United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued May 12, 2014

Decided June 27, 2014.

No. 98-1379

NATURAL RESOURCES DEFENSE COUNCIL AND SIERRA CLUB, PETITIONERS

v.

ENVIRONMENTAL PROTECTION AGENCY AND GINA MCCARTHY,
RESPONDENTS

AMERICAN CHEMISTRY COUNCIL, INTERVENOR

Consolidated with 98-1429, 98-1431

On Petitions for Review of Final Action of the United States Environmental Protection Agency

James S. Pew argued the cause for the petitioners. Khushi K. Desai and David R. Case were on brief.

Norman L. Rave, Jr., Attorney, United States Department of Justice, argued the cause for the respondents. Robert G. Dreher, Acting Assistant Attorney General, and Steven Silverman and Alan H. Carpien, Attorneys, United States Environmental Protection Agency, were on brief. Cynthia J.

Morris, and *Christopher S. Vaden*, Attorneys, United States Department of Justice, and *Lois J. Schiffer*, Attorney, National Capital Planning Commission, entered appearances.

Michael W. Steinberg argued the cause for the intervenor. David M. Kerr and Leslie A. Hulse were on brief.

Thomas Sayre Llewellyn, Harry M. Ng and Deanne M. Ottaviano were on brief for amici curiae American Petroleum Institute et al. in support of the respondents.

Before: HENDERSON and MILLETT, Circuit Judges, and SENTELLE, Senior Circuit Judge.

Opinion for the Court filed by Circuit Judge HENDERSON.

KAREN LECRAFT HENDERSON, Circuit Judge: Petitioners Natural Resources Defense Council, Sierra Club and Environmental Technology Council (collectively, Petitioners) seek review of a portion of a 1998 rule of the Environmental Protection Agency (EPA) creating a "Comparable Fuels Exclusion" from regulation under section 3004(q) of the Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. § 6924(q). See Hazardous Waste Combustors; Revised Standards, 63 Fed. Reg. 33,782, 33,783-801, 33,823-35 (June 19, 1998) (1998 Rule) (codified at 40 C.F.R. §§ 261.4(a)(16) and 261.38). Section 6924(q) directs EPA to establish standards applicable to all facilities that produce, burn for energy recovery or distribute/market fuels derived from specific listed hazardous wastes. The Comparable Fuels Exclusion exempts from section 6924(q)'s mandate all fuels deemed comparable to non-hazardous-waste-derived fossil fuels because they satisfy EPA's specifications. §§ 261.4(a)(16), 261.38. We conclude the Comparable Fuels Exclusion is inconsistent with the plain language of section 6924(q), which requires that EPA establish standards applicable to *all* fuel derived from hazardous waste. Accordingly, we grant the petitions for review filed by the Natural Resources Defense Council (NRDC) and the Sierra Club (collectively, Environmental Petitioners) and vacate the Comparable Fuels Exclusion.

I.

RCRA, codified at 42 U.S.C. §§ 6901 et seq., is "a comprehensive environmental statute under which EPA is granted authority to regulate solid and hazardous wastes." Am. Mining Cong. v. EPA (AMC I), 824 F.2d 1177, 1179 (D.C. Cir. 1987). Subtitle C of RCRA, 42 U.S.C. §§ 6921-39g, governs "Hazardous Waste Management" and "establishes a 'cradle to grave' federal regulatory system for the treatment, storage, and disposal of hazardous wastes." Cement Kiln Recycling Coal. v. EPA, 493 F.3d 207, 211 (D.C. Cir. 2007) (quotation marks and citation omitted). RCRA defines "hazardous waste" as "a solid waste, or combination of solid wastes" which, because of its characteristics, may "cause, or significantly contribute to an increase in mortality or ... serious . . . illness [or] pose a substantial present or potential hazard to human health or the environment when improperly ... managed." 42 U.S.C. § 6903(5). A "solid waste," in turn, is defined as "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material." Id. § 6903(27) (emphasis added). Section 6924 provides generally that EPA "shall promulgate regulations establishing such performance standards, applicable to owners and operators of facilities for the treatment, storage, or disposal of hazardous waste identified or listed under this subchapter, as may be necessary to protect human health and the environment." *Id.* § 6924(a).

Until 1985, EPA regulations expressly exempted from section 6924's hazardous waste standards "material...being burned as a fuel for the purpose of recovering usable energy,"

under the theory that such material was not "discarded," 40 C.F.R. § 261.2(c)(2) (1984), and therefore not "solid waste," as defined in 42 U.S.C. § 6903(27), or, consequently, "hazardous waste," which is defined in section 6903(5) "as a subset of 'solid waste,' "Horsehead Res. Dev. Co. v. Browner, 16 F.3d 1246, 1263 (D.C. Cir. 1994); see AMC I, 824 F.2d at 1189 (noting regulations existing in November 1984 had "provided that unused commercial chemical products were solid wastes only when 'discarded' [and] '[d]iscarded' was at that time defined as abandoned (and not recycled) by being disposed, burned, or incinerated (but not burned for energy recovery)" (citing 40 C.F.R. §§ 261.33, 261.2(c) (1983))). In 1984, the Congress attempted to eliminate EPA's regulatory energy recovery exemption when it enacted section 6924(q) as part of "The Hazardous and Solid Waste Amendments of 1984," Pub. L. No., 98-616, § 204(b)(1), 98 Stat. 3221, 3236-37 (Nov. 8, See AMC I, 824 F.2d at 1189 (noting Congress "apparently added [section 6924(q)(1)] to override" 40 C.F.R. § 261.33 (1983)); Horsehead Res. Dev. Co., 16 F.3d at 1253 ("Exempting facilities that burned hazardous waste for energy recovery from Subtitle C's requirements created a regulatory 'loophole' by means of which over half of the hazardous waste generated in the United States came to be burned in [boilers and industrial furnaces] not subject to RCRA. closed this loophole by enacting RCRA section 3004(q)[, which] set a deadline of November 8, 1986 for the EPA to promulgate regulations governing the burning of hazardous waste for energy recovery." (citation omitted)).

Section 6924(q) governs "[h]azardous waste used as fuel" and mandates that EPA regulate entities that produce, burn for energy recovery or distribute/market hazardous-waste-derived fuel. In particular, it provides that EPA "shall promulgate regulations establishing . . . as may be necessary to protect human health and the environment": "(A) standards applicable to the owners and operators of facilities which produce a fuel

... from any hazardous waste identified or listed under [42 U.S.C. § 6921], ... (B) standards applicable to the owners and operators of facilities which burn, for purposes of energy recovery, any [such] fuel ... or any fuel which otherwise contains any hazardous waste ... and (C) standards applicable to any person who distributes or markets any [such] fuel ... or any fuel which otherwise contains any hazardous waste." 42 U.S.C. § 6924(q)(1)(A)-(C). In January 1985, pursuant to

¹Section 6924(q)(1) provides in full:

- (1) Not later than two years after November 8, 1984, and after notice and opportunity for public hearing, the Administrator shall promulgate regulations establishing such—
 - (A) standards applicable to the owners and operators of facilities which produce a fuel—
 - (i) from any hazardous waste identified or listed under section 6921 of this title, or
 - (ii) from any hazardous waste identified or listed under section 6921 of this title and any other material;
 - (B) standards applicable to the owners and operators of facilities which burn, for purposes of energy recovery, any fuel produced as provided in subparagraph (A) or any fuel which otherwise contains any hazardous waste identified or listed under section 6921 of this title; and
 - (C) standards applicable to any person who distributes or markets any fuel which is produced as provided in subparagraph (A) or any fuel which otherwise contains any hazardous waste identified or listed under section 6921 of this title:

as may be necessary to protect human health and the environment. Such standards may include any of the

⁽q) Hazardous waste used as fuel

section 6924(q), EPA eliminated the energy recovery exclusion. *See* Hazardous Waste Management System; Definition of Solid Waste, 50 Fed. Reg. 614, 664 (Jan. 4, 1985) (amending definition of "solid waste" to provide that "[m]aterials are solid wastes if they are recycled" by, inter alia, "[b]urning for energy recovery").

EPA proposed the Comparable Fuels Exclusion in 1996. See Revised Standards for Hazardous Waste Combustors, 61 Fed. Reg. 17,358, 17,529-30 (Apr. 19, 1996). Following notice and comment, the final version was published in the 1998 Rule. See 63 Fed. Reg. at 33,823-29. The Comparable Fuels Exclusion exempts from the section 6924(q) hazardous waste fuel standard requirement all "comparable fuels," which are "fuels which are produced from a hazardous waste, but which are comparable to some currently used fossil fuels." Id. at 33,782; see id. at 33,783-801. To be comparable, the fuel must "meet specification levels comparable to fossil fuels for concentrations of hazardous constituents and for physical properties that affect burning," such as heating value and

requirements set forth in paragraphs (1) through (7) of subsection (a) of this section as may be appropriate. Nothing in this subsection shall be construed to affect or impair the provisions of section 6921(b)(3) of this title. For purposes of this subsection, the term "hazardous waste listed under section 6921 of this title" includes any commercial chemical product which is listed under section 6921 of this title and which, in lieu of its original intended use, is (i) produced for use as (or as a component of) a fuel, (ii) distributed for use as a fuel, or (iii) burned as a fuel.

²The Comparable Fuels Exclusion includes "an exclusion for a particular type of hazardous waste-derived fuel, namely a type of synthesis gas ('syngas') meeting particular specifications." 63 Fed. Reg. at 33,785.

viscosity. 63 Fed. Reg. at 33,783; see 40 C.F.R. §§ 261.4(a)(16) ("The following materials are not solid wastes for the purpose of this part: . . . [c]omparable fuels or comparable syngas fuels that meet the requirements of § 261.38."), 261.38 (setting out "[s]pecifications for excluded fuels" as well as other conditions and limitations). The Comparable Fuels Exclusion also imposes notification requirements, including (1) that the generator of a comparable fuel provide to the appropriate State or to EPA notice of, inter alia, the hazardous waste content and the location where it will be burned and (2) that the burner of such fuel publish in a local newspaper notice of the fact, location and estimated extent of the burning. 63 Fed. Reg. at 33,784, 33,797-98 (codified at 40 C.F.R. § 261.38(b)(2)).³

EPA's stated rationale for the Comparable Fuels Exclusion was that EPA "has discretion to classify . . . as a fuel product, not as a waste" a "hazardous waste-derived fuel [that] is comparable to a fossil fuel in terms of hazardous and other key constituents and has a heating value indicative of a fuel." *Id.* at 33,783. Under this rationale, EPA explained, it "can reasonably determine that a material which is a legitimate fuel and which contains hazardous constituents at levels comparable to fossil fuels is not being 'discarded' within the meaning of RCRA section 1004(27) [42 U.S.C. § 6903(27) (defining "solid waste)"], and therefore is not "waste." 63 Fed. Reg. at 33,783. Such a determination, EPA continued, "promotes RCRA's resource recovery goals without creating

³ The Comparable Fuels Exclusion imposes additional conditions "to assure that burning of comparable fuels will not become part of the waste management problem"—notably, it limits comparable fuels combustion to industrial furnaces, industrial and utility boilers and hazardous waste incinerators and it prohibits meeting specification limits through dilution. 63 Fed. Reg. at 33,784.

any risk greater than those posed by the commonly used In setting its comparable fuel commercial fuels." Id.specifications, EPA used a "benchmark" approach "based on the level of hazardous and other constituents normally found in fossil fuels" so that "concentrations of hazardous constituents in the comparable fuel could be no greater than the concentration of hazardous constituents normally occurring in commercial fossil fuels." *Id.* at 33,784. Under the benchmark specifications, EPA stated, it "reasonably expect[ed]—based on the methodology used to establish the specification—that the comparable fuel will pose no greater risk when burned than a fossil fuel and concomitant energy recovery benefits will be realized from reusing the waste to displace fossil fuels." Id. EPA further explained that it "conclude[d] it has discretion in exercising jurisdiction over hazardous waste-derived fuels that are essentially the same as fossil fuel, since there would likely not be environmental benefits from regulating those hazardous waste-derived fuels (i.e., burners would likely just choose to burn fossil fuels)." Id. In fact, EPA asserted, many of the commercial fossil fuels already being burned "could be less 'clean' than the comparable fuels, so that substitution of some commercial fuels could be a net deterrent." *Id.* In sum, EPA "expect[ed] that the comparable fuel would pose no greater risk when burned than a fossil fuel and would at the same time be physically comparable to a fossil fuel, leading to the conclusion that EPA may classify these materials as products, not wastes." Id.

Multiple petitioners—representing both environmental and industry groups—filed timely petitions for review of the Comparable Fuels Exclusion, which petitions were held in abeyance pending, initially, settlement negotiations and, subsequently, an administrative appeal of the related challenge to EPA's "Gasification Exclusion Rule" in *Sierra Club v. EPA*, No. 08-1144 (D.C. Cir. June 27, 2014). The Comparable

Fuels Exclusion case was removed from abeyance in March 2013.

II.

We have subject matter jurisdiction to review the petitions under 42 U.S.C. § 6976(a)(1), "which gives this court exclusive jurisdiction over 'petitions for review of action of the EPA in promulgating any regulation, or requirement under RCRA.' " Cement Kiln Recycling Coal. v. EPA, 493 F.3d 207, 214 (D.C. Cir. 2007) (brackets omitted). Before reaching the merits, we consider the Petitioners' standing vel non under Article III of the United States Constitution. See Bancoult v. McNamara, 445 F.3d 427, 432 (D.C. Cir. 2006) ("The 'first and fundamental question' that we are 'bound to ask and answer' is whether the court has jurisdiction to decide the case." (quoting Steel Co. v. Citizens for a Better Env't, 523 U.S. 83, 94 (1998))).

A. Standing

"Because Article III limits the constitutional role of the federal judiciary to resolving cases and controversies, a showing of standing 'is an essential and unchanging' predicate to any exercise of our jurisdiction." Fla. Audubon Soc'y v. Bentsen, 94 F.3d 658, 663 (D.C. Cir. 1996) (en banc) (quoting Lujan v. Defenders of Wildlife, 504 U.S. 555, 560 (1992) (citation omitted)). Moreover, "the party invoking the court's jurisdiction ... bears the burden of demonstrating that it satisfies the 'irreducible constitutional minimum' of standing: (1) an 'injury in fact' that is 'concrete and particularized' as well as 'actual or imminent'; (2) a 'causal connection' between the injury and the challenged conduct; and (3) a likelihood, as opposed to mere speculation, 'that the injury will be redressed by a favorable decision.' " Ark Initiative v. Tidwell, 749 F.3d 1071, 1075 (D.C. Cir. 2014) (quoting Lujan, 504 U.S. at 560-61 (1992) (quotation marks and brackets omitted)).

Environmental Petitioners claim representational standing on behalf of their members. Accordingly, each must demonstrate that "[1] its members would otherwise have standing to sue in their own right, [2] the interests it seeks to protect are germane to the organization's purpose, and [3] neither the claim asserted nor the relief requested requires the participation of individual members." *Defenders of Wildlife v. Perciasepe*, 714 F.3d 1317, 1323 (D.C. Cir. 2013).

The Environmental Petitioners have met their burden of demonstrating standing on behalf of their members. They have submitted declarations of long-time members who spend time near facilities which, as a result of the Comparable Fuels Exclusion, now burn comparable fuels, and who are concerned about the emissions' effects on their health and, in some cases, spend less time outdoors on that account. See, e.g., Br. for Pet'rs, Decls. Add. 6 (declaration of NRDC member Doris Falkenheiner), 12-14 (Sierra Club member Glen Besa), 22-23 (Sierra Club member William Fontenot), 34-35 (Sierra Club member Kristina Moazed). The declarations' averments satisfy the Environmental Petitioners' evidentiary burdens to demonstrate injury, causation and redressability. See Ass'n of Battery Recyclers v. EPA, 716 F.3d 667, 672 (D.C. Cir. 2013) (finding association had Article III standing based on members' averments that "they live or work in close proximity to [challenged] smelters and have reduced their time outdoors in response to concerns about pollution—precisely the kinds of harms the Supreme Court has deemed sufficient to show injury in fact").

Intervenor American Chemistry Council challenges the Environmental Petitioners' standing, asserting they did not demonstrate that as of the time the petitions were filed, there was a "substantial probability" that a facility located near one of their members would burn comparable fuels, thereby causing the alleged injury—largely because they do not aver

any facility had then provided notice of such burning—either to the applicable RCRA director or through newspaper publication—prerequisites under the 1998 Rule to burning comparable fuels. See Br. for Intervenor 14-15; 40 C.F.R. § 261.38(b)(2); see also Chamber of Commerce v. EPA, 642 F.3d 192, 199-200 (D.C. Cir. 2011) (petitioner bears burden to "show a 'substantial probability' that it has been or will be injured, that the defendant caused its injury, and that the court could redress that injury"; "standing is assessed as of the time a suit commences" (brackets, capitalization and quotation marks omitted)). We disagree.

It is "well-established . . . that standing will lie where 'a plaintiff demonstrates that the challenged agency action authorizes the conduct that allegedly caused the plaintiff's injuries, if that conduct would allegedly be illegal otherwise." Am. Trucking Ass'n v. Fed. Motor Carrier Safety Admin., 724 F.3d 243, 248 (D.C. Cir. 2013) (quoting Animal Legal Def. Fund, Inc. v. Glickman, 154 F.3d 426, 440 (D.C. Cir. 1998) (en This is precisely the case here. banc)). Once EPA promulgated the Comparable Fuels Exclusion, it was "'a hardly-speculative exercise in naked capitalism' " to predict that facilities would take advantage of it to burn hazardous-waste-derived fuels rather than more expensive fossil fuels. *Id.* (inferring that "motor carriers would respond to the hours-increasing provisions by requiring their drivers to use them and work longer days" (quoting Abigail Alliance for Better Access to Developmental Drugs v. Eschenbach, 469 F.3d 129, 135 (D.C. Cir. 2006))). And the Intervenor does not dispute that, as it turned out, many facilities did just that. In fact, one facility in proximity to the Environmental Petitioners' members—the Chemical Co. Baton Rouge Plastics Plant—had

⁴The Intervenor does not question that the Environmental Petitioners meet the second and third representational standing requirements. Nor do we.

pending RCRA applications to combust hazardous waste in its boilers (subject to RCRA regulation) before the 1998 Rule issued—which applications it promptly withdrew in May 1999 when it achieved compliance with the Comparable Fuels Exclusion and could therefore burn such fuels free from RCRA regulatory constraints. See Br. for Pet'rs, Decls. Add. 37 (May 17, 1999 Letter from Exxon Chemical Co. Baton Rouge Plastics Plant manager to Louisiana Department of Environmental Quality Office of Waste Services).

The Intervenor also asserts that the Environmental Petitioners have not shown that burning comparable fuels is any more dangerous than burning fossil fuels and therefore they have not demonstrated the possibility of any injury from the Comparable Fuels Exclusion. "In EPA's expert judgment," they note, "burning these comparable fuels will have roughly the same risks, and the same affect [sic] on air quality, as burning commercially available virgin fuels." Br. for Intervenor 21. The Environmental Petitioners, however, are challenging EPA's assessment of the Comparable Fuels Exclusion's risks—and we "assume for standing purposes" that the Environmental Petitioners are "correct on the merits." See Sierra Club v EPA, 699 F.3d. 530, 533 (D.C. Cir. 2012).

In addition, both EPA and the Intervenor challenge the standing of petitioner Environmental Technology Council, "a national non-profit trade association of commercial firms that provide technologies and services for recycling, treatment, and secure disposal of industrial and hazardous wastes." Petitioners' Rule 26.1 Disclosure Statement at 2 (Feb. 7, 2014).

⁵ Given our conclusion that NRDC and Sierra Club have demonstrated standing based on their members' asserted injuries from facilities burning hazardous-waste-derived fuels, we need not consider the Environmental Petitioners' alternative claims of informational and procedural injury.

We agree with EPA that under our precedent, the Environmental Technology Council's interest in the litigation—"to protect its members' competitive position in selling greater quantities of waste treatment and disposal services,"—"does not fall within the zone of interests" that RCRA is intended to protect. Br. for Resp. 18 (citing Hazardous Waste Treatment Council v. Thomas, 885 F.2d 918, 922-23 (D.C. Cir. 1989)); see also Sierra Club v. EPA, 292 F.3d 895, 902-903 (D.C. Cir. 2002); Cement Kiln Recycling Coal. v. EPA, 255 F.3d 855, 871 (D.C. Cir. 2001). Environmental Technology Council therefore lacks a cause of action and we deny its petition for review. See Lexmark, Int'l, Inc. v. Static Control Components, Inc., 134 S. Ct. 1377, 1388 (2014).

B. Statutory Construction

On the merits, the Petitioners first contend the Comparable Fuels Exclusion is inconsistent with the language of section 6924(q). We review EPA's interpretation of RCRA—a statute it is charged with administering—under the familiar two-step analysis of *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984). *See Am. Chem. Council v. EPA*, 337 F.3d 1060, 1063 (D.C. Cir. 2003). Under *Chevron*:

We first ask "whether Congress has directly spoken to the precise question at issue," in which case we "must give effect to the unambiguously expressed intent of Congress." If the "statute is silent or ambiguous with respect to the specific issue," however, we move to the second step and defer to the agency's interpretation as long as it is "based on a permissible construction of the statute."

Natural Res. Def. Council v. EPA, 706 F.3d 428, 431 (D.C. Cir. 2013) (quoting Chevron, 467 U.S. at 842–43 (quotation marks

omitted)). We stop on *Chevron* step 1 because we agree with the Petitioners that the Congress spoke directly to the question whether EPA may exclude what it calls "comparable fuels"—and foreclosed their exclusion.

Section 6924(q) unequivocally provides that EPA "shall promulgate regulations establishing ... standards" such "as may be necessary to protect human health and the environment"—applicable to three categories of entities: (1) "owners and operators of facilities which produce a fuel . . . from any hazardous waste identified or listed under [42 U.S.C. § 6921," (2) "owners and operators of facilities which burn, for purposes of energy recovery, any [such] fuel" and (3) "any person who distributes or markets any [such] fuel." 42 U.S.C. § 6924(q)(1)(A)-(C) (emphases added). The word "shall" makes the directive to regulate hazardous-waste-derived fuels mandatory. See Miller v. French, 530 U.S. 327, 337 (2000) (referring to "mandatory term 'shall' "); Ass'n of Civilian Technicians, Mont. Air Ch. No. 29 v. FLRA, 22 F.3d 1150, 1153 (D.C. Cir. 1994) ("The word 'shall' generally indicates a command that admits of no discretion on the part of the person instructed to carry out the directive."). And the repeated use of "any" makes the mandate broadly inclusive—reaching all fuels produced from all listed hazardous wastes. See Nat'l Ass'n of Clean Water Agencies v. EPA, 734 F.3d 1115, 1128 (D.C. Cir. 2013) ("The word 'any' is usually understood to be all inclusive, and EPA presented no compelling reason why 'any' should not mean 'any.' " (quotation marks and citation omitted)); United States v. Gonzales, 520 U.S. 1, 5 (1997) ("Read naturally, the word 'any' has an expansive meaning, that is, one or some indiscriminately of whatever kind." (quotation marks omitted)); cf. Massachusetts v. EPA, 549 U.S. 497, 528-29 (2007) (Clean Air Act definition of "air pollutant" as "'any air pollution agent or combination of such agents, including any physical, chemical ... substance or matter which is emitted into or otherwise enters the ambient

air'... embraces all airborne compounds of whatever stripe, and underscores that intent through the repeated use of the word 'any'") (emphases in original).⁶

From the statute's mandatory and inclusive language we can only conclude the Congress intended to require that EPA regulate the production, burning for energy recovery and distributing/marketing of all such fuels derived from all listed hazardous wastes—with the sole express exclusions of (1) certain oil-containing petroleum refinery wastes that are converted into petroleum coke and (2) facilities that burn only de minimis quantities of hazardous waste, see 42 U.S.C. § 6924(q)(2)(A)-(B). Given the plain intent of the Congress, EPA had no discretion, as it claimed, to create its own Comparable Fuels Exclusion to exempt from regulation fuels that are derived from a listed hazardous waste and therefore subject to mandatory regulation under section 6924(q). Cf. Nat'l Ass'n of Clean Water Agencies, 734 F.3d at 1128 ("Congress's use of the word 'any' in the definitional phrase 'any facility which combusts any solid waste from commercial or industrial establishments' rendered the phrase clear and unambiguous, and EPA had no authority to create exceptions not explicitly listed in the statute through its definition of 'commercial or industrial waste.' " (citing Natural Res. Defense Council v. EPA, 489 F.3d 1250 (D.C. Cir. 2007)) (emphases in original)).

⁶The intended breadth of coverage is further illustrated by the express inclusion of "any commercial chemical product which is listed under section 6921 of this title and which, in lieu of its original intended use, is (i) produced for use as (or as a component of) a fuel, (ii) distributed for use as a fuel, or (iii) burned as a fuel." 42 U.S.C. § 6924(q)(1) (emphasis added). During oral argument, EPA conceded that this language makes all commercial chemical products subject to section 6924(q). See Recording of Oral Argument at 16:44 (May 12, 2014).

In particular, contrary to its stated rationale, EPA had no discretion to "reasonably determine that a material which is a legitimate fuel and which contains hazardous constituents at levels comparable to fossil fuels is not being 'discarded' within the meaning of [42 U.S.C. § 6903(27)]." 63 Fed. Reg. at 33,783. This is the very reasoning that the Congress rejected when it enacted section 6924(q) to close EPA's "regulatory loophole" for energy recovery. Horsehead Res. Dev. Co., 16 F.3d at 1253. As we explained in AMC I, the Congress added section 6924(q) in response to EPA's regulations that excluded from the definition of "solid waste" (and thereby of "hazardous waste") hazardous materials that are—or will be—burned for energy recovery as not "discarded"; and the Congress "addressed this problem by deeming the offending materials to be 'discarded' and therefore within the statutory definition of 'solid waste.' " AMC I, 824 F.2d at 1189 (emphasis added).⁷ Thus, for the purpose of interpreting section 6924(q), "discarded" is not, as EPA claims in the 1998 Rule, "an ambiguous term." 63 Fed. Reg. at 33,783. And EPA therefore has no discretion to "reasonably" construe the term to exclude hazardous-waste-derived fuels from regulation.

EPA argues in its brief that the Comparable Fuels Exclusion is itself a "standard" within the meaning of section

⁷AMC I focused on "the burning of commercial chemicals as fuels, contrary to their original intended use"—a specific instance of energy recovery burning that section 6924(q) identifies. See supra note 8. Section 6924(q)'s compass is, as we explained supra, far broader than that. See AMC I, 824 F.2d at 1189 ("'Hazardous waste, as used in this provision [6924(q)], includes not only wastes identified or listed as hazardous under EPA's regulations, but also includes any commercial chemical product (and related materials) listed pursuant to 40 C.F.R. § 261.33, which is not used for its original intended purpose but instead is burned or processed as fuel.'" (quoting H.R. Rep. No. 98-198, at 40 (1983) (emphasis added))).

6924(q), which requires only that EPA establish "standards . . . as may be necessary to protect human health and the environment," 42 U.S.C. § 6924(q)(1). Br. for Resp't 28-29, EPA asserts that the Comparable Fuel Exclusion's specifications and restrictions—in conjunction with existing Clean Air Act, Occupational Safety and Health Administration and Department of Transportation regulations—constitute EPA's determination of "the level of regulation 'necessary' for the management, i.e., the storage, transportation, and burning, of comparable fuels that is protective of human health and the environment, as required by section 6924(q)." Id. at 29. But this theory was not part of EPA's rationale as expressed in the 1998 Rule. There, EPA concluded it need not establish any standards applicable to qualifying comparable fuels because a comparable fuel is not a "waste" but rather a "fuel product" and therefore excluded from the statute's reach. See 63 Fed. Reg. at 33,783 ("The rationale for the Agency's approach is that if a hazardous waste derived fuel is comparable to a fossil fuel in terms of hazardous and other key constituents and has a heating value indicative of a fuel, EPA has discretion to classify such material as a fuel product, not as a waste."); id ("Under this final rule, EPA is excluding from the regulatory definition of solid waste hazardous waste-derived fuels that meet specification comparable fossil levels to fuels for concentrations of hazardous constituents and for physical properties that affect burning.").

The rationale EPA now offers—that by setting criteria for exclusion from section 6924 regulation, it was in fact "establishing standards" under section 6924 specifications—is entirely post hoc. Accordingly, we may not sustain the 1998 rule thereunder. See Nat'l Ass'n of Clean Water Agencies, 734 F.3d at 1138 ("EPA did not state this rationale in the rulemaking, and we cannot 'accept appellate counsel's post hoc rationalizations for agency action.' " (quoting Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S.

29, 50 (1983))); see also SEC v. Chenery Corp., 318 U.S. 80, 95 (1943) ("[A]n administrative order cannot be upheld unless the grounds upon which the agency acted in exercising its powers were those upon which its action can be sustained."). EPA's new rationale is also flatly inconsistent with the 1998 Rule, which expressly and repeatedly characterized its action See, e.g., 63 Fed. Reg. at 33,782-84. as an "exclusion." Finally, the 1998 Rule did not even purport to apply the RCRA protection standard EPA now cites—that the regulatory standards be sufficient "to protect human health and the environment." 42 U.S.C. § 6924(a), (q)(1). Instead, EPA considered only whether a fuel complying with the Comparable Fuels Exclusion's specifications presents a "greater risk than burning fossil fuel"—which is quite a different level of protection—and EPA's answer was merely that it "expects" not. See 63 Fed. Reg. at 33,783-84.

In support of its rationale as expressed in the 1998 Rule—that hazardous wastes recycled for energy recovery are excluded from section 6924(q)'s "standard" mandate—EPA relies on Circuit precedent that has upheld EPA's characterization of recycled materials as not "discarded" and therefore not "waste" subject to RCRA hazardous waste regulation. In AMC I, for example, we concluded at Chevron step 1 that RCRA's "solid waste" definition precludes EPA from regulating materials produced in the oil refining process—to be recycled through reintroduction at the appropriate stage of the refining process—because the Congress "clearly and unambiguously expressed its intent that 'solid waste' (and therefore EPA's regulatory authority) be limited to materials that are 'discarded' by virtue of being disposed of, abandoned, or thrown away." 824 F.2d at 1193. Accordingly, the term's plain meaning excludes materials that "are destined for beneficial reuse or recycling in a continuous process by the generating industry itself," such as the recycled materials there. *Id.* at 1186 (emphasis omitted); accord Ass'n

of Battery Recyclers, Inc. v. EPA, 208 F.3d 1047, 1056 (D.C. Cir. 2000) ("[A]t least some of the secondary material EPA seeks to regulate as solid waste is destined for reuse as part of a continuous industrial process and thus is not abandoned or thrown away. Once again, 'by regulating in-process secondary materials, EPA has acted in contravention of Congress' intent' because it has based its regulation on an improper interpretation of 'discarded' and an incorrect reading of our AMC I decision." (quoting AMC I, 824 F.2d at 1193)).

On the flip side, in Safe Food & Fertilizer v. EPA, 350 F.3d 1263 (D.C. Cir. 2003), we upheld as permissible under Chevron step 2 EPA's interpretation of the "solid waste" definition to exclude as not "discarded" industrial process byproducts recycled to produce zinc fertilizers as well as the fertilizers themselves. Id. at 1269-71; see also Am. Mining Cong. v. EPA, 907 F.2d 1179, 1186 (D.C. Cir. 1990) ("Nothing in AMC [I] prevents the agency from treating as 'discarded' the wastes at issue in this case, which are managed in land disposal units that are part of wastewater treatment systems.") (emphases omitted). None of the cited cases, however, involved fuels burned for energy recovery so as to come under section 6924(q), which, as we explained in AMC I, "deem[s]" the materials burned for energy recovery to be "'discarded' and therefore within the statutory definition of 'solid waste.' " AMC I, 824 F.2d at 1189; see Horsehead Res. Dev. Co., 16 F.3d at 1263 ("AMC I involved an altogether different facet of waste disposal governed by a different statutory section, i.e., the scope of the RCRA term 'solid waste' "). Outside the section 6924(q) energy recovery context—as the cited cases demonstrate—materials to be reused may be reasonably—or even necessarily—characterized as not "waste" because they are not "discarded." See AMC I, 824 F.2d at 1189 ("This specific measure did not, however, revamp the basic definitional section of the statute."). But not under section 6924(q), which provides that EPA "shall promulgate

regulations establishing . . . standards" applicable to producers, burners and distributors/marketers of a fuel produced from "any hazardous waste identified or listed under [42 U.S.C. § 6921]" and deems the listed component hazardous materials to be "discarded" waste. 42 U.S.C. § 6924(q)(1)(A)-(C) (emphasis added).

Finally, EPA contends that the "Petitioners' claim that the Comparable Fuels Rule is inconsistent with section 6924(q) has been waived because it was not raised in comments during the rulemaking." Br. for Resp't 21; see Natural Res. Def. Council v. EPA, 25 F.3d 1063, 1073–74 (D.C. Cir. 1994) ("We do not reach the merits of this challenge because petitioners failed to raise this question . . . before the agency during the notice and comment period. They have therefore waived their opportunity to press this argument in court."); see also Military Toxics Project v. EPA, 146 F.3d 948, 956-57 (D.C. Cir. 1998). In response, the Petitioners point to two comments they claim raised their statutory argument. See Reply Br. 9-10. First, petitioner Environmental Technology Council submitted a comment criticizing EPA's "implementing approach" as

an attempt to defer RCRA § 3004(q)-(s) regulation of ... hazardous wastes to the CAA in accordance with RCRA § 1006(a) to avoid duplication, but without making the essential finding that such a deferral satisfies the objectives of RCRA. For example, EPA has not conducted any kind of technical or risk analysis showing how a blanket exemption from all RCRA Subtitle C controls for hazardous wastes that meet the comparable fuel spec somehow adequately protects human health and the environment. Thus, the proposal is legally deficient.

Joint Appendix (JA) 387. Second, citing an EPA background document's explanation for rejecting a "risk" approach in

setting the comparable fuel specifications in favor of a benchmark approach, commenter Molten Metal Technology Inc. (Molten Metal) asserted:

Therefore, the Agency's comparable fuels proposal will likely result in higher exemption concentrations than levels that would normally be derived using a risk-based approach. Such an approach would violate the clear Congressional mandate in Section 3004(q) of RCRA to regulate the burning of hazardous waste for energy recovery "as may be necessary to protect human health and the environment."

JA 374.

We agree with EPA that both comments seem to focus more on the way EPA implemented the Comparable Fuels Exclusion than on its statutory authority vel non to create any Nonetheless, EPA's response to Molten such exclusion. Metal's comment suggests that EPA understood Molten Metal to challenge EPA's statutory authority to exclude comparable fuels in the first place and affirms its authority to do so: "Section 3004(q) applies to hazardous wastes which are burned for energy recovery. The provision does not speak to EPA's authority to determine whether particular fuels produced from secondary materials are or are not, products rather than wastes." JA 547. Thus, the issue was expressly addressed by EPA and is properly before the court. See Appalachian Power Co. v. EPA, 135 F.3d 791, 818 (D.C. Cir. 1998) ("The purpose of the exhaustion requirement is to ensure that the agency is given the first opportunity to bring its expertise to bear on the resolution of a challenge to a rule."). Moreover, even if a party may be deemed not to have raised a particular argument before the agency, "EPA 'retains a duty to examine key assumptions as part of its affirmative burden of promulgating and explaining a nonarbitrary, non-capricious rule" and therefore . . . 'EPA must justify that assumption even if no one objects to it during the comment period.' " *Id.* (quoting *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 534-35 (D.C. Cir. 1983); *see also Okla. Dep't of Envtl. Control v. EPA*, 740 F.3d 185, 192 (D.C. Cir. 2014); *Ne. Md. Waste Disposal Auth. v. EPA*, 358 F.3d 936, 948 (D.C. Cir. 2004) (per curiam). As EPA's response to Molten Metal's comment demonstrates, that EPA had statutory authority under section 6924(q) to exempt some hazardous-waste-derived fuels from regulation was a "key assumption" underlying EPA's exercise of its "discretion to classify such material as a fuel product, not as a waste," 63 Fed. Reg. at 33,783, and thereby "exclude" it from section 6924(q)'s ambit. Accordingly, we reject EPA's "waiver" argument.

For the foregoing reasons, we grant the Environmental Petitioners' petitions for review and vacate the Comparable Fuels Exclusion codified at 40 C.F.R. §§ 261.4(a)(16) and 261.38. We deny Environmental Technology Council's petition for review.

So ordered.