

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued October 14, 2004

Decided January 11, 2005

No. 03-1455

CARUS CHEMICAL COMPANY,
PETITIONER

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENT

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

Thomas W. Dimond argued the cause for petitioner. With him on the brief were *John C. Berghoff, Jr.* and *Jennifer R. Hagan*.

Ammie Roseman-Orr, Attorney, U.S. Department of Justice, argued the cause for respondent. With her on the brief were *John C. Cruden*, Deputy Assistant Attorney General, and *Sheila M. Igoe*, Attorney, U.S. Environmental Protection Agency.

Before: GINSBURG, *Chief Judge*, and HENDERSON and ROBERTS, *Circuit Judges*.

Opinion for the Court filed by *Chief Judge* GINSBURG.

GINSBURG, *Chief Judge*: The Environmental Protection Agency placed a site owned in part by Carus Chemical Company on the National Priorities List (NPL) of hazardous waste sites, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 94 Stat. 2767, 42 U.S.C. § 9601 *et seq.*, and its implementing regulations. Carus argues the EPA's action was arbitrary and capricious because the agency misinterpreted, and hence misapplied, its Hazard Ranking System, and because it disregarded more recent data that contradicted those upon which the agency relied.

We hold that neither the EPA's interpretation nor its application of the disputed regulation was unreasonable. Further, the agency reviewed the data Carus submitted and correctly concluded they did not cast doubt upon the decision to list the site. Accordingly, we deny the petition for review.

I. Background

Carus operates a manufacturing plant east of La Salle, Illinois on a parcel of land, once part of a larger property to which the EPA refers as the Matthiessen & Hegeler Zinc Company Site, where the latter company operated a smelter and a rolling mill for more than 100 years. During that period, there accumulated at the site two large slag piles, one of which, six acres in extent, is located adjacent to (and partly in) the Little Vermilion River and partly on Carus's property. The EPA decided that hazardous substances in the slag piles posed a threat to human health and to the environment sufficient to warrant putting the entire Matthiessen & Hegeler site on the NPL.

Before recounting the specifics of the EPA's decision, an explanation of the statute and regulations underlying the NPL is

in order. The CERCLA directs the President, who delegated the responsibility to the EPA, to compile a list of cleanup priorities among hazardous waste sites around the country. The EPA's listing a site on the NPL, however, does not necessarily mean it will order remedial action at that site, *see Honeywell Int'l, Inc. v. EPA*, 372 F.3d 441, 443 (D.C. Cir. 2004); rather, it guarantees only more detailed study, *see Eagle-Picher Indus., Inc. v. EPA*, 759 F.2d 905, 919-20 (D.C. Cir. 1985). Nonetheless, listing can have significant adverse consequences for the owner of a listed property. *See Mead Corp. v. Browner*, 100 F.3d 152, 155 (D.C. Cir. 1996) (costs in business reputation, property value, and increased probability of remediation).

In order to identify candidates for the NPL, the EPA promulgated the Hazard Ranking System (HRS), *see* 40 C.F.R. pt. 300, App. A, a comprehensive methodology and mathematical model the agency uses to “evaluate[] the observed or potential release of hazardous substances” and to “quantif[y] the environmental risks a site poses.” *Tex Tin Corp. v. EPA*, 992 F.2d 353, 353 (D.C. Cir. 1993).

In order to evaluate a waste site using the HRS, the EPA first identifies the “sources” of contamination, the “[h]azardous substances associated with these sources,” and the “[p]athways potentially threatened by these hazardous substances.” HRS § 2.2. The HRS lists four possible pathways: soil exposure, air migration, ground water migration, and the one relevant to this case, surface water migration. *Id.* at § 2.1. For each pathway deemed potentially affected in light of conditions at the site, the agency calculates a score based upon particular “threats.” The surface water migration pathway is scored based upon threats to drinking water, to the human food chain, and to the environment. *See id.* at § 4.0.1. With respect to each pathway and threat to be scored, the HRS calls for the EPA to measure

three so-called factor categories: “likelihood of release (or likelihood of exposure)”; “waste characteristics”; and “targets,” which may include an individual, a human population, resources, and sensitive environments. *Id.* at § 2.1.3. The agency’s measurements of the first two categories are relevant to this case.

The “[l]ikelihood of release is a measure of the likelihood that a waste has been or will be released to the environment.” *Id.* at § 2.3. When, as in this case, the EPA determines there has already been a release, it assigns a fixed number for this component of the overall score of the pathway, regardless of the level of that release. *Id.*

With respect to waste characteristics, the HRS first requires the EPA to “select the hazardous substance potentially posing the greatest hazard for the pathway.” *Id.* at § 2.4.1. The agency is then to evaluate persistence, bioaccumulation, and toxicity factors pertaining to that substance, *id.* at § 2.4 (only the last of which features in this case).

For each substance being scored, the agency uses a toxicity factor value between 0 and 10,000, reflecting the potential of that substance to cause adverse health effects. For a single substance there may be multiple toxicity factor values, each corresponding to a route of exposure (*e.g.*, inhalation, ingestion) through which that substance may come into contact with humans. If there are, and if the agency has “usable toxicity data” for more than one such exposure route, then it should “consider all exposure routes and use the highest assigned value, regardless of exposure route, as the toxicity factor value.” *Id.* at § 2.4.1.1.

Based upon the considerations recounted above (as well as

others not relevant here), the EPA assigns each site a score from 0 to 100. A site with a score greater than 28.50 is eligible for the NPL. *See* 68 Fed. Reg. 55,875, 55,876 (Sept. 29, 2003).

The EPA's study of the Matthiessen & Hegeler site began with an aerial photograph of the site taken in 1988 and with data compiled by the Environmental Protection Agency of Illinois in 1991 and 1993 from sediment, groundwater, and soil samples taken around the slag piles. Upon the basis of this evidence, the EPA determined that hazardous substances were being released into the Little Vermilion River. Because the observed release was into a river, the agency scored the surface water migration pathway, and because Illinois classified that river as a fishery, the agency scored that pathway for the threat it posed to the human food chain.

Following the method set forth in the HRS, the EPA then assessed the "waste characteristics" of the hazardous substances found at the site, namely, cadmium, copper, lead, nickel, and zinc. Carus's principal dispute is over the EPA's choice, purportedly in compliance with HRS § 2.4.1.1, to use the toxicity factor value for cadmium corresponding to the inhalation route of exposure. Plugging this value into the model, the EPA calculated a score of 100 for the pathway and a total score of 50 for the Matthiessen & Hegeler site.

Because the total score exceeded 28.50, the EPA proposed to list the site on the NPL. *See* 66 Fed. Reg. 32,287, 32,290, 32,293 (June 14, 2001). Carus submitted comments in opposition to the listing, which comments included technical documents prepared for it by GeoSyntec Consulting. The EPA found the objections raised in those comments unpersuasive and, accordingly, published a final rule adding the Matthiessen & Hegeler site to the NPL. 68 Fed. Reg. at 55,878. Carus now

petitions for review of that decision.

II. Analysis

Carus raises two separate challenges to the EPA's decision to place the Matthiessen & Hegeler site on the NPL. First, Carus argues the agency wrongly interpreted HRS § 2.4.1.1 as requiring it to use a toxicity factor value for cadmium corresponding to a route of exposure (inhalation) unlikely to occur in light of the conditions at the site. Had the agency instead applied the toxicity factor value corresponding to the ingestion route of exposure, Carus maintains, the HRS score for the site would have been below 28.50. Second, Carus contends the sampling data and the documents it submitted during the comment period rendered unreasonable the EPA's reliance solely upon data collected earlier by the Illinois EPA.

A. The EPA's Interpretation of HRS § 2.4.1.1

As the EPA understands HRS § 2.4.1.1, and as it applied that regulation in the rulemaking under review, 68 Fed. Reg. at 55,875-55,882, the agency was required to use the toxicity factor value for the inhalation of cadmium even though it was scoring the surface water migration pathway. Carus takes exception to that interpretation, arguing it is nonsensical to read the rule as mandating the use of a toxicity factor value corresponding to an exposure route (inhalation) unlikely to present a threat considering the pathway being scored.

An agency is, of course, entitled to "substantial deference" in its "interpretation of its own regulations." *Thomas Jefferson Univ. v. Shalala*, 512 U.S. 504, 512 (1994). Carus does not quarrel with this principle but nonetheless argues deference to the EPA's interpretation of § 2.4.1.1 is not appropriate because

(Carus nakedly asserts) that interpretation is simply a “litigation position.” *See Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 212 (1988) (court owes no “deference to an agency counsel’s interpretation of a statute where the agency itself has articulated no position on the question”). *But see Auer v. Robbins*, 519 U.S. 452, 462 (1997) (agency interpretation of regulation first appearing in legal brief not categorically unworthy of deference).

We need not, however, concern ourselves today with the degree of deference owed to an agency’s regulatory interpretation first articulated in the course of litigation. *See generally Drake v. FAA*, 291 F.3d 59, 68 (D.C. Cir. 2002) (listing three conditions for deference in that circumstance). The EPA has consistently interpreted § 2.4.1.1 as requiring it to use the highest toxicity factor value for a substance regardless of the most likely route of exposure. Indeed, the protest Carus now advances – that there is no scientific justification for using the toxicity factor value for a route of exposure that is improbable in light of the pathway being scored – was made and rejected when the EPA first issued the regulation. At that time, the agency defended its interpretation of the rule as follows:

EPA recognizes that toxicity values for substances are route-specific. However, the three pathways ... receiving a toxicity factor value are substance migration pathways, not human exposure routes. Multiple human exposure routes are possible for each substance migration pathway (e.g., volatile substances in ground water or surface water used for drinking can be inhaled during showering), and, therefore, use of a single route-specific toxicity value is not necessarily appropriate For this reason, and to avoid the added complexity of route-specific toxicity evaluations, EPA decided to base the toxicity factor on the highest

route-specific value (if more than one is available)
[T]his may, in a few site situations, overstate toxicity

Responses to Comments on the Revisions to the Hazard Ranking System (HRS), at 3-G1 (1990).

The EPA's original understanding of HRS § 2.4.1.1 is reflected in its response to Carus's comments in the proceeding now under review, and Carus points to not one instance in the intervening dozen years in which the agency applied the regulation differently. We therefore have no basis for treating the EPA's interpretation of its regulation as though it were a mere litigation position. Consequently, we must defer to that interpretation unless "an alternative reading is compelled by the regulation's plain language" or by other indicia of the agency's "intent at the time of the regulation's promulgation." *Thomas Jefferson Univ.*, 512 U.S. at 512; *see also Castlewood Products, L.L.C. v. Norton*, 365 F.3d 1076, 1082 (D.C. Cir. 2004).

Under that standard of review, we must uphold the EPA's interpretation because it accords both with the text of the regulation and with what we know of the agency's understanding of the rule when it was issued.

As for the former, the regulation reads in relevant part as follows:

Toxicity Factor. Evaluate toxicity for those hazardous substances at the site that are available to the pathway being scored. For all pathways and threats, except the surface water environmental threat, evaluate human toxicity as specified below.

....

For hazardous substances having usable toxicity data for multiple exposure routes (for example, inhalation and ingestion), consider all exposure routes and use the highest assigned value, regardless of exposure route, as the toxicity factor value.

HRS § 2.4.1.1. The EPA's interpretation clearly hews close to the text. The rule first directs the agency to "[e]valuate [the] toxicity" of each hazardous substance "available to the pathway being scored," and then unequivocally requires that, when the substance being scored has "usable toxicity data for multiple exposure routes" – as does cadmium – the EPA "consider all exposure routes and use the highest assigned value, regardless of exposure route."

Carus does not claim the EPA failed to follow its own long-standing interpretation of the rule; rather, Carus complains that the agency has misread the rule – presumably ever since its promulgation. Read properly, per Carus, the rule allows the use of only those toxicity factor values corresponding to routes of exposure the EPA finds are a threat at the site. In support of this interpretation, Carus points to the reference, in the opening sentence of the rule, to the "pathway being scored."*

*In its brief, Carus also claims support from HRS § 1 which, it says, provides the agency is to assign "numerical values to factors, that relate to or indicate risk, *based on conditions at the site.*" Neither the italicized words nor any variation thereof appear in § 1 nor, as far as we can tell, anywhere in the HRS. Instead, that phrase appears only in the document issued by the EPA along with the rule that added the Matthiessen & Hegeler site to the NPL. *See Support Document for the Revised National Priorities List Final Rule – September 2003*, at ix. Because the quoted words are not part of the HRS they are of no assistance to Carus in its effort to show the agency misinterpreted the

to Carus, this phrase modifies not just the preceding clause of the same sentence but the entire rule, thus requiring the EPA to decide whether exposure via a particular route is likely, considering the pathway being scored, before it uses a toxicity factor value corresponding to that exposure route.

We need not tarry long over this claim. “A challenge to an agency’s interpretation of its own regulation ... turns not on whether the *challenger* has articulated a rationale to support its interpretation, but on whether the *agency* has offered an explanation that is reasonable and consistent with the regulation’s language and history.” *Trinity Broad. of Fla., Inc., v. FCC*, 211 F.3d 618, 627 (D.C. Cir. 2000). Even if we owed no deference to the agency, however, we would not be persuaded by Carus’s alternative reading of the rule. First, the phrase “available to the pathway” plainly limits only the universe of hazardous substances the EPA may use in scoring a pathway; the phrase cannot reasonably be read to limit, as Carus suggests, the universe of toxicity factor values upon which the agency may draw. Second, Carus would read out of the regulation the direction to use the highest toxicity factor value “regardless of exposure route,” in contravention of the principle that every word of a legal text should be given effect. *See United States v. Menasche*, 348 U.S. 528, 520 (1955) (interpretation must “give effect, if possible, to every clause and word of a statute”).

Carus nonetheless seeks to bolster the plausibility of its interpretation by arguing the EPA’s reading lacks a “rational

HRS. In any event, in the same support document the EPA explained that HRS § 2.4.1.1 required it to use the highest toxicity factor value for a substance regardless of exposure route. *Id.* at 1.1-21.

basis” in science and in common sense. The rationality of § 2.4.1.1, however, is not before us; the Congress, in § 113(a) of the CERCLA, provided that a substantive challenge to a regulation promulgated under that Act must be made within 90 days of its promulgation. *See* 42 U.S.C. § 9613(a). The time to challenge the reasonableness of § 2.4.1.1 therefore passed in 1991. *Accord RSR Corp. v. EPA*, 102 F.3d 1266, 1269 (D.C. Cir. 1997) (Section 113(a) bars untimely claim that HRS states improper toxicity factor for lead). It is some comfort, therefore, that EPA’s rendering of § 2.4.1.1 seems consistent with the purpose of the NPL to provide a quick and an inexpensive means of identifying high priority sites for further study, *see Eagle-Picher*, 759 F.2d at 911.

B. Carus’s Submissions to the EPA

Carus also claims the EPA relied upon insufficient and outdated sampling data obtained by its Illinois counterpart in 1991 and 1993. Carus apparently believes more recent data from samples collected by GeoSyntec Consulting shows the EPA erred in listing the Matthiessen & Hegeler site on the NPL. Before considering this argument we must address two anterior matters.

First, because the CERCLA does not specify a standard of review applicable to this issue, we shall proceed under the standard prescribed by the Administrative Procedure Act and will set aside the agency’s action only if it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A); *see Eagle-Picher*, 759 F.2d at 921 n.80. In applying that standard, we remain mindful of the “significant deference” we owe to the EPA’s decision to list a site on the NPL because of the “highly technical issues involved” and because the NPL serves merely

as a “rough list of priorities, assembled quickly and inexpensively.” *Bradley Mining Co. v. EPA*, 972 F.2d 1356, 1359 (1992). Even so, we must assure ourselves the EPA has “examined relevant data and has articulated a rational explanation for its actions.” *Eagle-Picher*, 759 F.2d at 921.

Second, the EPA contends Carus has forfeited any claim the agency failed adequately to consider the GeoSyntec data because Carus failed to say with “reasonable specificity during the period for public comment,” *Mossville Env'tl. Action Now v. EPA*, 370 F.3d 1213, 1238 (D.C. Cir. 2004), how those data would have affected the HRS score for the Matthiessen & Hegeler site. Although we do not doubt the need for specificity, we see that Carus made three comments before the EPA with sufficient specificity that we may consider them on review.

Carus first argued before the EPA that the documents it submitted showed the slag piles were “highly resistant to further leaching.” Neither before the agency nor here, however, does Carus describe the significance of this purported fact for the HRS scoring of the site. As far as we are told – and that is by the EPA – the only arguable connection between resistance to leaching and the HRS score is whether cadmium, the substance scored for the surface water migration pathway, was “available to the pathway.” Yet Carus does not challenge the EPA’s contention that both direct observation (based upon the aerial photograph taken in 1988) and chemical analyses (performed in 1991 and 1993), established cadmium from the slag piles had been released into the Little Vermilion River, and hence was “available to the pathway.” The toxicity factor value for a substance available to the pathway pursuant to HRS § 2.4.1.1, notwithstanding any putative resistance to “further leaching,” may be used in scoring that pathway.

Next, Carus asserts the documents it submitted to the EPA “establish[ed] risk-based clean-up levels” – whatever that may mean – and “evaluate[d] possible remedial alternatives,” both of which contributions the agency apparently failed to consider. Perhaps so, but Carus did and still does nothing to explain how either consideration could have affected the HRS score for the Matthiessen & Hegeler site, *see Northside Sanitary Landfill, Inc. v. Thomas*, 849 F.2d 1516, 1519 (D.C. Cir. 1988) (comment to agency must show alleged mistake “was of possible significance in the results”). Nor does Carus refute the EPA’s response that it had no obligation to consider such matters because they are irrelevant to the decision to list a site on the NPL, *see Honeywell Int’l*, 372 F.3d at 445 (EPA not required to explore remedial options when placing site on NPL).

Finally, Carus maintains the sampling data that GeoSyntec prepared and submitted to the EPA shows the agency overstated the environmental and health risks posed by conditions at the site. Here Carus cites *Linemaster Switch Corp. v. EPA*, 938 F.2d 1299 (D.C. Cir. 1991), for the proposition the EPA must consider more recent data that have been included in the administrative record. Carus remains fatally silent, however, in the face of the EPA’s indisputable observation that it did review the data Carus submitted but found them consistent with its scoring of the site. *See Support Document for the Revised National Priorities List Final Rule – September 2003*, at 1.1-10 (cited in 68 Fed. Reg. at 55,877).

In the EPA’s response to public comments it explained that the data compiled by GeoSyntec, far from contradicting the data upon which the agency relied, “confirmed the presence of ... cadmium and lead in soil samples” taken from around the slag piles. *Id.* The EPA also responded to Carus’s claim the GeoSyntec data showed the levels of hazardous substances

present in the Little Vermilion River were below applicable limits; the agency explained that an “observed release” of a hazardous substance may be established “[e]ven though levels may be lower than regulatory limits ... if the measured levels are significantly higher than background levels.” *Id.* In sum, the EPA concluded Carus did not present “any specific comments [showing] that the data used in the HRS scoring [were] incorrect or why [Geosyntec’s] data would suggest that the site score is incorrect.” *Id.* Just so.

III. Conclusion

For the foregoing reasons Carus’s petition for review is

Denied.