of sites later contaminated by the improper disposal of the products (or their contents) to recover response costs under CERCLA from the products’ manufacturers. The courts will not assume that product manufacturers are typically “arrang[ing] for disposal or treatment” of hazardous substances when they sell a product for the very purpose for which it was manufactured, in the absence of evidence somehow casting doubt on the legitimacy of such a sale.

Thus, for example, in *Florida Power & Light Co. v. Allis-Chalmers Corp.*, 893 F.2d 1313 (11th Cir. 1990), a utility company had purchased PCB-containing transformers and had used them for their full useful life of approximately forty years, before selling them as scrap to a salvage company whose disposal facility became contaminated with PCBs. The utility and the salvage company sought to recover cleanup costs under CERCLA from the manufacturers of the transformers, but those cost-recovery claims were rejected. There was no evidence, the court concluded, that the manufacturers had “arranged for disposal or treatment” of the PCBs contained in the transformers, or had engaged in anything other than a “mere sale” of a new and useful product.

Similarly, in *Prudential Insurance Co. v. United States Gypsum Co.*, 711 F. Supp. 1244 (D.N.J. 1989), the plaintiff building owners sought to recover, under CERCLA, asbestos monitoring and abatement costs from the manufacturers of asbestos-containing materials that had been installed in their buildings during construction. The court rejected these claims because the plaintiffs' allegations demonstrated only "that there had been a conveyance of a useful, albeit dangerous product, to serve a particular, intended purpose." *Accord*, *3550 Stevens Creek Associates v. Barclays Bank*, 915 F.2d 1355 (9th Cir. 1990), *cert. denied*, 500 U.S. 917 (1991). And in *Edward Hines Lumber Co. v. Vulcan Materials Co.*, 685 F. Supp. 651 (N.D. Ill.), *aff'd*, 861 F.2d 155 (7th Cir. 1988), the court declined to impose CERCLA "arranger" liability on the manufacturer of wood treatment chemicals who had sold them, for their intended purpose, to a wood treatment facility that later became contaminated by the chemicals.

The case before us differs fundamentally from substantially all of the "useful product" decisions cited by the petitioners. Those decisions reject CERCLA § 107(a)(3) claims against product sellers where "the sale is of a new product, manufactured specifically for the purpose of sale, or of a product that remains useful for its normal purpose in its existing state." *California v. Summer del Caribe, Inc.*, 821 F. Supp. 574, 581 (N.D. Cal. 1993). "In contrast, the courts have consistently rejected the 'sale of a useful product' defense where the purpose of the sale is to get rid of or treat a waste or by-product." *Id.* The transactions at issue in this case fall within the latter category.

Preliminarily, there is simply no basis for the petitioners' contention that their flue dusts were not "waste."<sup>10</sup> *See American Petroleum Institute v. EPA*, 906 F.2d 729, 741 (D.C. Cir. 1990) (holding that K061 destined for metals reclamation is "indisputably 'discarded'" and is therefore a waste); *accord*, *Steel Manufacturers Ass'n v. EPA*, 27 F.3d 642, 646-47 (D.C. Cir. 1994) (both K061 itself, and the components remaining after K061 is subjected to metals reclamation, are properly regarded as hazardous wastes under RCRA). *See also Owen Electric Steel Co. v. Browner*, 37 F.3d 146, 150 (4th Cir. 1994) ("[T]he fundamental inquiry in determining when a byproduct has been 'discarded' is whether the byproduct is immediately recycled for use in the same industry; if not, then the byproduct is justifiably seen as 'part of the waste disposal problem' \* \* \* and therefore as a 'solid waste.'")

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<sup>10</sup> *See, e.g.*, Reply Brief for Armco, Inc., *et al.* in Support of Petition for Reimbursement, at 8 ("Petitioners' dust was not 'waste.' This material was not discarded by Petitioners. It was supplied to Micronutrients for a useful purpose; \* \* \*").

(citation omitted).<sup>11</sup> Thus, none of the petitioners has been held responsible for contamination at the MII Site based on conduct related to the manufacture and sale of a “useful, albeit dangerous product.” None of the petitioners was in the business of manufacturing emission control dusts, and those dusts are not a “product” in any sense of the word; they are particulate wastes that are filtered from the hot gases generated in a steelmaking furnace, and that are collected in order to prevent their escape from the steel manufacturing facility in the form of air pollution.<sup>12</sup> Accordingly, the principles gov-

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<sup>11</sup> We note, however, that while CERCLA incorporates a definition of “disposal” from RCRA, and while RCRA defines “disposal” as an activity involving “solid waste or hazardous waste,” it does not follow that CERCLA liability arises only from conduct involving RCRA solid or hazardous wastes. Rather, CERCLA by its terms applies to all “hazardous substances” — a category that includes, but is considerably broader than, the category of RCRA hazardous wastes. See *Catellus Development Corp. v. United States*, 34 F.3d 748, 750-51 (9th Cir. 1994) (“We emphasize \* \* \* that our reliance on the terms used in [RCRA] to describe the characteristics of waste does not necessarily indicate that the specific hazardous substances covered by CERCLA are limited to those set forth as solid waste under [RCRA].”).

Thus, for example, Atlantic Richfield asserts that the zinc smelter flue dust sent to MII by Atlantic Richfield’s former subsidiary, Anaconda Minerals Company, “resulted from mineral processing and, therefore, would not have been subject to 40 C.F.R. Part 261.” Reply Brief for Armeo, Inc., *et al.*, at 8. This is presumably a reference to RCRA’s Bevill Amendment, which excludes certain mining wastes from RCRA regulation and which further precludes the designation of such wastes as CERCLA “hazardous substances” based solely on their RCRA hazardous characteristics. See RCRA § 3001(b)(3)(A)(ii); CERCLA § 101(14)(C). Those wastes and their components are, however, CERCLA “hazardous substances” if they fit within any of the categories described in subsections (A), (B), (D), (E), and (F) of CERCLA § 101(14). See *Louisiana-Pacific Corp. v. Asarco Inc.*, 24 F.3d 1565, 1574 (9th Cir. 1994). Atlantic Richfield does not dispute that its flue dusts contained CERCLA “hazardous substances,” and its allusion to the Bevill Amendment is therefore not relevant in the context of this proceeding.

Similarly, in our Preliminary Decision, we stated that the land application of a fertilizer incorporating K061 waste is a “disposal” subject to EPA’s RCRA regulatory jurisdiction (citing 40 C.F.R. § 261.2(c)(1)). The petitioners commented that, irrespective of its RCRA status, such activity should not be cited in support of a CERCLA claim because “the normal application of fertilizer” is specifically excluded from the kinds of “releases” that give rise to CERCLA liability. CERCLA § 101(22). To eliminate any implication that the “releases” addressed in this cleanup were in any way comparable to the normal application of fertilizer, we have deleted the RCRA references in question in preparing this Final Decision.

<sup>12</sup> See, e.g., *Tippins Inc. v. USX Corp.*, 37 F.3d 87, 90 n.3 (3d Cir. 1994) (“A baghouse, a large, fabricated structure, vacuums contaminated air inside [the baghouse] to filter out the EAF dust. The dust is collected in a hopper or dumpster, and clean air is emitted from the structure.”). Because petitioners’ transactions with the operators of the MII Site involved nothing but hazardous wastes, and because the transfer of those wastes was the sole or principal purpose for the transactions rather than a mere “incidental” consequence of the transactions, petitioners’ reliance on *United States v. Cello-Foil Products, Inc.*, 848 F. Supp. 1352 (W.D. Mich. 1994) and *G.J. Leasing Co. v. Union Electric Co.*, 54 F.3d 379 (7th Cir. 1995) is wholly misplaced. In those cases, the courts declined to impose liability under CERCLA § 107(a)(3) where the transfer of

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erning CERCLA liability in this case are not those developed in the context of product sales, but those developed in the context of sales and other dispositions of waste materials for secondary uses.

The relevant case law has recently been reviewed at length both by the U.S. District Court for the District of Maryland and by the U.S. District Court for the District of Utah, within whose jurisdiction the MII Site is located. See *United States v. Maryland Sand, Gravel & Stone Co.*, 39 Env't Rep. Cas. (BNA) 1761 (D. Md. 1994); *Ekotek Site PRP Committee v. Self*, 881 F. Supp. 1516 (D. Utah 1995). *Maryland Sand, Ekotek*, and the other authorities discussed in those decisions, make clear that the "useful product" doctrine does not exempt these petitioners from CERCLA liability under the circumstances outlined in their petitions. Rather, the relevant cases hold with virtual unanimity that generators of hazardous substances such as these petitioners are "liable for response costs when such defendants transferred toxic substances generated as by-products in their operations, and for which they had no further use, even when the recipients place some residual value on the waste." *Maryland Sand*, 39 Env't Rep. Cas. at 1766.

Like the other cases addressing petitioners' argument, *Ekotek* and *Maryland Sand* recognize a distinction between two different types of transactions: (1) sale of a product or material, containing hazardous substances, that is currently useful — *i.e.*, is capable of performing the function for which it was created without first undergoing further processing; and (2) sale of a product or material, containing hazardous substances, that is currently incapable of performing the function for which it was created but that, with further processing, might be rendered useful or returned to a useful state. Transactions in the former category may or may not represent arrangements for disposal or treatment of hazardous substances. Transactions in the latter category, however, have consistently been regarded as arrangements for disposal or treatment of hazardous substances. As the *Ekotek* court stated:

The useful product defense arises where the product alleged to be waste in fact "remains useful for its nor-

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hazardous substances was merely "incidental" to a transaction whose principal purpose, from the standpoint of the transferor, was to do something other than get rid of those hazardous substances. See *Cello-Foil*, 848 F. Supp. at 1357 (buyer of solvent not liable for returning empty drums to seller, even though traces of solvent remained in drums and escaped onto seller's property during rinsing; transfer of the residual solvent was merely incidental to the return of the drums); *G.J. Leasing*, 54 F.3d at 385 (seller of power plant complex not liable under CERCLA as arranger for disposal of asbestos insulation present in the plant's buildings; evidence at trial showed that no asbestos was leaking at the time of sale, and that the property was not sold for the purpose of demolition or to accomplish the transfer of an asbestos problem).

mal purpose in its existing state.” *California v. Summer Del Caribe, Inc.*, 821 F. Supp. 574, 581 (N.D. Cal. 1993). The focus in these cases is not whether the product has some general or residual economic value, but whether the product is still fit to perform the function for which it was created. *Chesapeake & Potomac Telephone Co. v. Peck Iron & Metal Co.*, 814 F. Supp. 1269, 1275 (E.D. Va. 1992). The recent case of *United States v. Maryland Sand, Gravel & Stone \* \* \** (D. Md. Aug. 12, 1994) states the principle well. The court rejected an argument advanced by the defendant generators of industrial chemical solvents, who had transferred the chemicals to a solvent recovery operator, that the transfer represented “recycling” rather than “disposal,” and hence did not constitute the activity covered by CERCLA. The court concluded that CERCLA applied to the transaction, since the defendants transferred solvents “for which they had no further use, even when the recipients placed some residual value on the waste.” *Id.* at \*4. The court observed that it was unable to identify any authority for “the proposition that merely because a valuable substance could, through processing, be reclaimed from an otherwise useless product, that the otherwise useless product was ‘new and useful’ such that CERCLA liability would not attach.” *Id.* at \*53 n.20.

The useful products defense has thus been a shield to defendants where the allegedly hazardous substance is contained in a product which is still useful in fulfilling the purpose for which the product was created.

*Ekotek*, 881 F. Supp. at 1516.

Further support for the imposition of CERCLA “arranger” liability in the circumstances of this case can be found in the decision of the U.S. Court of Appeals for the Ninth Circuit in *Catellus Development Corp. v. United States*, 34 F.3d 748 (9th Cir. 1994). In *Catellus*, an automotive products chain accepted used automobile batteries from its customers and sold the spent batteries to the operators of a lead reclamation plant. The reclaimers cracked the batteries open, extracted the recoverable lead from within, and then dumped the crushed, lead-contaminated battery casings onto the ground. The question presented to the Ninth Circuit concerned the CERCLA liability of the auto-

motive products chain as an “arranger” for disposal or treatment of the hazardous substances contained in its customers’ spent batteries.

In its decision, the court refused to recognize a broad immunity from CERCLA liability for the sale of any material that can reasonably be called, in a colloquial sense, a “useful product” — that is, any material having some commercial value or containing some recoverable constituent that is capable of productive use. Instead, the court adhered to its previous holding, in *Louisiana-Pacific Corp. v. Asarco Inc.*, 24 F.3d 1565 (9th Cir. 1994), that the sale of such a “product” can indeed give rise to CERCLA liability if the alleged “product” is merely a waste material that its generator “want[s] to get rid of whether [the generator] can sell [it] or not.”<sup>13</sup> The court further explained that in determining whether a transaction constitutes an arrangement for disposal or treatment under CERCLA § 107(a)(3), the issue is not whether the substance in question retains some intrinsic commercial value or contains potentially useful constituents but, rather, whether the substance in question is or is not a “waste,” under RCRA and its implementing regulations, when it leaves the hands of the alleged arranger: “[Defendant] could be said to have arranged for the disposal or treatment of the spent batteries only if the spent batteries could be characterized as waste.” *Catellus*, 34 F.3d at 750. Applying that analysis here, we conclude that petitioners cannot avoid liability under § 107(a)(3) simply by labeling their transfers of K061 wastes to the MII Site as sales of a product. Whatever commercial value petitioners’ K061 wastes may have possessed, they were unquestionably RCRA wastes from the moment they were generated, through and including the moment they were transferred to MII.

Finally, in *Tippins Inc. v. USX Corp.*, 37 F.3d 87 (3d Cir. 1994), the court specifically found the “useful product” defense inapplicable to shield a steel manufacturer from liability, under CERCLA § 107(a)(3), arising from the manufacturer’s sale of electric arc furnace dust. In *Tippins*, USX Corp. had sold a used “baghouse” containing electric arc furnace dust to an intermediary (Tippins) for resale to a Canadian steel company. Before delivering the baghouse to its Canadian customer, Tippins removed the EAF dust and paid a waste hauler to transport the dust to a disposal site in Indiana, which later became the subject of a CERCLA remedial action. In the ensuing litigation, the district court “determined that USX was liable as an arranger under

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<sup>13</sup> *Louisiana-Pacific*, 24 F.3d at 1575 (citing *United States v. A&F Materials Co.*, 582 F. Supp. 842, 844-45 (S.D. Ill. 1984); *New York v. General Electric Co.*, 592 F. Supp. 291, 297 (N.D.N.Y. 1984); and *United States v. Conservation Chemical Co.*, 619 F. Supp. 162, 240-41 (W.D. Mo. 1985)).

§ 107(a)(3), rejecting USX's claim that the [USX-Tippins] purchase agreement with respect to the EAF dust was for the sale of a useful commodity in contrast to a contract arranging for the disposal of a hazardous substance." 37 F.3d at 91.<sup>14</sup> In an appeal "raising the same issues that were before the district court," *id.*, the Court of Appeals summarily rejected USX's useful product defense, deeming the issue "straightforward" and concluding that "the district court's treatment of [USX's 'arranger' liability] \* \* \* will be affirmed without discussion." *Id.* at 89-90.<sup>15</sup>

Petitioners claim that their transactions with MII, unlike the transactions analyzed in the foregoing cases, were meant to result in the wholesale incorporation of a "by-product" material as the "feedstock" for a manufacturing process, without creating any "side stream" of waste requiring later disposal or treatment. Thus, petitioners argue

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<sup>14</sup> Indeed, the district court ordered USX to bear the largest single share (50%) of past and future response costs associated with the remedial action at the Indiana site — with the remaining costs to be divided equally between Tippins and the waste hauler hired by Tippins to deliver the dust to Indiana. *See* 37 F.3d at 91. That determination was affirmed in its entirety by the Court of Appeals, *see id.* at 96, even though USX's primary motivation for the transaction was, it would seem, to sell the used baghouse (for which it was paid \$300,000) rather than simply to get rid of the electric arc furnace dust.

<sup>15</sup> Petitioners urge us to reject the authorities cited in the text and to rely, instead, on *United States v. Petersen Sand & Gravel, Inc.*, 806 F. Supp. 1346 (N.D. Ill. 1992). In *Petersen*, a utility company (Commonwealth Edison) executed a "Disposal Agreement" under which it paid a broker to dispose of its "fly ash" waste. The broker also undertook, to the extent possible, to find buyers willing to purchase some of the waste, thus partially offsetting the cost of disposing of the remainder. Pursuant to that agreement, the broker sold some of Commonwealth Edison's fly ash to an asphalt company for use as an ingredient in "road base." The asphalt company, however, allegedly stockpiled the fly ash at a gravel mine that later became a Superfund site. In the ruling cited by petitioners, a court rejected the site owner's contribution claim against Commonwealth Edison, reasoning that although Commonwealth Edison arranged for disposal of fly ash under the agreement, it did not arrange for disposal "on this site." 806 F. Supp. at 1354. To the extent that *Petersen* would require, as an element of CERCLA "arranger" liability, proof of the arranger's control over how or where disposal was to occur, we respectfully disagree and conclude that *Petersen* is in error. *See Catellus*, 34 F.3d at 752 (control requirement "would make it too easy for a party, wishing to dispose of a hazardous substance, to escape by a sale its responsibility to see that the substance is safely disposed of," and "would allow defendants to simply 'close their eyes' to the method of disposal of their hazardous substances, a result contrary to the policies underlying CERCLA") (quoting *United States v. Aceto Agricultural Chemicals Corp.*, 872 F.2d 1373, 1382 (8th Cir. 1989)). Indeed, § 107(a)(3) does not even require proof of an arranger's knowledge concerning how or where disposal would occur. *See Chatham Steel Corp. v. Brown*, 858 F. Supp. 1130, 1142 (N.D. Fla. 1994) (knowledge requirement "would encourage generators to escape liability by 'playing dumb' about how their hazardous wastes are disposed of. This in turn would undermine CERCLA's goal of placing responsibility for the proper treatment and disposal of hazardous substances on those who generate these dangerous compounds and arrange for their disposal or treatment.") (citing *United States v. Ward*, 618 F. Supp. 884, 895 (E.D.N.C. 1985)).

that the other “useful product” cases have involved by-products containing an irreducible core of waste material that can never be rendered useful and that, therefore, must eventually undergo treatment or disposal. They argue that here, in contrast, nothing but a “useful product” would have remained if their transactions with MII had proceeded in the manner they expected.

We find petitioners’ proposed distinction inadequate to relieve them of liability under CERCLA § 107(a)(3). The MII production process described by petitioners, whereby the zinc in their emission control dusts was to have been converted to zinc sulfate, would not have rendered “useful” any of the other hazardous substances (such as lead, cadmium, chromium, and arsenic) that were present in the dusts when they left petitioners’ hands and that were, in fact, released into the environment at the MII Site in significant concentrations (*see infra* note 22). And the expectation that a chemical process would return the zinc in their flue dusts to a usable form does not, in any event, distinguish petitioners’ situation from any other (*e.g.*, used oil recycling, as in *Ekotek*; regeneration of spent solvents, as in *Maryland Sand*; or battery reclamation, as in *Catellus*) in which waste material containing a mixture of hazardous substances is transferred to a processor so that one such substance — here, zinc — can be reclaimed from the otherwise useless mixture and returned to a usable state. In each of those cases the courts concluded, as we do here, that it is perfectly sensible to regard the transfer of hazardous waste to a “recycling” or “reclamation” facility as an arrangement for treatment or disposal of hazardous substances where the waste, as of the time of transfer (indeed, from the moment of its creation), is completely useless.<sup>16</sup> By definition, a waste material that must be subjected to phys-

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<sup>16</sup> Indeed, several courts have reasoned that a transfer of hazardous substances for purposes of recycling or reclamation necessarily constitutes an arrangement for “treatment” of those substances. *See California v. Summer del Caribe*, 821 F. Supp. 574 (N.D. Cal. 1993) (seller of waste metal, which would be heated to recover usable solder, was an arranger for “treatment” under CERCLA); *United States v. Pesses*, 794 F. Supp. 151 (W.D. Pa. 1991) (seller of scrap metal, which would be processed to produce alloys, was an arranger for treatment); *Chesapeake & Potomac Telephone Co. v. Peck Iron & Metal Co.*, 814 F. Supp. 1269 (E.D. Va. 1992) (sellers of spent lead-acid batteries to a lead reclamation facility were arrangers for treatment); *Chatham Steel Corp. v. Brown*, 858 F. Supp. at 1141 (same); *Catellus*, 34 F.3d at 753 (same); *Ekotek*, 881 F. Supp. at 1528 (sellers of used oil to a recycling facility, where the oil would undergo substantial “chemical reworking,” were arrangers for treatment). CERCLA defines “treatment,” by reference to RCRA § 1003(34), to include “any method, technique, or process \* \* \* designed to change the physical, chemical, or biological character of any hazardous waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume.” Treatment is further defined in EPA’s RCRA regulations to include any alteration of a waste’s physical, chemical, or biological character undertaken “so as to recover \* \* \* material resources from the waste.” 40 C.F.R. § 260.10.



ical, chemical, and/or biological processes before any use can be made of it is simply not a “useful product.”

For these reasons, even under the extraordinarily optimistic assumptions allegedly relied on by these petitioners — *i.e.*, that MII would incorporate 100 percent of their emission control dusts into a fertilizer, without any significant on-site spillage, without any storage of the dust by placement on land,<sup>17</sup> and without the production of any “side stream” of residue separately requiring disposal — petitioners’ transfers of their dust to MII constitute arrangements for disposal or treatment of the hazardous substances contained in the dust. Petitioners’ claims for full reimbursement of their CERCLA response costs from the Superfund, based on their contention that they are not responsible persons under CERCLA § 107(a)(3), are therefore denied.

### C. Divisibility

Liability under CERCLA is ordinarily joint and several, but the imposition of such liability is not mandatory. *See* Order for Evidentiary Hearing, *In re Dico, Inc.*, CERCLA Petition No. 95-1, at 12 (EAB, July 25, 1995) (citing *In re Bell Petroleum Services*, 3 F.3d 889 (5th Cir. 1993)). It is, however, the CERCLA responsible party’s burden to establish the divisibility of harm in order to avoid the imposition of joint and several liability, and that burden is a “substantial” one. *United States v. Alcan Aluminum Corp.*, 964 F.2d 252, 269 (3d Cir. 1992). The divisibility inquiry is “factually complex,” typically requiring “an assessment of the relative toxicity, migratory potential, and synergistic capacity of the hazardous waste at issue.” *Id.* (citing *United States v. Monsanto Co.*, 858 F.2d 160, 172 n.26 (4th Cir. 1988)).<sup>18</sup>

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<sup>17</sup> “Spilling” or “placement” of dust on the land would represent a form of disposal of the dust, *see* RCRA § 1004(3), for which the petitioners would have arranged by supplying the dust to MII.

<sup>18</sup> *See also* *O’Neil v. Picillo*, 883 F.2d 176, 178-79 (1st Cir. 1989) (“The practical effect of placing the burden on defendants [to establish the divisibility of harm] has been that responsible parties rarely escape joint and several liability, courts regularly finding that where wastes of varying (and unknown) degrees of toxicity and migratory potential commingle, it simply is impossible to determine the amount of environmental harm caused by each party.”), *cert. denied*, 493 U.S. 1071 (1990); *United States v. Robm & Haas Co.*, 2 F.3d 1265, 1280 (3d Cir. 1993) (“In order to warrant apportionment, a defendant cannot simply provide some basis on which damages may be divided up, but rather it must show that there is a ‘reasonable basis for determining the contribution of each cause to a single harm.’ In other words, [the CERCLA defendant] must prove that there is a way to determine what portion of the ‘harm’ (i.e. the hazardous substances present at the facility and the response costs incurred in dealing with them) is fairly attributable to [the defendant], as opposed to other responsible parties.”) (emphasis in original).

For guidance in determining when it may be appropriate to apportion the costs of responding to contamination at a CERCLA site, courts have looked to the analysis in the *Restatement (Second) of Torts* § 433A, which provides for apportionment where “there is a reasonable basis for determining the contribution of each cause to a single harm.” See, e.g., *Bell Petroleum*, 3 F.3d at 895; *Alcan*, 964 F.2d at 268-69. In *Bell Petroleum*, the court concluded that such a reasonable basis had been shown to exist where three responsible parties had discharged the same hazardous substance to a ground water aquifer in known amounts over successive, distinct time periods. Emphasizing that only one hazardous substance (chromium) had been discharged by each defendant, the court found it reasonable to apportion the cost of cleaning up the aquifer among the defendants in proportion to the volume of waste discharged by each:

As is evident from our previous discussion of the jurisprudence, most CERCLA cost-recovery actions involve numerous, commingled hazardous substances with synergistic effects and unknown toxicity. In contrast, this case involves only one hazardous substance — chromium — and no synergistic effects. The chromium entered the groundwater as the result of similar operations by three parties who operated at mutually exclusive times. Here, it is reasonable to assume that the respective harm done by each of the defendants is proportionate to the volume of chromium-contaminated water each discharged into the environment.

*Bell Petroleum*, 3 F.3d at 903.

Petitioners assert that the contamination of the MII Site is similar in critical respects to the situation presented in *Bell Petroleum*, and that the *Bell Petroleum* court’s divisibility analysis is therefore applicable to the MII Site. First, petitioners point out that they are not the only generators whose wastes contaminated the MII Site: They have identified, based on accounting ledgers and other documents obtained from the operators of the Site, six other generators who shipped materials to the Site but who are not parties to this proceeding or to the underlying administrative orders. Next, they argue that the materials shipped to the Site by the non-party generators represent the same (or approximately the same) CERCLA “hazardous substance” as the flue dusts shipped to the Site by the petitioners.<sup>19</sup> Finally, the petitioners calcu-

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<sup>19</sup> Bethlehem Steel takes the position that all of the material sent to the MII Site, by each petitioner and by each non-party generator, consisted (as in *Bell Petroleum*) of one and only

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late that the six non-party generators supplied, in the aggregate, 10,912,390 pounds of materials to the Site, compared to an aggregate total of 42,364,180 pounds collectively supplied to the Site by the petitioners — meaning, if petitioners' weights are correct, that 20.48 percent, by weight,<sup>20</sup> of the material shipped to the MII Site is not attributable to the petitioners. From this they conclude that they should be reimbursed for 20.48% of the costs they have incurred in connection with the cleanup of the MII Site, to the extent that those costs are otherwise recoverable.<sup>21</sup>

In order to accept petitioners' divisibility argument based on *Bell Petroleum*, we would first have to accept the premise that the wastes sent to the MII Site by each petitioner and by each non-party generator were, in terms of their environmentally harmful characteristics, fundamentally the same; or, in other words, that a pound of any one generator's waste would have caused the same environmental harm as a pound of any other generator's waste. That premise was examined and determined to be reasonable in *Bell Petroleum*, where only a single "hazardous substance" had been discharged by each generator. Here, however, the contamination of the MII Site was not caused by a single hazardous substance but by combinations of many such substances. Petitioners cite no authority, and we are aware of none, for extending the *Bell Petroleum* court's analysis to a multiple-pollutant situation such as this.

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one CERCLA hazardous substance: "It is undisputed that only a single hazardous substance, flue dust, is at issue." Reply Brief of Bethlehem Steel, at 11. The other petitioners claim only that the material sent to the Site by each generator was similar in composition: "The products shipped to the [MII] Site by the suppliers shared largely identical properties and were essentially fungible." Supplemental Petition of Armco Inc., *et al.*, at 5; Supplemental Petition of Marathon Steel Company, at 7-8. *See also* Reply Brief for Armco, Inc., *et al.*, at 16 ("[T]he contaminants of concern in the soils, lead and cadmium, were present in each party's dust in roughly the same proportions.").

<sup>20</sup> In all of their submissions, the petitioners claim to desire an apportionment of liability based on the "volume" of waste that they contributed to the MII Site. There is, however, no evidence in the record concerning the "volume" of waste contributed by the petitioners. The petitioners have furnished some evidence concerning the weight of the materials that they sent to the Site, and we therefore assume that they are actually seeking an apportionment of liability on the basis of weight.

<sup>21</sup> Region VIII contends that petitioners' arguments seeking partial reimbursement come too late to be considered, because they were first presented to the Board in supplemental pleadings that were admittedly not filed within the first sixty days after completion of the Phase II work. The supplemental pleadings, however, merely presented alternative arguments in support of claims for reimbursement that were already properly before the Board. The supplemental pleadings were submitted with leave of the Board, and the Region had a sufficient opportunity to respond to them. We thus perceive no statutory or other bar to our consideration of the divisibility arguments raised by the various petitioners.

Petitioners contend that *Bell Petroleum* itself is controlling here, because all of the wastes that contaminated the MII Site were “fungible.” That contention appears unreasonable on its face. Emission control dusts from the steelmaking industry are known to contain as many as fourteen different metals — including twelve distinct CERCLA “hazardous substances” (see *supra* note 3) — in varying concentrations, with the composition of any given sample of dust depending upon the specific types and amounts of scrap metals and other materials melted in the furnace and the kind of steel being produced. Thus, EPA has previously remarked upon the “wide variety in metals composition [of] K061 wastes,” as follows:

Data on the composition of K061 indicate that these 14 metals are present at varying concentrations in K061 wastes from different generating facilities. This appears to be related to the types of scrap materials smelted in the electric furnace, the metals added to make certain types of steel alloys, and/or the grade of steel produced.

*Land Disposal Restrictions for Electric Arc Furnace Dust; Final Rule (Preamble)*, 56 Fed. Reg. 41,164, 41,167 (1991). See also *Listing Background Document for K061*, at 5 (U.S. EPA 1980) (“[T]he composition of electric furnace dust can vary considerably depending on the type and quantity of cold scrap used to charge the furnace.”). The environmental harm at the MII Site is traceable to several different hazardous substances,<sup>22</sup> and there is simply no basis for assuming that each petitioner’s waste contributed each of the relevant substances to the Site in the same or similar proportions.<sup>23</sup>

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<sup>22</sup> Four days of sampling on and near the Site during January 1985 showed the presence of elevated concentrations of the CERCLA hazardous substances cadmium, lead, chromium, mercury, nickel, zinc, and arsenic. See September 25, 1985 Memorandum from Floyd D. Nichols, On-Scene Coordinator, to John G. Welles, Regional Administrator for EPA Region VIII. Each of those hazardous substances is associated with electric arc furnace dust generated by the steelmaking industry. See *supra* note 3.

<sup>23</sup> The suggestion that the various petitioners’ wastes were “fungible” appears even less plausible given that one petitioner — Atlantic Richfield — did not, like the other petitioners, contribute wastes from a steelmaking process. See *Armco Inc., et al. Petition for Reimbursement*, at 3 (stating that Anaconda Minerals Corporation (Atlantic Richfield’s predecessor in interest) sent to MII “zinc flue dust produced from [Anaconda’s] zinc smelter located at its Great Falls Reduction Works”). There is no evidence before us concerning the composition of zinc smelter dust generally, or of Anaconda’s dust in particular, and thus we have no basis for comparing Anaconda’s waste with the wastes generated by any of the steel industry petitioners.

Even if there were evidence suggesting that the petitioners' own wastes were "fungible," there is no evidence suggesting that the petitioners' wastes are comparable to those contributed by the six non-party generators. All of the petitioners rely on a set of six documents<sup>24</sup> — one document pertaining to each of the identified non-party generators — which we have examined closely for any support they might lend to petitioners' theory of apportionment. Those documents, however, say virtually nothing about the nature of the wastes arriving at the MII Site from the non-party sources, and they say literally nothing about the kinds or amounts of CERCLA hazardous substances that were present in those wastes.<sup>25</sup> The documents thus do not furnish proof concerning "what portion of the 'harm' \* \* \* is fairly attributable" to the petitioners and what portion is allocable to "other responsible parties." *Robm & Haas*, 2 F.3d at 1280. Based on the contents of the documents, we can only conclude that the substances contributed to the MII Site by the non-party generators remain substances of "unknown toxicity."

Petitioners' evidence, in sum, allows no meaningful conclusions to be drawn as to each petitioner's own relative contribution to the contamination of the MII Site, and no meaningful conclusions as to the relative contributions of any non-parties. Their proposed assignment of a 20.48% share of responsibility to non-parties is entirely speculative. Petitioners have therefore failed to carry their "substantial" burden, under the *Restatement's* approach to the "intensely factual \* \* \* 'divisibility' issue,"<sup>26</sup> of establishing a "reasonable and just method for determining the amount of harm caused by [each party]."<sup>27</sup> In the absence of detailed probative evidence regarding the nature

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<sup>24</sup> The documents in question are attached as Exhibits I through N to the Supplemental Petition for Reimbursement submitted by Armco, Inc., *et al.* (dated July 29, 1994), and are also attached as Exhibits I through N to the Supplemental Petition for Reimbursement submitted by Marathon Steel (dated September 23, 1994).

<sup>25</sup> The exhibits pertaining to two of the alleged non-party generators (B.J. Metals and Roane Electric) contain references to "flue dust." The exhibit pertaining to a third generator (Consolidated Reclamation Industries) refers to "bag house residue," and the exhibit pertaining to a fourth generator (Pacific Smelting Company) refers variously to "die cast skimmings," "crude zinc oxide," and "grade 200 zinc oxide." The exhibit pertaining to a fifth generator (Philipp Brothers Division of Engelhard Minerals & Chemicals Corporation) refers to "fertilizer compound" having a zinc content of 61.2 percent, but says nothing further about the origin or composition of the material in question. Finally, the exhibit pertaining to the sixth alleged non-party generator (Western Geognostics) says nothing at all about the nature of any wastes that that generator may have shipped to the MII Site.

<sup>26</sup> *Alcan*, 964 F.2d at 269.

<sup>27</sup> *Bell Petroleum*, 3 F.3d at 896.

and composition of the wastes shipped to the Site by the non-party generators, petitioners' proposal for a weight-based apportionment of the costs of cleaning up the Site must be rejected and their claims for partial reimbursement denied.

### **III. CONCLUSION**

For the reasons stated herein, the claims for reimbursement in CERCLA Petition Nos. 94-1, 94-2, 94-3, and 94-4 are denied in all respects.

So ordered.