IN RE HOWMET CORPORATION

RCRA (3008) Appeal No. 05-04

FINAL DECISION

Decided May 24, 2007

Syllabus

Howmet Corporation ("Howmet") appeals an Initial Decision in which Administrative Law Judge William B. Moran (the "ALJ") assessed a $309,091 penalty for violations of the Resource Conservation and Recovery Act and the Hazardous and Solid Waste Amendments of 1984 (collectively, "RCRA"), relating to Howmet's shipment of used potassium hydroxide ("KOH") to a fertilizer manufacturer.

Howmet employed KOH as a cleaning agent for metal castings at its facilities. When the KOH became too contaminated for this use without reclamation or reprocessing, Howmet would ship the used KOH either to a permitted hazardous waste treatment, storage or disposal facility, or to a fertilizer manufacturer for use as a fertilizer ingredient. Howmet did not handle the used KOH that it sent to the fertilizer manufacturer according to RCRA's hazardous waste regulations.

As a result, the ALJ found Howmet to be in violation of RCRA and its implementing regulations as to the KOH sent to the fertilizer manufacturer because Howmet (1) sent hazardous waste to facilities without United States Environmental Protection Agency ("EPA") identification numbers, (2) failed to prepare hazardous waste manifests for these shipments, (3) failed to notify the receiving facilities that the waste did not meet a treatment standard and was subject to land disposal restrictions, and (4) used a transporter that was not authorized to transport hazardous waste. The ALJ based his conclusions on a finding that the used KOH sent to the fertilizer manufacturer was a "spent material" and therefore was subject to RCRA's regulations for the management of hazardous waste.

Howmet appeals the Initial Decision, arguing that, contrary to the ALJ's findings, the used KOH in question was not "spent material," and therefore was not hazardous waste subject to the RCRA regulations. In the alternative, Howmet argues that it was denied due process because it was not given fair notice of an interpretation of the RCRA regulations that would treat the used KOH as "spent material." The parties have stipulated to the facts of this case and as to the penalty should Howmet be found to be liable. As such, only the legal issues of the definition of "spent material" and whether Howmet had fair notice are at issue.

Held: The Board upholds the ALJ's decision.

(1) *Liability.* The Board affirms the ALJ's finding that the used KOH that Howmet sent to the fertilizer manufacturer was "spent material." "Spent material" is defined as "any

material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing." 40 C.F.R. § 261.1(c)(1). When a hazardous "spent material" is recycled, or "[u]sed to produce products that are applied to or placed on the land or otherwise contained in products that are applied to or placed on the land * * * ," *id.* § 261.1(c)(1)(B), it must be managed as a hazardous waste under RCRA. The parties' arguments focus on the interpretation of the phrase "the purpose for which it was produced." Howmet argues that "purpose" implies a fundamental purpose. Howmet's interpretation would allow a multi-use product, such as KOH, to be used first as a cleaning agent and then as a fertilizer ingredient without being "spent," because both uses allegedly are consistent with KOH's broad fundamental purpose as a concentrated source of hydroxide ions and of potassium. The Regions, in contrast, argue that a product's purpose for production (*i.e.*, "the purpose for which it was produced") must be related to its original use, such that a product first used as a cleaning agent becomes a "spent material" when it becomes too contaminated for that use and then is sent to a fertilizer manufacturer to be used in a fundamentally different manner.

To determine whether the used KOH sent to the fertilizer manufacturer is a "spent material," the Board first reviews RCRA's general approach to recyclable materials and the more specific question of the use of secondary materials as ingredients in fertilizers. The Board next reviews the regulatory definition of "spent material," the regulations as a whole, and the rule-making history. Finally, the Board considers prior Agency interpretations of the "spent material" definition. The Board concludes that Howmet's argument, if accepted, would drive a wedge into the regulatory framework that is irreconcilable with other elements of the regulation and RCRA's overall thrust. Consistent with the Regions' position, the Board instead reads "the purpose for which it was produced" as contemplating a relational inquiry informed by a product's initial use. Under such a framework, reuse of used KOH consistent with its original particularized purpose as a cleanser would not give rise to coverage as a spent material, but when the used KOH is deployed in a manner substantially dissimilar from this purpose--in this case as an ingredient for fertilizer--it must be treated as a spent material under the regulations. Such an approach is not only consistent with the regulatory text and RCRA and EPA's overall approach to recyclable materials, but it also takes into account Congress's concern that activities that are part of "the waste disposal problem" are regulated.

(2) *Fair notice.* The Board also affirms the ALJ's finding that Howmet failed to prove that it had not received fair notice of the regulations. To be absolved of liability on the basis of lack of fair notice of an agency's regulatory interpretation, a party must demonstrate that the interpretation was not ascertainable by the regulated community. In determining whether Howmet had fair notice of the Regions' interpretation of the definition of "spent material," the Board first examines the text of the regulation itself, and then considers the regulatory history and past Agency statements with regard to the subject. Finally, the Board considers whether Howmet inquired about the meaning of the regulation. Even if the text of the regulations may be subject to more than one interpretation, this ambiguity alone is not enough to support a finding that Howmet lacked fair notice. As discussed in the section relating to liability, the interpretation of the definition of "spent materials" advanced by the Regions represents the better and more harmonious reading. In addition, the Board notes that the Regions' interpretation of "spent material" reflects the interpretation held by EPA consistently over time-an interpretation that was discernable by members of the regulated community like Howmet. Accordingly, the Board also finds that the interpretation was ascertainable by Howmet. Finally, the Board notes that Howmet must assume the consequences for apparently choosing to pursue a risky course of action without inquiring of EPA whether its activities complied with RCRA.

Before Environmental Appeals Judges Scott C. Fulton, Edward E. Reich, and Kathie A. Stein.

Opinion of the Board by Judge Fulton:

I. *INTRODUCTION*

Howmet Corporation ("Howmet") appeals an Initial Decision issued September 30, 2005, in which Administrative Law Judge William B. Moran (the "ALJ") assessed a $309,091 civil penalty for violations of the Resource Conservation and Recovery Act and the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. §§ 6901-91, (collectively "RCRA"), relating to Howmet's shipment of certain used materials to a fertilizer manufacturer. Specifically, the ALJ found that Howmet violated RCRA and its implementing regulations when Howmet (1) sent hazardous waste to facilities without United States Environmental Protection Agency ("EPA") identification numbers, (2) failed to prepare hazardous waste manifests for these shipments, (3) failed to notify the receiving facilities that the waste did not meet a treatment standard and was subject to land disposal restrictions,[1] and (4) used a transporter that was not authorized to transport hazardous waste. Howmet's primary argument on appeal is that the ALJ's findings are erroneous because the used materials were not subject to RCRA and its implementing regulations. According to Howmet, the used materials in question were not "hazardous waste," as defined by RCRA, because they were not "spent materials." In the alternative, Howmet argues that it was denied due process because it was not given fair notice of EPA's interpretation of the RCRA regulations – an interpretation that treats the materials in question as subject to RCRA regulation. As detailed below, we find that the used materials in question were indeed "spent," and therefore hazardous waste, and thus affirm the ALJ's findings with respect to liability. We also affirm the ALJ's finding that Howmet failed to prove that it had not received fair notice of the regulations, and we assess a $309,091 civil penalty.

[1] The RCRA land disposal restrictions require hazardous waste to be treated in a specified manner or treated to meet specified constituent levels prior to land disposal. Hazardous wastes that are not treated as specified or that do not meet the appropriate constituent levels may not be disposed of on land unless EPA has granted a specific variation. *See* 40 C.F.R. part 268.

II. *BACKGROUND*

A. *Statutory and Regulatory Background*

RCRA and its implementing regulations impose various requirements and restrictions on the generators of hazardous waste.[2] Relevant to this appeal, (1) generators[3] of hazardous waste may not send hazardous waste to a facility that does not have an EPA identification number;[4] (2) generators who transport, or offer for transport, hazardous waste for offsite treatment, storage, or disposal must prepare hazardous waste manifests;[5] (3) generators must send to each facility receiving hazardous waste a one-time notification that the waste is subject to land disposal restrictions and identify all underlying hazardous constituents;[6] and (4) generators of hazardous waste may not offer hazardous waste to a transporter that does not have an EPA identification number.[7]

Under RCRA and its regulations, "hazardous waste" is a subset of "solid waste."[8] If a substance does not meet the threshold definition of "solid waste," it cannot be "hazardous waste" or subject to the RCRA hazardous waste regulations. Accordingly, any analysis of whether a substance is hazardous waste must begin with an analysis of whether it is solid waste. Generally, "solid waste" is any "discarded material."[9] The definition of "discarded material" includes certain "secon-

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[2] The violations alleged in this case took place in Texas and New Jersey. The States of Texas and New Jersey both have EPA-authorized hazardous waste management programs with regulations that mirror the federal RCRA regulations in relation to the issues on appeal. For ease of citation, this opinion, like the Initial Decision below, generally cites only to the federal statute and regulations; such citations are intended to incorporate state counterpart laws and regulations as well. Neither party has objected to this use of the federal requirements as a short-form reference.

[3] "Generator" is defined as "any person, by site, whose act or process produces hazardous waste * * * or whose act first causes a hazardous waste to become subject to regulation." 40 C.F.R. § 260.10.

[4] *Id.* § 262.12(c).

[5] *Id.* § 262.20(a).

[6] *Id.* § 268.7(a).

[7] *Id.* § 262.12(c).

[8] 42 U.S.C. § 6903(5) ("The term 'hazardous waste' means a solid waste, or combination of solid wastes * * * ."); 40 C.F.R. § 261.3(a) ("A solid waste, as defined in § 261.2, is a hazardous waste if * * * ."). RCRA Subtitle C governs the generation, transportation, and management of hazardous wastes.

[9] *See* 40 C.F.R. § 261.2(a)(1).

dary materials"[10] when they are "recycled."[11] A "spent material" is one such secondary material when it is recycled, or "[u]sed to produce products that are applied to or placed on the land or otherwise contained in products that are applied to or placed on the land * * * ."[12] A "spent material" is defined as "any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing."[13] According to the regulations, when a spent material is recycled, it must be managed as a solid waste. If such a material also exhibits a hazardous characteristic, such as corrosivity, or is one of several listed hazardous wastes, it also is a hazardous waste,[14] and subject to the RCRA requirements described above.[15] Because the materials in question in this case indisputably exhibit the hazardous characteristic of corrosivity, and would therefore be regulated as hazardous waste if deemed solid waste in the first instance, the outcome of this appeal hinges on whether the materials in question were "spent" and therefore solid waste.[16]

B. *Factual and Procedural Background*

1. *The Facts*

The parties have stipulated to the facts of this case. *See* Howmet's Brief in Support of Notice of Appeal ("App. Br.") at 3; EPA's Response Brief to Howmet's Appeal of Initial Decision ("Reg. Br.") at 2. Howmet owns and operates facilities in Wichita Falls, Texas, and Dover, New Jersey, that manufacture aluminum investment castings for aerospace and industrial gas turbine applications. NJ Stip.

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[10] The term "secondary materials" does not appear in the regulations themselves, but is used extensively throughout the preamble to the final rule to describe those materials that are solid wastes when recycled. *See* 50 Fed. Reg. 614, 616 n.4 (Jan. 4, 1985) ("Throughout this preamble, EPA refers for convenience to 'secondary materials.' We mean a material that potentially can be a solid and hazardous waste when recycled. The rule itself refers to the following types of secondary materials: Spent materials, sludges, by-products, scrap metal, and commercial chemical products recycled in ways that differ from their normal use. The rule does not use the term secondary materials.").

[11] *See* 40 C.F.R. § 261.2(c) ("Materials are solid wastes if they are *recycled* - or accumulated, stored, or treated before recycling * * * .") (emphasis added). The term "discarded material" also includes materials that are "abandoned" or "considered inherently waste-like," and certain military munitions. 40 C.F.R. § 261.2(a)(2). None of these categories of "discarded material" is at issue in this appeal. *See* EPA's Response Brief to Howmet's Appeal of Initial Decision ("Reg. Br.") at 29 n.37.

[12] 40 C.F.R. § 261.2(c)(1)(i)(B).

[13] *Id.* § 261.1(c)(1).

[14] *Id.* §§ 261.3, 261.22.

[15] EPA has listed certain hazardous wastes at 40 C.F.R. §§ 261.31, 261.32, and 261.33. These so-called "listed wastes" are not at issue in this appeal.

[16] If the materials were not spent, then they would not be considered solid waste and could therefore not be regulated as hazardous waste.

¶¶ 3, 4; Tx. Stip. ¶¶ 3, 4. At both facilities, Howmet used liquid potassium hydroxide ("KOH") as a cleaning agent for its metal castings. NJ Stip. ¶¶ 11, 12; Tx. Stip. ¶¶ 10,11. When the KOH became too contaminated for Howmet to continue to use it as a cleaning agent without reclaiming or reprocessing, Howmet would ship the used KOH either to a permitted hazardous waste facility[17] or to Royster-Clark, Inc. ("Royster"), a fertilizer manufacturer. The destination of the used KOH depended solely upon Royster's demand for KOH for use in Royster's fertilizer manufacturing process.[18] Order on Motions at 2; NJ Stip. ¶¶ 13, 14; Tx. Stip. ¶¶ 12, 13. Royster employed the used KOH as a source of potassium in its fertilizer mixture, without processing or otherwise reclaiming it. NJ Stip. ¶¶ 18, 19; Tx. Stip. ¶¶ 17, 18. The used KOH was hazardous, in that it exhibited the characteristic of corrosivity, as defined by the RCRA regulations.[19] NJ Stip. ¶¶ 15, 26; Tx. Stip. ¶¶ 14, 22. Howmet apparently followed the hazardous waste regulatory requirements for purposes of KOH shipments to hazardous waste facilities. It did not, however, manage the used KOH it sent to Royster as a hazardous waste under RCRA, allegedly because Howmet did not believe that the used KOH, when shipped for this purpose, was a "waste" and subject to the RCRA regulations.

2. *The Proceeding Below*

EPA Regions 6 and 2 (the "Regions") brought RCRA enforcement actions against Howmet in 2003, alleging that Howmet violated RCRA when it sent the used KOH to Royster for use as a fertilizer ingredient without adhering to the RCRA hazardous waste regulations. The ALJ consolidated the two cases for purposes of litigation. *See* Order on Motions (September 16, 2004) at 1-2. According to the Regions, the used KOH Howmet sent to Royster was a hazardous waste, despite the Howmet's alleged beliefs to the contrary. Region 6 filed its complaint on September 26, 2003, alleging violations at the Texas facility, and Region 2 filed a complaint on November 3, 2003, alleging similar violations at the New Jersey facility. Region 6 amended its complaint on August 26, 2004. Viewed together, the Complaints[20] alleged violations occurring from approximately March 1999 through September 2000 at the Texas facility and August 1999 to October

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[17] These facilities were RCRA-authorized hazardous waste treatment, storage, or disposal ("TSD") facilities.

[18] There was no difference between the used KOH sent to the TSD facility and the used KOH sent to Royster. The stipulated facts relating to the New Jersey facility state that the used KOH contained concentrations of chromium ranging from 0.92 to 52.5 parts per million using a gross metals analysis.

[19] The used KOH was aqueous with a pH greater than 12.5. *See* NJ Stip. ¶¶ 15, 26; Tx. Stip. ¶¶ 14, 22. Materials with a pH greater than 12.5 are defined as "corrosive" under the RCRA regulations. *See* 40 C.F.R. § 261.22(a)(1).

[20] "The Complaints" refers to Region 2's November 3, 2003 Complaint and Region 6's August 26, 2004 First Amended Complaint.

2000 at the New Jersey facility, and consisted of the following counts. First, the Regions alleged that Howmet shipped hazardous waste to facilities that did not have an EPA identification number. Second, Region 2 alleged that Howmet's Texas facility sent hazardous waste off-site using transporters without EPA identification numbers.[21] Third, the Regions alleged that Howmet did not prepare hazardous waste manifests for the KOH shipments to Royster. Fourth, the Regions alleged that Howmet failed to send and maintain on file the appropriate land disposal restriction notifications with respect to the Royster shipments. For these alleged violations, Region 6 sought a $255,601 civil penalty, and Region 2 sought a $180,021 civil penalty. Both Regions also sought compliance orders.

The ALJ first issued an Order on Motions, which granted the Regions' motion for partial accelerated decision and found Howmet liable for the RCRA violations alleged in the Complaints. *See* Order on Motions at 21. Thereafter, the ALJ issued an Initial Decision, which incorporated the ALJ's findings in the Order on Motions. *See* Init. Dec. at 3. The ALJ concluded that the used KOH that Howmet sent to Royster was a spent material, and therefore also a hazardous waste, and that Howmet had failed to manage this hazardous waste in accordance with RCRA. Order on Motions at 20-21. At the same time, the ALJ denied Howmet's claim that it had been denied due process because it had not received fair notice of the regulatory interpretation advanced by the Regions in this case. Order on Motions at 21 n.33. The ALJ assessed a $309,091 civil penalty, based on the parties' Joint Stipulation on Penalty Amount, filed on August 25, 2005.[22] Init. Dec. at 3.

3. *The Appeal*

Howmet appealed the Initial Decision on October 31, 2005, and the Regions filed a Response Brief on November 15, 2005. The Board heard the parties' views during oral argument on April 11, 2006.[23] The parties' arguments on appeal can be summarized as follows.

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[21] Although Region 6 included this count in its original Complaint, it did not include it in its First Amended Complaint.

[22] The ALJ initially had planned to hold a hearing for the penalty phase of the proceeding, until the parties filed a Joint Stipulation on Penalty Amount and a Joint Motion Requesting Issuance of an Initial Decision, which the ALJ granted. Init. Dec. at 1.

[23] Because the parties have stipulated to the facts and the penalty, the parties addressed only liability at the oral argument.

a. *Howmet's Arguments*

Howmet argues that the used KOH that it sent to Royster was not a hazardous waste because it was not a "spent material."[24] As explained above, a "spent material" is one that "has been used and as a result of contamination can no longer serve the *purpose for which it was produced* without processing." 40 C.F.R. § 261.1(c)(1) (emphasis added). Howmet argues that even though the used KOH that it sent to Royster had become too contaminated to be used to clean the metal castings at its manufacturing facilities, the KOH was not a waste because it was continuing to serve its purpose for production (*i.e.*, "the purpose for which it was produced") in Royster's hands.

Howmet argues that, whether used to clean metal or used as a fertilizer ingredient, the KOH served the same fundamental purpose for which it was produced. According to Howmet, the plain meaning of the term "purpose" in the regulatory definition of "spent material" refers to a product's fundamental purpose, to account for a multi-use product's various uses. Howmet explains that "the *fundamental purpose* of KOH is to provide a high concentration of hydroxide ions and a concentrated source of potassium, which in turn results in KOH being effective in various different applications and for various different uses." App. Br. at 10 (emphasis added); *see also* EAB Oral Argument Transcript ("Tr.") at 7. According to this line of reasoning, even though Royster and Howmet employed the KOH for very different uses (as a fertilizer ingredient and as a cleaning agent, respectively) the KOH was not a waste when it left Howmet's facilities because both Howmet and Royster used the KOH in a manner consistent with its "fundamental purpose." To support this argument, Howmet emphasizes that it never was a producer of KOH – Howmet merely purchased KOH for use in its manufacturing processes. Therefore, while Howmet chose how to *use* the KOH it purchased, it did not and could not determine the *purpose* for its *production*. According to Howmet, an interpretation of RCRA that would deem the used KOH to be spent would improperly conflate the definitions of "purpose" and "use," and fail to acknowledge the fundamental purpose for which a product is produced. Such an interpretation, according to Howmet, would incorrectly dictate that a product's purpose be defined by its first use. App. Br. at 8-9.

Howmet contends that it finds support for this position in the preamble to the final rule defining solid waste, promulgated in 1985. 50 Fed. Reg. 614 (Jan. 4, 1985). Howmet focuses in particular on EPA's explanation of the change from the definition of "spent material" that EPA had earlier proposed in 1983 to the definition that EPA ultimately adopted in 1985. As discussed more fully below, EPA had first proposed to define "spent material" as "any material that has been used

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[24] This argument is Howmet's sole basis for claiming the used KOH it sent to Royster was not hazardous waste.

and has served its *original purpose*." 48 Fed. Reg. 14,472, 14,508 (Apr. 4, 1983) (emphasis added). When adopting the regulations in 1985, however, EPA revised the definition of "spent material" to read: "any material that has been used and as a result of contamination can no longer serve the *purpose for which it was produced*," and explained that materials that are reused should not necessarily be deemed spent if their further use is not identical to their initial use. 50 Fed. Reg. at 663; 40 C.F.R. § 261.1(c)(1) (emphasis added). Based on this regulatory history, Howmet concludes that "if the used material is still 'fit for use' – any use for which it was produced – the material is not spent." App. Br. at 13 At bottom, according to Howmet, the used KOH at issue in this case was not "spent" because it remained useful to Royster in its fertilizer production process. The fact that the two uses for the KOH were vastly different, that the used KOH sent to Royster was too contaminated for Howmet's further use, and that Howmet sent the used KOH to a third party does not, according to Howmet, render the KOH "spent." *Id.* at 13-14. Howmet further argues that various EPA interpretive statements, which we discuss more fully below, lend credence to Howmet's interpretation of the regulations. *Id.* at 15-20. Finally, Howmet argues that, should the Board uphold the ALJ's liability determination, it should reverse the ALJ's rejection of Howmet's fair notice defense and find that Howmet was without the benefit of fair notice that EPA would interpret the RCRA regulations in the manner leading to regulatory coverage under the facts of this case. *Id*. at 26-28.

b. *The Regions' Arguments*

The Regions argue that, contrary to Howmet's assertions, the used KOH sent to Royster was "spent material" and therefore was hazardous waste. Reg. Br. at 16. First, the Regions assert that the plain wording of the regulations supports their argument. They focus on the same regulatory language as Howmet, but argue that under the regulatory definition anything other than "continued use" of a material for the same or similar function gives rise to spent material status. The Regions assert that, regardless of the range of potential uses of virgin KOH, when Howmet could no longer use the KOH as a cleaning agent because it had become too contaminated, the KOH, by definition, became "spent." *Id.* According to the Regions, because the regulations refer to "*the purpose* for which [the material] was produced," 40 C.F.R. § 261.1(c)(1) (emphasis added), rather than "the *purposes* for which it was produced," each material may have only one purpose for production that is germaine for purposes of RCRA regulatory coverage. Thus, to accept Howmet's argument is to, in effect, change the wording of the definition from "*the* purpose" to "*a* purpose," and in so doing rewrite the regulation to include all "potential uses" of a virgin material, which the Region argues is contrary to the plain meaning of the regulations.[25] Reg. Br. at 20.

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[25] The ALJ also focused on the "*the* purpose" versus "*a* purpose" argument. *See* Order on Motions at 14.

The Regions further argue that the various commercial purposes of KOH are irrelevant and that it is "axiomatic that a fertilizer manufacturer would not purchase used KOH that contains high levels of contaminants." *Id.* at 22. According to the Regions, "the RCRA regulations ensure that use-based contaminated material is appropriately managed as a hazardous waste by requiring the generator to determine if its waste is a solid/hazardous waste by examining the used material it generated and its subsequent uses." *Id.* The Regions maintain that, under Howmet's interpretation of spent material, virgin sand employed in a brass foundry as an abrasive until too contaminated for that purpose could be used to fill children's sandboxes without being deemed a spent material. The Regions assert that this example demonstrates why it is nonsensical to look only at the potential uses for a virgin material, which can differ so dramatically from the uses for a used material.[26] *Id.*

The Regions also observe that the regulations do not prohibit fertilizer manufacturers such as Royster from employing used KOH, so long as they comply with all applicable hazardous waste regulations.[27] The Regions further explain that used materials are not RCRA-regulated simply because they are spent. They are regulated as solid and hazardous waste only when used in a manner constituting disposal, *e.g.*, when applied to the land as fertilizer. Reg. Br. at 23.

The Regions argue that their interpretation of the definition of "spent" material is supported by the Agency's preamble to the regulations and interpretive statements and administrative case law, and note that courts have given greater deference to agencies when their rulings, legal interpretations, and opinions are consistent over long periods of time. Finally, because, in the Regions' view, their interpretation of the regulations is consistent with the Agency's long-standing and discernable view, the Regions argue that the Board should uphold the ALJ's rejection of Howmet's fair notice defense.

III. *DISCUSSION*

As the foregoing illustrates, there are two issues on appeal in this case. The primary issue is whether the ALJ properly found that the used KOH that Howmet sent to Royster was a "spent material." If it was a spent material, the secondary issue is whether the ALJ properly found that Howmet failed to prove that it did

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[26] The ALJ also found this "sandbox example" persuasive. Order on Motions at 21-22. Howmet responded that while this example has emotional appeal, if the Board were to adopt EPA's logic the contaminated sand would be out of EPA's reach if the sandbox were lined and the foundry sand were not land-applied. App. Br. at 25; Tr. at 25. Howmet also observes that the spent materials regulation is not the only method of capturing this type of activity. Tr. at 25.

[27] Reg. Br. at 23; *see also* 40 C.F.R. § 266.20.

not have fair notice that EPA was interpreting the RCRA regulations to treat materials like the used KOH shipped to Royster as hazardous waste. Because the parties have stipulated to the facts in this case, no facts are at issue before the Board. Rather, only the ALJ's legal conclusions are at issue, and the Board reviews these conclusions *de novo*. *See* 40 C.F.R. § 22.30(f).

As we have explained in previous cases, "[w]hen construing an administrative regulation, the normal tenets of statutory construction are generally applied." *In re Bil-Dry Corp.*, 9 E.A.D. 575, 595 (EAB 2001) (citing *Black & Decker Corp. v. Comm'r*, 986 F.2d 60, 65 (4th Cir. 1993)). "The plain meaning of words is ordinarily the guide to the definition of a regulatory term." *Id.* (citing *T.S. v. Bd. of Educ.*, 10 F.3d 87, 89 (2d Cir. 1993)). "Additionally, the regulation must, of course, be 'interpreted so as to harmonize with and further and not to conflict with the objective of the statute it implements.'" *Id.* (quoting *Sec. of Labor v. W. Fuels-Utah, Inc.*, 900 F.2d 318, 320 (D.C. Cir. 1990)). Moreover, in interpreting a regulation, we examine not just the provision at issue, but the entire regulation. *In re U.S. Army, Fort Wainwright Cent. Heating & Power Plant*, 11 E.A.D. 126, 141 (EAB 2003) ("The meaning – or ambiguity – of certain words or phrases may only become evident when placed in context.") (quoting *Food & Drug Admin. v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132 (2000)). *See generally In re Harpoon P'ship*, 12 E.A.D. 182, 195-96 (EAB 2005), *appeal dismissed*, *Harpoon P'ship v. EPA*, No. 05-2806 (7th Cir., Aug. 24, 2005). *Cf. United States Nat'l Bank of Or. v. Indep. Ins. Agents of Am.*, 508 U.S. 439, 455 (1993) ("In expounding a statute, we must not be guided by a single sentence or member of a sentence, but look to the provisions of the whole law * * * .") (citations omitted). Moreover, just as legislative history can be helpful in interpreting a statute, regulatory history, such as preamble statements, assists us in interpreting regulations. *See In re Morton L. Friedman & Schmitt Const. Co.*, 11 E.A.D. 302, 328 (EAB 2004), *aff'd*, *Friedman v. United States Environmental Protection Agency*, No. 2:04-CV-00517-WBS-DAD (E.D. Cal. Feb. 25, 2005). Last, we give greater deference to a position when it is supported by Agency rulings, statements, and opinions that have been consistent over time. *See In re Lazarus, Inc.*, 7 E.A.D. 318, 352-53 (EAB 1997).

As explained more fully below, we find that the used KOH Howmet sent to Royster was indeed "spent." Because Howmet does not deny that the used KOH was ultimately used to produce a land-applied product or that the substance was corrosive, it follows that the used KOH sent to Royster was a hazardous waste. Accordingly, we affirm the ALJ's conclusions that Howmet violated RCRA. With respect to the secondary issue of whether Howmet demonstrated that it did not have fair notice of this interpretation of the regulations, we find that, given the incongruity of Howmet's interpretation of the definition of spent material with other provisions of the regulations, and in view of the Agency's various interpretive statements relating to the definition of spent material, Howmet reasonably could have ascertained that the path it had chosen would prove problematic in the

Agency's view. Moreover, there is no indication that Howmet, even though it should have known that it was following a course that was at best highly questionable, sought regulatory guidance from the Agency. In the past, we have taken a regulated entity's assumption of risk into account in evaluating a fair notice defense, and we do so here as well. In short, as discussed more fully below, we find that Howmet's fair notice defense must fail.

Our path to these conclusions begins with a brief review of how RCRA addresses recyclable materials in general, and how the RCRA program has approached the more specific question of the use of secondary materials as ingredients in fertilizers. After reviewing this contextual material, which we find instructive, we turn to the more specific questions of used KOH as "spent material" and Howmet's fair notice defense.

A. *RCRA's Approach to Recyclable Material*

Before addressing the more specific question of how to interpret the regulatory definition of "spent material," it is instructive to review briefly how the RCRA regulatory program addresses recyclable material in general. The opening sections of RCRA set forth several broad public policy concerns that bear mention in this regard. Section 1003(b) declares it to be "the national policy of the United States that, wherever feasible, the generation of hazardous waste is to be reduced or eliminated. * * * Waste that is nevertheless generated should be treated, stored, or disposed of so as to minimize the present and future threat to human health and the environment." 42 U.S.C. § 6902(b). Section 1002, for its part, essentially observes that "land disposal" of hazardous waste should be the least favored method for managing hazardous waste. 42 U.S.C. § 6901(b).

> Congress made it abundantly clear when it enacted the Hazardous and Solid Waste Amendments of 1984, Pub. L. No. 98-9 ("HSWA"), that its concerns with the management of hazardous wastes applied with equal force to recyclable materials. The following passage from HSWA's legislative history is instructive in this regard.
>
> This section of the Bill amends Section 3001 of RCRA to require the Administrator to issue regulations regarding use, reuse, recycling, and reclamation of hazardous wastes. * * * The Committee affirms that RCRA already provides regulatory authority over these activities (which authority the Agency has exercised to a limited degree) and in this provision is amending to clarify that materials being used, reused, recycled, or reclaimed can indeed be solid and hazardous wastes and that these various recycling activities may constitute hazardous waste treat-

> ment, storage, or disposal. * * * The committee is particularly concerned with possible harm caused by hazardous waste use and reuse involving direct introduction of hazardous wastes to the air or direct application of hazardous wastes to the land.

H.R. Rep. No. 98-198(I), at 46 (1984), *as reprinted in* 1984 U.S.C.C.A.N. 5576, 5605.[28] Accordingly, for over twenty years there has been little question about EPA's general authority and mandate to regulate recyclable waste materials. This being said, since its inception, the RCRA program has carried within it a certain tension between, on the one hand, prophylactic regulation of recyclables in order to protect the public and the environment from the serious consequences of mismanagement of such materials, and, on the other hand, not inhibiting through such regulation the beneficial recycling and legitimate reuse of such material.[29] One commenter describes this tension as follows:

> Recycling is the most loaded and double-edged term in the hazardous waste lexicon. It generally connotes a highly desirable activity such as reclamation (regeneration of spent solvents). However, it also refers more generally to any use or reuse of a waste, such as burning, to recover energy or materials, or applying materials to the ground as "fertilizer" or "fill material." Depending upon the types of wastes and the nature of the practice such recycling activities can either help protect or harm human health and the environment. (For example, using a waste as a fertilizer may actually aid crop growth or may be little more than disposal, if toxic metals run off in the process or are taken up by crops.)

Richard C. Fortuna & David J. Lennett, *Hazardous Waste Regulation, The New Era: An Analysis and Guide to RCRA and the 1984 Amendments* 62 (1987).

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[28] In the course of developing implementing regulations under RCRA, EPA has echoed and amplified the concerns expressed by Congress regarding recycling activity. For example, EPA rejected "the argument that hazardous wastes that are recycled do not require any regulation because they are inherently valuable and do not pose significant environmental risks." 48 Fed. Reg. 14,472, 14,473 (Apr. 4, 1983). EPA explained that some recycling activities, such as recycling in a manner analogous to disposal, pose a much greater potential for harm than others, and stated that the RCRA regulations were intended to guard against these risks. *Id.* at 14,474. EPA further noted that "[f]acilities that recycle hazardous wastes have caused serious health and environmental problems by directly placing the wastes on the land," and cited numerous expensive cleanups at hazardous waste recycling facilities. *Id.*

[29] To the extent that used materials can be legitimately and safely recycled, they avoid becoming part of the waste disposal problem, at least when the reuse does not itself constitute disposal.

The Agency has generally resolved this tension through a series of categorical inclusions and exclusions, informed in part by an assessment of whether a given material is inherently waste-like or product-like, and in part by consideration of the environmental risks associated with the reuse scenario. In the delta between the categorical inclusions and exclusions, the Agency determined to approach the question of regulatory applicability on a case-by-case basis: "in most cases one must know both what the material is and how it is being recycled before determining whether it is a waste." 50 Fed. Reg. 614-01, 617 (January 4, 1985).

It is axiomatic that to be subject to RCRA regulation, a recyclable material must be a "waste" in the first instance. But this is in itself a sometimes difficult calculation, and a cautionary note on this front was prominent in a series of cases brought before the United States Court of Appeals for the District of Columbia ("D.C.") Circuit in the late 1980s and early 1990s challenging certain EPA rules attempting to regulate certain reuse scenarios. In the seminal case of *American Mining Congress v. EPA*, 824 F.2d 1177 (D.C. Cir. 1987) (hereinafter "*AMC I* "), for example, the D.C. Circuit confronted the question of whether secondary materials destined for reuse in a continuous process by the generating entity itself could be regulated as waste. The court concluded that these materials were beyond EPA's regulatory reach under RCRA, finding, inter alia, that such materials "have not yet become part of the waste disposal problem * * * ." *Id.* at 1186. Subsequently, in the case of *American Petroleum Institute v. EPA*, 906 F.2d 729 (D.C. Cir. 1990) (hereinafter "*API*"), the D.C. Circuit distinguished the kind of on-site, continuous process recycling it addressed in *AMC I* from a process for reclaiming metals from a material, known as K061, generated from air pollution control equipment in steel industry electric furnaces. In this setting, the court observed, "Unlike the materials in question in *AMC [I]*, K061 is indisputably 'discarded' *before* being subject to metals reclamation. Consequently, it *has* 'become part of the waste disposal problem.'" *Id.* at 741 (quoting *AMC I*, 824 F.2d at 1186). *See also Am. Mining Congress v. EPA*, 907 F.2d 1179 (D.C. Cir. 1990) (hereinafter "*AMC II*") (emphasizing that the holding in *AMC I* applied only to materials that are destined for immediate reuse in a company's ongoing production process and applying the "waste disposal problem" test). In another case, *Association of Battery Recyclers, Inc. v. EPA*, 208 F.3d 1047 (D.C. Cir. 2000), the court described the cross-walk between *AMC I* and *API* as follows:

> API thus involved the taking of solid waste from the steel industry and reclaiming it within another industry, typically primary zinc smelting or some other type of secondary metal recovery. The *API* decision is entirely consistent with *AMC I*. In fact the *AMC I* court recognized EPA's authority over comparable secondary materials: "Oil recyclers typically collect discarded used oils, distill them, and sell the resulting material for use as fuel in boilers. Regulation of those activities is likewise consistent

> with an everyday reading of the term 'discarded.' It is only when EPA attempts to extend the scope of that provision to include the recycling of undiscarded oils at petroleum refineries that conflict occurs."

Id. at 1054-55 (citations omitted).

What can we distill from this contextual backdrop? First, we note the recognition by Congress and the Agency that recyclable materials can themselves, if improperly managed, present significant risks to public health and the environment. Second, we note Congress's strongly articulated concern regarding waste management pathways that result in applications to land. Third, we note the D.C. Circuit's litmus test for assessing the regulatory status of recyclable materials – have they become "part of the waste disposal problem?"[30]

B. *Regulatory Coverage of Secondary Materials Used as Fertilizer Ingredients*

Howmet's arguments regarding the regulatory treatment of its secondary KOH ignore altogether the fact that the regulatory history of the RCRA regulations reflects a fairly clear intention on EPA's part to regulate the deployment of hazardous secondary materials as ingredients in fertilizer as hazardous waste management activity – in particular, as a "use constituting disposal" under 40 C.F.R. § 261.2(c). We now review this regulatory history, before turning in Part III.C. to our analysis of why Howmet's KOH is a spent material under RCRA.

When the Agency proposed to amend the RCRA regulations in 1983 to clarify the coverage of recyclable materials, the proposed rule specifically referenced fertilizer reuse scenarios. The proposal anticipated differentiating between chemical by-products used directly (as-is) for certain uses and those that would be used as an ingredient for another product and altered chemically or biologically

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[30] We discuss the D.C. Circuit cases as a means of illustrating RCRA's orientation to recycled material, and the various considerations that the D.C. Circuit has found significant in analyzing when a material is solid waste. The ALJ also discussed some of these cases, *see* Order on Motions at 15-21, but Howmet argues on appeal that the ALJ's analysis of the cases is incorrect, *see* App. Br. at 23-24. In particular, Howmet maintains that the ALJ "relied upon his reading of various D.C. Circuit decisions to conclude that Howmet's used KOH could not avoid regulation as a solid waste unless the used KOH was used in an 'ongoing, continuous process of beneficial reuse by Howmet.'" *Id.* at 23. Although the extent to which the ALJ's conclusions were influenced by this line of thought is somewhat unclear, we note that in their brief, the Regions state that "EPA agrees with Appellant that its 'used KOH did not become discarded simply because it was reused by another company in a different industry.'" Regions' Brief at 30 n.38. We agree with the parties that the ALJ misconstrued D.C. Circuit case law to the extent that he concluded that the fact Royster was a separate company in a different industry was by itself determinative with respect to the waste status of Howmet's used KOH. As our analysis reflects, we are not relying on D.C. Circuit precedent for such a proposition.

through blending with other ingredients. With respect to the former category, the Agency observed, "The first category of secondary materials considered to be solid wastes when recycled and when destined for recycling are secondary materials used or reused in a manner involving direct placement on the land. Examples are the direct use of recycled materials for land reclamation, as dust suppressants, as *fertilizers*, and as fill material." 48 Fed. Reg. 14,472, 14,484 (Apr. 4, 1983) (emphasis added). While the Agency proposed not to regulate the latter category of chemical by-products – i.e., those used as ingredients that were altered in some way through the fertilizer manufacturing process – the preamble stated: "The Agency * * * is concerned about not regulating fertilizers made from toxic metal-containing sludges and by-products (where these materials are significantly changed in the process). * * * The Agency is gathering information on waste-derived fertilizers and may alter this part of the proposal after assessing this information." *Id.* at 14,485.

In the final rule, the Agency did, in fact, expand coverage to include the second category of materials. In the preamble, EPA observed, "all secondary materials * * * are considered to be wastes when they are used in a manner constituting disposal * * * ." 50 Fed. Reg. 614, 619 (Jan. 4, 1985). "This activity involves directly placing wastes or waste-derived products (a product that contains a hazardous waste as an ingredient) onto the land." *Id.* at 618. Plainly, the Agency saw fertilizer manufacture using secondary materials as a classic example of "use constituting disposal," as indicated by the following passage in the preamble to the RCRA rules:

> [T]he Agency's jurisdiction extends to all hazardous wastes placed on the land, whether or not the waste was mixed with other materials or chemically altered before being placed on the land. * * * Thus, *fertilizers*, asphalt, and building foundation materials that use hazardous wastes as ingredients and are then applied to the land are subject to RCRA jurisdiction.

Id. at 628 (emphasis added). As the Agency observed in the preamble to the proposed rule, "materials used in a manner that constitutes disposal * * * should be regulated at all stages of management. This includes the recycling phase, since recycling that constitutes disposal is virtually tantamount to unsupervised land disposal."[31] 48 Fed. Reg. at 14,496.

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[31] Also, in recognizing that certain secondary materials that are used as alternatives to raw materials should not be regarded as waste, the Agency stipulated that a "major exception to this provision is when spent material, by-products, sludges or scrap metal are used as ingredients in waste-derived fuels or in waste-derived products that will be placed on the land. In these situations, * * * the spent material, sludge, scrap metal, or by-product [is] a solid waste * * * ." 50 Fed. Reg. at 619.

EPA's intention to regulate this kind of activity is also reflected in 40 C.F.R. § 261.2(e)(1)(i). This section addresses materials that are "reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed." 40 C.F.R. § 261.2(e)(1)(i). Section 261.2(e)(1)(i) treats such materials as non-waste; however, there is an important proviso – that the material not be "used in a manner constituting disposal, or used to produce products that are applied to the land." 40 C.F.R. § 261.2(e)(2)(i). In this circumstance, the re-used materials are treated as a waste. The fertilizer reuse scenario appears to be in the immediate contemplation of section 261.2(e)(1)(i), in that fertilizers are clearly products that are applied to the land.

Interestingly, in January of 1999, eight months before Howmet began the shipments to Royster that gave rise to this enforcement action, EPA published a report entitled *Background Report on Fertilizer Use, Contaminants and Regulation*, Office of Pollution Prevention & Toxics, U.S. EPA, EPA 747-R-98-003 (Jan. 1999).[32] That report, in describing the regulation of used contaminants in the manufacture of fertilizer, stated:

> Management of hazardous secondary materials prior to recycling for fertilizers is subject to the "use constituting disposal" (UCD) provision of RCRA (40 CFR 266.20). This provision in essence requires that hazardous waste secondary materials must be managed as hazardous wastes prior to being recycled. Thus, for example, shipments of such materials are subject to manifest requirements, and storage of the materials (e.g., by the fertilizer manufacturer) will generally require a RCRA permit.

Id. at 64. This report stands as a further indication of how the Agency viewed the use of hazardous secondary materials in the manufacture of fertilizer.

Finally, a rule change undertaken by the Agency in 2002 to establish regulatory relief for one category of secondary materials used to make fertilizer bears note. There, EPA established a conditional exemption for zinc fertilizers, *see* 40 C.F.R. § 266.20(d), and for "[h]azardous secondary materials used to make zinc fertilizers." *See* 40 C.F.R. §§ 261.4(a)(20) and 266.20(d). While we recognize that this rule change post-dates the conduct in question here,[33] we nonetheless find

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[32] Although this report was not cited by the parties, we take notice of it as a public document. *See In re Cutler*, 11 E.A.D. 622, 650-51 (EAB 2004) (explaining that information in the public domain is subject to official notice by the Board); 40 C.F.R. § 22.22(f) (stating that official notice may be taken of any matter that can be judicially noticed in the federal courts).

[33] Accordingly, we do not rely on this regulatory development in our analysis of the fair notice issue.

it relevant as a further reflection of the Agency's longstanding intentions with respect to the use of hazardous secondary material in the manufacture of fertilizer. That the Agency saw it necessary to provide regulatory relief for this category of secondary materials strongly implies first, that without such relief, zinc-bearing secondary materials would be regulated as hazardous waste, and second, that hazardous secondary materials other than zinc-bearing materials would continue to be regulated as hazardous waste.[34] The regulatory history for this provision speaks further to the Agency's intentions in this regard. In the preamble to the proposed zinc fertilizer rule, the Agency observed:

> Currently, hazardous waste[35] feedstocks that are used in fertilizer manufacture are subject to full hazardous waste management requirements, which include generator requirements, manifests (when such wastes are transported), and permits for manufacturers who store such materials prior to incorporation into fertilizer. * * * Today's proposed regulatory amendments address only one type of fertilizer that is made from recycled hazardous wastes; specifically zinc micronutrient fertilizer. * * * EPA may address other types of hazardous waste derived fertilizers in a follow-up rulemaking. Until then, the current RCRA regulatory framework will continue to apply to recycling of hazardous wastes to make fertilizers other than zinc micronutrient fertilizers.

65 Fed. Reg. 70,954, 70,955-56 (Nov. 28, 2000). The Agency further observed:

> Under RCRA, placement of hazardous wastes on the land is generally regulated as a disposal practice, and thus the regulations that apply to this type of recycling practice are generally referred to as the "use constituting disposal" (UCD) regulations. Fertilizers produced from hazardous

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[34] We assume that the used KOH supplied by Howmet to Royster would not be covered by this conditional exemption. Even if it were, this would not exonerate Howmet, as the actions in question in this case occurred prior to the rule change.

[35] Given that in this notice the Agency variously refers to the materials of concern as "hazardous waste" and "hazardous secondary materials," *see, e.g.*, 65 Fed. Reg. 70,954, 70,959 (Nov. 28, 2000) (referencing "hazardous zinc secondary materials"), we do not regard the reference here to "hazardous waste" as having limiting significance in cases like this one in which it is argued that the material used in the manufacture of fertilizer was not a "waste" in the first place. Indeed, consistent with the balance of our discussion, we believe that the Agency has long assumed that hazardous secondary materials reused as fertilizer ingredients were hazardous "wastes." We analyze in Part III.C., *infra*, why we conclude that Howmet's used KOH is also a spent material under RCRA, thus completing our analysis of why Howmet's used KOH is a hazardous waste.

> waste (i.e., incorporating hazardous wastes as one of their ingredients) are an example of a use constituting disposal. * * * Under the current UCD regulations, hazardous wastes that are going to be recycled to make fertilizers must be managed in accordance with all applicable hazardous waste management requirements, until they are incorporated into a fertilizer. * * * EPA's rationale for regulating these materials as hazardous wastes is that the end disposition of the waste closely resembles uncontrolled land disposal, which is the classic type of discard under RCRA.

Id. at 70,956-59. *See also* 67 Fed. Reg. 48,393, 48,394-97 (July 24, 2002) (final rule).

Significantly, upon promulgation, the zinc fertilizer rule did not exempt hazardous zinc secondary materials altogether from RCRA regulation. Rather, the exemption is conditional, and the conditions set forth in the regulation essentially establish those controls necessary to ensure safe management of the material. *See* 40 C.F.R. § 261.4(a)(20) (establishing, among other things, requirements for safe storage of such material, as well reporting and recordkeeping requirements). This program for safely managing hazardous zinc secondary materials to be reused in manufacturing fertilizer stands in sharp contrast to the approach to which Howmet's arguments point – an interpretation of the "spent material" definition that essentially produces an unconditional, no-controls exemption for hazardous KOH secondary materials destined for reuse in fertilizer manufacture.

In short, it seems clear that EPA intended to treat the reuse of hazardous secondary materials as fertilizer ingredients as regulated hazardous waste activity. We now turn to the specific question of how best to interpret the definition of "spent materials" and whether that definition can be credibly read as undoing the regulatory intention that we have just described. As discussed below, we are unprepared to interpret the spent materials provision in this manner.

c. *The Definition of* "*Spent Material*"

The current regulations were promulgated in 1985, finalizing a rule intended to clarify which materials are considered hazardous wastes when they are recycled, and the types of recycling activities that are deemed hazardous waste management. *See* 50 Fed. Reg. 614 (Jan. 4, 1985). Notably, the predecessor rules- the 1980 rules- did not include a reference to "spent material" or a product's "purpose." Rather, under those rules, a material would become a solid waste when, among other things, it had been "used" and was "sometimes discarded." *See* 45 Fed. Reg. 33,084, 33,119 (May 19, 1980); *see also* 48 Fed. Reg. 14,472, 14,475 (April 4, 1983). A key reference point in determining whether a material

had become a waste was the material's "original intended use." *See* 40 C.F.R. § 261.2(b)(2) (1980); *see also* 45 Fed. Reg. at 33,093. Once a material had been used and was no longer suited for its originally intended use, it was considered waste. The concept of original intended use necessarily focused attention on how the material was initially deployed after being purchased as a product, i.e., the product's first application. While the Agency changed the text of this provision in 1985, as discussed below, we do not believe that the Agency by so doing intended to shift focus altogether away from the first deployment or application of a material. After reviewing the rulemaking preambles and interpretive statements by the Agency, we rather believe that the initial deployment or application holds continued significance as a reference point in determining a product's purpose and the waste status of a used material.

1. *1983 Proposed Regulations*

In 1983, EPA published the proposed rule that formed the basis of the current regulations. The Agency proposed to change the definition of solid waste to "no longer base a material's status as solid waste on whether it is 'sometimes discarded.' Instead, [under the proposed regulations,] a recycled material's regulatory status would depend upon both what the material [was] and how it actually [was] managed – and the status could vary with the means of recycling." 48 Fed. Reg 14,472, 14,475 (Apr. 4, 1983). The proposed regulations first stated that five types of recycling activities would be within EPA's jurisdiction. Relevant to this appeal, one of these activities was "use constituting disposal," which "involves the direct placement of wastes onto the land."[36] *Id.* at 14,476. The proposed rule then specified what types of materials would be considered waste when recycled, and introduced the concept of a "spent material." The proposed definition for "spent material" was "any material that has been used and has served its *original purpose*." *Id.* at 14,508 (emphasis added). Under the proposed rule, spent materials always would be considered solid wastes when recycled, unless they fell under certain specified exceptions.[37] *See id.* at 14,476.

In terms of what the Agency intended in using the words "original purpose," it appears that the use of singular "purpose" was not accidental. Rather, the framers of the proposed rule appear to have had a particular purpose in mind- the purpose associated with the initial deployment or application of the product. In other words, although a product may be developed with multiple purposes, or applications, in mind, under RCRA the product would be marked or identified by

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[36] The other four activities were: (1) burning waste or waste-derived fuels of energy recovery, (2) reclamation, (3) speculative accumulation, and (4) accumulation without sufficient amounts of stored material being recycled. *See* 48 Fed. Reg. 14,472, 14,476.

[37] Other types of materials that always would be considered solid waste when recycled were sludges, by-products, and commercial chemical products. 48 Fed. Reg. 14,472, 14,476.

its original deployment.[38] Once that "original purpose" had been served, the material would be treated as a spent material and therefore a waste. As is self-evident, the distinction between this orientation and the one under the 1980 rule is not dramatic. Indeed, it appears that the Agency was attempting to preserve within the definition of spent material and the concept of "use constituting disposal" a concept quite similar to the one present in 1980 rules, although in a narrower setting.

2. *1985 Final Rule*

In 1985, EPA adopted the 1983 proposal as a final rule, with some modifications and clarifications. *See* 50 Fed. Reg. 614, 616 (Jan. 4, 1985). "Use constituting disposal" remained one of the regulated recycling activities, but was revised to include not just waste, but also waste-derived products placed on the land. "Spent materials" remained one of the regulated secondary materials, but EPA "altered the wording * * * to express the concept more clearly"[39] and read as it does today: "A 'spent material' is any material that has been used and as a result of contamination can no longer serve the *purpose for which it was produced* without processing." 40 C.F.R. § 261.1(c)(1) (emphasis added).

The preamble to the final rule defining solid waste explained the history of EPA's regulatory definition of "spent material":

> We are continuing to define spent materials as those which have been used and are no longer fit for use without being regenerated, reclaimed, or otherwise re-processed. In response to comments [to the 1983 proposed rule], however, we have altered the wording of the definition of spent material to express this concept more clearly. *As the proposal was worded, a spent material was one that had been used and no longer could serve its original purpose. The Agency's reference to original purpose was ambiguous when applied to situations where a material can be used further without being reclaimed, but the further use is not identical to the initial use.* An example of this is where solvents used to clean circuit boards are

[38] While we recognize that the reference to "original purpose" could, without the benefit of context, arguably be read to refer to the manufacturer's purpose without reference to how the material was actually deployed by the user, it seems fairly clear that is not what the Agency had in mind in the 1983 preamble. *See* 48 Fed. Reg. at 14,475 (explaining that the "'sometimes discarded' test caused many product like materials * * * that still had legitimate uses to be categorized as solid waste."). As discussed below, the 1985 preamble makes it all the more clear that "original purpose," as used in the 1983 proposal, contemplated reference to a product's initial use. *See* 50 Fed. Reg. 614, 624 (Jan. 4, 1985).

[39] 50 Fed. Reg. at 624.

> not [sic] longer pure enough for that continued use, but are still pure enough for use as metal degreasers. These solvents are not spent materials when used for metal degreasing. The practice is simply continued use of a solvent. (This is analogous to using/reusing a secondary material as an effective substitute for commercial products.) The reworded regulation clarifies this by stating that spent materials are those that have been used, and as a result of that use become contaminated by physical or chemical impurities, and can no longer serve the *purpose* for which they were produced. (This reworded definition appropriately parallels the definition of "used oil"--a type of spent material--in RCRA section 1004(36).)[40]

50 Fed. Reg. at 624 (emphasis added). The italicized passage above, along with the solvent example, makes it plain that the Agency was, in both the 1983 proposed rule and the 1985 final rule, associating the concept of "purpose" with the concept of "initial use." The reason for the change from the proposed "original purpose" text to the final "purpose for which it was produced" was that the Agency was concerned that the term "original" was too confining and might not allow reuses that were similar, but not identical, to the initial use. While one might legitimately question whether the Agency's reformulation addressed its stated concern as clearly as it might have, its intention seems clear.

D. *Was the Used KOH Sent to Royster "Spent"?*

In working through this question, we start first with the regulatory text to see if its meaning is clear on its face in terms of its application to Howmet's KOH shipments to Royster. *See In re Consumers Scrap Recycling, Inc.*, 11 E.A.D. 269, 292 (EAB 2004) (citing *T.S. v. Bd. of Educ.*, 10 F.3d 87, 89 (2d Cir. 1993)) ("The plain meaning of words is ordinarily the guide to the definition of a regulatory term."). As discussed below, we find the terms less than clear in their application to the facts at hand. We then consider the regulations as a whole, their regulatory history, and the Agency's post-promulgation interpretive statements in divining the meaning of "spent material" in this context.

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[40] RCRA section 1004(36) provides that "[t]he term 'used oil' means any oil which has been (A) refined from crude oil, (B) used, and (C) as a result of such use, contaminated by physical or chemical impurities." 42 U.S.C. § 6903(36).

1. *Is the Definition of Spent Material Clear on Its Face in Its Application to Howmet's KOH?*

The parties agree that the regulatory text is the appropriate place to begin the analysis, and both maintain that the regulation is clear on its face, but, not surprisingly, they disagree on the "clear" meaning of the phrase "the purpose for which it was produced." Notably, the parties also appear to agree that the phrase "the purpose" should be construed in the singular and contemplates a singular purpose.[41] The parties disagree, however, as to which purpose the regulation points and on the relationship of "purpose" to "use." *See* Tr. at 12, 42. As noted, Howmet contends that "purpose" refers to a product's *fundamental* purpose and, as such, incorporates all of the potential applications of a product amenable to multiple uses by virtue of its chemical properties. Based on Howmet's interpretation of "purpose for production," the KOH at issue in this appeal lived out its fundamental purpose for production whether in Howmet's or Royster's hands, and thus was not a "waste."[42] In contrast, the Regions argue that the word "purpose" should be construed more narrowly, and argue that the particular purpose contemplated by the regulation is determined by reference to the material's first use.

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[41] This likewise strikes us as the better reading of the regulations. In reviewing EPA's attempts over the years to develop a regulatory program for recyclable materials, it seems to us reasonably clear that the Agency had in mind the notion of a material's "purpose" as manifesting a *singular* character, not a multiple character. We should note that we are not drawn to a contrary conclusion by 40 C.F.R. § 260.3, which provides that, as used in the RCRA regulations, words "in the singular include the plural; and * * * [w]ords in the plural include the singular." While potentially instructive in other settings, where, as here, the regulatory context strongly suggests that a deliberate choice was made in favor of singular usage, and where that choice is not insignificant in terms of regulatory impact, we will follow a contextual reading rather than a formalistic application of § 260.3 that ignores that context. *See, e.g., In re Consumers Scrap Recycling, Inc.*, 11 E.A.D. 269, 292 (EAB 2004) (a regulation must be "interpreted so as to harmonize with and further and not to conflict with the objective of the statute it implements") (citing federal circuit court cases).

[42] We note that Howmet apparently concedes that "use" and "purpose" are closely connected and potentially interrelated as concepts, as evidenced by the following colloquy at oral argument:

Q So you do agree that in looking at purpose you have to look at use?

A I believe so, yes. * * * I believe that purpose and use are intertwined, and Howmet is a very good example of that. Howmet [sic] has multiple uses and therefore it *could be said to have multiple purposes*. But when you boil it down to an elemental purpose, a single solitary purpose, it comes back down to its chemical composition, its chemical makeup in every single use.

Tr. at 12 (emphasis added). It also bears note that in its brief before the ALJ, Howmet argued that the spent material regulations allow reuse for *any* purpose for which a product is produced, implying that a product often has more than one purpose. Order on Motions at 7; Howmet's Opposition Brief at 9. However, in its appeal before the Board, Howmet argues the phrase "the purpose" contemplates only one purpose, but that the single, fundamental purpose is broad enough to cover all uses. App. Br. at 10.

The regulations themselves do not define "purpose for production" or "use,"[43] and the everyday meanings of these terms strike us as ultimately unhelpful in interpreting the spent materials definition as it applies to the facts of this case. The American Heritage Dictionary, for example, defines "purpose" as "the object toward which one strives or for which something exists; an aim or goal." American Heritage College Dictionary 1111 (3d ed. 2000). The same dictionary defines "use" as "to put into service or apply for a purpose." *Id.* at 1486. In short, it is simply unclear from the text of the specific provision at issue whether the phrase, "the purpose for which it was produced" refers to the kind of chemical property-based purpose to which Howmet points or contemplates instead a contextual, "original use"-based purpose test, as advocated by the Region in this case.[44] *See U.S. Army, Fort Wainwright Cent. Heating & Power Plant*, 11 E.A.D. 126, 141 (EAB 2003) (explaining that language is ambiguous if it may be understood in more than one way).

2. *Is Howmet's Approach Consistent with the Regulations as a Whole?*

Having found the language of the definition of "spent material" itself insufficient to resolve the question, we now consider whether 40 C.F.R. § 261.2, read as a whole, offers any further interpretive guidance. From this vantage point, we find Howmet's interpretation difficult to reconcile with the overall thrust of the regulations. Significantly, as we noted earlier, section 261.2(e)(1)(i) appears to push in a different direction. That provision addresses materials that are "reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed." 40 C.F.R. § 261.2(e)(1)(i). Here, as noted, Howmet's used KOH is reused by Royster, without reclamation, in an industrial process to make fertilizer. Section 261.2(e)(1)(i) treats such material as non-waste; however, this exemption is subject to the proviso that the material not be "used in a manner constituting disposal, or used to produce products that are applied to the land." *Id.* § 261.2(e)(2)(i). If the resulting products are land-applied, the re-used material ingredients are treated as waste.

Plainly, fertilizers are products that are applied to the land. Accordingly, the clear implication of section 261.2(e)(1)(i) is that used KOH of the kind that Howmet shipped to Royster, reused as it was to make fertilizer, would be treated as

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[43] It bears noting that the RCRA regulations do offer a definition of sorts for the term "use" in describing when a material is considered "used or reused," *see* 40 C.F.R. § 261.1(c)(5), but that provision, because of its context, is not instructive here.

[44] Recognizing that the ALJ determined that the Regions' interpretation was compelled by the plain language of the regulation, *see* Order on Motions at 14-15, we disagree with the ALJ in this respect.

waste under the regulations.[45] Viewed in this light, Howmet's elastic interpretation of the definition of "spent materials" would appear to circumvent the fairly clear import of § 261.2(e)(2)(i).

3. *What Guidance Does the Regulatory History Provide?*

Howmet's proferred interpretation is not only difficult to reconcile with the regulations as a whole, but it is also incompatible with the regulatory history for the definition of spent material. *See In re Morton L. Friedman & Schmidt Constr. Co.*, 11 E.A.D. 302, 328 (EAB 2004) (considering examples provided in preamble to determine meaning of a term used in the regulations), *aff'd, Friedman v. United States Environmental Protection Agency*, No. 2:04-CV-00517-WBS-DAD (E.D. Cal. Feb. 25, 2005). As we have observed, the regulatory history of the spent material definition makes it fairly plain that the Agency had something in mind other than the fundamental chemical purpose concept that Howmet is advocating. In particular, the Agency's use of "the purpose" contemplated a particularized and relational inquiry that is informed by the product's initial use or application. In other words, for a product that has been developed for the purpose of a number of potential applications, it is the type of application for which it was initially deployed that is *the* purpose of concern in order to determine waste status. Beyond this, though, there is some indication in the regulatory history that the Agency affirmatively rejected the kind of fundamental, chemical characteristic approach advocated by Howmet here. In the preamble to the 1983 proposed rule,[46] the Agency described a scenario roughly analogous to the used KOH Howmet sent to Royster.[47] Specifically, the Agency discussed the use of sulfuric acid no longer functional as sulfuric acid in its own right as "a feedstock where it is burned to derive sulfur as SO_2." 48 Fed. Reg. 14,472, 14,488 n.30. The Agency characterized the used sulfuric acid as "spent" within the meaning of the proposed regulations.[48] *Id.* Presumably, virgin sulfuric acid would serve as readily as used

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[45] This interpretation is consistent with our conclusion that EPA's regulatory approach reflects a long-standing intention to regulate hazardous secondary materials used in the manufacture of fertilizers as hazardous waste.

[46] We consider the preambles to both the 1983 proposed rule and the 1985 final rule to be relevant, as the preamble to the 1985 final rule reveals that EPA, in modifying the proposed text, was intending to make a clarifying change rather than effect a fundamental change in approach as to what types of materials would and would not be considered "spent." *See* 50 Fed. Reg. 614, 624 (Jan. 4, 1985) (explaining that the new language "clarifies" the proposed text). The Agency stated that it was "*continuing* to define spent materials as * * * ," and explained that it "*altered the wording* of the definition of spent material to express this concept more clearly." *Id.* (emphasis added). We therefore consider the analysis in the 1983 preamble as instructive.

[47] EPA provided this example in the context of describing the definition of "reclamation."

[48] We see nothing in the 1985 regulatory history that reflects an intention on the Agency's part to treat the sulfuric acid scenario any differently under the final rule.

sulfuric acid in producing sulfur as SO_2; consequently, being used to produce sulfur as SO_2 would appear to be within the range of uses associated with sulfuric acid's fundamental nature and purpose as a sulfur-based compound. If we were to accept Howmet's interpretation of "spent material" as turning on the fundamental purpose of a compound, the reused sulfuric acid would presumably not be considered "spent." Yet, EPA clearly refers to this material as "spent," suggesting that Howmet's interpretation was not what the Agency had in mind.[49]

We also find it telling that in the 1985 preamble the Agency referenced used oil as an analog.[50] While the preamble refers to the definition of "used oil" in RCRA § 1004(36), 42 U.S.C. § 6903(36), we find especially interesting the provision in RCRA that follows it defining "recycled oil," because there we see Congress itself working with the concept of "purpose." As defined by Congress, "recycled oil," which is subject to less onerous regulation than contaminated oil destined for disposal, is defined as "any used oil which is reused, following its original use, *for any purpose (including the purpose for which the oil was originally used)*. Such term includes oil which is refined, reclaimed, burned, or reprocessed." RCRA § 1004(36), 42 U.S.C. § 6903(37) (emphasis added). We take two elements of instruction from the italicized portion of the text. First, we note Congress's deployment of language clearly intended to allow for open-ended reuse scenarios, which we find to be in sharp contrast with the confining language used by EPA in the spent material definition. Second, the parenthetical language – "including the purpose for which the oil was originally used" – signals a Congressional orientation to the relationship between purpose and use not unlike the one advanced by the Regions in this case- that *original use* can serve as the defining consideration in determining *the purpose* of a material.[51]

Finally, the various references to the Agency's intention to regulate as waste secondary materials used as ingredients in fertilizers applied to the land provide further evidence of the Agency's intention to regulate the very scenario for which Howmet now seeks sanctuary. But, significantly, the collateral impacts of Howmet's interpretation, if accepted, might extend well beyond the fertilizer context.

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[49] It seems plain that the Agency considered that a product could have multiple purposes and intended to confine the focus to a particular purpose – the one for which a product was initially deployed. Indeed, the Agency's reference to "original" purpose in the 1983 proposed rule implies that a product may have more than one purpose. Notably, Howmet's interpretation allows for only a single, elemental purpose, reflecting a fundamentally different orientation than the one that appears to have informed the Agency's approach.

[50] "This reworded definition [of spent materials] appropriately parallels the definition of used oil--a type of spent material--in RCRA section 1004(36)." 50 Fed. Reg. at 624.

[51] While we recognize that used oil is a specially regulated recyclable material, and has its own legislative foundation in the Used Oil Recycling Act of 1980, Pub. L. No. 96-463, 94 Stat. 2055 (1980), we nonetheless find instructive the manner in which Congress used the phrase "the purpose."

In addition to the fertilizer reuse scenario, there are a number of other use-constituting-land-disposal scenarios mentioned in the regulatory history that might be rendered potentially vulnerable were we to accept Howmet's proferred interpretation. In particular, the 1983 preamble addresses, among other things, the reuse of contaminated materials as "dust suppressants," 48 Fed. Reg. at 14,484-85, and the 1985 preamble refers to a number of scenarios, including the deployment of contaminated material as ingredients for "asphalt" and "building foundation materials." 50 Fed. Reg. at 628. We anticipate that there are certain materials that, because of their fundamental chemical nature or properties, will be equally amenable to use in certain industrial capacities and to use as dust suppressants, ingredients in asphalt, and ingredients in building materials. Howmet's fundamental purpose theory might well open the door to unregulated reuse of contaminated materials for these purposes and others. We are most reluctant to interpret the definition of spent material in a manner that puts beyond regulatory reach a class of material that the Agency clearly intended to regulate.

4. *How Has the Agency Interpreted and Applied the "Spent Material" Definition to Date?*

Prior EPA interpretations of "spent material" also support the conclusion that the used KOH sent to Royster was spent. Although the Board is not bound by these interpretations, as the Regions note, it is appropriate to give greater deference to an agency's position on a regulation when its rulings, legal interpretations, and opinions are consistent over long periods of time. *See In re Lazarus, Inc.*, 7 E.A.D. 318, 352-53 (EAB 1997) ("The degree of deference accorded to [an informal Agency] interpretation 'will depend upon the thoroughness evident in its consideration, the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade, if lacking power to control.'") (quoting *Skidmore v. Swift*, 323 U.S. 134, 140 (1944)); *In re Landfill Serv. Corp.*, 3 E.A.D. 346, 350 (EAB 1990) (explaining that interpretations by EPA's program offices are neither binding on the Board nor dispositive). Although none of the prior EPA interpretations cited by the parties directly addresses Howmet's creative argument that the used KOH was not spent because it continued to serve its fundamental purpose, they all support our conclusion that the used KOH on appeal in this case was a "spent material."

To begin, the description of "spent materials" given in EPA's *Guidance Manual on the RCRA Regulation of Recycled Hazardous Wastes* is directly on point and reinforces our conclusion that the used KOH sent to Royster was spent. This manual was prepared just a year after EPA promulgated the final regulations in 1985, and states:

> [A] spent material is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing. EPA

> interprets "the purpose for which a material was produced" to include all uses of the product that are similar to the original use of the particular batch of material in question. For example, EPA cites the case of materials used as solvents to clean printed circuit boards. * * * If the solvents become too contaminated for this use but are still pure enough for similar applications (e.g., use as metal degreasers), they are not spent materials. Use of slightly contaminated solvents in this way is simply continued use of the original material rather than recycling of a spent material. However, the solvents would be spent materials if they had to be reclaimed before reuse or if the manner in which they were used was not similar to their original application. * * * As [an] example, used plating baths reused directly in other plating processes would not be spent materials. If used for a purpose other than plating, however, the used plating baths would be a spent material.

Office of Solid Waste, U.S. EPA, *Guidance Manual on the RCRA Regulation of Recycled Hazardous Wastes* 1-7 (Mar. 1986).[52] This explanation clearly is contrary to Howmet's contention that the similarity between the primary and secondary uses of a material are unimportant. A substance that is used first as a cleaning agent and then, after contamination, is shipped to another company for use as a fertilizer ingredient clearly is "spent," based on this explanation.[53]

Several advisory opinions issued by the Agency also support the conclusion that the used KOH sent to Royster was a "spent material." In 1994, EPA's Office of Solid Waste issued a memorandum attempting to clarify when a material meets the definition of "spent material." Letter from Michael Shapiro, Director, Office of

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[52] EPA announced the availability of this document in the *Federal Register*. *See* 51 Fed. Reg. 26,892 (July 28, 1986). This document is available from the National Technical Information Service, with NTIS Number PB86-208584. It also is available from EPA's RCRA Docket Center. Curiously, neither Howmet nor the Regions refer to this document in their briefs. We take official notice of this document nonetheless. *See supra* note 32.

[53] Howmet argues that the reference in the 1985 preamble to non-identical use creates the space for the Howmet/Royster reuse scenario (i.e., using used KOH as fertilizer ingredients). While we would certainly agree that the use of KOH as a cleaning agent is not identical to its use as fertilizer ingredient, we think the preamble statements, properly construed, contemplate not mere non-identity, but rather a nexus between use and reuse. Read fairly and fully, and with due consideration to its discussion of the 1983 proposal and its use of the circuit board example, the 1985 preamble supports the conclusion that while uses need not be identical, they do need to be *similar*. We do not see any way to find the deployment of used KOH as a fertilizer ingredient as "similar" to its use as cleaning agent.

Solid Waste, to Hazardous Waste Management Division Directors, Regions 1-10 (Mar. 24, 1994). In particular, the memorandum addressed the questions of whether "a material must: (1) be spent as a result of contamination, and (2) be nonfunctional in the sense that it could not continue to be used for its original purpose." *Id.* at 1. Significantly, this memorandum specified that the change in the wording of the definition of "spent material" in 1985 was meant to "clarify that a material such as a solvent may continue to be used for its original, though not identical, purpose and yet not be classified as a solid waste." *Id.* at 2. The Office of Solid Waste reinforced this position later that year when it responded to a written inquiry from a company that sold used chemicals to other businesses for further use. *See* Letter from David Bussard, Director, Characterization and Assessment Division, Office of Solid Waste and Emergency Response, to Kristina M. Woods, Environmental Counsel, Ashland Chemical Co. (Aug. 30, 1994).[54] In that letter, EPA explained that "it is important to point out here that the determining factor is not whether a used chemical is marketable, but rather whether it is reused in a manner consistent with its original use without prior reclamation." *Id.* at 1-2. Accordingly, EPA's position in 1994 clearly was that a material's secondary use must be similar to its first use in order to avoid classification as a "spent material." This conclusion is consistent with an earlier advisory letter issued by EPA's Office of Solid Waste and Emergency Response in 1988[55] stating that if the secondary use of a substance has the same purpose as the primary use, there may be a basis for claiming that the substance is not "spent." Letter from Devereaux Barnes, Director, Characterization and Assessment Division, Office of Solid Waste and Emergency Response, EPA, to Margaret Tribble, American Cyanamid Co. (Aug. 9, 1988).[56]

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[54] Neither party refers to this letter in its briefs. We take official notice of this document nonetheless. *See supra* note 32.

[55] Curiously, this letter cites to § 261.2(e) and (f) as the reference point for whether a material is spent. In any event, the letter is useful in that it stands for the proposition that if a product's secondary use is not similar to its first, it is spent. It also supports the view that the Agency continued to evaluate a product's "purpose" in relation to its deployment.

[56] Howmet cites two letters issued by the Agency in 1986 as supportive of its position, but we find these letters to be inapposite. These letters addressed the question of whether used phosphoric acid may be reused as an ingredient in fertilizer without being considered a solid or hazardous waste. *See* Letter from Steven E. Silverman, Attorney, Solid Waste and Emergency Response Division, EPA, to Daniel McCaskill, Vice President, Distribution Systems and Environmental Affairs, Van Watels and Rogers Division (June 4, 1986); Letter from Matthew A. Straus, Chief, Waste Characterization Branch, EPA, to A.L. Horner, Environmental Specialist, Albright and Wilson, Inc. (Oct. 20, 1986). Howmet argues that these letters support its case because, in them, EPA advised that phosphoric acid from aluminum metal finishing operations may be reused as an ingredient in fertilizer manufacture. App. Br. at 16. It is clear from these letters, however, that EPA conditioned its determination on the fact that the used acid was no more contaminated than virgin material. Because a "spent material" is one that is by definition both used *and contaminated*, these letters do not lend support to Howmet's

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5. *Conclusion Regarding Liability*

Having reviewed the regulations as a whole, the regulatory history behind the definition of spent material, and the Agency's various interpretive statements since, we must reject Howmet's proferred interpretation of the definition of spent material. Howmet's argument, if accepted, would drive a wide wedge into the regulatory framework – a wedge ultimately irreconcilable with other elements of the regulation and RCRA's overall thrust. Consistent with the position advocated by the Regions, we read the reference to "the purpose for which it was produced" as contemplating a particularized and relational inquiry that is informed by the product's initial deployment or application. When dealing with a product that has a number of potential purposes, or applications, the particular purpose for which it is initially deployed is *the* purpose of concern under the regulation. Although virgin KOH may, as Howmet posits, be developed for multiple purposes or applications, its particularized purpose in the case before us was to serve as a cleaning agent. Reuse of used KOH consistent with its particularized purpose as a cleanser does not give rise to coverage as a spent material, but where the used KOH is deployed in a manner substantially dissimilar from its purpose as a cleaning agent – in this case as an ingredient for fertilize-it is treated as a spent material under the regulations.

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arguments. In fact, their focus on the virgin state of the phosphoric acids, if anything, implies that had the used acids also been contaminated, they would have been deemed "spent."

Howmet also contends an ALJ decision in *In re Brenntag Great Lakes, LLC*, Docket No. RCRA-5-2002-00001 (ALJ June 2, 2004) (Initial Decision) supports its approach. Because ALJ decisions are not precedential before this Board, we are disinclined to give this line of argument significant attention. We note, however, that the case does not clearly stand for the proposition for which it is cited. *Brenntag* concerned a company that used anhydrous isopropyl alcohol ("IPA") as a solvent to remove water from glass fibers. When the substance became too aqueous to serve that function, the company would sell the aqueous IPA to a chemical broker. Because the aqueous IPA could no longer be used as a solvent, the ALJ found that it was a "spent material." Howmet points to an example of where the ALJ allegedly stated that aqueous IPA that can be used without reclamation is not "spent." App. Br. at 19-20. Upon review, however, it appears that, to the contrary, the ALJ concluded that the IPA became a spent solvent "once the IPA extracted the water and thus became aqueous IPA due to its lower isopropyl alcohol concentration," irrespective of a third party's plans for the material. *Brenntag* at 16. The ALJ also agreed with an expert witness's conclusion that "'spent solvent' means that if you were using this material, the solvent to do something, and it could no longer be used for that, it becomes spent for that process, for that particular unit operation," *id.* (citation omitted), which is clearly contrary to Howmet's position on this appeal. Howmet is correct, however, that the ALJ surmised that aqueous IPA that could be used "as is" would not be spent, which does appear inconsistent with the reasoning expressed in the opinion overall. In any case, there is another ALJ decision discussed by the parties – *In re Royster Co.*, Docket No. RCRA-III-195 (ALJ Dec. 17, 1993) (Initial Decision) – that, in an arguably more analogous setting, cuts fairly clearly against Howmet's position. This case is mentioned further in the fair notice section below.

Beyond representing the best reading of the regulations, the approach we are taking strikes us as most consistent with RCRA's overall approach to recyclable materials, taking into account Congress's concerns about scenarios in which recycling serves, essentially, as a means of disposing of used materials and its concerns about recycling activities that result in application of contaminated materials to land. We further see this interpretation as consistent with the D.C. Circuit's instruction that regulation be reserved for those activities that are part of "the waste disposal problem."

Determining whether a material is waste-like or "spent" and therefore part of the waste disposal problem should not ignore the on-the-ground realities of how a substance is used and its fate after use.[57] Although the text of the regulation perhaps makes the inquiry before us more challenging than it otherwise needed to be, there seems to be little question that the purpose for which Howmet purchased KOH has been fully satisfied, and that the material has, by virtue of its contamination, lost its functionality consistent with that purpose. Indeed, it has lost its functionality altogether for Howmet, such that, when Royster does not have a demand for the used KOH, Howmet transports it off-site for disposal, managing it as hazardous waste.[58] For all intents and purposes, the material is "waste-like" in Howmet's hands, and the shipment of the material to Royster has the appearance of simply serving as an alternative path for disposal. That Royster's use of the material guarantees that it will end up on the ground sharpens this image all the more, and harkens back to Agency's concern in 1985 regarding "waste-derived products whose recycling is similar to a normal form of waste management – in this case, land disposal." 50 Fed. Reg. at 628.[59]

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[57] As the Agency has observed, "in most cases one must know both what the material is and how it is being recycled before determining whether it is a waste." 50 Fed. Reg. 614, 617 (January 4, 1985).

[58] This fact alone is not dispositive, in that if the used KOH continued to be deployed in a manner that legitimately utilized its properties as a cleaning agent, then presumably it would not yet be a "spent" in relation to that purpose and would not be a waste.

[59] Along these lines, we also find instructive the following discussion from the preamble to the zinc fertilizer rule regarding "indicators" that a material has been discarded:

> EPA believes that it has ample jurisdiction to classify hazardous secondary materials used to produce fertilizers as solid wastes. * * * First, the generator of the hazardous secondary material is an unrelated entity getting rid of its secondary materials to a different industry sector. Thus, when one entity takes a secondary material for which it has no continuing use and transfers it to an unrelated entity, the materials can be viewed as discarded by that first entity. * * * Recycling via land application is a further indication of discarding. As EPA stated years ago, "Use constituting disposal involves as a practical matter the disposal of hazardous wastes. The wastes are being gotten rid of by placing them directly on the ground." 53 Fed. Reg. at 31,198 [(Apr. 8, 1988)]; see also

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In short, we see no reason to embrace an interpretation of "spent material" that would ignore these realities. To the contrary, we conclude that the better reading of the regulation, one appropriately informed by the provision's regulatory history and Agency interpretive guidance, is that these realities remain an important part of the equation for assessing whether a material is "spent" and therefore a waste. Accordingly, we uphold the ALJ's finding that Howmet is liable for violating RCRA.

E. *Whether Howmet Received Fair Notice*

Howmet argues that even if we conclude that the Regions' interpretation of "spent material" is correct, we nonetheless should find Howmet not liable because it had not been given fair notice of this interpretation. *See* App. Br. at 26. The Regions disagree and assert that Howmet had been given fair notice by the Agency, and therefore should be liable for its RCRA violations. *See* Reg. Br. at 31. Howmet bears the burden of establishing lack of adequate notice because it raises the issue as an affirmative defense to liability.[60] *See In re Morton L. Friedman & Schmitt Constr. Co.*, 11 E.A.D. 302, 320 (EAB 2004) (citing *United States v. Ohio Edison Co.*, 276 F. Supp. 2d 829, 886 (S.D. Ohio 2003)), *aff'd*, *Friedman v. United States Environmental Protection Agency*, No. 2:04-CV-00517-WBS-DAD (E.D. Cal. Feb. 25, 2005). As explained below, we do not find that Howmet has met its burden of proof in this case. Accordingly, we affirm the ALJ's rejection of Howmet's fair notice defense.

It is well established that it is contrary to the constitutional principle of due process for an agency to penalize a party for violating a regulation when that party has not received adequate notice of what the regulation requires. *See Gen. Elec.*

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> 48 Fed. Reg. at 14484 (Apr. 4, 1983) ("these practices are virtually the equivalent of unsupervised land disposal"). When placed on the land, hazardous secondary materials and the hazardous constituents they contain (few, if any, of which contribute to the recycling activity) could escape via all conceivable exposure pathways – air, runoff, leaching, even (as here) foodchain uptake. Such activities can certainly be viewed as discarding that is "part of the waste disposal problem."

67 Fed. Reg. 48,393, 48,401-02 (July 24, 2002).

[60] The Board has at times taken fair notice issues into account in considering the amount of the penalty to be assessed. Here, however, the parties have stipulated to the penalty amount, leaving Howmet's affirmative defense to liability the only potential avenue for addressing its concern. When asked at the April 11, 2006 oral argument whether the stipulation would preclude any argument that Howmet might have to seek a reduction of the penalty on this basis, Howmet responded, "[W]e have not raised that issue on appeal. In good faith we have stipulated with the Agency as to a penalty and, of course, would be prepared to address the next phase of this case: how to pay that penalty or appeal it should we not prevail before the Board." Tr. at 30.

Co. v. EPA, 53 F.3d 1324, 1328-29 (D.C. Cir. 1995) (citing *Gates & Fox Co. v. Occupational Safety & Health Review Comm'n*, 790 F.2d 154, 156 (D.C. Cir. 1986)). As the D.C. Circuit has explained, when the law is not clear on its face regarding what is required in a given circumstance, an agency's pre-enforcement efforts to bring about compliance will often provide adequate notice. *Gen. Elec.*, 53 F.3d at 1329. "If, for example, an agency informs a regulated party that it must seek a permit for a particular process, but the party begins processing without seeking a permit, the agency's pre-violation contact with the regulated party has provided notice." *Id*. To determine whether a violator had received notice in cases such as the present case, however, where there is not a history of pre-enforcement contact between the regulator and regulated entity,

> [w]e must ask whether the regulated party received, or should have received, notice of the Agency's interpretation in the most obvious way of all: by reading the regulations. If by reviewing the regulations and other public statements issued by the agency, a regulated party acting in good faith would be able to identify, with "ascertainable certainty," the standards with which the agency expects parties to conform, then the agency has fairly notified a petitioner of the agency's interpretation.

Gen. Elec. Co. v. EPA, 53 F.3d 1324, 1329 (D.C. Cir. 1995).

The Board has considered a number of appeals where a regulated party claims that it lacked fair notice of the Agency's interpretation of a regulation. *See, e.g.*, *In re Harpoon P'ship*, TSCA App. No 04-02 (EAB May 19, 2005), 12 E.A.D. 182; *In re Morton L. Friedman & Schmitt Constr. Co.*, 11 E.A.D. 302 (EAB 2004), *aff'd*, *Friedman v. United States Environmental Protection Agency*, No. 2:04-CV-00517-WBS-DAD (E.D. Cal. Feb. 25, 2005); *In re Coast Wood Preserving, Inc.*, 11 E.A.D. 59 (EAB 2003); *In re Tenn. Valley Auth.*, 9 E.A.D. 357 (EAB 2000), *appeal dismissed*, *Tenn. Valley Auth. v. Whitman*, 336 F.3d 1236 (11th Cir. 2003); *In re V-1 Oil Co.*, 8 E.A.D. 729 (EAB 2000); *In re B.J. Carney Indus.*, 7 E.A.D. 171 (EAB 1997), *appeal dismissed*, 192 F.3d 917 (9th Cir. 1999), *vacated as moot*, 200 F.3d 1222 (9th Cir. 2000). Based on the standard articulated in *General Electric*, the Board has elaborated on what is required for adequate notice:

> [P]roviding fair notice does not mean that a regulation must be altogether free from ambiguity. Indeed, the case law shows that even where regulatory ambiguity exists, the regulations can still satisfy due process considerations. * * * Thus, the question is not whether a regulation is susceptible to only one possible interpretation, but rather,

> whether the particular interpretation advanced by the regulator was ascertainable by the regulated community.

Coast Wood Preserving, 11 E.A.D. at 81(quoting *Tenn. Valley Auth.*, 9 E.A.D. at 412).

Accordingly, our inquiry, consistent with *General Electric* and past Board decisions, focuses on whether Howmet could have determined, with "ascertainable certainty," that the used KOH it sent to Royster would be considered a spent material under the RCRA regulations. To make such a determination, we consider a number of factors. For example,

> In some cases, the plain language of the regulation may suffice to show fair notice. The agency's other public statements also bear on the fair notice inquiry. * * * Significant difference of opinion within the agency as to the proper interpretation of the agency's regulation may also be considered in evaluating whether the regulatory text provides fair notice. * * * In addition, courts often consider whether or not an allegedly confused defendant inquires about the meaning of the regulation at issue.

Friedman, 11 E.A.D. at 319-320 (citations omitted). In light of these factors, we conclude, for the reasons explained below, that Howmet could have determined, with ascertainable certainty, that EPA would consider Howmet's used KOH "spent material."

1. *The Text of the Regulation*

In evaluating a fair notice issue arising under a regulation, we begin, of course, with the text of the applicable regulation itself. *See, e.g.*, *Coast Wood Preserving*, 11 E.A.D. at 81. To determine if a regulation, on its face, provides fair notice of an Agency interpretation, we consider whether such an interpretation was "reasonably comprehensible to people of good faith," *Gen. Elec.*, 53 F.3d at 1330-31 (quoting *McElroy Elecs. Corp. v. FCC*, 990 F.2d 1351, 1358 (D.C. Cir. 1993)), and whether the Agency's interpretation is consistent with the common understanding of the words used. *Id.* As explained previously, we have found that the regulatory definition of "spent material," on its face, is not a model of clarity and may be subject to more than one interpretation.[61] Ambiguity alone, however,

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[61] Although we have found both Howmet's and the Regions' interpretations to be potentially reconcilable with the common meanings of the words used in the "spent material" definition, we note that Howmet, which now argues that the regulation requires us to consider only a product's single "fundamental purpose," initially argued before the ALJ that "[i]t is beyond dispute that KOH is manu-

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is not enough to support a finding that Howmet lacked fair notice. As we have discussed, we find the interpretation advanced by the Region to be the better reading of the provision, taking into account the regulation as a whole, the provision's regulatory history, and the Agency's various interpretive statements. Considering this same body of information in our fair notice analysis, we find that Howmet has failed to demonstrate that the Regions' interpretation was unascertainable.

2. *The Regulations as a Whole*

In prior cases considering issues relating to fair notice, the Board has stated that after examining the language of the regulation on its face, it is appropriate to consider whether the Regions' "interpretation embodied in the rule or statement was reasonable in light of the * * * overall structure of the regulatory scheme." *Tenn. Valley Auth.*, 9 E.A.D. at 412 (quoting *In re CWM Servs., Inc.*, 6 E.A.D. 1, 18 n.28 (EAB 1995)). As discussed in Part III.D.2., considering the regulation as a whole, the Regions' interpretation of "spent materials" represents by far the better and more harmonious reading. For example, as explained above, if Howmet's interpretation that contaminated materials that are re-used as ingredients in an industrial process are not "spent" according to the definition provided by § 261.1(c)(1) were correct, then the exemption provided by § 261.2(e)(1)(i) would be unnecessary and redundant. The Region's interpretation, however, correctly subjects the used KOH re-used as a fertilizer ingredient to 40 C.F.R. § 261.2(e)(2)(i), which categorizes materials re-used to produce products that are applied to land as solid wastes. A thoughtful review of the broader regulatory scheme reveals that the Regions' interpretation of the meaning of "spent material" is consistent with that scheme, whereas Howmet's interpretation is at odds with it. This consistency differential strikes us as being within Howmet's means to grasp.

3. *Regulatory History and Agency Interpretive Guidance*

As we have noted, a party may claim that it was denied fair notice because of internal agency confusion regarding the correct interpretation of a regulation. *See Friedman*, 11 E.A.D. at 320 (citing *Gen. Elec.*, 53 F.3d at 1332 (explaining that confusion among agency offices may result in a party not receiving adequate notice)). In this case, we find no such confusion. Rather, we find that the interpretation of "spent material" advanced by the Regions reflects an interpretation held by the Agency consistently over time. In our view, this interpretation was discernible from the preambles to the 1983 proposed rules and the 1985 final rules, and made all the more plain through the Agency's various guidance and interpretive

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factured for many purposes * * * ." Respondent's Brief in Opposition to Motions for Accelerated Decision and in Support of Motion to Dismiss at 7. Howmet articulated its "fundamental purpose" argument only after the ALJ adopted the Regions' interpretation that "purpose" was to be assessed in relation to first use. Order on Motions at 21 n.33.

statements issued since.[62] Further, we find that this interpretation dovetails neatly with what we see as the Agency's long-standing intention to regulate as hazardous waste those hazardous secondary materials used as ingredients in the manufacture of fertilizer – an intention that was discernable from the construction of the RCRA rules and the Agency's publicly stated views.[63] The consistency of Agency statements with respect to the definition of "spent material," coupled with the Agency's apparent intention to regulate materials of this kind, supports our finding that Howmet has failed to show that the Agency's interpretation was unascertainable.

In short, we find that there was ample information available by which Howmet could have determined the Agency's orientation and interpretation with ascertainable certainty. It is striking that, in the face of this body of information and what it suggested regarding the Howmet/Royster arrangement, Howmet did not so much as inquire of EPA before pursuing its path of choice – a point to which we now turn.

4. *Howmet's Failure to Inquire*

In cases such as this case, where a regulation may arguably be subject to more than one interpretation, we also consider whether a regulated party inquires about the meaning of the regulation at issue. *See, e.g.*, *Friedman*, 11 E.A.D. at 320; *Tenn. Valley Auth*., 9 E.A.D. at 415; *Tex. E. Prods. Pipeline Co. v. Occupational Safety & Health Rev. Comm'n*, 827 F.2d 46, 50 (7th Cir. 1987). "The courts and this Board have noted that a member of the regulated community, when confused by a regulatory text and confronted by a choice between alternative courses

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[62] Notably, Howmet has not argued that it did not have access to the Agency's statements on this subject, but rather has argued about the content of the Agency statements and what the statements portended. Access to the relevant Agency statements does not strike us as an issue in any event. The preambles to the proposed and final RCRA rules, having been published in the *Federal Register*, are clearly public documents to which Howmet had access. Likewise, notice of the 1986 *Guidance Manual on the RCRA Regulation of Recycled Hazardous Wastes*, discussed in Part III.D.4., *supra*, was published in the *Federal Register*, as "a guidance document designed to assist State and EPA Regional personnel and the regulated community in applying the definition of solid waste, used in regulations that implement Subtitle C of the Resource Conservation and Recovery Act of 1976 (RCRA), to determine which materials when recycled are solid and hazardous wastes." 51 Fed. Reg. 26,892, 26,892 (July 28, 1986). With respect to the Agency's other interpretive statements discussed in Part III.D.4., because Howmet, as the proponent of an affirmative defense, has not alleged any problems with access, we assume the public availability of these documents for purposes of evaluating Howmet's fair notice defense. Accordingly, it appears that Howmet's choices were made in the face of access to the relevant information rather than in the absence of such access.

[63] *See, e.g.*, Office of Pollution Prevention & Toxics, U.S. EPA, EPA 747-R-98-003, *Background Report on Fertilizer Use, Contaminants and Regulations* 64 (January, 1999) ("Management of hazardous secondary materials prior to recycling for fertilizers is subject to the use constituting disposal (UCD) provision of RCRA * * * .").

of action, assumes a calculated risk by failing to inquire about the meaning of the regulations at issue." *Friedman*, 11 E.A.D. at 324. *See also, e.g.*, *Tenn. Valley Auth.*, 9 E.A.D. at 411-16 (finding that regulation's text and context put the regulated entity on notice that its interpretation of the regulation might be incorrect and that the failure of an inquiry is a relevant consideration in determining the availability of a fair notice defense); *DiCola v. Food & Drug Admin.*, 77 F.3d 504, 508 (D.C. Cir. 1996) ("it is not unfair to require that one who deliberately goes perilously close to an area of proscribed conduct shall take the risk that he may cross the line," quoting *Throckmorton v. Nat'l Transp. Safety Bd.*, 963 F.2d 441, 44-45 (D.C. Cir. 1992)); *Tex. E. Prods. Pipeline Co.*, 827 F.2d at 50 (finding fault with company's failure to make any inquiry of the administrative agency responsible for the regulations at issue and explaining "[t]he regulations, while not models of clarity, should not have been incomprehensively vague to Texas Eastern. Texas Eastern made no inquiry."). Howmet has provided no evidence that it made any attempt to obtain clarification from the Regions or any other EPA office regarding whether the used KOH it sent to Royster would, in EPA's view, be subject to regulation as spent material. It is fairly plain what that guidance would have been had Howmet inquired.[64]

Notably, this is not a case in which a respondent can credibly claim that it lacked the capacity to traverse the regulatory landscape or to engage the Agency.

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[64] Rather than paying to dispose of it at a RCRA facility, we note that Howmet may have benefited by leaving unresolved the regulatory status of its used KOH. For example, based on the following colloquy from oral argument in this case, it appears that leaving the issue arguably in question may have enabled Howmet to avoid RCRA's hazardous waste storage requirements:

Q If you have a material some of which is shipped offside [sic] and disposed of as a hazardous waste and some of which is sold under a recycling arrangement, how do you store that material? Are you subject to the hazardous waste storage limitations? Is it treated as a hazardous waste, effectively, until the decision is made on which path to send the material off on? * * * [D]o the * * * hazard [sic] waste storage rules apply in that case?

A No, they would not, because they would not be a hazardous waste unless it was effectively accumulated or unless your intent for that waste load was to not ship it to somebody such as Royster for use in a second application but to ship it to a hazardous waste site. Then you've made the determination that that product is not going to be reused and therefore it is a hazardous waste at that point in time.

Q So it turns on the intent of the generator?

A It actually turns on the use that is going to be made of the material.

Q Which you don't know until the decision is made regarding its use.

A That's correct. But it would not only hinge on the intent of the generator. In this case, for instance, the reason that the single waste load was not shipped to Royster is because Royster had no need for it at that point in time in its process.

Tr. at 27-29.

Indeed, the record rather depicts a sophisticated entity well versed with RCRA and well equipped to avail itself of Agency guidance. By failing to seek regulatory guidance in a circumstance in which Howmet should have known that it was pursuing a highly risky course of conduct, Howmet assumed the consequences associated with its actions and cannot now credibly claim that it was victimized by a lack of fair notice.

5. *Conclusion Regarding Howmet's Fair Notice Defense*

In sum, we find that Howmet has failed to prove its affirmative defense. Indeed, we find to the contrary that Howmet did have fair notice that the used KOH it sent to Royster would be regarded by the Agency as a spent material subject to the RCRA regulations. Accordingly, we affirm the ALJ's rejection of Howmet's fair notice defense.

IV. *CONCLUSION*

For the foregoing reasons, we uphold the ALJ's liability findings and rejection of Howmet's fair notice defense. A penalty of $309,091 – the penalty to which the parties have stipulated[65] - is assessed against Howmet. Howmet shall pay the full amount of the civil penalty within thirty (30) days of the date of service of this order. Payment shall be made to both Region 2 and Region 6, as follows: Payment of $151,433 shall be made by forwarding a cashier's check or certified check payable to the Treasurer, United States of America, to the following address:

EPA-Region 2
Regional Hearing Clerk
P.O. Box 360188M
Pittsburgh, PA 15251

Payment of $157,658 shall be made by forwarding a cashier's check or certified check payable to the Treasurer, United States of America, to the following address:

EPA-Region 6
Regional Hearing Clerk
P.O. Box 371009M
Pittsburgh, PA 15251

So ordered.

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[65] The parties stipulated to a $151,433 penalty for the violations alleged by Region 2 and a $157,658 penalty for the violations alleged by Region 6.