

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued October 27, 2016

Decided December 20, 2016

No. 15-1072

NATIONAL BIODIESEL BOARD,
PETITIONER

v.

ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENT

On Petitions for Review of Administrative Actions of the
United States Environmental Protection Agency

Consolidated with 15-1073

Bryan M. Killian argued the cause for petitioner. With him on the briefs were *David B. Salmons* and *Sandra P. Franco*.

Perry M. Rosen, Attorney, U.S. Department of Justice, argued the cause for respondent. With him on the brief was *John C. Cruden*, Assistant Attorney General, and *Susan Stahle*, Of Counsel, U.S. Environmental Protection Agency.

Before: TATEL, BROWN, and KAVANAUGH, *Circuit Judges*.

Opinion for the Court filed by *Circuit Judge* TATEL.

TATEL, *Circuit Judge*: Petitioner, a trade association representing the domestic biofuel industry, challenges the Environmental Protection Agency’s decision to allow a group of Argentine biofuel producers and other companies to use certain recordkeeping practices in connection with sales of their product in the United States. Petitioner separately challenges the regulation, promulgated in 2010, pursuant to which EPA granted the Argentine application. Although this case implicates a pressing international issue—whether EPA is meeting its responsibility to protect against harmful global land-use changes resulting from our country’s demand for renewable fuels—we can resolve it on familiar terrain. Petitioner’s challenge to the 2010 regulation is untimely, and EPA’s decision to grant the Argentine application was neither arbitrary nor capricious, as it comports with agency regulations and rests upon the kind of highly technical judgments to which we owe agencies great deference.

I.

Established by Congress in 2005, the Renewable Fuel Standard (RFS) program requires transportation fuel—the kind used in cars and sold at gas stations—to include specific amounts of “renewable fuel” made from planted crops, trees, animal waste, algae, or other alternatives to traditional fossil fuels. Energy Policy Act of 2005, Pub. L. No. 109–58, § 1501, 119 Stat. 594 (codified as amended at 42 U.S.C. § 7545(o)). In 2007, Congress amended the program both to significantly increase use of renewable fuel and to ensure this increase would reduce greenhouse-gas emissions and thereby “lower the risk of climate change.” 75 Fed. Reg. 14,670, 14,799; *see id.* at 14,673, 14,843; Energy Independence and Security Act of 2007, Pub. L. No. 110–140, §§ 201–204, 121 Stat. 1492 (codified as amended at 42 U.S.C. § 7545(o)).

Specifically, recognizing that demand for renewable fuels might spur land-use changes like deforestation, which exacerbate greenhouse-gas emissions and wreak ecological harm, Congress mandated that renewable fuel from planted crops come from agricultural land already cleared or cultivated prior to the 2007 statute's enactment. 42 U.S.C. § 7545(o)(1)(i). *See e.g.*, 75 Fed. Reg. at 14,692.

In order to accomplish this objective, Congress defined “renewable fuel” as “fuel that is produced from renewable biomass” and specified that “renewable biomass” means, as relevant here, “[p]lanted crops and crop residue harvested from agricultural land cleared or cultivated at any time prior to December 19, 2007, that is either actively managed or fallow, and nonforested.” 42 U.S.C. §§ 7545(o)(1)(J), (o)(1)(I)(i).

To implement the RFS program, the statute directs EPA to “promulgate regulations to ensure that gasoline sold or introduced into commerce in the United States . . . contains the applicable volume of renewable fuel,” *id.* § 7545 (o)(2)(A)(i), including “compliance provisions applicable to refineries, blenders, distributors, and importers” of renewable fuels, *id.* § 7545(o)(2)(A)(iii)(I). Pursuant to that authority, EPA took the actions challenged here.

Renewable fuel is made from plant material, known as feedstock, typically sent from farms to grain elevators, then to crushers, and eventually to fuel producers, who transform it into renewable fuel. Biofuel produced abroad and intended for use by domestic refiners—the subject of this litigation—is often sent from producers to importers, who then sell the renewable fuel for incorporation into domestic transportation fuel.

Under the RFS program, producers and importers of renewable fuel generate “Renewable Identification Numbers” (RINs)—codes that correspond to batches of fuel. *See* 40 C.F.R. §§ 80.1452, 80.1426. In turn, refiners and importers acquire RINs to demonstrate that they have introduced into the transportation-fuel supply the requisite amount of renewable fuel. 42 U.S.C. § 7545(o)(3)(B)(ii)(I); *see* 40 C.F.R. § 80.1405(c); *Hermes Consolidated, LLC v. EPA*, 787 F.3d 568, 572 (D.C. Cir. 2015) (describing the RFS program).

In 2010, EPA promulgated a final rule that imposes recordkeeping requirements on RIN-generating producers and importers in order to verify that crops used in renewable fuel production come from qualified land, *i.e.*, land in cultivation prior to December 19, 2007. 75 Fed. Reg. at 14,699–701; 40 C.F.R. § 80.1454. The Rule gives producers and importers three options. 40 C.F.R. §§ 80.1454(c)(1), (g), (h).

The first, individual tracking, requires producers or importers to keep, but not provide to EPA unless requested, (1) “[m]aps or electronic data identifying the boundaries of the land” where each type of feedstock was harvested, (2) “commercial documents showing the quantity of feedstock purchased from each area . . . and showing each transfer of custody from the location where it was produced to the renewable fuel production facility,” and (3) records sufficient to verify that the feedstock came from land cleared or cultivated prior to December 19, 2007, such as sales records. *Id.* § 80.1454(c)(1).

The second option, aggregate compliance, excuses from recordkeeping requirements “any producer or RIN-generating importer” in a country subject to an approved aggregate compliance plan. *Id.* § 80.1454(g). A country is eligible for the aggregate compliance approach if EPA determines that its

total amount of agricultural land is no higher than it was in 2007. *See id.* § 80.1457 (establishing the petition process for the aggregate compliance approach for foreign counties). United States domestic renewable-fuel producers are currently exempt from recordkeeping requirements based on EPA’s finding that total U.S. agricultural land has not exceeded its 2007 baseline. *Id.* § 80.1454(g). Only one foreign country—Canada—has sought and obtained an approved aggregate compliance regime. 76 Fed. Reg. 14,007.

A third option—the one at issue here—is the alternative tracking requirement. 40 C.F.R. § 80.1454(h). Under this provision, a “foreign or domestic renewable fuel producer or RIN-generating importer” can participate in an industry-funded program in which an “independent third party conduct[s] a comprehensive program of annual compliance surveys . . . to be carried out in accordance with a survey plan which has been approved by EPA.” *Id.* §§ (h), (h)(1). The independent surveyor must perform “feedstock audits of renewable fuel production and import facilities” and “[o]btain the records and product transfer documents associated with the feedstocks being audited.” *Id.* §§ (h)(3)(i)–(ii). The surveyor must “[c]onfirm that feedstocks used to produce RIN-generating renewable fuels” come from qualifying land, and “[i]mmediately notify EPA” of noncompliance. *Id.* §§ (h)(3)(iv)–(vi). Overall, annual surveys must be “representative” of the entities in the survey area and “[d]esigned to achieve the same level of quality assurance”—that is, the same level of confidence that renewable fuels come from qualified land—as the individual tracking and aggregate compliance options. *Id.* §§ (h)(2)(iii)–(iv).

In 2012, the Argentine Chamber of Biofuels (CARBIO), a nonprofit association of biodiesel producers, soybean growers, warehouses, and oil-crushing mills, submitted a

comprehensive survey program for EPA's approval as an alternative tracking program. In considering the application, EPA required CARBIO to answer many questions about its proposal and submit additional materials in the form of seven addenda. Some two-and-a-half years later, EPA approved the application, finding that CARBIO's proposal satisfied section 80.1454(h)'s requirements.

The plan works like this. Using historical satellite images, CARBIO begins by identifying land cleared or cultivated prior to 2007. CARBIO then classifies these lands as either "go areas," from which feedstock may be used, or "no go areas." When feedstock arrives at a crushing plant, each shipment is inspected—using a document known as a *carta de porte*, or waybill—to ensure that the zip code of origination matches an identified go area. If ineligible land falls within a zip code, no feedstock from that zip code may qualify. The plan calls for the independent surveyor to visit each producer and crushing plant at least once a year, as well as some five percent of grain elevators and farms. Any feedstock supplier, such as a farm or grain elevator, not visited in a given year will submit to a desk audit of its product-transfer documents to verify compliance with the Rule's qualified-land restriction.

On November 13, 2013, while EPA was considering CARBIO's proposal, Petitioner National Biodiesel Board (NBB) sent a letter to EPA expressing concern about the viability of enforcing an alternative tracking program abroad and requesting that EPA "provide the public with notice and comment on any proposed survey plan for foreign feedstocks and production before EPA takes any action." On January 27, 2015, EPA approved the CARBIO proposal and responded to NBB, explaining that "[g]iven the significant notice and comment process used to develop [the recordkeeping]

regulations,” the agency “d[id] not find it appropriate to create additional notice and comment processes for each plan approval as you suggested in your letter.”

NBB then filed these petitions for review. In case number 15-1073, Petitioner seeks review of the 2010 Rule that established the alternative tracking program. 75 Fed. Reg. 14,670. In case number 15-1072, Petitioner challenges EPA’s approval of CARBIO’s alternative tracking proposal. We consolidated the cases and heard them together at oral argument.

II.

EPA offers a threshold objection to the petitions for review—that NBB lacks Article III standing. In response, NBB asserts that it has standing on behalf of its members: domestic producers who will suffer injury as a result of increased competition from Argentine biodiesel.

Article III standing requires “injury in fact” that is “actual or imminent” and “fairly . . . trace[able] to the challenged action of the defendant” as well as “likely . . . redress[able] by a favorable decision.” *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992) (internal citations and quotation marks omitted). Under the doctrine of competitor standing, economic actors “suffer constitutional injury in fact when agencies lift regulatory restrictions on their competitors or otherwise allow increased competition.” *Louisiana Energy and Power Authority v. FERC*, 141 F.3d 364, 367 (D.C. Cir. 1998). An association, such as NBB, may represent the interests of its members if—the issue here—“at least one of [its] members has standing to sue in [its] . . . own right.” *See American Library Association v. FCC*, 401 F.3d 489, 492 (D.C. Cir. 2005).

This case differs little from *Delta Construction v. EPA*, 783 F.3d 1291 (D.C. Cir. 2015) (per curiam), in which we held that an importer and seller of a vegetable-based fuel suffered constitutional injury as a result of “EPA regulations that incentivize[d] other renewable fuels like electricity sold by its competitors.” *Id.* at 1299. Here it is “self-evident” that NBB members meet the constitutional prerequisites of injury, causation, and redressability, as approval of the CARBIO plan incentivizes importation of renewable fuels that will compete with domestic production, and an order vacating that approval would eliminate the resultant competitive harm. *Id.* at 1299–1300 (quoting *White Stallion Energy Center, LLC v. EPA*, 748 F.3d 1222, 1256 (D.C. Cir. 2014), *cert granted on other grounds sub nom. Michigan v. EPA*, 135 S. Ct. 702 (2014)). Declarations submitted by NBB confirm that its members “compete with imports” in the U.S. biodiesel market.

With standing established, we turn to Petitioner’s challenges.

III.

We begin with NBB’s attack on section 80.1454(h), which EPA promulgated in 2010. 75 Fed. Reg. 14,670. EPA argues that the challenge is untimely.

Section 307(b)(1) of the Clean Air Act provides that a petition for review of any nationally applicable regulations:

shall be filed within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register, except that if such petition is based solely on grounds arising after such sixtieth day, then any petition for review under this subsection shall be filed within sixty days after such grounds arise.

42 U.S.C. § 7607(b)(1). NBB failed to challenge the Rule until it initiated this action some five years after notice was promulgated—despite exhaustively commenting during the rulemaking process and then even intervening on behalf of EPA in support of the Rule in a lawsuit before this circuit. *National Petrochemical and Refiners Association v. EPA*, 630 F.3d 145 (D.C. Cir. 2010). NBB nonetheless maintains that, for several reasons, its challenge to the Rule is timely.

First, NBB notes that section 307(b)(1)'s provision for judicial review after the initial sixty days “if such petition is based solely on grounds arising after,” 42 U.S.C. § 7607(b)(1), includes “the occurrence of an event that ripens a claim.” *American Road & Transportation Builders Association v. EPA*, 588 F.3d 1109, 1113 (D.C. Cir. 2009). It follows, says NBB, that approval of the CARBIO proposal conferred on it a newly ripened claim because until that point it had no idea that EPA would “interpret its regulation in an arbitrary way” that would injure its members. Petitioner’s Br. 52.

On this point, NBB relies on our decision in *Coalition for Responsible Regulation, Inc. v. EPA*, 684 F.3d 102, 129–32 (D.C. Cir. 2012), *aff’d in part, rev’d in part sub nom. Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014), in which we held that section 307(b)(1) did not bar industry petitioners’ challenge to a longstanding EPA program when a new rule expanded the program “to never-regulated sources” operated by those industries. *Id.* at 130. The new rule gave petitioners “newly ripened” claims against the program because, as we explained, prior to its expansion the prospect that the program would injure petitioners was too speculative to confer jurisdiction on the court. *Id.* at 131. Here, in stark contrast, NBB members were subject to the Rule on day one, which is why NBB both participated in the rulemaking

process and intervened in litigation challenging the Rule. Instead of defending the Rule, NBB members could have argued then that the Rule’s recordkeeping requirements were insufficient to protect against the importation of nonqualified renewable fuel. Because NBB was well positioned to challenge the Rule on these grounds when it was first promulgated, the CARBIO plan conferred on NBB no “newly ripened” claim. *See Sierra Club de Puerto Rico v. EPA*, 815 F.3d 22, 26–28 (D.C. Cir 2016) (explaining that *Coalition* left unchanged the principle that mere application of a regulation, “without anything more,” falls short of “after-arising grounds.”).

Coalition aside, NBB’s argument that the CARBIO plan gives rise to a newly ripened claim because, prior to it, the recordkeeping regulations “could potentially have been applied by EPA in a manner that would not have injured Petitioner or its members,” reveals the true “grounds” upon which NBB seeks to challenge EPA: the agency’s decision to grant the CARBIO proposal as an *application* of the Rule not the Rule itself. Petitioner’s Br. 52. We consider that issue in Part IV, *infra*.

NBB next argues that its challenge is timely because EPA “reopened” the Rule when it approved the CARBIO proposal. The reopener doctrine allows an otherwise untimely challenge to proceed “where an agency has—either explicitly or implicitly—undertaken to ‘reexamine its former choice.’” *National Mining Association v. Department of the Interior*, 70 F.3d 1345, 1351 (D.C. Cir. 1995) (quoting *Public Citizen v. Nuclear Regulatory Commission*, 901 F.2d 147, 151 (D.C. Cir. 1990)). The CARBIO proposal is, the argument goes, a “constructive” reopening of the Rule, which “occurs if the revision of accompanying regulations ‘significantly alters the stakes of judicial review’ as the result of a change that ‘could

have not been reasonably anticipated.” *National Resources Defense Council v. EPA*, 571 F.3d 1245, 1266 (D.C. Cir. 2009) (per curiam) (quoting *Sierra Club v. EPA*, 551 F.3d 1019, 1025 (D.C. Cir. 2008)). We have described the magnitude of alteration required to invoke this doctrine as a “sea change,” and have declined to apply it when “the basic regulatory scheme remains unchanged.” *Id.* As the Rule expressly establishes that foreign producers may seek approval of an alternative tracking program, the CARBIO plan neither alters that regulatory framework nor works a change that NBB members could not have reasonably anticipated. To the extent NBB argues that the CARBIO proposal is out of line with the Rule, this is—yet again—a challenge to EPA’s application of the Rule rather than to the Rule itself.

For these reasons, NBB’s petition for review of the Rule is untimely under section 307(b)(1) and is, accordingly, dismissed.

IV.

We now turn to the heart of this case—whether EPA erred when it approved the CARBIO plan. NBB challenges EPA’s action on both procedural and substantive grounds.

With respect to procedure, NBB contends that EPA erred when it approved the CARBIO plan via informal adjudication without public notice and comment. As a general matter, “agencies have ‘very broad discretion whether to proceed by way of adjudication or rulemaking.’” *Qwest Services Corp. v. FCC*, 509 F.3d 531, 536 (D.C. Cir. 2007) (quoting *Time Warner Entertainment Co. v. FCC*, 240 F.3d 1126, 1141 (D.C. Cir. 2001)). Not only does the Rule do nothing to fetter this discretion, but it expressly requires public notice and comment for country-wide aggregative compliance

applications, *see* 40 C.F.R. §§ 80.1454(g)(1), 80.1457, while imposing no notice and comment requirement for the approval of alternative tracking plans like the one submitted by CARBIO, *id.* § 80.1454(h).

NBB insists that EPA's approval of the CARBIO proposal was, in effect, a rule that required notice and comment, not an adjudication, because the plan "provides a new set of substantive standards for future conduct, indefinitely applying to a large number of entities," involves "several policy determinations," and leaves "key facts . . . unresolved." Reply 11-12. But we need not meditate on the sometimes-fuzzy line between rulemaking and informal adjudication because EPA's approval of the CARBIO plan was a straightforward instance of adjudication. Only after a two-and-a-half-year process, during which EPA frequently asked for new information and modifications to the proposal and CARBIO submitted several addenda, did the agency approve the CARBIO plan. The nature of that proceeding "reflect[s] a highly fact-specific, case-by-case style" characteristic of adjudication. *Conference Group, LLC v. FCC*, 720 F.3d 957, 965 (D.C. Cir. 2013) (quoting *AT&T v. FCC*, 454 F.3d 329, 333 (D.C. Cir. 2006)). The approval, by its own terms, applies only to the CARBIO program; indeed, NBB never even suggests that an entity other than CARBIO or its producer-members could avail itself of the program without making a separate application to EPA. That the CARBIO plan will survey some yet-unidentified feedstock suppliers hardly transforms the approval into a rulemaking, lest every element of a license application need be set in stone to escape notice and comment. Under NBB's theory, an agency could not by adjudication issue a permit to transport cargo without first knowing who would drive the truck. And as we have explained, the fact that an agency action applies to a "large number of licensees" "carr[ies] [little] weight" in our

analysis. *Goodman v. FCC*, 182 F.3d 987, 994 (D.C. Cir. 1999).

On to NBB's substantive objection: that approval of the CARBIO plan was arbitrary and capricious. Our standard of review under the Clean Air Act is the same as under the Administrative Procedure Act, 5 U.S.C. § 706(2)(A), and we will affirm EPA's action "if the record shows EPA considered all relevant factors and articulated a 'rational connection between the facts found and the choice made.'" *Catawba County v. EPA*, 571 F.3d 20, 41 (D.C. Cir. 2009) (per curiam) (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)). That said, we will not hesitate to overturn agency action as arbitrary and capricious if the agency fails to "comply with its own regulations." *Environmental, LLC v. FCC*, 661 F.3d 80, 85 (D.C. Cir. 2011). Critical to our resolution of this challenge, we give an "extreme degree of deference to EPA when it is evaluating scientific data within its technical expertise." *Catawba*, 571 F.3d at 41 (quoting *City of Waukesha v. EPA*, 320 F.3d 228, 247 (D.C. Cir. 2003) (alteration omitted)). This deference is especially appropriate when EPA "acts under 'unwieldy and science-driven' statutory schemes like the Clean Air Act." *Blewater Network*, 372 F.3d 404, 410 (D.C. Cir. 2004) (quoting *Husqvarna AB v. EPA*, 254 F.3d 195, 199 (D.C. Cir. 2001)).

NBB contends that EPA's approval of the CARBIO proposal was arbitrary and capricious because the plan fails to comply with the alternative tracking requirements set out in 40 C.F.R. § 80.1454(h) in three ways: (1) its omission of importers; (2) its reliance on satellite technology, as well as waybills for verifying the origin of feedstock; and (3) its failure to identify, in advance, participating feedstock producers and other entities in the supply chain. We consider each in turn.

A.

NBB first argues that the CARBIO plan is out of sync with the Rule because it fails to include importers. As designed, the CARBIO proposal tracks the fuel supply chain from farm through biodiesel production, but not thereafter. As NBB points out, however, section 80.1454(h) appears to suggest, in three places, that a survey plan must include producers *and* importers. 40 C.F.R. §§ 80.1454(h)(2)(ii) (specifying that surveys must be “[c]onducted at renewable fuel production *and* import facilities and their feedstock suppliers”) (emphasis added); (h)(2)(iii) (requiring surveys to be “[r]epresentative of all renewable fuel producers *and* importers in the survey area”) (emphasis added); (h)(3)(i) (requiring “feedstock audits of renewable fuel production *and* import facilities in accordance with the survey plan”) (emphasis added).

EPA responds that the best reading of section 80.1454(h) is that only an alternative tracking plan sponsored by RIN-generating importers needs to include importers, whereas the CARBIO proposal is sponsored by RIN-generating producers. “[W]e review an agency’s interpretation of its own regulations with ‘substantial deference.’ ” *In re Sealed Case*, 237 F.3d 657, 667 (D.C. Cir. 2001) (quoting *Thomas Jefferson University v. Shalala*, 512 U.S. 504, 512 (1994)). Even without that deference, however, we can readily adopt EPA’s interpretation given our obligation to “read . . . words ‘in their context and with a view to their place in the overall . . . scheme.’ ” *King v. Burwell*, 135 S. Ct. 2480, 2489 (2015) (quoting *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 133 (2000)).

Section 80.1454(h) specifies that “[a]ny foreign or domestic renewable fuel producer *or* RIN-generating importer” may adopt an alternative tracking requirement.

(emphasis added). Elaborating, section 80.1454(h)(1) states that “a renewable fuel producer *or* importer” must sponsor an independent survey plan in order to comply. (emphasis added). The Rule thus provides that either RIN-generating producers or RIN-generating importers may sponsor an alternative tracking plan, and, by implication, without participation from the other. Given that the purpose behind these recordkeeping provisions is to ensure that entities generating RINs can produce the records needed to verify that renewable fuel comes from qualified land, we agree with EPA that little additional value would flow from requiring a producer, once it has generated the RIN and possesses those records, to continue monitoring its product downstream. By contrast, if an importer is the RIN-generating entity, then biofuel producers are upstream, and an importer can only possess the necessary documentation if it has tracked the product from the farm to its doors. This second scenario is, EPA explains, why the three provisions cited by NBB inelegantly refer to producers *and* importers. Respondent’s Br. 50–51.

Additional textual clues favor EPA’s view. For one thing, as EPA points out, the alternative tracking program is open to any “foreign or *domestic* renewable fuel producer.” 40 C.F.R. § 80.1454(h) (emphasis added). At the moment, domestic producers are subject to the aggregate compliance regime, based on EPA’s determination that the total amount of agricultural land in the United States is no higher than it was in 2007. *Id.* § 80.1454(g). Were the United States to exceed that 2007 baseline and become ineligible for the aggregate compliance regime, then domestic producers could avail themselves of alternative tracking. Under that scenario, it would make no sense to interpret the regulations as requiring a program sponsored by domestic producers to include

“importers”—domestic fuel, unlike domestic beer, is never imported.

Second, the alternative tracking approach must “achieve at least the same level of quality assurance” as individual tracking. *Id.* § 80.1454(h)(2)(iv). Because individual tracking regulations do not require producers to track what importers do with renewable fuel, EPA notes, it would be logical to interpret alternative tracking in the same way. *See id.* § 80.1454(c)(1).

Third, as EPA observes, the regulation’s preamble includes not a single reference to importers. According to EPA, this demonstrates that it “envisioned [alternative tracking] survey plans from renewable biomass *producers* need not reach the actions of importers in the context of the alternative tracking program.” Respondent’s Br. 51; *see* 75 Fed. Reg. at 14,700.

Fourth, reading the regulation in EPA’s preferred manner creates no gap in the regulatory scheme. Approval of an alternative tracking plan only allows participating entities to avail themselves of section 80.1454(h)’s recordkeeping provisions. Non-participating entities, like RIN-generating importers, remain subject to section 80.1454(c)(1)’s individual tracking requirements, as well as to other regulatory provisions that stand independent of the recordkeeping measures in section 80.1454. *See, e.g.*, 40 C.F.R. § 80.1451(d) (directing producers and RIN-generating importers to submit quarterly reports that include “electronic data identifying the land . . . from which each type of feedstock . . . was harvested.”).

Taken together, these features of the regulation demonstrate that the CARBIO plan's omission of importers is consistent with the best reading of the Rule.

B.

NBB's second argument rests on the Rule's requirement that an alternative tracking plan must be "[d]esigned to achieve the same level of quality assurance" as the individual tracking and aggregate compliance options. *Id.* § 80.1454(h)(2)(iv). According to NBB, several features of the CARBIO plan make it less likely than these other recordkeeping regimes to ensure that feedstock comes from qualified land.

One such feature is the plan's use of satellite technology to identify land cleared or cultivated prior to 2007, a methodology NBB calls too "untested" and ill-defined to provide the requisite level of quality assurance. For several reasons, this claim fails on the launch pad.

For one thing, under the regulation, the CARBIO plan must provide "the *same level* of quality assurance" as the individual and aggregate compliance approaches. *Id.* § 80.1454(h)(2)(iv). Because the regulation establishing the petition process for aggregate compliance plans expressly contemplates the use of "[s]atellite imagery or data" to evaluate when land was cleared or cultivated, how could the CARBIO plan possibly fall short for doing precisely the same thing? *See id.* §§ 80.1457(b)(3)(i), (b)(4)(i).

In any event, we can hardly imagine a more appropriate occasion to defer to EPA's expert judgment than its assessment of whether a particular satellite methodology can accurately measure environmental change. Indeed, Petitioner

has identified no basis in the record to upset the agency's conclusion as to CARBIO's use of satellite technology.

The CARBIO proposal includes 23 pages explaining its methodology. Relying predominantly on images collected by NASA's Landsat program, the plan takes electromagnetic data gathered by sensors on Landsat satellites and then employs algorithms to transform that data into categories of land use. EPA is well-positioned to evaluate the proposal's technical feasibility, as the agency itself uses satellite data to measure international land-use changes as part of its analysis of lifecycle greenhouse-gas emissions in the Renewable Fuel Standard program. *See* EPA, *Renewable Fuel Standard Program Regulatory Impact Analysis*, 317 (2010). Moreover, the Landsat program is, since the launch of its first satellite in 1972, "the longest continuous space-based record of Earth's land in existence." NASA, *About Landsat*, http://landsat.gsfc.nasa.gov/?page_id=2. Today, the program produces images capable of spotting "[w]hen a new road appears in the dense forests of Peru[] or a baseball diamond-sized patch of forest is felled in the Republic of Congo." NASA, *Staying Alert: How a New Landsat-Based Tool Spots Deforestation*, <http://landsat.gsfc.nasa.gov/?p=12335>. Researchers have used Landsat data to view and characterize subtle vegetation changes in the Alaskan tundra. Junchang Ju and Jeffrey G. Masek, *The Vegetation Greenness Trend in Canada and US Alaska from 1984-2012 Landsat Data*, 176 *Remote Sensing of Environment* 1 (2016). These do not strike us as markers of an unproven or untrustworthy technology.

NBB believes that the land categories adopted in the plan will result in the misclassification of native forests as qualified land. But the proposal classifies native forests as "other vegetation" and specifies that "go areas" will exclude that category. Without context, NBB's passing reference to

the plan's treatment of wetlands provides an insufficient basis to set the agency's action aside. Petitioner's Br. 42–43. The plan requires CARBIO—not the independent surveyor—to identify go areas. Yet nothing in the Rule precludes such an arrangement and, for good measure, the proposal specifies that a third party will verify its maps on an annual basis.

NBB separately contends that the plan's reliance on satellite imagery to verify historical land use runs afoul of the Rule's requirement that the independent surveyor “[o]btain the *records* and product transfer documents associated with the feedstocks being audited.” 40 C.F.R. § 80.1454(h)(3)(ii) (emphasis added). This is so, it maintains, because these images cannot constitute “records” within the meaning of that provision. NBB gives us no basis—nor can we divine one—for concluding that the expansive term “record” excludes historical satellite images.

NBB also takes issue with the plan's use of waybills. Under the plan, waybills are inspected to ensure feedstock was sent from a zip code that matches an identified go area. If ineligible land falls within a zip code, no feedstock from that zip code may qualify.

NBB thinks this system is inadequate because waybills display only whether feedstock was shipped from a qualifying zip code, so shipments made from *qualifying land* could contain *unqualified feedstock*. In other words, NBB fears that qualified land might launder unqualified feedstock. But any concern about feedstock laundering is equally present under the individual tracking regime and, as noted above, CARBIO's proposal need achieve only the “*same level of quality assurance*” as individual tracking. *Id.* § 80.1454(h)(2)(iv) (emphasis added); *see also id.* § 80.1454(c)(1)(i)(B) (relying on transfer documents from

qualified land to show the quantity of feedstock purchased from each area and to verify the chain of custody for said feedstock). Moreover, the CARBIO proposal, like other alternative tracking programs, includes independent audits to verify compliance by feedstock suppliers, as opposed to the passive recordkeeping requirements of individual tracking.

In a related argument, NBB contends that the CARBIO plan fails to explain how it will prevent mixing of qualified and unqualified feedstock. Again, however, NBB never explains how the CARBIO plan is any more deficient in this respect than the individual tracking regime—the relevant question. Moreover, the CARBIO plan provides, with no direct analogue under the individual tracking provision, for use of a “mass balance” approach, which ensures that RINs are only generated in proportion to the quantity of qualified biomass. Additional regulatory requirements—independent of the recordkeeping provisions at issue—impose a responsibility to segregate qualified renewable fuel from nonqualified renewable fuel. *See, e.g.*, 40 C.F.R. §§ 80.1466(d)(vi)(B), (j)(1).

Having been given no basis to disturb EPA’s conclusion that the CARBIO plan is “[d]esigned to achieve the same level of quality assurance” as the individual tracking and aggregate compliance regimes, we move on to NBB’s final challenge.

C.

Under section 80.1454(h)(2)(iii), “annual compliance surveys . . . must be . . . [r]epresentative of all renewable fuel producers and importers in the survey area and representative of their feedstock suppliers.” Elaborating, the Rule states that the “survey program must include a statistically supportable methodology.” 75 Fed. Reg. at 14,670. Because the CARBIO

proposal does not identify the survey area and all of the feedstock suppliers in advance, NBB argues, EPA failed to “rationally” assess whether the CARBIO program will use a sampling methodology that is “representative” of the feedstock suppliers. Petitioner’s Br. 35–38.

This challenge misses the regulation’s distinction between survey plans and surveys. *See, e.g.*, 40 C.F.R. § 80.1454(h)(1) (stating that “an independent third party conduct[s] a comprehensive program of annual compliance surveys, to be carried out in accordance with a survey plan which has been approved by EPA”). The regulation mandates representative surveys. Only in the report issued to EPA after a survey is complete must the independent surveyor identify “the covered area surveyed.” *Id.* § 80.1454(h)(3)(vii)(D). A survey plan, by contrast, must include “the parties for whom the survey is to be conducted,” as well as a “methodology” for conducting audits. *Id.* § 80.1454(h)(4). But the regulation nowhere mandates that survey plans identify feedstock suppliers or survey areas.

NBB’s theory—that EPA may not approve an alternative tracking program without knowing the full population of feedstock suppliers in advance—scrambles the sequence envisioned in the regulation. Moreover, it is unclear why EPA must know the precise universe of feedstock suppliers in the survey in order to determine, in advance, whether a *methodology* for conducting those surveys is acceptable.

NBB separately questions whether CARBIO’s plan to use a “random sampling methodology with probability proportional to size (PPS) of feedstock amounts supplied for biodiesel production” is a proper statistical methodology. Given our highly deferential standard of review, however, we are more likely to brew renewable fuel ourselves than second-

guess the EPA's determination on this highly technical point based on a fleeting attack by the challenger.

V.

For the foregoing reasons, we dismiss the petition in case number 15-1073 and deny the petition in case number 15-1072.

So ordered.