

**SUSTAINABLE ADVANCED BIOFUEL REFINERS COALITION**

**PETITION FOR RECONSIDERATION AND RULEMAKING**

**Renewable Fuel Standard (RFS) Program:  
Standards for 2023–2025 and Other Changes  
Published at 88 Fed. Reg. 44,468 (July 12, 2023)**

**Docket EPA-HQ-OAR-2021-0427**

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## Table of Contents

|  |    |
|--|----|
| BACKGROUND .....   | 3  |
| I.    Statutory Provisions Governing Reconsideration.....  | 3  |
| II.   Biodiesel Represents all of the Goals of the RFS Program .....   | 3  |
| III.  History of Biodiesel Under the RFS Program .....   | 6  |
| IV.   The Set Rule.....  | 9  |
| GROUND FOR RECONSIDERATION .....   | 14 |
| I.    EPA Must Reconsider its Implementation of the Biomass-Based Diesel<br>Program, Which has Rendered it Meaningless and is Counter to Statutory<br>Directives and Goals .....                               | 14 |
| II.   EPA Cannot Rely on the Definition of “Biomass-Based Diesel” to Ignore<br>Reality or its Statutory Obligations.....   | 22 |
| III.  EPA Must Reconsider its Inclusion of Jet Fuel as Being Eligible for<br>Generating Biomass-Based Diesel RINs .....  | 25 |
| IV.   Even Under EPA’s (Incorrect) Reading of the Definition of “Biodiesel” in<br>the Statute, EPA Failed to Respond to Comments Regarding the<br>Alternative to Including a Subcategory for “Biodiesel” ..... | 29 |
| V.    EPA Must Revise the Equivalence Values for Renewable Diesel .....  | 31 |
| VI.   EPA Must Undertake a Rulemaking to Ensure Renewable Diesel and Jet<br>Fuel Are Meeting the Regulatory Requirements .....   | 34 |
| CONCLUSION.....  | 36 |
| EXHIBITS   |    |

**BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

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**In Re:**

**Renewable Fuel Standard (RFS) Program:  
Standards for 2023-2025 and Other Changes  
88 Fed. Reg. 44,468 (July 12, 2023)**

**40 C.F.R. Part 80, Subpart M, 40 C.F.R. § 80.2.**

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**Docket EPA-HQ-OAR-2021-0427**

**PETITION FOR RECONSIDERATION AND RULEMAKING**

Pursuant to Section 307(d)(7)(B) of the Clean Air Act, 42 U.S.C. § 7607(d)(7)(B), and the Administrative Procedure Act (APA), 5 U.S.C. § 553(e), the Sustainable Advanced Biofuel Refiners Coalition (SABR) respectfully submits this petition for reconsideration of the U.S. Environmental Protection Agency’s (EPA) recent final rule entitled “Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes,” which was published at 88 Fed. Reg. 44,468 (July 12, 2023) (referred to as “Final Set Rule”). The petition for reconsideration is being submitted within the time required for seeking judicial review under Section 307(b) of the Clean Air Act, 42 U.S.C. § 7607(b)(1). SABR petitions EPA to address the disparate treatment of biodiesel under the RFS program that has caused the displacement of biodiesel by renewable diesel and sustainable aviation fuel as opposed to supporting its *growth* as Congress envisioned and required. Although EPA could have, and should have, resolved several of these issues in the Final Set Rule and can do so on reconsideration, SABR also petitions EPA to conduct a rulemaking to amend its regulations at 40 C.F.R. Part 80, Subpart M and 40 C.F.R. § 80.2 pursuant to the APA.<sup>1</sup> Because renewable diesel continues to displace biodiesel production in the biomass-based diesel market (as recently confirmed by the U.S. Energy Information Administration (EIA)),<sup>2</sup> EPA is currently in violation of the Clean Air Act, the RFS program imposes annual requirements, and the volumes for 2026 are due by November 2024, we believe any delay in responding to this petition would be unreasonable.

SABR is an association of stakeholders that have invested in building out America’s first advanced biofuel—biodiesel. SABR includes stakeholders from every link in the value chain from feedstock growers to biodiesel producers, distributors, retailers, and consumers, as well as infrastructure, products, and services suppliers. SABR pursues an all-of-the-above energy policy that includes biodiesel and a diversity of feedstocks to reduce greenhouse gas (GHG) emissions in a cost-effective and sustainable manner. Members of SABR have invested heavily in response

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<sup>1</sup> The Final Set Rule moved the definitions in 40 C.F.R. § 80.1401 to § 80.2, effective September 11, 2023. These actions may also impact company specific pathways approved through 40 C.F.R. § 80.1416.

<sup>2</sup> EIA, *In 2023, U.S. renewable diesel production capacity surpassed biodiesel production capacity*, Sept. 5, 2023, <https://www.eia.gov/todayinenergy/detail.php?id=60281>.

to the RFS program and have a direct and significant interest in EPA’s implementation of the RFS program, experiencing the impacts of displacement of biodiesel by renewable diesel. Because of these interests, SABR submitted comments on the proposed rule, testified at EPA’s public hearing, and engaged in stakeholder meetings with EPA. These comments and testimony are incorporated by reference herein.<sup>3</sup>

Under the RFS program, Congress specifically sought to promote biodiesel production by, among other things, establishing a distinct “biomass-based diesel” category within the advanced biofuel program. Where the RFS program sets the market for “biomass-based diesel,” EPA’s implementation of the program affects the ability of biodiesel producers to compete in that market. As such, biodiesel producers have standing to challenge EPA’s implementation of the RFS program.<sup>4</sup> This standing is evident by the testimony and comments of members of SABR, describing the harms they are experiencing as a result of EPA’s implementation of the RFS program, which will continue and get worse under the final rule unless EPA undergoes reconsideration or a new rulemaking.<sup>5</sup>

In summary, SABR petitions EPA to initiate reconsideration and/or rulemaking addressing the following.

- EPA must reconsider and revise its implementation of the biomass-based diesel program, which EPA has essentially rendered meaningless, to promote biodiesel (methyl esters) in compliance with the statute and Congressional intent. We believe the statute provided for a biodiesel-only category, but EPA also failed to address the alternative approach of establishing a subcategory for biodiesel.
- EPA must reconsider and revise its definition of “biomass-based diesel,” which includes reference to “jet fuel,” and pathways allowing “jet fuel” to generate D4 RINs as “biomass-based diesel,” including EPA’s recent approval of a pathway for ethanol-to-jet fuel.
- EPA must revise the equivalence value for renewable diesel and, as necessary, for its co-products, including jet fuel (also referred to as sustainable aviation fuel).
- EPA must review and revise the RFS regulations, as necessary, to ensure the requirements of the Clean Air Act are being met and to protect against biomass-based diesel or RIN-market manipulation.

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<sup>3</sup> EPA-HQ-OAR-2021-0427-0428; EPA-HQ-OAR-2021-0427-0436; EPA-HQ-OAR-2021-0427-0813; EPA-HQ-OAR-2021-0427-1125.

<sup>4</sup> See, e.g., *Alon Ref. Krotz Springs, Inc. v. EPA*, 936 F.3d 628, 664-65 (D.C. Cir. 2019); *Nat’l Biodiesel Bd. v. EPA*, 843 F.3d 1010, 1015-1016 (D.C. Cir. 2016).

<sup>5</sup> EPA-HQ-OAR-2021-0427-0437; EPA-HQ-OAR-2021-0427-0438; EPA-HQ-OAR-2021-0427-0439; EPA-HQ-OAR-2021-0427-0440; EPA-HQ-OAR-2021-0427-0723; EPA-HQ-OAR-2021-0427-0773; EPA-HQ-OAR-2021-0427-0826 (EPA-HQ-OAR-2021-0427-0669); see also EPA-HQ-OAR-2021-0427-0547.

## BACKGROUND

### I. Statutory Provisions Governing Reconsideration

Under Section 307(d)(7)(B) of the Clean Air Act, the Administrator is required to grant a petition for reconsideration upon a demonstration that it was impracticable to raise a particular objection during the period for public comment (but within the time specified for judicial review), and the objection is of central relevance to the outcome of the rule.<sup>6</sup> Reconsideration petitions also may be the appropriate forum to raise procedural violations.<sup>7</sup> In addition, EPA also has the authority to initiate reconsideration of an action even if the agency concludes that the standards of Section 307(d)(7)(B) have not been met.<sup>8</sup>

In the Final Set Rule, EPA expressed authority to reconsider even the volumes and standards previously set under the RFS program.<sup>9</sup> EPA stated that it “is committed to successful implementation of the program,” noting it “will monitor a set of indicators that will help us assess the impact from implementation of the final Set rule volumes to determine whether EPA should consider adjusting those volumes or taking other action.”<sup>10</sup> The Final Set Rule further states that “EPA has authority to reconsider its volumes and standards, and has shown its willingness to do so when extreme and unforeseen events require it, such as revising the 2020 and 2021 volumes to account for changes due to the COVID–19 pandemic.”<sup>11</sup> While we believe there are limits to EPA’s claimed authority to reconsider actions taken to implement the RFS program, such authority is present in this case.<sup>12</sup>

EPA also must allow for petitions to amend or repeal regulations under the APA, 5 U.S.C. § 553(e). EPA has initiated rulemaking procedures to correct regulations that are violative of the statute.<sup>13</sup> Such is the case here.

### II. Biodiesel Represents all of the Goals of the RFS Program

EPA has recognized “the long and important history of biodiesel’s role in the RFS program, and its contribution to national energy security as well as to local economies.”<sup>14</sup> Biodiesel was the first true success story of the RFS program. Investments made in response to

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<sup>6</sup> 42 U.S.C. § 7607(d)(7)(B).

<sup>7</sup> *Id.* § 7607(d)(9).

<sup>8</sup> *See, e.g.*, 88 Fed. Reg. 28,918, 28,925 (May 4, 2023) (undertaking reconsideration where EPA “recognized that aspects of this action warrant careful review, and potential modification, to ensure our actions are fully consistent with the requirements of the Clean Air Act and the Regional Haze Rule”); 86 Fed. Reg. 35,795, 35,795 (July 7, 2021) (“EPA has the authority to review and reconsider, on its own initiative, previous decisions and actions.”).

<sup>9</sup> 88 Fed. Reg. at 44,474.

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*; *see also* 86 Fed. Reg. 72,436, 72,444 (Dec. 21, 2021) (“We generally have authority to reconsider and revise previously finalized RFS standards.”).

<sup>12</sup> On the other hand, we did not agree that EPA properly reconsidered the 2020 and 2021 volumes to account for changes due to the COVID-19 pandemic.

<sup>13</sup> *See, e.g.*, Rescinding the Rule on Increasing Consistency and Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process, 88 Fed. Reg. 44,710 (July 13, 2023).

<sup>14</sup> *See* Letter from EPA to SABR Coalition, dated Nov. 11, 2022, at 2 (EPA-HQ-OAR-2021-0427-0428).

the RFS program, resulted in the growth of biodiesel consumption in the United States from 260 million gallons in 2010 to over 2 billion gallons in 2016, according to EIA data.<sup>15</sup>

The unique and important aspects of biodiesel production compared to other biofuels include, but are not limited to, the following.<sup>16</sup>

Biodiesel provides substantial local benefits across the United States. “[U]nlike corn ethanol plants that are almost exclusively located in the Midwest, biodiesel plants are more scattered around the country.”<sup>17</sup> This reflects the diversity of abundant regional feedstocks that are used for biodiesel.<sup>18</sup> This also reflects the investments made in infrastructure to accommodate the growth of biodiesel.<sup>19</sup> Biodiesel facilities are also more likely to be located near lower income or minority populations, providing jobs and local benefits, than other biofuels.<sup>20</sup>

Biodiesel also provides benefits to consumers. EPA’s Regulatory Impact Analysis found biodiesel to have a lower production cost than renewable diesel.<sup>21</sup> EPA’s response to comments states that “with the exception of RINs generated for fuels that are not blended into gasoline and diesel, RINs generally do not increase or decrease the price of transportation fuel.”<sup>22</sup> As SABR explained, however, biodiesel is typically blended by marketers and retailers, which has allowed for the reduction of prices at the pump.<sup>23</sup>

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<sup>15</sup> EIA, *U.S. Biodiesel Production, Exports, and Consumption (Million Gallons)*, Jan. 9, 2023, available at <https://afdc.energy.gov/data/10325>.

<sup>16</sup> See generally EPA-HQ-OAR-2021-0427-0813 at 26-38.

<sup>17</sup> EPA, *Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes: Regulatory Impact Analysis*, at 83 (2023) (“EPA RIA”).

<sup>18</sup> See, e.g., Hui Xu, et al., *Life Cycle Greenhouse Gas Emissions of Biodiesel and Renewable Diesel Production in the United States*, *Environ. Sci. Technol.*, 2022, 56, 7512, 7512 (“Over the past decade, feedstocks used for BD and RD production in the U.S. have been more diversified.”), available at <https://pubs.acs.org/doi/epdf/10.1021/acs.est.2c00289>. According to EMTS data, in 2023, biodiesel has been produced from soybean oil, canola oil, distillers corn oil, other biogenic waste oils/fats/greases, and “all other feedstock.” EPA, *RINs Generated Transactions – Feedstock Summary*, <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rins-generated-transactions> (data as of Aug. 10, 2023).

<sup>19</sup> See generally Bates White Economic Consulting, *Biodiesel Distribution in the U.S. and Implications for RFS2* Volume Mandates (2016), available at [https://www.bateswhite.com/media/publication/116\\_2016.07.11%20Biodiesel%20paper%20final.pdf](https://www.bateswhite.com/media/publication/116_2016.07.11%20Biodiesel%20paper%20final.pdf); see also EPA-HQ-OAR-2021-0427-0749 at 7.

<sup>20</sup> EPA RIA at 380.

<sup>21</sup> Compare EPA RIA at 401 (soybean biodiesel costs per gallon - \$6.83), with EPA RIA at 404-405 (soybean renewable diesel costs per gallon - \$7.24 to \$7.61). While renewable diesel is more expensive to produce, EPA only really discusses the *biodiesel* tax credits and subsidies, and fails to address the revised tax credit under the Inflation Reduction Act that favors sustainable aviation fuel (in other words, renewable diesel plants as EPA has assessed them) and state tax credits that favor sustainable aviation fuel. *Id.* at 86-87. This is despite acknowledging the new tax provisions “may result in increasing volumes of SAF produced from existing renewable diesel production facilities.” 88 Fed. Reg. at 44,485.

<sup>22</sup> EPA, *Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes*, at 167 (2023) (“2023 RTC”).

<sup>23</sup> EPA-HQ-OAR-2021-0427-0813 at 16; see also EPA-HQ-OAR-2021-0427-0749 at 10 (“The only reason that any fuel marketer incorporates biomass-based diesel into their diesel fuel supply is to make the finished product less expensive.”).

Biodiesel provides environmental benefits.<sup>24</sup> “EPA’s MOVES3 model assumes no emission impacts of biodiesel fuel for engines meeting 2007 and later standards due to their highly efficient emission controls.”<sup>25</sup> For pre-2007 model year vehicles, the model found that a B20 blend reduces total hydrocarbon emissions by 14.1%, reduces carbon monoxide emissions by 13.8%, and reduces particulate matter emissions by 15.6%.<sup>26</sup> While EPA also indicates that B20 blends may increase NOx emissions in pre-2007 model year vehicles by 2.2%, several advancements in biodiesel fuel quality and NOx emission control techniques have been researched and developed to address this issue.<sup>27</sup>

Biodiesel also provides substantial greenhouse gas emissions reductions.

Life-cycle GHG emissions reductions for producing biodiesel and RD from soybean, canola, and carinata oils range from 40% to 69% after considering land-use change estimations, compared with petroleum diesel. Converting tallow, used cooking oil, and distillers corn oil to biodiesel and RD could achieve higher GHG reductions of 79% to 86% lower than petroleum diesel. The biodiesel route has lower GHG emissions for oilseed-based pathways than the RD route because transesterification is less energy-intensive than hydro-processing.<sup>28</sup>

EPA expects that “renewable diesel will represent an increasing percentage of total BBD in future years.”<sup>29</sup> This, however, is not due just to the overall increase in volumes as EPA attempts to assert, but due to *decreasing volumes of biodiesel*. “Since 2021, renewable diesel and other biofuels production capacity has more than tripled in the United States. Over the same period, biodiesel capacity has declined 13%.”<sup>30</sup> “Biodiesel capacity declined by 169 million gal/y from January 2022 to January 2023.”<sup>31</sup> EPA’s own projections from its Regulatory Impact Analysis (at 319) shows a declining trendline for biodiesel production:

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<sup>24</sup> A review of renewable diesel’s environmental benefits have gone largely unexplored by EPA. *See, e.g.*, EPA RIA at 117.

<sup>25</sup> EPA RIA at 118.

<sup>26</sup> *Id.* at 118.

<sup>27</sup> *See, e.g.*, Targray, *Catanox Biodiesel Additive – CARB-certified Low Cetane Additive Formula for the California Market*, <https://www.targray.com/biofuels/biodiesel/additive> (last visited Sept. 8, 2023); M. Senthil et al., *Experimental investigation on the impact of NOx emission in CI engine fueled with rapeseed biodiesel with antioxidant additives*, *Materials Today: Proceedings*, Feb. 24, 2023, available at <https://www.sciencedirect.com/science/article/abs/pii/S2214785323006958>.

<sup>28</sup> Hui Xu, et al., *supra* n.18, abstract.

<sup>29</sup> EPA RIA at 299.

<sup>30</sup> EIA, *In 2023, U.S. renewable diesel production capacity surpassed biodiesel production capacity*, Sept. 5, 2023, <https://www.eia.gov/todayinenergy/detail.php?id=60281>.

<sup>31</sup> *Id.*

**Table 6.2.6-8: Projected Domestic Production and Net Imports of Renewable Diesel Produced from Soybean Oil (million gallons)**

| Year                        | 2022  | 2023  | 2024  | 2025  |
|-----------------------------|-------|-------|-------|-------|
| <b>Biodiesel</b>            |       |       |       |       |
| Canola Oil                  | 267   | 292   | 307   | 323   |
| DCO                         | 130   | 116   | 89    | 63    |
| FOG                         | 346   | 321   | 303   | 285   |
| Soybean Oil                 | 995   | 982   | 968   | 953   |
| <b>Renewable Diesel</b>     |       |       |       |       |
| Canola Oil                  | 0     | 216   | 182   | 283   |
| DCO                         | 209   | 205   | 239   | 272   |
| FOG <sup>a</sup>            | 859   | 1,122 | 1,088 | 1,160 |
| Soybean Oil                 | 293   | 604   | 671   | 874   |
| <b>BBD Total</b>            |       |       |       |       |
| All Feedstocks <sup>a</sup> | 3,099 | 3,857 | 3,846 | 4,212 |

<sup>a</sup> Includes 14 million gallons of Jet Fuel projected to be supplied each year from 2023–2025

EPA states: “We project slight decreases in the volume of biodiesel used in the U.S. as new renewable diesel producers are able to out-compete some existing biodiesel producers for limited feedstocks.”<sup>32</sup> These “slight decreases” would occur each year, where EPA estimates 1.62 billion gallons of biodiesel in 2025, which would be the lowest volume of U.S. production since 2017, according to EIA (<https://afdc.energy.gov/data/10325>). Indeed, even though EPA increased the volume requirements from the proposed rule to the final rule based on its assessment of additional feedstock compared to the proposal, EPA *projected less biodiesel* in the final rule.<sup>33</sup> EPA’s implementation of the RFS program is going backwards for biodiesel. Where Congress sought to set demand for these fuels through the RFS program, EPA cannot simply claim that it is other market factors that are causing this, not the RFS. Moreover, EPA acknowledges that “lower BBD volumes would result in fewer energy security benefits, lower domestic employment in the biofuels industry and reduced income for biofuel feedstock producers.”<sup>34</sup> In summary, the displacement of biodiesel—a lower cost fuel with higher GHG emissions reductions—by renewable diesel and sustainable aviation fuel results in less carbon reduction at a higher cost to society, which is counter to the goals of the RFS.

### III. History of Biodiesel Under the RFS Program

EIA reports biodiesel production in the United States started at 9 million gallons in 2001 and grew to 91 million in 2005 (<https://afdc.energy.gov/data/10325>). In May 2005, then President Bush spoke at a biodiesel plant in Virginia in support of passing the RFS program, stating “Biodiesel is one of our nation’s most promising alternative fuel sources.”<sup>35</sup> The goal of the program was to expand the use of ethanol *and biodiesel*.<sup>36</sup> Later that same year, Congress first established the RFS program to address “renewable content of gasoline.”<sup>37</sup> While focused

<sup>32</sup> 88 Fed. Reg. at 44,488.

<sup>33</sup> In EPA’s Draft Regulatory Impact Analysis (at 367), EPA projected 1.65 billion gallons for 2025. Its projected biodiesel volumes were less in the final rule than in the proposal for 2022–2025.

<sup>34</sup> 2023 RTC at 90.

<sup>35</sup> Office of the Press Secretary, President Discusses Biodiesel and Alternative Fuel Sources, May 16, 2005, <https://georgewbush-whitehouse.archives.gov/news/releases/2005/05/20050516.html>.

<sup>36</sup> See, e.g., House Committee on Agriculture June 28, 2005 Press Release, *Gutknecht Introduces Renewable Fuels Act of 2005*, <https://agriculture.house.gov/news/documentsingle.aspx?DocumentID=1847>.

<sup>37</sup> Pub. L. No. 109-58, § 1501 (2005).



on gasoline, Congress defined renewable fuel to include “biodiesel,” defined through incorporation of the definition at 42 U.S.C. § 13220(f), and allowed for the generation of credits for “biodiesel.”

In first implementing the RFS program (often referred to as RFS1), EPA interpreted “the Act as allowing regulated parties to demonstrate compliance based on any fuel that meets the statutory definition for renewable fuel, whether it is directly blended with gasoline or not.”<sup>38</sup> Regarding biodiesel, EPA acknowledged “mono-alkyl esters which meet ASTM specification D-6751” is “the most common meaning of the term.”<sup>39</sup> Nonetheless, providing no statutory analysis, EPA simply stated that the statutory term “biodiesel” included both biodiesel *and* non-ester renewable diesel, but, for purpose of the RFS program, it defined them separately in the regulations.<sup>40</sup> This recognized the distinct differences between biodiesel and renewable diesel.

Where there were no specified categories under RFS1, the biodiesel industry supported the regulatory definition of biodiesel, as the reference to the ASTM D6751 specification provided fuel quality assurances to the marketplace. Comments submitted by Neste—a “Northern European refiner” of renewable diesel—supported a broad reading of the definition of “biodiesel,” and, while also not engaging in a review of the language, noted that “various State officials” had indicated that “they are unaware that there are other types of ‘biodiesel’ technologies commercially available.”<sup>41</sup> To indicate that there were other technologies, Neste recommended that EPA clearly define “biodiesel” as including “both ‘biodiesel (mono-alkyl ester)’ and ‘non-ester renewable diesel.’”<sup>42</sup> These comments are ironic in light of Neste’s significant marketing campaign to distinguish renewable diesel from biodiesel, while equating it to petroleum diesel.<sup>43</sup> In other words, for the market, renewable diesel was equated to *petroleum diesel*, while for the purposes of the RFS program, renewable diesel producers sought to ride the wave of biodiesel.

EPA declined to finalize the definition requested by Neste, but did finalize those separate definitions of biodiesel and renewable diesel. EPA claimed that the separate definitions implemented the statutory definition while “recognizing the unique history and role of mono-alkyl esters meeting ASTM D-6751.”<sup>44</sup> Because EPA treated any fuel meeting the definition of “renewable fuel” as eligible to participate in the RFS program, its regulations treated “biodiesel” and “renewable diesel” differently, and there was no renewable diesel production in the United States at the time, there was no reason for the industry to raise concerns with EPA’s final rule.

While biodiesel was included in the initial RFS program, the limited volumes required were easily met by ethanol use in gasoline. In 2007, Congress expanded the RFS program to require renewable fuel in all transportation fuel and established a separate “biomass-based

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<sup>38</sup> 71 Fed. Reg. 55,552, 55,567 (Sept. 22, 2006).

<sup>39</sup> *Id.* at 55,569.

<sup>40</sup> *Id.* at 55,570.

<sup>41</sup> EPA-HQ-OAR-2005-0161-0191 at 1-2.

<sup>42</sup> *Id.* at 2.

<sup>43</sup> See, e.g., <https://www.neste.com/renewable-solutions/how-renewable-diesel-different-biodiesel> (“It is not called biodiesel. Biodiesel refers to ‘traditional’ biofuel, and the chemical composition of such fuel is different from that of both fossil diesel and renewable diesel.”).

<sup>44</sup> 72 Fed. Reg. 23,900, 23,917, 23,993 (May 1, 2007).

diesel” category.<sup>45</sup> Congress incorporated the same definition of “biodiesel” in 42 U.S.C. § 13220(f) in its definition of biomass-based diesel.<sup>46</sup> It also continued to allow the appropriate amount of credits for “biodiesel.”<sup>47</sup> In its regulations implementing the amendments to the RFS program, EPA again finalized different definitions of biodiesel and renewable diesel, but determined both could be used to meet the required “biomass-based diesel” volumes, merely referring to the “same very broad definition of ‘biodiesel’ that was in EPA Act.”<sup>48</sup> EPA determined that the definition “includes any diesel fuel made from biomass feedstocks.”<sup>49</sup> At the time, there was still no renewable diesel (to our knowledge) produced in the United States. The first reported gallons of renewable diesel supply in the United States was in 2011 ([https://afdc.energy.gov/fuels/renewable\\_diesel.html](https://afdc.energy.gov/fuels/renewable_diesel.html)). And, the required volumes presented growth *for both fuels*, though EPA’s own projections had biodiesel as the primary fuel that would fill the biomass-based diesel category through 2022.<sup>50</sup> And, until recently, that had been the case. In 2011, biodiesel D4 RINs (1.616 billion) made up almost 96% of total biomass-based diesel D4 RINs generated (1.692 billion), according to EPA EMTS data.<sup>51</sup> In 2023 (through July), biodiesel D4 RINs (1.815 billion) now makes up only 42% of total biomass-based diesel D4 RINs generated (4.325 billion).

The biomass-based diesel category is “nested” in the advanced biofuel category. Congress listed specific volumes for biomass-based diesel through 2012, after which time EPA was to set the volumes based on a list of statutory factors and such volumes had to be at least 1 billion gallons.<sup>52</sup> For advanced biofuels, on the other hand, Congress specified volumes through 2022.<sup>53</sup> Because the statute specified volumes for advanced biofuels through 2022, EPA limited the growth in biomass-based diesel based on the advanced biofuel volumes to maintain space for other advanced biofuels, effectively capping the biomass-based diesel volumes based on the (non-cellulosic) advanced biofuel statutory volumes. EPA then only increased the volume of biomass-based diesel by the “same energy-equivalent amount” of the increase in non-cellulosic advanced biofuel in the statute.<sup>54</sup> EPA found: “Historically, the BBD standard has not independently driven the use of BBD in the market. This is due to the nested nature of the standards and the competitiveness of BBD relative to other advanced biofuels. Instead, the advanced biofuel standard, and occasionally the total renewable fuel standard, have driven the use of BBD in the market.”<sup>55</sup>

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<sup>45</sup> Pub. L. No. 110-140 (2007).

<sup>46</sup> 42 U.S.C. § 7545(o)(1)(D).

<sup>47</sup> 42 U.S.C. § 7545(o)(5)(A).

<sup>48</sup> 74 Fed. Reg. 24,904, 24,923 (May 26, 2009).

<sup>49</sup> 75 Fed. Reg. 14,670, 14,686 (Mar. 26, 2010).

<sup>50</sup> *See, e.g.*, 75 Fed. Reg. at 14,741.

<sup>51</sup> <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rins-generated-transactions> (data as of Aug. 10, 2023).

<sup>52</sup> 42 U.S.C. § 7545(o)(2)(B)(ii).

<sup>53</sup> *Id.*

<sup>54</sup> 87 Fed. Reg. 39,600, 39,625 (July 1, 2022).

<sup>55</sup> *Id.*

#### IV. The Set Rule

Through compliance year 2022, EPA was required to implement the minimum required volumes, including biomass-based diesel, by calculating a percentage standard for each category under 42 U.S.C. § 7545(o)(3). EPA previously pointed to this provision to contend that it could only set one percentage standard for the four listed categories in the statute—renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel.<sup>56</sup> For compliance years 2023 and later, EPA is required to set the minimum applicable volumes under the RFS program, based on factors identified by Congress in the statute, which required a review of implementation of the program.<sup>57</sup> In the proposed Set rule, EPA recognized that “[f]or years after 2022, the CAA does not expressly direct EPA to continue to implement volume requirements through percentage standards established through annual rulemakings.”<sup>58</sup> EPA also referenced Congress’ directive that it “review ‘the implementation of the program’ in years during which Congress provided statutory volumes.”<sup>59</sup> Taken together, EPA found that “Congress provided EPA discretion as to how to implement the volume requirements of RFS program in years 2023 and beyond.”<sup>60</sup> EPA nonetheless proposed to continue to set percentage standards with the difference for the Set rule being that it would do so for three years (2023-2025) rather than annually.<sup>61</sup>

Recognizing the greater discretion EPA has for purposes of implementing the volumes under the Set rule, SABR (previously referred to as Small Advanced Biofuel Refiners Coalition) submitted comments on the proposed rule for the 2022 volumes, raising concerns that the current structure and implementation of the biomass-based diesel program was resulting in renewable diesel displacing biodiesel.<sup>62</sup> SABR urged EPA to consider these impacts in the upcoming “Set Rule” for compliance years 2023 and later. EPA responded saying: “To the extent the commenter is asking EPA *to exercise our discretion* to revise the implementing regulations to create a separate standard for small advanced biofuel refiners, that request is beyond the scope of the rulemaking.”<sup>63</sup>

SABR sent additional letters to EPA in August and November of 2022, again noting its concerns with the displacement of biodiesel by renewable diesel and declining market share for biodiesel, proposing alternative means of implementing the biomass-based diesel program.<sup>64</sup> While EPA again referred to the definition of “biodiesel” incorporated into the statute, EPA indicated that they will consider the request to seek comment on the SABR proposal as it develops the Set rule proposal, noting:

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<sup>56</sup> EPA, *Renewable Fuel Standard (RFS) Program: RFS Annual Rules – Response to Comments*, at 56-57 (2022) (EPA-HQ-OAR-2021-0427-0045).

<sup>57</sup> 42 U.S.C. § 7545(o)(2)(B).

<sup>58</sup> 87 Fed. Reg. 80,582, 80,589 (Dec. 30, 2022).

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> *Id.*

<sup>62</sup> EPA-HQ-OAR-2021-0324-0463 (Ex. 1 to EPA-HQ-OAR-2021-0427-0813).

<sup>63</sup> EPA-HQ-OAR-2021-0427-0045 at 342 (emphasis added).

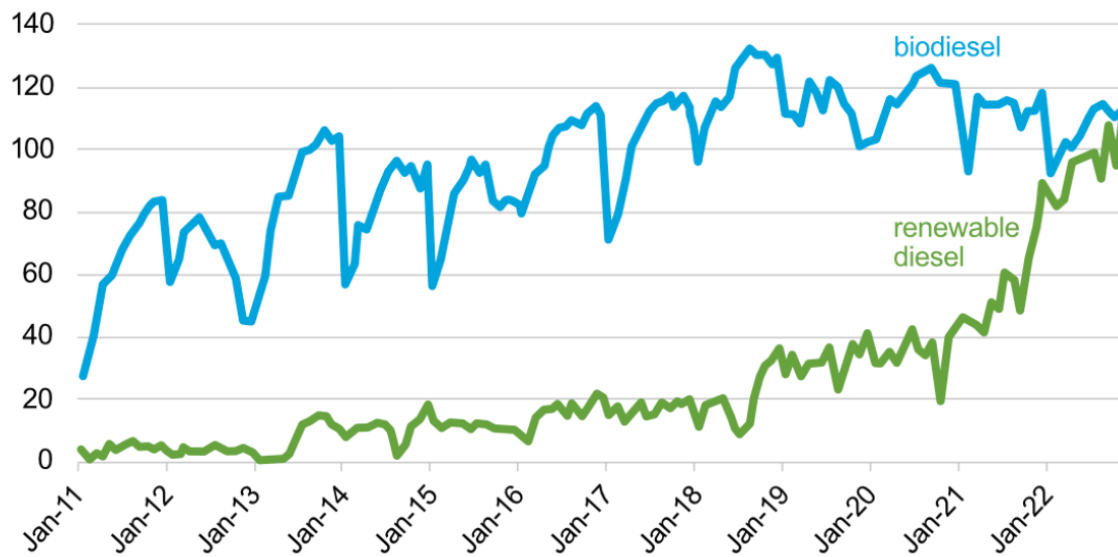
<sup>64</sup> See Letter from SABR Coalition to EPA, dated Aug. 31, 2022 (EPA-HQ-OAR-2021-0427-0428); Letter from SABR Coalition to EPA, dated Nov. 14, 2022 (EPA-HQ-OAR-2021-0427-0428).

We recognize the long and important history of biodiesel's role in the RFS program, and its contribution to national energy security as well as to local economies. We look forward to continued dialogue with you over the future role of biodiesel under the RFS program, and look forward to your comments on the proposal.<sup>65</sup>

It was in November of 2022 that renewable diesel production in the United States first surpassed U.S. biodiesel production, with U.S. biodiesel production projected to be on a continued downward trajectory compared to earlier years, as illustrated in the following tables from EIA.<sup>66</sup>

Figure 1. U.S. biodiesel and renewable diesel production (January 2011-November 2022)

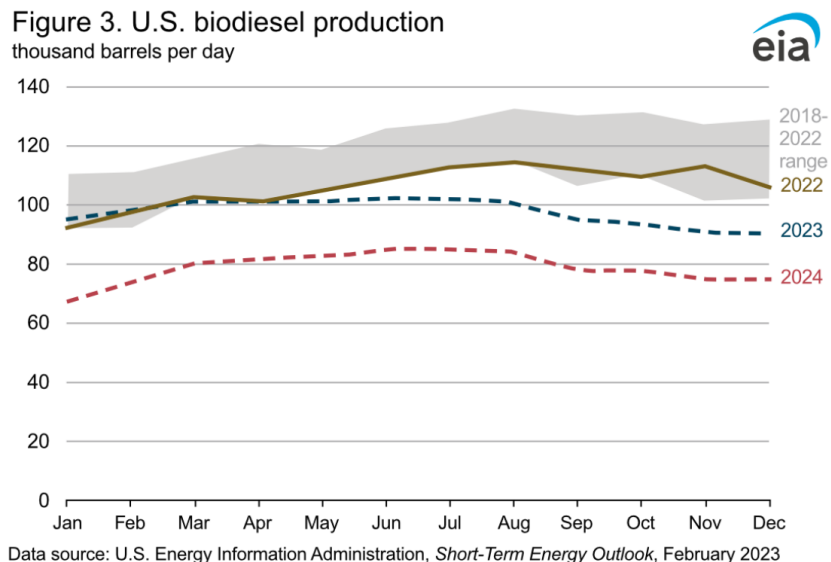
thousand barrels per day



Data source: U.S. Energy Information Administration, *Petroleum Supply Monthly* for renewable diesel data beginning in January 2020 and all biodiesel data; *Monthly Energy Review* for renewable diesel data prior to January 2020

<sup>65</sup> See, e.g., Letter from EPA to SABR Coalition, dated Nov. 11, 2022, at 2 (EPA-HQ-OAR-2021-0427-0428); see also 88 Fed. Reg. at 44,469-44,470.

<sup>66</sup> These tables are obtained from *EIA: Renewable Diesel Growth at Expense of Biodiesel*, Oil & Energy Online, [https://oilandenergyonline.com/articles/all/eia-renewable-diesel-growth-expense-biodiesel/?hss\\_channel=lcp-1205896](https://oilandenergyonline.com/articles/all/eia-renewable-diesel-growth-expense-biodiesel/?hss_channel=lcp-1205896) (last visited Sept. 9, 2023).



In the proposed rule, EPA did request comment on “the proposed increase to the BBD standard and whether other options should be considered.”<sup>67</sup> Effectively, this entailed alternative options to how EPA has set the biomass-based diesel volumes in the past, which it was basically proposing to follow in the proposal (i.e., having advanced biofuels do the work for biomass-based diesel and limiting the increase only to the increase it provided in the total advanced biofuel category). SABR provided such an alternative in its comments. EPA also requested comment on its approach to continuing to set percentage standards similar to that for compliance years 2022 and earlier.<sup>68</sup> Again, SABR provided alternative approaches to using the same percentage standards. SABR also testified at the public hearing, again, outlining its proposed alternatives.

In response to SABR’s comments, however, EPA simply referenced the definition of “biodiesel” in 42 U.S.C. § 13220(f) without (again) engaging in any real statutory analysis.<sup>69</sup> While seeking to rely on the “plain language of EISA,”<sup>70</sup> EPA’s Final Set Rule, however, is replete with instances of its going beyond those plain terms, rendering its argument hollow.<sup>71</sup> We believe EPA’s failure to assess and respond to SABR’s comments violates the requirements of the Clean Air Act, and the Final Set Rule is arbitrary and capricious on several grounds and is an abuse of EPA’s discretion. As such, SABR has submitted a petition for review to the U.S. Court of Appeals for the District of Columbia Circuit within the time limits in 42 U.S.C. § 7607(b).

<sup>67</sup> 87 Fed. Reg. at 80,626.

<sup>68</sup> *Id.* at 80,589.

<sup>69</sup> 2023 RTC at 58.

<sup>70</sup> *Id.*

<sup>71</sup> For example, where the statute requires EPA to “ensure” the volumes are met, EPA finalized three years of percentage standards over the objections of the public with the knowledge that this adds uncertainty as to whether the volumes will be met. 88 Fed. Reg. at 44,520. EPA also stated that, if small refinery exemptions are subsequently granted for compliance years 2023-2025, which EPA knows will reduce the actual volume requirements, it will not adjust the volume obligations for those years. *Id.* at 44,521.

EPA also stated that it considers “the changes requested by the commenter to be beyond the scope of the proposed rule.”<sup>72</sup> While acknowledging its obligation to review the implementation of the program, EPA claims this “does not enable EPA to adopt significant programmatic changes in a final rule without giving adequate notice and the opportunity for public comment.”<sup>73</sup> Where biodiesel has been used to meet a significant portion of the biomass-based diesel program since the start of the program, the SABR proposed biodiesel volume was at a level that has previously been met,<sup>74</sup> and EPA has acknowledged that the advanced biofuel program is driving renewable diesel growth, we strongly dispute EPA’s bald assertion that this request entailed “significant programmatic changes.” Moreover, even though we do not believe the definition of biomass-based diesel prohibits EPA from setting a minimum volume based on biodiesel volumes only, SABR, nonetheless, proposed an alternative to make a subcategory within biomass-based diesel, which EPA ignored.

Nothing in the Clean Air Act limits EPA to only finalizing regulations that were specifically proposed by EPA. EPA has authority to revise the proposal based on public comments, and the final rule need only be a “logical outgrowth” of the proposal to comply with the Act’s notice and comment requirements.<sup>75</sup> We believe this is particularly true when the public provides comments that EPA’s implementation of the RFS program is in violation of the statute. In fact, EPA asked for alternatives to a host of its proposals, and EPA included changes in the final rule that were not specifically included in the proposal, including increasing the conversion factor for determining renewable volume obligations for biomass-based diesel to 1.6, even though EPA’s proposal noted that the equivalence value for renewable diesel, which the 1.6 was based, allowed for generation of RINs for *the non-renewable portion of renewable diesel*.<sup>76</sup> Further, EPA’s concerns regarding insufficient notice are belied by the fact that other stakeholders did, in fact, comment on SABR’s proposal.<sup>77</sup>

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<sup>72</sup> 2023 RTC at 58.

<sup>73</sup> *Id.*

<sup>74</sup> This was reflected in EPA’s own Draft Regulatory Impact Analysis: RFS Standards for 2023-2025 and Other Changes, at 384 (2022) (“Most importantly, biodiesel consumption reached over 2 billion gallons in 2016 and has remained between 1.8–2 billion gallons per year from 2017–2021, largely exceeding the 1.82 billion gallons that we projected would be used in 2022.”). EPA’s final rule similarly states: “Most importantly, biodiesel consumption reached over 2 billion gallons in 2016 and has remained between 1.7–2 billion gallons per year from 2017–2022, often exceeding the 1.82 billion gallons that we projected would be used in 2022.” EPA RIA at 336.

<sup>75</sup> See *Brennan v. Dickson*, 45 F.4th 48, 68-69 (D.C. Cir. 2022) (“At the same time, the APA does not require that rules be subjected to multiple cycles of notice and comment until the version adopted as final is identical to the last notice of proposed rulemaking; after all, the very premise of agencies’ duty to solicit, consider, and respond appropriately to comments is that rules evolve from conception to completion.”); *Great Lakes Commun. Corp. v. FCC*, 3 F.4th 470, 478 (D.C. Cir. 2021) (finding “logical outgrowth” where agency included statement warning that it may modify proposal even where “it did not explicitly suggest” the language finalized); *Solite Corp. v. EPA*, 952 F.2d 473, 484 (D.C. Cir. 1991) (“At the same time, consistent with the APA, an agency may use “supplementary” data, unavailable during the notice and comment period, that ‘expands on and confirms’ information contained in the proposed rulemaking and addresses ‘alleged deficiencies’ in the pre-existing data, so long as no prejudice is shown.”) (quoting *Community Nutrition Institute v. Block*, 749 F.2d 50, 57-58 (D.C. Cir. 1984)).

<sup>76</sup> 87 Fed. Reg. at 80,707; see also 2023 RTC at 134 (making adjustments to AEO projections for purposes of setting standards that was not included in proposal).

<sup>77</sup> See, e.g., EPA-HQ-OAR-2021-0427-0627 at 9 (API); EPA-HQ-OAR-2021-0427-0749 at 14 (NACS et al.). API, in fact, did not raise any procedural objections, only the same (incorrect) argument that EPA also makes. See *Chesapeake Climate Action Network v. EPA*, 952 F.3d 310, 319-20 (D.C. Cir. 2020) (“A final rule is the ‘logical

Instead, EPA says that the suggested changes requested by SABR “should be formally proposed by EPA, with an opportunity for input from a broad ranges of stakeholders.”<sup>78</sup> But, EPA indicated that it was considering SABR’s request in its November 2022 response. And, if EPA subsequently felt there was insufficient notice, it could have simply issued a supplemental notice seeking comment, as EPA has done for other RFS rules before.<sup>79</sup> Acknowledging the timing of the proposal and likely final rule, SABR had suggested the proposed new category or subcategory for biodiesel start in 2024, but EPA also could have started it in 2025. There was time for EPA to issue a supplemental notice. Indeed, EPA claimed, in the proposed rule, that it is interested in understanding how the proposed required RFS volume requirements interact with domestic refining capacity and associated energy security considerations.<sup>80</sup> Arguing it could not finalize the rule because it did not specifically seek comment in the proposal effectively indicates that EPA determined it would not finalize such an alternative, denying SABR’s request. In either case, this does not justify EPA’s failure to revise its regulations or otherwise to fail to comply with statutory requirements.<sup>81</sup> Nor does it alleviate EPA’s obligation to carefully consider the issues raised in public comments.

In addition, EPA also asked for public input regarding ways in which EPA might enhance program administration to make the RFS program as efficient as possible, to increase program transparency, to address climate change, or otherwise improve program implementation.<sup>82</sup> SABR responded to those questions, explaining how its alternative to implementing the biomass-based diesel approach, as well as other changes to address the disparate treatment of biodiesel compared to renewable diesel and sustainable aviation fuel, is more consistent with the statutory language, better ensures that the goals of Congress are actually being achieved, and would facilitate RFS compliance and effectiveness.<sup>83</sup> For all these reasons, SABR submits this petition to formally request such action through reconsideration, which we believe is warranted, or through a new rulemaking, which we believe is required.

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outgrowth’ of a proposed rule if ‘interested parties should have anticipated that the change was possible, and thus reasonably should have filed their comments on the subject during the notice-and comment period.’”) (citation omitted); *Daimler Trucks N. Am. LLC v. EPA*, 737 F.3d 95, 100 (D.C. Cir. 2013) (“The court, however, will deem a final rule to be a logical outgrowth of a proposed rule ‘if a new round of notice and comment would not provide commentators with their first occasion to offer new and different criticisms which the agency might find convincing.’”).

<sup>78</sup> 2023 RTC at 58-59.

<sup>79</sup> Renewable Fuel Standard Program: Standards for 2018 and Biomass-Based Diesel Volume for 2019; Availability of Supplemental Information and Request for Further Comment, 82 Fed. Reg. 46,174 (Oct. 4, 2017); Renewable Fuel Standard Program: Standards for 2020 and Biomass-Based Diesel Volume for 2021, and Response to the Remand of the 2016 Standards; Supplemental Notice of Proposed Rulemaking, 84 Fed. Reg. 57,677 (Oct. 28, 2019).

<sup>80</sup> 87 Fed. Reg. at 80,587.

<sup>81</sup> EPA acknowledges it was required to review implementation of the program for the Final Set Rule. Nonetheless, The D.C. Circuit has found EPA’s refusal to amend regulations is subject to review for abuse of discretion. *See Alon Ref. Krotz Springs, Inc.*, 936 F.3d at 646 (finding “jurisdiction to consider the petitioners’ argument that EPA arbitrarily refused to amend the point of obligation rule based on the changed circumstances cited by the petitioners”); *see also Growth Energy v. EPA*, 5 F.4th 1, 22-24 (D.C. Cir. 2021).

<sup>82</sup> 87 Fed. Reg. at 80,587.

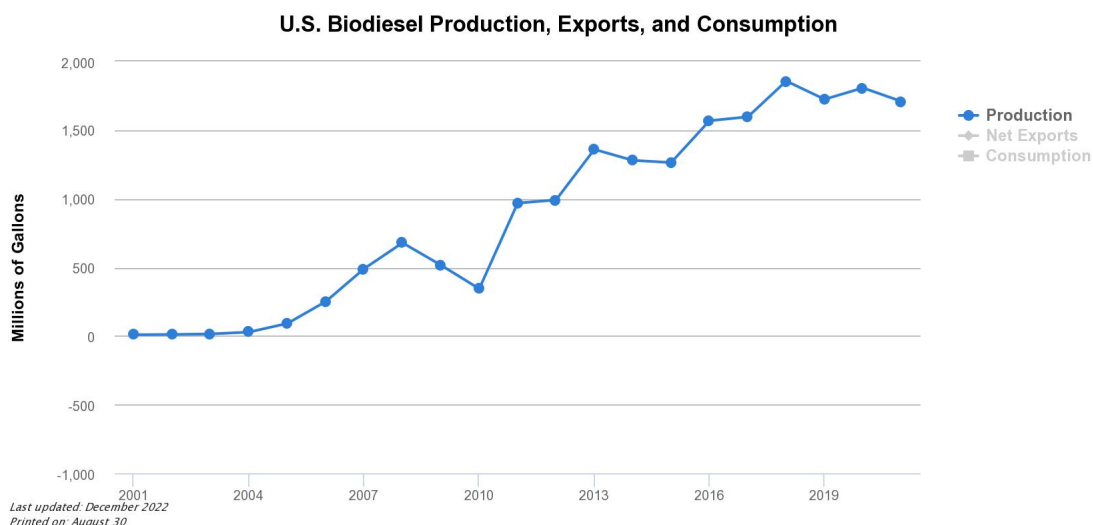
<sup>83</sup> EPA-HQ-OAR-2021-0427-0813 at 38-40.

## GROUNDS FOR RECONSIDERATION

### I. EPA Must Reconsider its Implementation of the Biomass-Based Diesel Program, Which has Rendered it Meaningless and is Counter to Statutory Directives and Goals.

As EPA and the D.C. Circuit have long recognized, the RFS program is intended to be market forcing.<sup>84</sup> That is certainly the case for biodiesel, where stakeholders from feedstock suppliers to producers to distributors to retailers have invested millions of dollars to meet the volumes expected under the program. With implementation of the RFS program, biodiesel production in the United States grew substantially, as shown in the following chart from EIA (<https://afdc.energy.gov/data/10325>).

#### RFS2 Implementation



In recent years, however, biodiesel production has started a concerning trendline. Acknowledging that it expects decreases in biodiesel production under the Final Set Rule, EPA appears to simply throw up its hands because it claims that overall “biomass-based diesel” volumes are growing, and other market factors will dictate the fuels used to meet those requirements.<sup>85</sup> This ignores EPA’s obligations under the statute and undermines the purposes of the Clean Air Act and the role of the RFS program.

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<sup>84</sup> *Ams. for Clean Energy v. EPA*, 864 F.3d 691, 705 (D.C. Cir. 2017) (“Congress intended the Renewable Fuel Program to be a ‘market forcing policy’ that would create ‘demand pressure’ to increase consumption’ of renewable fuel.”) (citations omitted); *Monroe Energy, LLC v. EPA*, 750 F.3d 909, 917 (D.C. Cir. 2014) (quoting Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 49,794, 49,821 (Aug. 15, 2013)).

<sup>85</sup> *See, e.g.*, 88 Fed. Reg. at 44,488.



It also ignores the fact that EPA has lumped all “biomass-based diesel” fuels together based on its perception of limited feedstocks for those fuels.<sup>86</sup> But, not all the fuels that EPA has called “biomass-based diesel” are the same—they have different markets, they have different specifications due to their different chemical compositions, they have different production, distribution, and infrastructure needs, etc. Notwithstanding these differences, the feedstock market has consistently adjusted to meet demand from all sectors. We believe Congress also sought diversification of feedstocks, which EPA should incentivize. We believe supporting incentives for *new* feedstocks would occur under SABR’s proposal versus EPA’s approach that simply focuses on existing feedstocks, allowing displacement of *existing production*.

As EPA says, the “‘Set rule’ marks a new phase for the program, one which takes place following the period for which the Clean Air Act enumerates specific volume targets.”<sup>87</sup> EPA also recognized “the important role that the RFS program can play in providing *ongoing support for increasing production* and use of renewable fuels, particularly advanced and cellulosic biofuels.”<sup>88</sup> EPA acknowledged that it was required to review the implementation of the program in prior years.<sup>89</sup> For biomass-based diesel, EPA simply repeated its same rationale for setting volumes prior to 2023, claiming it provided the right balance to provide support for biomass-based diesel producers, while maintaining an opportunity for other advanced biofuels.<sup>90</sup> EPA also again acknowledged that “the advanced biofuel standard has driven the use of BBD in the market,” which EPA indicated would continue into 2025.<sup>91</sup> But, Congress required EPA to review implementation of the program for a reason. That reason should be to make sure its implementation is fulfilling the goals of Congress, as reflected in several of the statutory factors that EPA is to consider when setting the volumes (e.g., impact on environment, including climate change, impact on energy security, and impact on rural economy). EPA failed to do so for biodiesel, largely treating biodiesel, renewable diesel, and jet fuel as one category of fuels, despite the different production processes, the different markets, and the different treatment of these fuels under the RFS, as well as other policies.

This can be compared to its treatment of ethanol, which makes up the bulk of the so-called “implied conventional biofuel” requirement. There, EPA found:

Higher-level ethanol blends such as E15 and E85 are one avenue through which higher volumes of renewable fuels can be used in the transportation sector to reduce GHG emissions and improve energy security over time, and the incentives created by the implied conventional renewable fuel volume requirement contribute to the economic attractiveness of these fuels. Moreover, sustained and predictable support of higher-level ethanol blends through the level of the implied conventional renewable fuel

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<sup>86</sup> The volumes for biomass-based diesel are based on “projected increases in feedstock production in the U.S and Canada, particularly in 2025.” 88 Fed. Reg. at 44,516.

<sup>87</sup> 88 Fed. Reg. at 44,469.

<sup>88</sup> *Id.* (emphasis added).

<sup>89</sup> *Id.* at 44,511.

<sup>90</sup> *Id.* at 44,516.

<sup>91</sup> *Id.*

volume requirement helps provide some longer-term incentive for the market to invest in the necessary infrastructure. As a result, we do not believe it would be appropriate to reduce the implied conventional renewable fuel volume requirement below 15 billion gallons at this time.<sup>92</sup>

The reason the category is called “implied” is because the statute does not specifically require ethanol. Yet, EPA sought to ensure that the program provided long-term incentives for increased use of *corn ethanol*.

Moreover, unlike just ensuring use of ethanol, biodiesel producers raised concerns as to whether EPA’s implementation is actually meeting the directives of the statute.

First, EPA ignores that Congress established a separate “biomass-based diesel” program for a reason. Under EPA’s implementation of the program, however, “the higher advanced biofuel standard—rather than the BBD standard—that has driven the demand for BBD.”<sup>93</sup> Yet, EPA still somehow contends that it is “providing continued support for *biodiesel and* renewable diesel producers.”<sup>94</sup> That is simply not the case. The purpose of the RFS program is to *increase* production of renewable fuels. But the evidence presented is that renewable diesel is displacing biodiesel from the market.<sup>95</sup> While EPA may claim that the overall biomass-based diesel program is growing, it is being limited by EPA’s implementation. And, where, as EPA states, the advanced biofuels category is driving renewable diesel production, this has rendered the biomass-based diesel program meaningless. But EPA cannot implement a statute that renders part of it “inoperative or superfluous, void or insignificant.”<sup>96</sup> EPA failed to respond to these comments.

Second, reviewing implementation of the biomass-based diesel program, shows that “biomass-based diesel” is really only being used in California, not throughout the country. This was confirmed by EIA after the Final Set Rule was issued. In a July 20, 2023 analysis, EIA found: “California accounts for nearly all renewable diesel consumption in the United States, but most of it isn’t made in the state. California’s consumption of renewable diesel was more than eight times the amount produced there in 2021. Instead, most of California’s renewable diesel was produced in other states or was imported, mostly from Singapore.”<sup>97</sup> EIA noted that renewable diesel “is often produced at existing petroleum refineries that are retrofitted to make

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<sup>92</sup> 88 Fed. Reg. at 44,517.

<sup>93</sup> 88 Fed. Reg. at 44,546.

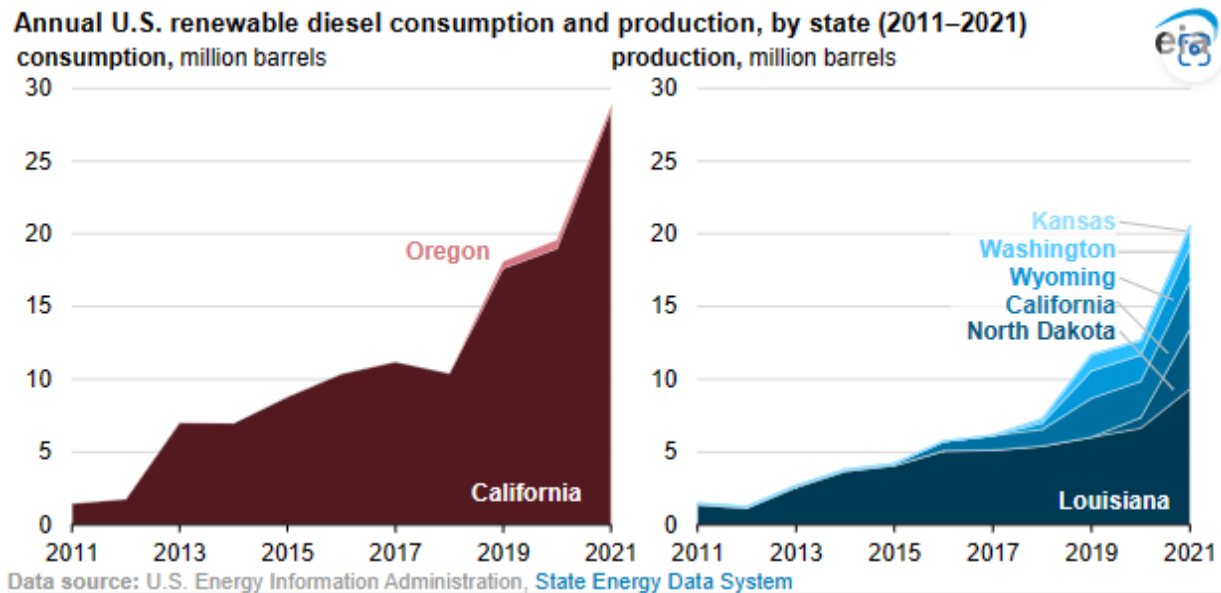
<sup>94</sup> 88 Fed. Reg. at 44,516 (emphasis added); *see also id.* at 44,473 (claiming EPA is providing benefits “[b]eyond providing continued support for fuels like ethanol and biodiesel”).

<sup>95</sup> *See, supra* note 3. (SABR comments)

<sup>96</sup> *Del. Dep’t of Nat. Res. & Envtl. Control v. EPA*, 895 F.3d 90, 99 (2018) (quoting *Corley v. United States*, 556 U.S. 303, 314 (2009) (quoting *Hibbs v. Winn*, 542 U.S. 88, 101 (2004)); *see also United States v. Tohono O’odham Nation*, 563 U.S. 307, 315 (2011) (statutes should not be rendered “nugatory through construction”).

<sup>97</sup> EIA, *Almost all U.S. renewable diesel is consumed in California; most isn’t made there*, July 20, 2023, <https://www.eia.gov/todayinenergy/detail.php?id=57180>.

biofuels instead of petroleum products.”<sup>98</sup> “Many of the plants in the other states have exclusive agreements to send all of the renewable diesel they produce to distributors in California.”<sup>99</sup>



But, one of the key goals of Congress was to diversify renewable fuels to expand production and use of renewable fuels *nationally*. While Congress understood there may be regional differences that may utilize the credit program, Congress prohibited geographic restrictions on where the biofuels are used.<sup>100</sup> EPA fails to acknowledge this, noting only that “[w]hile it may be easier to blend increasing quantities of renewable diesel in California, thereby taking advantage of the opportunity to generate LCFS credits this is the result of regulations enacted by the state of California, not EPA.”<sup>101</sup> As an initial matter, there is no evidence that it is “easier to blend increasing quantities of renewable diesel in California.” EPA has long considered renewable diesel a “drop-in” fuel, and, where renewable diesel is largely produced outside of California, this unsupported statement, on its face, would seem inaccurate. Regardless, this response misses the point. It ignores that the RFS is supposed to be *market forcing*. Other potential market forces do not somehow tie EPA’s hands. Indeed, EPA considered the impacts of the Inflation Reduction Act, among other policies, in considering whether there may be enough *supply* of biofuels. In this case, Congress expressly referred to restrictions on *use*.

In addition, EPA is to review implementation of the program and develop rules under Set based on *the statutory factors listed*. SABR comments explained how EPA’s *implementation of the RFS* is allowing renewable diesel to displace biodiesel under the biomass-based diesel category, making it essentially a one-state program. This effectively imposes geographic restrictions on where biomass-based diesel is used, contrary to the statute’s plain terms and Congressional intent. While Congress did require that EPA establish a credit program,

<sup>98</sup> *Id.*

<sup>99</sup> *Id.*

<sup>100</sup> 42 U.S.C. § 7545(o)(2)(A)(iii)(II).

<sup>101</sup> 2023 RTC at 64.

recognizing regional differences in production and availability of biofuels, Congress did not want to have all biofuels *used* only in one part of the country. Ironically, the credit program was established because of concerns that most renewable fuel was produced in the Midwest and that California would not want to be forced to use ethanol. But, the credit program sought to give flexibility for the rest of the country to develop the proper infrastructure to expand use of renewable fuels. That California devised a state program that changed this calculus does not absolve EPA of its obligations. For example, Congress required EPA to consider various impacts, including the impact of renewable fuels *on the infrastructure of the United States*.<sup>102</sup> SABR also explained the harms to many local communities across the country that would be impacted by the loss of biodiesel production, including negative impacts to the rural economy, the local environment, jobs, and fuel costs.<sup>103</sup> All of which are listed factors.

Third, EPA tries to sweep under the rug other provisions of the RFS program that advantage renewable diesel over biodiesel. Again, EPA attempts to shift blame away from its own actions, arguing that “the only additional incentive renewable diesel is provided over biodiesel is a higher equivalence value based on the higher energy content of renewable diesel on a per gallon basis. We continue to believe that basing equivalence values on the energy content of the fuel is appropriate, as fuels with higher energy content generally provide greater value as transportation fuel.”<sup>104</sup> This response, however, ignores that EPA acknowledge that the advantage being provided to renewable diesel was not based on any higher energy content of *renewable fuel*; that is, fuel derived *from renewable biomass*. Rather, the 1.6 and 1.7 equivalence values typically used for renewable diesel takes credit for energy from *non-renewable* inputs.<sup>105</sup> EPA conveniently leaves out of its response that, unlike for renewable diesel, it reduced the equivalence value for biodiesel based on the use of methanol in the production process. Even considering energy content, SABR presented evidence that, when treating both fuels equally, the equivalence values should be basically the same—1.5. *See infra* Section V. It also ignores the windfall that has been given to renewable diesel producers *by EPA*. EPA’s decision not to revise the equivalence values was arbitrary and capricious and an abuse of discretion.

EPA also acknowledges that co-products for renewable diesel may generate RINs. EPA further noted that, unlike the co-products of biodiesel some of the co-products of renewable diesel are used as transportation fuel.<sup>106</sup> Again, we are concerned EPA has missed the point. The point is that the RFS gives renewable diesel advantages, and EPA cannot simply ignore these factors because other market factors also may influence renewable diesel production. Moreover, EPA did not answer the question whether the same benefit given to renewable diesel regarding RINs generated for the energy content based on non-renewable sources related to the equivalence value was also given to the equivalence values granted to those co-products (e.g., naphtha (1.4/1.5) and LPG (1.1)).

Naphtha and LPG, however, are considered “other” advanced biofuel (D5). EPA ignores that renewable diesel plants can also produce sustainable aviation fuel, which can be “biomass-

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<sup>102</sup> 42 U.S.C. § 7545(o)(2)(B)(ii)(IV).

<sup>103</sup> 42 U.S.C. § 7545(o)(2)(B)(ii)(I), (VI).

<sup>104</sup> 2023 RTC at 64.

<sup>105</sup> 87 Fed. Reg. at 80,707.

<sup>106</sup> 2023 RTC at 64.

based diesel” and generate D4 RINs under EPA’s current implementation of the program. But, as further discussed below, while EPA seeks to rely on the “plain” language of the statute to read the definition of “biodiesel” broadly, it ignored the plain text when it allowed jet fuel to qualify as “biomass-based diesel.” *See, infra*, Section III. This is significant because biodiesel does not participate in the jet fuel market, jet fuel is not an obligated fuel, and, under the recent Inflation Reduction Act, sustainable aviation fuel is expected to get higher tax credits than if the facility produced renewable diesel. In addition, there would not appear to be any restrictions on jet fuel (e.g., no requirement that it only be used domestically) or, even if implicit in the regulations, there are no provisions to confirm those restrictions are being complied with. These concerns stem directly from EPA’s implementation of the RFS program, not because of California.

Finally, EPA responded to the concerns raised regarding the RIN separation provisions under the RFS program, stating “[t]he ability for renewable diesel producers to separate RINs is similarly not simply an advantage granted to renewable diesel producers but reflects the fact that renewable diesel can more readily be used as transportation fuel without blending with petroleum fuel.”<sup>107</sup> Again, EPA misstates the issue. Whether renewable diesel producers can separate RINs was not the issue, and, in any event, does *not* reflect the fact that renewable diesel can be more readily used as transportation fuel without blending. As explained in SABR’s comments, the ability of renewable fuel producers to separate RINs was for and requested by *biodiesel* producers (and was opposed by obligated parties).<sup>108</sup> This is because, for biodiesel blends, EPA imposed restrictions on RIN separation for higher biodiesel blends, not because of any purported difficulty in blending biodiesel, but because of the blender’s tax credit that caused EPA to be concerned with *RIN* liquidity.<sup>109</sup> Biodiesel producers had to request separate treatment for those biodiesel fuels sold directly for use, rather than for blending. We note that, the blender’s tax credit is being replaced by a production tax credit, rendering these limits on RIN separation for biodiesel blends unnecessary.

Moreover, the concerns raised, which were wholly ignored by EPA, stemmed from the increasing amount of renewable diesel capacity that is owned or operated by an obligated party, one of its subsidiaries, or by a joint venture with an obligated party.<sup>110</sup> The concern raised is that, because of these relationships and the lack of restrictions on the ability those obligated parties to separate RINs, we believe, will have a significant impact on the D4 RIN market for all the reasons outlined in the comments. SEC filings confirm that the related obligated party obtains the RINs for compliance. For example, Marathon Oil’s 2022 10-K filing (at 7), dated February 23, 2023, notes that the renewable diesel produced at the Dickenson, North Dakota facility

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<sup>107</sup> 2023 RTC at 64.

<sup>108</sup> EPA-HQ-OAR-2021-0427-0813 at 9. We note that EPA’s proposal for the Set rule would have also, without explanation, removed the ability of *biodiesel* producers to separate RINs. While not finalized, EPA makes no mention of this in the Final Set Rule.

<sup>109</sup> EPA-HQ-OAR-2021-0427-0813 at 9. We again note that EPA’s proposal for the Set rule would have, without explanation, placed further restrictions on the ability to separate RINs for even biodiesel blends. While not finalized, EPA makes no mention of this in the Final Set Rule.

<sup>110</sup> At most EPA contends that it is uncertain the impact of setting a higher volume standard for biodiesel production in energy security. 2023 RTC at 158. But, SABR did not request a “higher volume standard for biodiesel production.” Its recommendation was for a 2 billion gallon requirement, which has been met by the market and is *less than* the biomass-based diesel volume EPA finalized. Instead, it would ensure a diversity of alternatives to petroleum diesel, which cannot be disputed provides energy security benefits.

“generates federal RINs and LCFS credits when sold in California or similar markets. These instruments are used to help meet our Renewable Fuel Standard and LCFS compliance obligations as a petroleum fuel producer.”<sup>111</sup> HF Sinclair’s 2022 10-K filing (at 8), dated February 28, 2023, also acknowledged that its new renewable diesel plant will “provide us the opportunity to meet the demand for low-carbon fuels while covering the cost of our annual RINs purchase obligation under current market conditions.”<sup>112</sup>

While EPA has long pitted biofuels against each other,<sup>113</sup> the establishment of a biomass-based diesel category, which was defined to include “biodiesel,” is clear evidence that Congress sought to ensure a minimal market for biodiesel (methyl esters). This is not unlike EPA’s treatment of corn ethanol under the “implied” conventional biofuel volume requirement. The difference is that ethanol remains the primary and dominant fuel in that category, and EPA determined that its implementation will continue to support its use and growth. Here, EPA expressly found that biodiesel will *decline*, even if it only characterized this loss of production as “slight decreases.”<sup>114</sup> Elsewhere in the rule, EPA referred to a 200 million gallon drop in domestic biodiesel production from 2018 to 2022 as a “slight[]” decrease, which represented more than a 10% decline.<sup>115</sup> It is important to note that biodiesel plants average close to 30 million gallons in size, so that represents about 6-7 facilities. EPA may view that as “slight,” but the biodiesel producer, its investors and employees, and those communities that rely on those facilities would not.

EIA reports that, as of January 1, 2019, there were 102 U.S. biodiesel facilities.<sup>116</sup>

| U.S. Biodiesel Annual Production Capacity |                  |                                 |            |
|---|------------------|---------------------------------|------------|
| PAD District                              | Number of Plants | 2019 Annual Production Capacity |            |
|   |                  | (MMgal/year)                    | (mb/d)     |
| PADD 1                                    | 21               | 197                             | 13         |
| PADD 2                                    | 45               | 1,464                           | 95         |
| PADD 3                                    | 18               | 628                             | 41         |
| PADD 4                                    | 2                | 40                              | 3          |
| PADD 5                                    | 16               | 224                             | 15         |
| <b>U.S. Total</b>                         | <b>102</b>       | <b>2,553</b>                    | <b>167</b> |

**Annual Production Capacity:** The quantity of biodiesel that a plant can produce in a calendar year, assuming normal downtime for maintenance. It includes the capacity of idle plants until the plant is dismantled or abandoned.

**Source:** Form EIA-22M Monthly Biodiesel Production Survey

<sup>111</sup> <https://d18rn0p25nwr6d.cloudfront.net/CIK-0001510295/da94fffe-b34a-4cd3-86eb-017afb841fc6.pdf>.

<sup>112</sup> <https://d18rn0p25nwr6d.cloudfront.net/CIK-0001915657/ea35f2e6-de06-4f74-9f0e-9f2d28eb8c31.pdf>.

<sup>113</sup> See, e.g., EPA, *Renewable Fuel Standards for 2014, 2015 and 2016, and the Biomass-Based Volume for 2017: Response to Comments*, at 475-476 (2015).

<sup>114</sup> 88 Fed. Reg. at 44,488.

<sup>115</sup> *Id.* at 44,485.

<sup>116</sup> <https://www.eia.gov/biofuels/biodiesel/capacity/archive/2019/index.php> (release date Sept. 13, 2019).

EIA recently reported that this dropped to 59 as of January 1, 2023, resulting in the loss of almost 500 million gallons of domestic capacity.<sup>117</sup>

**U.S. Biodiesel Plant Production Capacity as of January 1, 2023**

| PAD District      | Number of Plants | Production Capacity |            |
|-------------------|------------------|---------------------|------------|
|                   |                  | (MMgal/year)        | (Mb/d)     |
| PADD 1            | 10               | 123                 | 8          |
| PADD 2            | 33               | 1,461               | 95         |
| PADD 3            | 9                | 298                 | 19         |
| PADD 4            | 0                | 0                   | 0          |
| PADD 5            | 7                | 205                 | 13         |
| <b>U.S. Total</b> | <b>59</b>        | <b>2,086</b>        | <b>136</b> |

**Biodiesel Production Capacity** is intended to measure estimated gallons of biodiesel that a plant is capable of producing over a period of one year (365 consecutive days) starting on the first day of each report month.

**Note:** Totals may not equal sum of components due to independent rounding.

**Source:** Form EIA-819, *Monthly Report of Biofuels, Fuels from Non-Biogenic Wastes, Fuel Oxygenates, Isooctane, and Isooctene*.

EPA, nonetheless, simply states: “Available data suggests that *there is significant unused biodiesel production capacity in the U.S.*, and thus domestic biodiesel production could grow without the need to invest in additional production capacity.”<sup>118</sup> The conclusion EPA draws, however, is that production capacity of biodiesel will not impose a limit on potential volumes. There was no consideration that the implementation of the program in recent years was resulting in this loss of utilization (except for equivalence values that EPA acknowledge was advantaging renewable diesel yet EPA decided to retain the current equivalence values for renewable diesel).

EPA may claim that this is just the market at work, but EPA has created the “biomass-based diesel” market, regardless of any other market factors. That market is artificial, and, in fact, not consistent with the statute. It was incumbent on EPA, as part of the new phase of the RFS program, to reassess its implementation of the biomass-based diesel program. Indeed, EPA provides absolutely no rationale why forcing biodiesel to compete on an unfair playing field with renewable diesel and with jet fuel that is not part of the same market fulfills Congress’s policy. Rather, we believe EPA is imposing its own policy determination that allowing more fuels in the biomass-based diesel market will reduce compliance costs for obligated parties. This is a flawed assumption for the reasons noted about the changes it will make to the biomass-based diesel

<sup>117</sup> <https://www.eia.gov/biofuels/biodiesel/capacity/> (release date Aug. 7, 2023).

<sup>118</sup> 88 Fed. Reg. at 44,485 (emphasis added).

market, *reducing choices and eliminating competition*. Regardless, that is not EPA's obligation.<sup>119</sup>

For all the reasons noted above, it was incumbent on EPA to ensure it was properly asserting its discretion under the set provisions in the statute. EPA did not dispute that, notwithstanding its reading of biomass-based diesel definition, it had authority to support biodiesel through the Final Set Rule. In other words, EPA failed to make a proper assessment of how the biomass-based diesel program should be implemented in promulgating the rules under "Set" as required by the statute for compliance years 2023-2025, and, as such, it must do so now. EPA further must ensure the proper changes for its upcoming rule for compliance years 2026 and later. With the new renewable diesel plants coming online, the impacts of EPA's failure to correct the program on the biodiesel industry will only be further exacerbated.

## **II. EPA Cannot Rely on the Definition of "Biomass-Based Diesel" to Ignore Reality or its Statutory Obligations.**

In response to SABR's request to establish a volume requirement for biodiesel and provide a level playing field, EPA contends that the "changes to the RFS program requested by the commenter contradict the plain language of the Energy Independence and Security Act."<sup>120</sup> This plain language argument is based on a definition of "biodiesel" in 42 U.S.C. § 13220(f) that was incorporated by reference. That section defined "biodiesel" as "a diesel fuel substitute produced from nonpetroleum renewable resources that meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 7545 of this title." EPA's whole statutory analysis is simply that biodiesel and renewable diesel are both "diesel fuel substitutes." This conclusory and superficial analysis, however, is incorrect.

EPA focuses on the phrase "diesel fuel substitute." But, the phrase is actually "*a* diesel fuel substitute," which simply serves as a descriptor of "biodiesel" that is a diesel fuel substitute. The common usage and definition of "biodiesel" at the time was methyl esters. In 1998, when the definition was enacted, there was no specific ASTM standard for biodiesel, which was not developed until 2002. After 2002, the industry began including reference to the ASTM standard in defining "biodiesel." But there is no indication that in incorporating the definition of "biodiesel" from 42 U.S.C. § 13220 that Congress sought to define biodiesel to include anything more than methyl esters for which it was commonly used.<sup>121</sup> As noted above, EPA and public comments acknowledged that the common definition of biodiesel was that biodiesel was a methyl ester, and no one was generally aware of any other technologies to replace petroleum

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<sup>119</sup> See *Monroe Energy, LLC v. EPA*, 750 F.3d 909, 919 (D.C. Cir. 2014) ("high RIN prices should, in theory, incentivize precisely the sorts of technology and infrastructure investments and fuel supply diversification that the RFS program was intended to promote").

<sup>120</sup> 2023 RTC at 58.

<sup>121</sup> The definition of biomass-based diesel excludes those fuels that are produced from "co-processing" renewable biomass with petroleum based feedstocks. This only confirms that Congress was concerned with biodiesel, where the exclusion for co-processing began to address concerns with converted petroleum refineries being used to produce fuel that would displace *biodiesel*. 153 Cong. Rec. S8022, S8025 (June 20, 2007) (statement of Senator Kyl, Arizona). EPA's proposal also recognized that the term "co-processing" applies to renewable diesel, and not biodiesel, because of the production process using petroleum based hydrogen. 87 Fed. Reg. at 80,706-80,707. This is unlike biodiesel where EPA found "all of the energy in the fuel comes from the feedstock." *Id.* at 80,705.



based diesel. As the National Renewable Energy Laboratory (NREL) has noted, in describing renewable diesel, it is “[n]ot the same as biodiesel, may be improperly called second generation biodiesel, paraffinic biodiesel—but it is incorrect and misleading to refer to it as biodiesel.”<sup>122</sup>

In addition, the inclusion of the term “substitute” also has relevance. “Substitute” means “a person or thing that takes the place or function of another.”<sup>123</sup> “Diesel fuel” is not defined in that provision, but elsewhere in the Energy Policy Act of 2005, Congress defined “renewable diesel” as “*diesel fuel* derived from biomass (as defined in section 45K(c)(3)) using a thermal depolymerization process which meets—(A) the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 211 of the Clean Air Act (42 U.S.C. 7545), and (B) the requirements of the American Society of Testing and Materials D975 or D396.”<sup>124</sup> This is the common definition of diesel fuel that it meets ASTM D975, which does not distinguish petroleum-based diesel from renewable diesel, but does treat biodiesel differently. NREL has found that “When RD meets ASTM D975 properties, it is considered the same as conventional diesel fuel.”<sup>125</sup> EPA and renewable diesel producers have long touted renewable diesel as a “drop in” fuel to petroleum based diesel, because of its chemical similarity. On the other hand, the biodiesel industry worked hard to overcome those concerns, including establishing its own specification—ASTM D6751, which was intended to support blending of biodiesel into “diesel fuels”—i.e., those that meet ASTM D975. Biodiesel similarly can be blended with renewable diesel. In other words, it is EPA’s claimed “plain language” reading of the statute that turns the “a” to “any” (or “all”) and adds the term “petroleum” to read the definition as plainly saying “any (or all) petroleum diesel fuel substitute(s)” and, with its inclusion of jet fuel, “any fuel that is produced from a similar process as diesel fuel.” That is well beyond the plain reading of the statute.

This would have been confirmed if EPA bothered to look at the structure of the statute, as one must also do when determining the plain meaning of the provision. If it had done so, it would see that the “plain” reading indicates that Congress meant the common definition of biodiesel—methyl esters. Section 13220(a) refers to the common blend of biodiesel of B20.<sup>126</sup>

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<sup>122</sup> NREL, *Renewable Diesel Fuel*, Presentation at Slide 2, July 18, 2016, available at [https://cleancities.energy.gov/files/u/news\\_events/document/document\\_url/182/McCormick\\_Alleman\\_RD\\_Overview\\_2016\\_07\\_18.pdf](https://cleancities.energy.gov/files/u/news_events/document/document_url/182/McCormick_Alleman_RD_Overview_2016_07_18.pdf).

<sup>123</sup> <https://www.merriam-webster.com/dictionary/substitute>.

<sup>124</sup> Pub. L. No. 109-58, § 1346(a), 119 STAT. 1055 (emphasis added). Elsewhere in the Energy Policy Act of 2005, Congress continued to define “biodiesel” as “a diesel fuel substitute,” as in 42 U.S.C. § 13220(f), but also added the 2002 ASTM standard for biodiesel (D6751), which applied to methyl esters. *Id.*, § 757(e), 119 STAT. 833. “[I]dential words used in different parts of the same act are intended to have the same meaning.” *Advocate Christ Med. Ctr. v. Becerra*, \_\_4th\_\_, 2023 U.S. App. LEXIS 23263, at \*10 (D.C. Cir. Sep. 1, 2023) (quoting *Gustafson v. Alloyd Co.*, 513 U.S. 561, 570 (1995)).

<sup>125</sup> NREL, *Renewable Diesel Fuel*, Presentation at Slide 11, July 18, 2016, available at [https://cleancities.energy.gov/files/u/news\\_events/document/document\\_url/182/McCormick\\_Alleman\\_RD\\_Overview\\_2016\\_07\\_18.pdf](https://cleancities.energy.gov/files/u/news_events/document/document_url/182/McCormick_Alleman_RD_Overview_2016_07_18.pdf).

<sup>126</sup> Pub. Law 105-277, § 1201, 112 STAT. 2681, 2681-48 (1998); see also Pub. L. No. 105-388, § 7(a), 112 STAT. 3477, 3480; see also U.S. Department of Energy (DOE), *Biofuel Basics*, Bioenergy Technologies Office, <https://www.energy.gov/eere/bioenergy/biofuel-basics> (last visited Sept. 10, 2023) (noting B20 as “the most common blend” of biodiesel). Prior to this legislative change, the U.S. Department of Energy (DOE) had only determined that B100 qualifies as alternative fuels to take advantage of the credit under 42 U.S.C. § 13220. See H.R.

Because of concerns that followed biodiesel in its early years, it would not be unusual for Congress to provide different treatment of biodiesel. While the biodiesel industry has worked hard to eliminate these concerns, the concerns, which were lobbed at biodiesel are also reflected in the statute, giving DOE the ability to change the blend levels “for reasons related to cold start, safety, or vehicle function considerations.”<sup>127</sup> Moreover, there simply was no need to establish a broad definition of “biodiesel” in 42 U.S.C. § 13220(f), because the definition of “alternative fuels” in that statute already listed “fuels (other than alcohol) derived from biological materials,”<sup>128</sup> which would have covered renewable diesel fuels.

That Congress knew the difference between biodiesel (methyl esters) and renewable diesel at the time the RFS was enacted is further evidenced by Congress’s use of the term “renewable diesel,” which it treated differently from “biodiesel” in the Energy Policy Act of 2005.<sup>129</sup> And, there is no indication that Congress read it differently in 2007, when EISA also added subsection (u) to 42 U.S.C. § 7545, which referenced specifications for “B5” and “B20,” referring to the same definition in 42 U.S.C. § 13220(f). B5 and B20, again, refer to blends of methyl esters, not renewable diesel.<sup>130</sup> And EPA’s regulations at the time, notwithstanding EPA’s interpretation of the meaning of “biodiesel,” included two distinct definitions of “biodiesel” and “renewable diesel” under the RFS program.

In addition, it is only SABR’s reading of the statute, based on EPA’s own concessions, that gives meaning to the biomass-based diesel category. While EPA may attempt to claim that the biomass-based diesel category provides market certainty to biomass-based diesel producers, it currently provides no certainty to biodiesel producers, and renewable diesel producers do not need that certainty. As noted above, EPA provided no rationale, nor did the comments opposing SABR’s proposal, why renewable diesel and jet fuel must remain in the biomass-based diesel category to effectuate Congress’s intent. This is likely because there is no such rationale where, again, EPA has found the advanced biofuel category drives its production and other incentives are sufficient to ensure ongoing investments in renewable diesel and sustainable aviation fuel (which, as EPA acknowledged, will largely stem from the same investments).

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Rep. No. 105-727, at 8-9 (1998). This change allowed use of B20 fuel to qualify for the credit in that definition was methyl esters. *Id.*

<sup>127</sup> 42 U.S.C. § 13220(a)(3).

<sup>128</sup> 42 U.S.C. § 13211.

<sup>129</sup> Compare Pub. L. No. 109-58, § 1346 (adding renewable diesel to tax credit) with § 757 (biodiesel engine testing program).

<sup>130</sup> This is further supported by the legislative history that discussed Congressional intent to support *biodiesel*. See, e.g., S. Rep. No. 110-65, at 2-3, 8 (2007); 153 Cong. Rec. E328 (Feb. 1, 2007) (statement of Rep. Weller, Illinois); 153 Cong. Rec. H733 (Jan. 18, 2007) (statement of Rep. Braley, Iowa); 153 Cong. Rec. E2529 (Dec. 10, 2007) (statement of Rep. DeLauro, Connecticut); 153 Cong. Rec. S1615-S1617 (Feb. 6, 2007) (statement of Sen. Grassley, Iowa); 153 Cong. Rec. H13398-H13403 (Nov. 8, 2007) (statement of Rep. Inslee, Washington); 153 Cong. Rec. S3732-S3735 (Mar. 26, 2007) (statement of Sen. Salazar, Colorado); 153 Cong. Rec. H14260, H14269 (Dec. 6, 2007) (statement of Rep. Herseth Sandlin, South Dakota).

### III. EPA Must Reconsider its Inclusion of Jet Fuel as Being Eligible for Generating Biomass-Based Diesel RINs.

The inclusion of jet fuel in the biomass-based diesel category similarly was required to be considered under “Set.” In addition, EPA’s claim that it is bound by the “plain language” in the definition of biodiesel from 42 U.S.C. § 13220(f) raises new grounds to challenge its inclusion of sustainable aviation fuels (also referred to as “jet fuel” in EPA’s regulations) in the biomass-based diesel category. While we believe the plain terms only refers to methyl esters, there is no reading of the statute that would include jet fuel. Yet, EPA states in the Final Set Rule that the “rule does support the use of sustainable aviation fuels, which is a form of BBD.”<sup>131</sup>

The statute includes renewable jet fuel (also referred to as sustainable aviation fuel) as “additional renewable fuel.”<sup>132</sup> Congress also, in a separate provision from that allowing for credits for “biodiesel” (defined as 42 U.S.C. § 13220), gave EPA the discretion to issue regulations providing: (i) for the generation of an appropriate amount of credits by any person that refines, blends, or imports additional renewable fuels; and (ii) for the use of such credits by the generator, or the transfer of all or a portion of the credits to another person, for the purpose of complying with the volume requirements.<sup>133</sup> If jet fuel met the definition of “biodiesel” under 42 U.S.C. § 7545(o)(1)(D), this provision would have been unnecessary. Instead, Congress could have merely clarified that biomass-based diesel included jet fuel, so long as it met the 50% reduction requirement. Instead, Congress defined it as “additional renewable fuel.” Nonetheless, EPA has equated jet fuel to “biomass-based diesel” (i.e., “biodiesel”).

In the Final Set Rule, EPA acknowledged that jet fuel has contributed limited supply to the biomass-based diesel category<sup>134</sup> but also noted that “there are currently significant efforts underway to incentivize growth in renewable jet fuel in particular (often referred to as sustainable aviation fuel or SAF).”<sup>135</sup> EPA only states that jet fuel was approved as an “advanced biofuel” since 2010, and uses the same process and feedstocks as renewable diesel,<sup>136</sup> noting, “in most cases, we consider renewable diesel jet fuel to be a component of renewable diesel.”<sup>137</sup> While in the proposal EPA admitted that “any growth in renewable jet fuel [would likely] come at the expense of *biodiesel and* renewable diesel,”<sup>138</sup> the Final Set Rule considered renewable diesel and sustainable aviation fuel together and stated “[i]n the near term, we expect that any increase in SAF production will result in a corresponding decrease in renewable diesel

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<sup>131</sup> 2023 RTC at 1.

<sup>132</sup> 42 U.S.C. § 7545(o)(1)(A).

<sup>133</sup> 42 U.S.C. § 7545(o)(5)(E).

<sup>134</sup> “According to EMTS data renewable jet fuel supply has ranged from 0–15 million gallons per year from 2014–2022.” 88 Fed. Reg. at 44,484 n.77. EMTS data (<https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rins-generated-transactions>) (data as of Aug. 10, 2023)) shows, however, that there were no jet fuel D4 RINs generated until 2016, and the volumes were less than 5 million gallons through 2020 and just over 5 million gallons in 2021. In 2022, D4 jet fuel exceeded 15 million gallons, and, for 2023 (through July), D4 jet fuel volumes are already over 12.8 million gallons. And, where these gallons appear to have received 1.6 RINs due to the equivalence value—that is over 20.5 million RINs in 2023 through July.

<sup>135</sup> 88 Fed. Reg. at 44,484.

<sup>136</sup> *Id.* at 44,484–44,485.

<sup>137</sup> *Id.* at 44,515 n.215.

<sup>138</sup> 87 Fed. Reg. at 80,596 (emphasis added).

production,” acknowledging that “an increasing portion of this fuel may be used as SAF in future years.”<sup>139</sup> This ability to shift to jet fuel production, provides added advantages to renewable diesel over biodiesel, since jet fuel is not an obligated fuel and this “additional renewable fuel” can further displace biodiesel.

EPA’s proposal, in passing, noted that “other technologies and feedstocks are being developed that might enable new sources of SAF.”<sup>140</sup> SABR’s comments, however, noted that EPA had recently approved D4 RIN generation for an ethanol-to-jet fuel project, calling into question EPA’s authority to issue that approval, but also raising concerns that EPA did not appear to make a determination that this fuel qualifies as biomass-based diesel.<sup>141</sup> In a footnote in the Final Set Rule, EPA noted that “new technologies are being developed to produce SAF from a wider variety of feedstocks,” claiming that “SAF using these technologies would not negatively impact renewable diesel production.”<sup>142</sup> EPA’s failure to consider its impacts *on biodiesel*, as EPA initially recognized in the proposal and as urged by SABR under the Set process, was arbitrary and inconsistent with its obligations under the statute.

In its comments (and for this petition) SABR has sought to find where EPA has found that the “plain language” of the definition of biodiesel in 42 U.S.C. § 13220(f) includes jet fuel. EPA’s initial pathways from 2010 did include jet fuel but only as cellulosic diesel (D7) or advanced biofuel (D5).<sup>143</sup> In 2013, EPA “clarifie[d] the definition of renewable diesel to explicitly include jet fuel.”<sup>144</sup> This clarification appears to be only on the basis that it can also be produced through hydrotreating.<sup>145</sup> Thus, the only basis we could find for including jet fuel in biomass-based diesel appears to be that jet fuel can be produced at renewable diesel plants, maximized for jet fuel production, which also appears to be the basis of the lifecycle GHG reduction emissions determination.<sup>146</sup> EPA does not explain how this equates to treating these fuels as “biomass-based diesel.” Worse yet, this does not explain how ethanol-to-jet, which is not produced at renewable diesel plants previously considered by EPA, could qualify as biomass-

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<sup>139</sup> 88 Fed. Reg. at 44,485; *see also* 2023 RTC at 49-50.

<sup>140</sup> 87 Fed. Reg. at 80,596.

<sup>141</sup> EPA-HQ-OAR-2021-0427-0813 at 22-23.

<sup>142</sup> 88 Fed. Reg. at 44,485 n.86.

<sup>143</sup> 75 Fed. Reg. at 14,872. EPA simply said that “Renewable fuel that is used for jet fuel may fall into multiple renewable fuel categories depending on its feedstock and lifecycle performance.” EPA, *Renewable Fuel Standard Program (RFS2) Summary and Analysis of Comments*, at 3-27 (2010), available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1007GC4.pdf> (“2010 RFS2 RTC”). Under the RFS2 rule, Cellulosic Diesel D7 RINs can be used toward meeting the biomass-based diesel requirement. But, according to EPA EMTS data (as of Aug. 10, 2023), <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rins-generated-transactions>, there have been minimal D7 RINs generated to date (and none listed as renewable jet fuel). The first D7 RINs—a total of 1,741 RINs—were generated in 2012. The most D7 RINs generated was about 2.45 million in 2018, which was an unusually high year. SABR recognizes that this provision may also need to be corrected based on its petition for reconsideration/rulemaking, since biodiesel is not considered cellulosic diesel. However, there was no cause to challenge this determination because there was no production in 2010, and, even today, these volumes are minimal, and it is unclear how many D7 RINs are used for biomass-based diesel versus the cellulosic biofuel category.

<sup>144</sup> 78 Fed. Reg. 14,190, 14,191 (Mar. 5, 2013).

<sup>145</sup> *Id.* at 14,198, 14,201; *see also* 75 Fed. Reg. 26,026, 26,028 (May 10, 2010).

<sup>146</sup> 78 Fed. Reg. at 14,201.

based diesel. Nonetheless, EPA approved a pathway for LanzaJet to generate D4 RINs and compete *with biodiesel*.

There is simply no support for EPA's continued treatment of biomass-based diesel as a broad category. Biomass-based diesel in the statute is defined as "biodiesel," under 42 U.S.C. § 13220(f). That definition of "biodiesel" reads as follows:

(1) the term "biodiesel"—

(A) means a [1] diesel fuel substitute produced from nonpetroleum renewable resources that [2] meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 7545 of this title;

(B) includes biodiesel derived from—(i) animal wastes, including poultry fats and poultry wastes, and other waste materials; or (ii) municipal solid waste and sludges and oils derived from wastewater and the treatment of wastewater.

First, even if you ignore the "a" to (improperly) read the statute as "any" or "all," jet fuel is not a "diesel fuel substitute." Rather, jet fuel is a co-product of diesel fuel production. "Diesel fuel is the common term for the distillate fuel oil sold for use in motor vehicles that use the compression ignition engine named for its inventor, German engineer Rudolf Diesel."<sup>147</sup> Jet fuel and diesel fuel are different fuels and have different specifications. Even if they could technically be used in the same engines, they are specifically designed for use in different engines. There are different types of fuel used in aircraft, but Congress referred to "jet fuel." When comparing diesel fuel and jet fuel, the "bottom line comes down to flight safety and performance."<sup>148</sup> EPA properly treats other co-products from renewable diesel production as D5 only fuels (e.g., naphtha and LPG).

As discussed in the previous section, the EPA has adopted an overly broad interpretation of the definition of "biodiesel" under the statute which defines biodiesel as "*a* diesel fuel substitute..." rather than any diesel fuel substitute. Renewable diesel is marketed and sold commercially as diesel fuel under the diesel fuel specification ASTM D975, which does not differentiate between petroleum and renewable sources. Renewable diesel cannot at once be both diesel fuel and a diesel fuel substitute. However, when it comes to sustainable aviation fuel, there should be no question whatsoever – sustainable aviation fuel is *neither* a diesel fuel *nor* a diesel fuel substitute, and it certainly isn't biodiesel as defined by the statute. According to the International Air Transport Association (IATA), "Sustainable Aviation Fuel (SAF) must have the

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<sup>147</sup> EIA, *Diesel fuel explained*, <https://www.eia.gov/energyexplained/diesel-fuel/> (last updated July 7, 2022).

<sup>148</sup> Air BP, *Ever considered refueling with diesel in place of jet fuel?*, Aug. 2020, <https://www.bp.com/en/global/air-bp/news-and-views/views/ever-wondered-what-the-difference-is-between-jet-fuel-and-diesel.html> ("Alisdair Clark, Air bp's aviation fuels research and development manager, explains that although the two fuels both come from the refinery 'middle distillate' pool, they are actually very different.").

same qualities and characteristics as conventional jet fuel in order to substitute it.”<sup>149</sup> Jet fuel has a unique specification and is not substituted in commerce for diesel fuel and diesel fuel and biodiesel are not substituted for jet fuel. EPA acknowledges that “[a] portion of the distillate fuel produced is in the distillation range of jet fuel range and separated and sold separately as SAF.”<sup>150</sup> Indeed, there are restrictions in the jet fuel specification to limit trace amounts of diesel fuel and biodiesel in jet fuel to prevent mixing of these fuels when they are transported on multi-fuel pipelines. It cannot be reasonably asserted that jet fuel is either biodiesel or diesel fuel when those products are expressly restricted in the jet fuel specification. The SAF specification is governed by ASTM D7566.

Second, jet fuel is not a motor vehicle fuel. Section 13220(f) requires that the “diesel fuel substitute” meets “the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 7545 of this title.”<sup>151</sup> The registration requirements for fuels and fuel additives under Section 7545 relate to fuels used in motor vehicles and nonroad vehicles,<sup>152</sup> and the registration requirements and are included in Part 79 of Title 40 of the Code of Federal Regulations.<sup>153</sup> Aircraft emissions, on the other hand, are regulated under Section 7571 and enforced by the Secretary of Transportation under Section 7572 of the Clean Air Act.<sup>154</sup>

While Section 7545 may apply to nonroad vehicles, nonroad vehicles do not include aircraft. As EPA recognized, jet fuel is not a motor vehicle, nonroad, locomotive or marine fuel.<sup>155</sup> Indeed, because of this, EPA declined to treat jet fuel as “transportation fuel” under the RFS program. If EPA believes that jet fuel meets the definition of “biodiesel” under the statute and is an alternative to diesel fuel, then there is no reason to exclude it from being an obligated fuel under the RFS program. In other words, EPA cannot have it both ways. Jet fuel cannot be considered biomass-based diesel, yet not an obligated, transportation fuel.

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<sup>149</sup> IATA, *Fact Sheet 2 - Sustainable Aviation Fuel: Technical Certification*, at 1, available at <https://www.iata.org/contentassets/d13875e9ed784f75bac90f000760e998/saf-technical-certifications.pdf> (last visited Sept. 11, 2023).

<sup>150</sup> 2023 RTC at 95. While EPA contends that if this step is not taken then the distillate fuel is sold as renewable diesel, but that does not make “jet fuel” a substitute for diesel fuel. *Id.*

<sup>151</sup> 42 U.S.C. § 13220(f).

<sup>152</sup> “Home heating oil” is also included in the definition of “additional renewable fuel.” Home heating oil is not a “transportation fuel.” Biodiesel (D6751), which is registered as a motor vehicle fuel, also can be used as heating oil. EPA, however, has broadened heating oil to include non-biodiesel (i.e., non-motor vehicle registered) fuels. To the extent these fuels also have been given a D4 RIN code, this would not meet the plain terms of the statute.

<sup>153</sup> It would be non-sensical to argue that, if EPA did not require registration that the fuel would “meet” these requirements. The registration requirements stem from 42 U.S.C. § 7545(b) and are required to be able to “conduct tests to determine potential public health and environmental effects of the fuel or additive (including carcinogenic, teratogenic, or mutagenic effects).” It would make little sense that Congress would have included a reference to Part 79 registration if any fuel that was not required to register could also qualify. Indeed, the biodiesel industry took great effort to become a registered fuel under Part 79, including undergoing substantial emission testing.

<sup>154</sup> See, e.g., EPA, Proposed Finding that Lead Emissions from Aircraft Engines that Operate on Leaded Fuel Cause or Contribute to Air Pollution that May Reasonably be Anticipated to Endanger Health and Welfare, 87 Fed. Reg. 62,753 (Oct. 17, 2022).

<sup>155</sup> 2010 RFS2 RTC at 3-198.



Third, Congress recognized that biodiesel is produced from certain oils, fats, and greases.<sup>156</sup> The Final Set Rule recognizes additional technologies for jet fuel that it says now will not compete with renewable diesel, but fails to address its recent approval of a company specific petition for ethanol-to-jet fuel pathway to generate D4 RINs.<sup>157</sup> The feedstock for that pathway is sugarcane converted to ethanol. In 2010, EPA said that “Renewable jet fuel does not have to be produced from animal fats or waste greases for it to be considered an advanced biofuel.”<sup>158</sup> That may be true, but to be “biodiesel” and thereby “biomass-based diesel,” it should be derived from biodiesel feedstocks, such as those listed in 42 U.S.C. § 13220(f)(1)(B). Where the biomass-based diesel category was created because ethanol dominated renewable fuels in the United States, it makes little sense that Congress intended the term “biodiesel” to extend to ethanol-derived fuels. Yet, under EPA’s flawed reading of the definition of “biodiesel,” ethanol could again overtake biodiesel despite the biomass-based diesel category. That cannot be what Congress intended.

For all these reasons, EPA must reconsider and revise those pathways that allow “jet fuel” to generate D4 RINs, including company-specific pathways. Because of the greater similarity between jet fuel and renewable diesel, we believe this only further supports our reading of the definition of “biomass-based diesel” as being a biodiesel (methyl esters) only category. This should present no prejudice to any parties as Congress only required a minimum volume of 1 billion gallons, making it a small portion of the overall program, even if EPA establishes the 2 billion gallon requirement requested by SABR, which we believe is more than justified and appropriate. Two billion gallons is consistent with historical biodiesel use under the RFS program and less than 10% of the total volumes for 2024 and 2025, and does not displace or prohibit any other fuel from participating in the RFS program. Instead, it better fulfills the intent of Congress.

#### **IV. Even Under EPA’s (Incorrect) Reading of the Definition of “Biodiesel” in the Statute, EPA Failed to Respond to Comments Regarding the Alternative to Including a Subcategory for “Biodiesel.”**

For all the reasons explained above, EPA’s determination to implement the biomass-based diesel category under the Final Set Rule as it did in prior years to force biodiesel to compete in an unfair playing field must be reconsidered. As noted above, the only concerns EPA raised regarding a “carve-out” for biodiesel are misplaced. However, EPA failed to address the alternative proposal of creating a subcategory within the biomass-based diesel category, which would continue to allow other “biomass-based diesel” volumes, as EPA has treated them, to participate in that category. This was an error. While we disagree with EPA’s “plain” reading of the statute, even under that reading, there is no express prohibition on creating a minimum volume for biodiesel alone. Nonetheless, this argument would not apply to the creation of a subcategory, which would continue to allow other fuels to qualify toward meeting the overall biomass-based diesel category. EPA, however, ignored these comments.

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<sup>156</sup> 42 U.S.C. § 13220(f).

<sup>157</sup> Letter from EPA to LanzaJet, Inc., Jan. 12, 2023, available at <https://www.epa.gov/system/files/documents/2023-01/lanzajet-d-code-4-rfs-pathway-determination-letter-2023-01-12.pdf>.

<sup>158</sup> 2010 RFS2 RTC at 3-28.

The notion of a subcategory is not unique, has been requested before, and would have been a logical outgrowth of the proposal. While EPA determined that the current system of using percentage standards was the only “straightforward and easily implementable alternative mechanisms” to implement the volumes, EPA acknowledged that it had discretion to implement the volumes after 2022 and other mechanisms existed.<sup>159</sup> Further, EPA assessed different specific fuels under each category to determine if the volumes were achievable. In other words, EPA considered how much of each category would likely be met by each fuel. Since subcategories would also be implemented through percentage standards, it was certainly within the realm of possibility that the volumes could be implemented through the use of subcategories. EPA does not dispute this in the final rule.

Instead, EPA states that no alternative mechanisms were “suggested in comments on the proposal.”<sup>160</sup> This statement is incorrect, as SABR did suggest alternative mechanisms for implementing the biomass-based diesel category. Since they are based on the same framework of percentage standards, they certainly were “straightforward and easily implementable.” While EPA did not directly address the SABR proposal for a subcategory in the Final Set Rule, this unsupported statement evidences that EPA rejected other alternatives. This was arbitrary and capricious, and EPA must reconsider this determination.

Although EPA previously declined to establish subcategories for other categories prior to the Set rule,<sup>161</sup> the reasons why EPA did not do so previously are not at issue under the set provisions or are inapplicable to the biomass-based diesel category.<sup>162</sup> In particular, as EPA acknowledged, 42 U.S.C. § 7545(o)(3)(B), which required “a single applicable percentage standard,”<sup>163</sup> does not apply for compliance years 2023 and later. As noted above, EPA also appeared to acknowledge it has discretion to create subcategories, noting that, to the extent the commenter on that proposal was asking EPA to exercise its discretion to revise the implementing regulations to create a new biofuel category, that request was beyond the scope of that rulemaking.<sup>164</sup> EPA similarly noted discretion in denying SABR’s initial request in the 2020, 2021, and 2022 RFS rulemaking to consider a small advanced biofuel volume requirement.

Presumably arguments would be made that a subcategory would give preferential treatment to biodiesel, where EPA has contended that “Congress chose to give such preferential treatment to advanced biofuel, BBD, and cellulosic biofuel, by creating a separate standard for each of them.”<sup>165</sup> Again, we point to the discretion Congress gave EPA in setting the applicable volumes post-2022. More important, as discussed above, EPA has given preferential treatment to renewable diesel and jet fuel. As such, EPA cannot use this argument to continue to allow and even accelerate the displacement of biodiesel. Moreover, Congress allowed for EPA to set

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<sup>159</sup> 87 Fed. Reg. at 80,630.

<sup>160</sup> 88 Fed. Reg. at 44,519.

<sup>161</sup> EPA, *Renewable Fuel Standard (RFS) Program: RFS Annual Rules – Response to Comments*, at 56-57 (2022) (EPA-HQ-OAR-2021-0427-0045).

<sup>162</sup> EPA-HQ-OAR-2021-0427-0813 at 23-26.

<sup>163</sup> As discussed in SABR’s comments, we do not believe the only reading of 42 U.S.C. § 7545(o)(3)(B) means that no subcategories were allowed, even before 2023. Nonetheless, that provision is no longer operative.

<sup>164</sup> EPA-HQ-OAR-2021-0427-0045 at 57.

<sup>165</sup> EPA-HQ-OAR-2021-0427-0045 at 56-57.



regulations to provide for the appropriate amount of credits for biodiesel, again indicating greater flexibility for implementation of the program for biodiesel specifically.

In any event, the biodiesel industry is not asking for preferential treatment, but it is asking for *fair* treatment in a manner that supports *all* fuels and promotes *all* of Congress's goals. Unlike EPA's finalized approach, a subcategory would recognize "the unique history and role of mono-alkyl esters meeting ASTM D-6751,"<sup>166</sup> while balancing the asserted concerns raised by EPA in the response to comments. Importantly, it *would not* reduce the overall volume of biomass-based diesel under the RFS program, but it *would* meet all the goals of Congress in creating a biomass-based diesel category. The Final Set Rule, however, either finds this option (with no explanation) not straightforward or easy to implement or ignores it completely. While we do not believe this request was beyond the scope of the Final Set Rule and should have been addressed, we submit this petition to reiterate the request that EPA provide a level playing field for biodiesel to compete in the RFS-created market.

## **V. EPA Must Revise the Equivalence Values for Renewable Diesel.**

In the proposed rule, EPA acknowledged that it never discounted the RINs that could be generated for renewable diesel based on the fossil fuel contributions to the fuel production process and energy content of the fuel.<sup>167</sup> While this discussion centered around its proposed definition for "produced from renewable biomass," the Final Set Rule admitted that the equivalence values in the RFS program advantages renewable diesel (and we believe its co-products) over biodiesel. The proposed rule outlined different ways for addressing this issue, including reducing the equivalence value from 1.7 to 1.6 or changing the heating value requirement.<sup>168</sup> In the Final Set Rule, EPA explained that it was not finalizing its proposed definition of "produced from renewable biomass" to allow it to consider comments received further,<sup>169</sup> but its response to SABR's request to revise the equivalence values was simply that EPA continues "to believe that basing equivalence values on the energy content of the fuel is appropriate, as fuels with higher energy content generally provide greater value as transportation fuel."<sup>170</sup> EPA then confirmed its decision to continue to use the same 1.7 equivalence value for renewable diesel that its proposal found flawed in revising the conversion factor to determine the biomass-based diesel renewable volume obligation based on the 1.7 equivalence factor for renewable diesel.<sup>171</sup> This was erroneous and arbitrary, requires reconsideration, and a prompt rulemaking to correct.

While EPA may have announced the error (reopening the equivalence value) when contemplating the definition of "produced from renewable biomass," the appropriate equivalence value for renewable diesel is wholly separate from whether or not it should revise the flawed

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<sup>166</sup> 72 Fed. Reg. at 23,917; *see also* Letter from EPA to SABR Coalition, dated Nov. 11, 2022 (EPA-HQ-OAR-2021-0427-0428).

<sup>167</sup> 87 Fed. Reg. at 80,707.

<sup>168</sup> *Id.* Thus, the public was on notice of a possible change to the equivalence value for renewable diesel and any such change would have been a logical outgrowth of the proposal, even if EPA relied on additional data to make the change. *See Solite Corp.*, 952 F.2d at 484.

<sup>169</sup> 88 Fed. Reg. at 44,551.

<sup>170</sup> 2023 RTC at 64.

<sup>171</sup> 88 Fed. Reg. at 44,546.

equivalence value (and whether EPA appropriately relied on it for the conversion factor in the final rule). EPA has long stated that the Equivalence Value determines the number of RINs that can be generated per gallon of renewable fuel produced. EPA indicated that the Equivalence Value takes into account the renewable content of a renewable fuel in comparison to that for ethanol and the energy content of the renewable fuel relative to that for ethanol.<sup>172</sup> This approach led to an Equivalence Value of 1.7 for most renewable diesel produced today under the RFS program and 1.5 for biodiesel.<sup>173</sup>

In other words, EPA, in the proposed rule, essentially announced that, for renewable diesel, it has allowed D4 RINs to be generated for a portion of the fuel that is not being used to displace fossil fuels in the transportation fuel market. In a meeting noted in EPA's stakeholder log,<sup>174</sup> SABR presented EPA with an analysis and data to support a finding that the actual equivalence value for renewable diesel should be 1.5 and the default value for jet fuel should be between 1.3 and 1.4.<sup>175</sup> This analysis used EPA's own formulas and two approaches for allocating energy to account for the hydrogen used in the production process. Under both approaches, the equivalence value was not 1.7 (or even 1.6).<sup>176</sup>

There is simply no justification for affirming the 1.7 equivalence value. For example, there were almost 2.875 billion RINs generated for renewable diesel with a 1.7 equivalence value in 2022, representing 1.7 billion gallons (2.875/1.7).<sup>177</sup> As further described below, we believe the proper equivalence value should be 1.5, which would have generated about 2.537 RINs. That's more than 338 million additional RINs generated (representing almost 200 million gallons).<sup>178</sup> Over the course of the RFS2 program (2010-July 2023), over 1.9 billion invalid RINs (1.59 invalid D4 RINs) were allowed to be generated by EPA for renewable diesel (EV 1.7). On September 1, 2023, EMTS data shows that 2022 D4 RIN prices were as high as \$1.81. That's a windfall of about \$180-360 million just for 2022. As renewable diesel keeps growing and displacing biodiesel, this will increase even more. This is not just an issue for biodiesel, but for the overall RIN market. This windfall may largely be in the hands of a few obligated parties with renewable diesel assets from which all other refiners will be required to purchase their D4 RINs. And, despite this fact, EPA has based its biomass-based diesel volumes on availability of *renewable* feedstocks for both biodiesel and renewable diesel. In other words, EPA is restricting the size of the market based on its perception of limited feedstock to be shared by all of biomass-based diesel, yet it allows gallons that stem from *fossil fuel* to generate RINs. EPA declining to

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<sup>172</sup> See EPA-HQ-OAR-2021-0427-0012 at 1.

<sup>173</sup> 40 C.F.R. § 80.1415(b).

<sup>174</sup> EPA-HQ-OAR-2021-0427-1125.

<sup>175</sup> This information was provided as part of the meeting request and is attached as Exhibit 1.

<sup>176</sup> These calculations and modeling approaches have been and are being reviewed by chemical engineers in industry, government, and academia (Exhibit 2). To the extent we receive written confirmation of their review, we will provide them to EPA for incorporation by reference in support of this petition. While we have received verbal communications that the calculations and modelling done are sound, written observations were not received in time to include with this submittal. We reserve the right to amend this petition with any such analysis we may receive.

<sup>177</sup> EPA, *RINs Generated Transactions* (as of Aug. 10, 2023), <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rins-generated-transactions>.

<sup>178</sup> Even using 1.6 as an equivalence value, which would have generated about 2.706 billion RINs, that's more than 169 million additional RINs generated (representing almost 100 million gallons).

adjust the equivalence value does not “ensure” the volumes are being met by renewable fuel and, alternatively, EPA should have increased the biomass-based diesel volumes. It did neither.

Further, EPA’s claim that the equivalence value should be based on energy content ignores that biodiesel is an oxygenated fuel, which makes it burn more efficiently and gives it a cleaner emissions profile. While pure renewable diesel has slightly higher BTU value than pure biodiesel (B100), biodiesel is almost always used in blends between B5 and B20, which oxygenates the greater diesel fuel supply. Blends up to B20 do not have a fuel economy penalty because the slight difference in BTU value in blends of B20 are more than made up for by the more efficient burn due to the oxygenation.<sup>179</sup> Moreover, as is explained further below, renewable diesel only has a higher BTU value than biodiesel when the hydrotreating catalysts are new. The BTU value diminishes over the lifespan of those catalysts.

We also believe that keeping renewable diesel (and jet fuel) in the same category as biodiesel—i.e., generating D4 RINs—skews the RIN market in favor of renewable diesel. EPA contends that RINs “generally represent the marginal cost of blending additional volumes of renewable fuel.”<sup>180</sup> But for biomass-based diesel, EPA generally reviews RIN prices *due to biodiesel production*.<sup>181</sup> Despite concerns raised by SABR regarding the differences in incentives, which are particularly acute with the recent revision to the sustainable aviation fuel tax credit under the Inflation Reduction Act,<sup>182</sup> and the different relationship between obligated parties and renewable diesel production facilities and biodiesel production facilities, EPA makes no real attempt to assess whether the D4 RIN price, based on biodiesel volumes, accurately reflects the “marginal cost of blending additional volumes of [renewable diesel or jet fuel].” While EPA may argue that these other incentives are outside its control, EPA has consistently considered the impacts of the blenders tax credit for biodiesel and, in any event, it would indicate if the inclusion of these disparate “biomass-based diesel” fuels in the same category is skewing RINs in favor of renewable diesel production plants, increasing overall costs to those obligated parties that do not own or operate renewable diesel plants.

In the Final Set Rule, EPA further claimed it was required “to ensure” the produced fuels “actually qualify as renewable fuel, i.e., are actually produced from renewable biomass and used as transportation fuel.”<sup>183</sup> Although EPA made this assertion to support its “biogas regulatory

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<sup>179</sup> KJ Jones, *What is Biodiesel? The Pros and Cons*, July 26, 2021, <https://www.motortrend.com/news/what-is-biodiesel-fuel-pros-cons/> (“Biodiesel can improve fuel economy a bit, as well as acceleration.”); U.S. Department of Energy, *Consumer Guide to Biodiesel*, Energy Saver, at 1 (2021), available at [https://www.energy.gov/sites/default/files/2021-11/EnergySavers\\_Biodiesel\\_Factsheet-v2.pdf](https://www.energy.gov/sites/default/files/2021-11/EnergySavers_Biodiesel_Factsheet-v2.pdf) (“Engines operating on B20 have similar fuel consumption, horsepower, and torque to engines running on conventional diesel. While a blend of diesel fuel and biodiesel, such as B20, generally has little impact on fuel economy, it has a higher ignition value and ability to lubricate the fuel systems better. This allows for easier combustion and functionality of the fuel system.”).

<sup>180</sup> 2023 RTC at 163.

<sup>181</sup> EPA RIA at 41-42.

<sup>182</sup> EPA-HQ-OAR-2021-0427-0749 at 3 (noting impacts to RFS program due to sustainable aviation fuel’s preferential tax treatment).

<sup>183</sup> 88 Fed. Reg. at 44,523. While we do not believe there is dispute that EPA is required to ensure *renewable fuel volumes* are introduced into the transportation fuel market, we believe there is disagreement over the scope of authority Congress sought to give EPA in this provision.

reforms,” EPA’s response to comments make clear that its concern was with the addition of *fossil* natural gas.<sup>184</sup> In other words, in the Final Set Rule, EPA claimed authority to impose requirements to ensure that the renewable fuel requirements were not being met by *fossil fuels*.

EPA consistently states that renewable diesel is a “drop-in” fuel for petroleum based diesel. Yet, EPA’s regulations *expressly allow* renewable diesel to generate RINs for fossil-based hydrogen used in the process. Because EPA didn’t show the math, it is still unclear whether this same issue is present in the Equivalence Values associated with the co-products of renewable diesel production, such as jet fuel, naphtha, and LPG.<sup>185</sup> Meanwhile, since inception of the RFS program, biodiesel could not generate RINs based on the typical use of methanol in the production process, even though EPA, in the proposal, explained the energy for biodiesel came from the renewable feedstock.<sup>186</sup>

Moreover, such changes would provide benefits and further the goals of Congress. It can incentivize and hasten the development and use of renewable hydrogen by renewable diesel and sustainable aviation fuel producers. As EPA considers approval of pathways for hydrogen under the RFS program, this will also assist in making an accurate assessment of the renewable content of renewable hydrogen that will need to be addressed for hydrogen as a finished fuel. While EPA reopened the issue of the proper equivalence value for renewable diesel in the proposed rule, it appears to have closed the door again in the final rule. Since the basis for that determination is inconsistent with the statute, as EPA itself has acknowledged, the equivalence values for renewable diesel, as well as its co-products, must be reconsidered and revised.

## **VI. EPA Must Undertake a Rulemaking to Ensure Renewable Diesel and Jet Fuel Are Meeting the Regulatory Requirements.**

The Final Set Rule noted several issues that EPA would continue to monitor to determine if reconsideration of the volumes is necessary.<sup>187</sup> The issues listed by EPA include, among others: the cost to consumers of transportation fuel; changes in domestic energy supply that affect domestic energy security; the stability of fuel supplies and domestic refining assets; and signs of market manipulation in RIN markets. SABR’s comments noted the concerns that decreased competition may have on the biomass-based diesel market unless EPA makes changes to its implementation.<sup>188</sup> We incorporate those comments by reference here. EPA failed to respond to those comments in the Final Set Rule.

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<sup>184</sup> See, e.g., 2023 RTC at 250, 273, 274, 326.

<sup>185</sup> For example, according to EMTS data, except for some gallons in 2016, all D4 RINs were generated for “Renewable Jet Fuel (EV 1.6).” As EPA claims, this jet fuel likely was produced from similar process as renewable diesel, it is possible EPA used the same flawed approach for determining the equivalence values for jet fuel, which we believe should also be lower.

<sup>186</sup> Methanol, of course, is not required to be used for the transesterification process to occur. For example, ethanol can also be used in lieu of methanol.

<sup>187</sup> 88 Fed. Reg. at 44,474.

<sup>188</sup> EPA-HQ-OAR-2021-0427-0813 at 13-16.

In the Final Set Rule, EPA also raised new concerns over potential fraud that it contended supported revisions to the RFS regulations related to biogas-derived fuels.<sup>189</sup> These concerns appear to stem from EPA's belief that high value RINs can incentivize "fraudulent generation."<sup>190</sup> "Fraudulent RINs can be generated, for example, by parties fabricating reports or records to generate RINs for volumes ... that have been used for a different, non-transportation fuel purpose."<sup>191</sup> As noted above, one of the concerns regarding such fraudulent behavior raised by EPA is trying to pass petroleum based fuels as renewable fuels. Based on the concerns raised by EPA, we believe the potential for fraud and double-counting is significantly higher for renewable diesel and sustainable aviation fuel.

An increasingly larger portion of the renewable diesel and sustainable aviation fuel market is becoming subject to control by obligated parties with renewable diesel assets. The Final Set Rule reflects a concern with interchangeable fuels. While there may or may not be as complex a contract scheme, as "drop-in" liquid fuels, blending petroleum based fuels into renewable diesel or sustainable aviation fuel to increase the claimed volumes generating RINs would be significantly easier with less safety concerns than natural gas, which is largely composed of methane. Unlike the natural gas pipeline system, which is controlled by companies largely unrelated to the RNG or RIN transactions being conducted, the obligated party controlling the renewable diesel/sustainable aviation fuel assets also would control refining assets. Indeed, a significant amount of renewable diesel is and will be coming from converted petroleum refineries.

In addition, unlike D3 RINs that are virtually all verified, much of RINs generated for renewable diesel and sustainable aviation fuel is not. The close relationship between the obligated party and its own assets makes "fabricating reports or records" significantly easier, even if those contracts are not as complex as for biogas-derived fuels. Moreover, in the biogas reforms, EPA eliminated the ability of obligated parties to separate the RINs, which was intended to better track the fuel to ensure it is used for transportation fuel. "Diesel fuels," particularly as EPA has appeared to broadly define them, can be used in a wide range of applications.

Further, we believe EPA should consider, and thus submit this petition for rulemaking, additional actions to provide more oversight and better mitigate against fraud. These actions include:

- Revise the ability of obligated parties to separate RINs for renewable diesel, unless it can establish the renewable diesel was used for transportation fuel.
- Require carbon-14 testing using ASTM D6866 of all renewable diesel and jet fuel, not just those co-processed with petroleum feedstocks at petroleum refineries.

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<sup>189</sup> We take no position on the biogas regulatory reforms. But, the concerns raised that EPA claims drove those reforms are even more likely for renewable diesel and sustainable aviation fuel.

<sup>190</sup> 88 Fed. Reg. at 44,525.

<sup>191</sup> *Id.*

- Revise the reporting and recordkeeping provisions to ensure jet fuel is not being used outside the United States. Airlines fly to Alaska and internationally and, as such, the use of that fuel is not in the contiguous United States. This raises questions as to how the export RVOs work in such cases and how EPA is monitoring that.
- Require additional measurements and testing to ensure the renewable diesel meets the heating value requirements for the applicable equivalence value. EPA's final biogas regulatory reforms also included specific requirements as to how to measure heating value. For renewable diesel, the equivalence value is dependent on the heating value of the fuel. As SABR also noted to EPA,<sup>192</sup> this value diminishes over time due to the limited life of the catalysts used in hydrotreating. Hydrotreating catalysts can be used for 18 to 24 months depending on the refinery's operating conditions and spent hydrotreating catalysts can be regenerated. However, the effectiveness of the catalysts declines as they are used, and the energy content of the fuel begins to diminish during that lifecycle. Thus, we are concerned that renewable diesel that has been sold using the 1.7 equivalence value does not contain the heating value required by EPA of at least 123,500 Btu/gal.

## CONCLUSION

For all the reasons discussed above, we believe reconsideration of EPA's implementation of the biomass-based diesel program, the equivalence value for renewable diesel, and the treatment of renewable jet fuel (or sustainable aviation fuel) is warranted, and rulemaking is required. In addition, based on concerns EPA itself raised regarding ensuring sufficient oversight, we urge EPA to engage in additional rulemaking to ensure renewable diesel and jet fuel generating RINs under the RFS program complies with its requirements.

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<sup>192</sup> SABR Letter to EPA, dated May 12, 2023 (Ex. 1). This letter is also available on the Office of Management and Budget's website at <https://www.reginfo.gov/public/do/viewEO12866Meeting?viewRule=false&rin=2060-AV14&meetingId=201373&acronym=2060-EPA/OAR>.