July 27, 2015

The Honorable Gina McCarthy
Administrator, Environmental Protection Agency
Air and Radiation Docket and Information Center
Mailcode: 2822T
1200 Pennsylvania Avenue NW
Washington, DC  20460

Docket ID No. EPA-HQ-OAR-2015-0111

Dear Administrator McCarthy:

I. Introduction

The Biotechnology Industry Organization (“BIO”) is pleased to have the opportunity today to comment on the U.S. Environmental Protection Agency’s (“EPA’s”) recently published proposed rule titled “Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass Based Diesel Volume for 2017.”

BIO is the world's largest trade association representing biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations. BIO members are involved in the research and development of innovative healthcare, agricultural, and industrial and environmental biotechnology products.

BIO represents over 90 companies leading the development of new technologies for producing conventional and advanced biofuels. Through the application of industrial biotechnology, BIO members are improving conventional biofuel processes, furthering advanced and cellulosic biofuel production technologies, and speeding development of new purpose grown energy crops. Because of the incentives created by the federal Renewable Fuel Standard (“RFS”) our member companies continued production of commercial quantities of advanced biofuels and began such production of cellulosic biofuels in 2014. When properly administered in accordance with the RFS statute, the policy ensures a steady and increasing market for renewable fuels in the United States, which in turn maintains and furthers investment in that market.

While BIO appreciates EPA’s hard work and positive intentions, we respectfully submit that EPA’s recent actions, especially those since 2013, have undermined the goals and requirements of the RFS statute, undercut investment in advanced

biofuels, and raised greenhouse gas emissions in the transportation fuel sector. Renewable fuels required to be used by the RFS statute “reduce emissions of greenhouse gases compared to fossil fuels,” so a decline in renewable fuel volumes subject to the RFS has a direct and damaging impact on greenhouse gas emissions goals.  

EPA’s unstable administration of the program since 2013 has been particularly detrimental to the achievement of the statutory goals. EPA has repeatedly failed to issue annual RFS rules in a timely manner, as required by the statute. And EPA’s proposed interpretation of its waiver authority -- first announced in the proposed rule initially issued by EPA in November 2013, and reiterated in the reissued proposed rule published on June 10, 2015 -- not only would violate the law (as explained below), but would further undermine certainty and predictability for investors and other market participants, with negative environmental and economic consequences that run contrary to Congress’s purposes in enacting the statute.

EPA’s recent actions are an unfortunate and unnecessary departure from how the Agency implemented the law prior to 2013, when the program began to work as intended to spur innovation and growth. Conventional biofuel producers invested heavily in the capacity to produce levels of renewable fuels as required and intended by the RFS statute. The advanced biofuel industry invested billions of dollars to build first-of-a-kind demonstration and commercial scale biorefineries here in the United States, with several new, large-scale cellulosic biofuel facilities beginning operations in 2014. Overall, total and advanced biofuels met the goals of the law every year from 2010 through 2013, furthering the goals of reducing our reliance on foreign oil, while cellulosic biofuels became a commercial reality. If the Agency returns to stable implementation of the program with a clear commitment to the statutory requirements that had their intended effect in past years, we can look forward to expanding cellulosic, advanced, and total renewable fuels production in the years ahead and continue to make an important contribution to the nation’s energy security.

Our comments below examine the flaws in the Agency’s interpretation of the statutory provisions governing EPA’s authority to waive annual Renewable Volume Obligations (“RVOs”), set forth in section 211(o) of the Clean Air Act (“CAA”) (42 U.S.C. § 7545(o)). Our comments further describe how this proposed rule and past EPA actions have created uncertainty that has undermined the basic goals of the RFS in violation of statutory requirements and have chilled investment particularly in the development of advanced and cellulosic biofuels, and broken the promise of

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the RFS on which biofuels producers and other market participants relied when making investment decisions.

EPA specifically asked members of the public for their views on whether EPA would need to invoke the general waiver authority under 42 U.S.C. § 7545(o)(7)(A) to make reductions in volume requirements for 2015 and 2016, or whether EPA could solely rely on its authority under 42 U.S.C. § 7545(o)(7)(D), the separate cellulosic waiver provision, to waive volumes of advanced biofuel and total renewable fuel. BIO’s position is that no reductions are needed under the general waiver authority. At the same time, EPA should reconsider and, in its final rule, reject the novel and unwarranted interpretation of the general waiver provision that is discussed below. This would restore certainty to the RFS program, which has been destabilized in significant part by EPA’s proposed expansion of its waiver authority. BIO further suggests, as discussed below, that EPA’s proposed reductions under the cellulosic waiver provision are too ambitious and indiscriminate, and that EPA has not properly justified its proposed reductions under that separate provision.

Finally, even if EPA’s waiver authority were broader than it is, we submit with respect that EPA would be obliged to make – and should make – more targeted, narrower reductions in RVO requirements for 2014, 2015, and 2016 than are suggested in the proposed rule. Narrower reductions are required by legal constraints on what EPA can do, as well as by key policy considerations.

BIO summarizes certain key elements of its comments as follows:

1. BIO recommends establishing the cellulosic RVO for 2015 at no less than **157 million gallons** and for 2016 at no less than **350 million gallons**.

2. EPA should set the 2015 and 2016 RVOs for advanced and overall RVOs at the **full statutory volumes**. EPA has not met its burden to reduce the volumes.

3. In the alternative, if EPA were to conclude that it can adequately justify utilizing its cellulosic waiver authority to diminish the market for advanced and overall renewable fuels without running afoul of the statutory goals, then BIO would respectfully propose, without prejudice to the potential assertion of different arguments in the future,

   a. that EPA set advanced RVOs at the highest numbers feasible, which (at minimum) would be no less than **3 billion gallons** for 2015 and **3.5 billion gallons** for 2016;

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3 Proposed Rule 33123.
b. and that EPA likewise set overall renewable fuel RVOs at the highest numbers feasible, which (at minimum) would be no less than **18 billion gallons** for 2015 and **18.5 billion gallons** for 2016.

c. No reductions need be made – and no reductions should be made – on the basis of the general waiver authority.

4. In setting the volumes, EPA should take into account the availability of RIN credits, and should not exclude them from its calculation of available domestic supply of renewable fuel to be used in satisfying the statutory volume requirements.

5. Statutory volume obligations should be set at the highest numbers possible. As recognized by EPA in the proposed rule, this must be done to comply with the statutory requirements and goals and Congress’s intent.

II. EPA’s Current Interpretation of Its Waiver Authority is Impermissibly Broad

As explained below and by other commenters (whose arguments we do not repeat comprehensively here), EPA may not use its general waiver authority under the RFS to make reductions to the annual advanced or total renewable fuel RVOs based on the Agency’s proposed interpretation of “inadequate domestic supply” in the proposed rule. EPA’s proffered interpretation is not consistent with the text, structure, or purposes of the statute, and is unreasonable. Moreover, EPA’s interpretation is directed in significant part to accommodating the economic interests of parties who are obligated to comply with the statutory renewable volume obligations (“obligated parties”), which is not a permissible reason or basis for waiving or ignoring the requirements of the statute. The term “inadequate domestic supply” unambiguously refers only to the potential availability of volumes of RFS qualified renewable fuels.\(^4\) It does not include “factors that constrain supplying available volumes [of renewable fuels] to the vehicles that can consume them,”\(^5\) such as the so-called “E10 blendwall” and fuel infrastructure. And the obligations of the Act do not extend to the ultimate consumer or to biofuel producers, as EPA suggests they do.\(^6\)

While courts will defer to agency interpretations of statutes that they are charged with implementing, this deference is not without limits. EPA’s interpretation of its

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\(^4\) See CAA sections 211(o)(2) and 211(o)(7)(A), 42 U.S.C. § 7545(o)(2), (o)(7)(A).

\(^5\) Proposed Rule 33115.

\(^6\) See, e.g., Proposed Rule 33111, 33114.
statutory authority is out of bounds, and the Agency may not reduce advanced or total renewable fuel requirements for 2014, 2015 or 2016 by relying on a concept of inadequate domestic supply that is determined by anything other than the actual supply of qualifying renewable fuel.

Clean Air Act section 211(o)(7)(A) (42 U.S.C. § 7545(o)(7)(A)) provides EPA its general waiver authority under the RFS. In relevant part, subparagraph (o)(7)(A) of the statute provides:

The Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, may waive the requirements of paragraph (2) in whole or in part on petition by one or more States, by any person subject to the requirements of this subsection, or by the Administrator on his own motion by reducing the national quantity of renewable fuel required under paragraph (2)—

(i) based on a determination by the Administrator, after public notice and opportunity for comment, that implementation of the requirement would severely harm the economy or environment of a State, a region, or the United States; or

(ii) based on a determination by the Administrator, after public notice and opportunity for comment, that there is an inadequate domestic supply.7

For its proposed waiver decision under this subparagraph, EPA relies only on the second major prong of the subparagraph – the “inadequate domestic supply” provision. EPA does not suggest that implementing the statutory volume requirements “would severely harm the economy or environment of a State, a region, or the United States.”

The plain meaning of the “inadequate domestic supply” provision is straightforward. Supply means “the amount of something that is available to be used.”8 The antecedent for “supply” in 42 U.S.C. § 7545(o)(7)(A)(ii) is the “renewable fuel required under paragraph (2)” immediately preceding subsections (i) and (ii).9 And “paragraph (2)” is section 7545(o)(2), which specifies the “applicable volume of renewable fuel.”10 As further explained below, this plainly refers to the renewable fuel available for purchase by obligated parties — not finished fuels that contain

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10 Id. § 7545(o)(2)(A)(i).
some fraction of renewable fuels, which are distributed to end-consumers. Subparagraph (o)(2)(A) directs EPA to promulgate regulations to “ensure that transportation fuel sold or introduced into commerce in the United States . . . on an annual average basis, contains the applicable volume of renewable fuel . . . determined in accordance with subparagraph (B).”\textsuperscript{11} Subparagraph B of paragraph (o)(2), CAA section 211(o)(2)(B), contains tables that set the statutory volume requirements for all four categories of renewable fuel over a series for years (through 2022, for renewable fuel [also known as “total renewable fuel”], advanced biofuel, and cellulosic biofuel; through 2012, for biomass-based diesel).

A. The Term “Inadequate Domestic Supply” in the Text of the RFS Statute’s General Waiver Provision Unambiguously Refers Only to Volumes of RFS Qualified Renewable Fuels

The text of the RFS statute makes it clear that Congress intended that “supply” as part of the term “inadequate domestic supply” in subparagraph (o)(7)(A) to mean supply of RFS qualified renewable fuel. EPA contends – as it must in order to uphold its interpretation – that the term is ambiguous.\textsuperscript{12} EPA is mistaken. In any event, EPA’s interpretation of the term is unreasonable.

Under CAA section 211(o)(7)(A)(ii), the term “inadequate domestic supply” clearly refers to the adequacy of the supply of volumes of RFS qualified renewable fuel required under paragraph (2). CAA section 211(o)(2) sets the requirements for the renewable fuel program under the RFS. In the second sentence of CAA section 211(o)(2)(A), Congress directed EPA “to ensure that transportation fuel sold or introduced into commerce in the United States . . . on an annual average basis, contains the applicable volume of renewable fuel . . . determined in accordance with subparagraph (B).”\textsuperscript{13} Subparagraph (B), or CAA section 211(o)(2)(B), provides the annual statutory \textit{volume} requirements for total renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel. In other words, CAA section 211(o)(2) directs EPA to use those volume requirements to set the annual volumetric requirements for the renewable fuels that need to be blended or used in transportation fuel, which requirements fall on obligated parties.\textsuperscript{14} “Supply” in this context thus refers to the volumes of RFS qualified

\textsuperscript{11} Id.

\textsuperscript{12} See, e.g., \textit{Proposed Rule} 33111.


\textsuperscript{14} As the D.C. Circuit explained last year:

The obligation to meet the applicable volumes falls collectively to "refineries, blenders, and importers, as appropriate." 42 U.S.C. § 7545(o)(3)(B)(ii)(i). EPA determined in 2007, and reaffirmed in 2010, that blenders "who only blend[] renewable fuels downstream from the refinery or importer" are exempt from the requirements, leaving refiners and importers as the primary obligated parties under the RFS program. Pursuant to EPA regulations, refiners and importers must demonstrate that they have introduced into U.S. commerce an amount of renewable fuel that is proportional to their import or production of conventional
renewable fuels. That supply of fuel is available to obligated parties, who then may use those renewable fuels to blend into transportation fuel as they see fit.

The RFS statute carefully distinguishes between “transportation fuel,” which is the fuel accessible to drivers of cars and other ultimate consumers of such fuel, and “renewable fuel.” The statute defines transportation fuel as “fuel for use in motor vehicles, motor vehicle engines, nonroad vehicles, or nonroad engines (except for ocean-going vessels).”15 By contrast, the statute defines renewable fuel as “fuel that is produced from renewable biomass and that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel.”16 Again, in paragraph (o)(2), Congress directed EPA to promulgate regulations to ensure that “transportation fuel” contains at least the applicable volume of renewable fuel.”17 And in paragraph (o)(3), Congress specified how EPA must “determine . . . the renewable fuel obligation” that satisfies the requirements of paragraph (o)(2).18 This “renewable fuel obligation” must be “expressed in terms of a volume percentage of transportation fuel sold or introduced into commerce in the United States.”19 The renewable fuel obligation falls not on ultimate consumers of transportation fuel, but only on “refineries, blenders, and importers, as appropriate.”20 This makes considerable sense: the only parties that can use RFS-qualified renewable fuels are obligated parties because they are the only entities with the capability to ensure that the requisite supply, or volumes, of renewable fuels are contained in U.S. transportation fuel. Factors as the so-called “blendwall” or purported infrastructure constraints are entirely irrelevant to whether or not the requisite renewable fuel gallons can be contained in the nation’s transportation fuel.

EPA argues that the term “inadequate domestic supply” as used in 42 U.S.C. § 7545(o)(7)(A) can be read to “encompass the full range of constraints that could result in an inadequate supply of renewable fuel to the ultimate consumers,

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16 Id. § 7545(o)(1)(J) (emphasis added).
17 Id. § 7545(o)(2)(A)(i) (emphasis added).
18 Id. § 7545(o)(3)(B)(i).
19 Id. § 7545(o)(3)(B)(ii)(II) (emphasis added).
20 Id. § 7545(o)(3)(B)(ii)(I).

including fuel infrastructure and other constraints.\textsuperscript{21} This would include, for instance, “factors affecting the ability to produce or import qualifying renewable fuels as well as factors affecting the ability to distribute, blend, dispense, and consume those renewable fuels in vehicles.”\textsuperscript{22} EPA thus seeks to claim the authority to waive statutory renewable fuel volumes by pointing to the so-called purported “blendwall” and other alleged practical concerns regarding distribution and ultimate consumption of renewable fuel — i.e., concerns related to renewable fuel demand, not renewable fuel supply.\textsuperscript{23} But the domestic supply of renewable fuel is the domestic supply of renewable fuel. It is not the domestic supply or use of “transportation fuel” by “ultimate consumers” or of fuel infrastructure. The renewable volume obligation provisions set forth in CAA sections 211(o)(2) and 211(o)(3) say nothing about, nor do they direct EPA about, ensuring the use of certain amounts of transportation fuels by “ultimate consumers.” EPA thus errs in suggesting that “legal and practical constraints” on “supply to vehicles” are relevant to whether an adequate domestic supply of renewable fuels exists.\textsuperscript{24}

With due respect to EPA, the Agency’s proposed interpretation of “inadequate domestic supply” amounts to a rhetorical sleight of hand. Supply is not demand. (EPA denies that its proposed approach engages in “consideration of ‘demand’ rather than ‘supply.’”)\textsuperscript{25} EPA is simply mistaken in this regard. EPA’s emphasis on consumption alone proves that its approach is focused on and tied to consideration of demand.\textsuperscript{26) Hence EPA is misleading at best when it suggests that supply of a product “is best understood in terms of the person or place using the product.”\textsuperscript{27} The domestic supply of renewable fuel, as governed by the RFS statute, is used by “refineries, blenders, and importers, as appropriate” — that is, by obligated parties.\textsuperscript{28}

\textsuperscript{21} Proposed Rule 33111.
\textsuperscript{22} Id.; see also id. at 33112-13.
\textsuperscript{23} See, e.g., id. at 33102, 33114.
\textsuperscript{24} Id. at 33117 n.46.
\textsuperscript{25} Id. at 33114.
\textsuperscript{26} See id. at 33104 (“We are proposing to use the waiver authorities to derive applicable volumes that reflect the maximum volumes that can reasonably be expected to be produced and consumed.”) (emphasis added); see also id. at 33114 (“In the context of a forward-looking annual RFS standards rulemaking issued consistent with the statutory schedule, we propose that the evaluation of ‘supply’ for purposes of determining whether ‘inadequate domestic supply’ exists pursuant to section 211(o)(7)A)(ii), should involve an assessment of the maximum renewable fuel volumes that can reasonably be expected to be produced and consumed, and a comparison of those volumes to statutory volumes.”) (emphasis added).
\textsuperscript{27} Id. at 33111.
In the proposed rule, what EPA seeks to do is to reduce required volumes based on a concept of excessive domestic supply – a belief that domestic supply is too great (but not so great as to trigger severe economic harm) and must be reduced in light of inadequate demand as constrained by infrastructure or other factors. While we appreciate EPA’s sincere interest in improving the functioning of the RFS program, this is simply a bridge too far. EPA’s approach turns the statutory language on its head – and is particularly unpersuasive when one considers that the purpose of the statute is to drive investment and financial decisions that remove the purported infrastructure and demand constraints on which EPA is relying to waive the statutory requirements.

As EPA correctly acknowledges, forcing the development of new markets and new technology is the statutory purpose. EPA concedes that “when Congress specified the renewable fuel volume targets that the RFS program was to attain, . . . it likely was with the understanding that the growth reflected in the statutory tables of applicable volumes would be beyond any previously demonstrated ability of the industry to produce, distribute, and consume renewable fuels.” Moreover, “Congress set targets that envisioned growth at a pace that far exceeded historical growth and prioritized that growth as occurring principally in advanced biofuels (contrary to historical growth patterns). It is apparent, therefore, that Congress intended to require changes that would be unlikely to occur absent the new program.” The statutory requirements for 2022 “were far beyond the industry’s abilities at the time of EISA’s enactment.” Thus Congress’s “clear goal” was to “compel[] the industry to make dramatic changes to increase renewable fuel use.” As EPA states, fuel producers, investors, and others “must see a sustained, profitable market for renewable fuels before they will be willing to invest in the construction of additional fuel production capacity” and in new “infrastructure.” We respectfully submit that the interpretation of the statute and overall approach set forth in the proposed rule cannot be reconciled with these statements.

Because “supply” under CAA section 211(o)(7)(A)(ii) unambiguously refers to supply of RFS qualified volumes of renewable fuels, EPA may not interpret the term “inadequate supply” to include consideration of anything other than annual production capacity and availability of volumes of renewable fuels which can be contained in transportation fuel. In particular, the Agency may not consider other, demand-related factors, such as the so-called E10 blendwall or fuel infrastructure, which do not determine supply. It is of no moment that EPA may think that

29 Proposed Rule 33118 (emphasis added).
30 Id. (emphasis added)
31 Id.
32 Id.
33 Id. at 33119-20.
Congress would have been wiser to grant EPA discretion to use such factors as a basis for reducing the statutory volumes.\textsuperscript{34}

In addition, EPA’s interpretation cannot be reconciled with other provisions of the statute. As EPA acknowledges in the proposed rule, in other parts of the CAA that do not pertain to the RFS, Congress explicitly specified that the Administrator may consider distribution capacity and other factors in determining whether to waive or how to determine fuel volumes.\textsuperscript{35} For example, CAA section 211(o)(2)(b)(ii) lays out a procedure whereby EPA is to determine “the applicable volumes of each fuel specified in the tables in clause (i) for calendar years after the calendar years specified in the tables” are at an end – that is, in the case of total renewable fuels, advanced biofuels, and cellulosic biofuels, for calendar years after 2022.\textsuperscript{36} This provision specifically directs EPA to analyze six enumerated factors, including “the impact of renewable fuels on the \textit{infrastructure} of the United States, including deliverability of materials, goods, and products other than renewable fuel, and \textit{the sufficiency of infrastructure to deliver and use renewable fuel}.”\textsuperscript{37} Congress thus decided to use infrastructure-related considerations in paragraph (o)(2) of the statute as an explicit basis for determining post-2022 volumes. Congress’s decision regarding paragraph (o)(2) underscores the significance of Congress’s decision not to include infrastructure-related considerations in the general waiver provisions in paragraph (o)(7). And other subsections of 42 U.S.C. § 7545 confirm that when Congress intended EPA to consider distribution capacity in addition to supply, it said so.\textsuperscript{38} These provisions show that Congress distinguished between “supply” and “distribution” and did not consider the former to encompass the latter.\textsuperscript{39} In addition, Congress’s decisions in this regard have even greater weight when one considers that Congress considered and rejected a proposed version of the statute.

\textsuperscript{34} \textit{See Utility Air Regulatory Group v. EPA}, 134 S. Ct. 2427, 2445 (2014) (“An agency has no power to ‘tailor’ legislation to bureaucratic policy goals by rewriting unambiguous statutory terms.”); id. at 2446 (“We reaffirm the core administrative-law principle that an agency may not rewrite clear statutory terms to suit its own sense of how the statute should operate.”).

\textsuperscript{35} \textit{See Proposed Rule} 33111-14.


\textsuperscript{37} \textit{Id.} § 7545(o)(2)(B)(ii)(IV) (emphasis added).

\textsuperscript{38} \textit{See, e.g., id.} § 7545(m)(3)(C)(i) (waivers for oxygenated gasoline in case of “an inadequate domestic supply of, or \textit{distribution} capacity for, oxygenated gasoline”) (emphasis added); \textit{id.} § 7545(c)(4)(C)(iii)(l) (waivers of certain controls or prohibitions respecting the use of fuels or fuel additives if, inter alia, extreme certain and unusual circumstances “prevent the \textit{distribution} of an adequate supply of the fuel or fuel additive to consumers”) (emphasis added); \textit{id.} § 7545(o)(8)(B) (study to evaluate renewable fuel supplies and prices, blendstock supplies, and \textit{supply and distribution} system capabilities”) (emphasis added).

\textsuperscript{39} \textit{Cf. Sosa v. Alvarez–Machain}, 542 U.S. 692, 711 n.9 (2004) (“when the legislature uses certain language in one part of the statute and different language in another, the court assumes different meanings were intended”) (citation omitted). EPA weakly endeavors to avoid the implications of these provisions, Proposed Rule 33112, but fails to do so persuasively.
that would have given EPA the power to grant a waiver if EPA determined “that there is an inadequate domestic supply or distribution capacity.”

Subparagraph (o)(7)(E) of the statute further supports the conclusion that distribution constraints and other demand-related factors have no place in determining whether there is an inadequate domestic supply of renewable fuels that would trigger EPA’s waiver authority. That provision authorizes EPA to waive biodiesel volume requirements if EPA “determines that there is a significant renewable feedstock disruption or other market circumstances that would make the price of biomass-based diesel fuel increase significantly.” The general waiver provisions in subparagraph (o)(7)(A) contain no similar authorization for a waiver based on overall “market circumstances” that could lead to fuel price increases.

EPA’s interpretation is similarly undermined by CAA section 211(o)(7)(A)(i) – the other general waiver provision of the RFS statute. Sub-subparagraph (o)(7)(A)(i) allows for waiver of an RFS volume requirement if EPA determines “that implementation of the requirement would severely harm the economy or environment of a State, a region, or the United States.” In making this determination, EPA can and does consider demand-related factors – factors that are irrelevant to supply. At the same time, EPA cannot consider demand-related (or

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42 Id. § 7545(o)(7)(A)(i).
43 See EPA, Notice of Decision Regarding the State of Texas’ Request for a Waiver of a Portion of the Renewable Fuel Standard, 73 Fed. Reg. 47168, 47170 (Aug. 13, 2008) [Texas Waiver Decision], available at http://www.gpo.gov/fdsys/pkg/FR-2008-08-13/pdf/E8-18738.pdf (rejecting waiver request based on economic harm theory; noting that EPA had solicited public comment on the request, specifically seeking “information that would enable EPA to: . . . determine to what extent, if any, a waiver approval would change demand for ethanol and affect corn or feed prices”); id. at 47172-80 (analyzing future ethanol consumption and prices, fuel prices, and other considerations); id. at 47180 (concluding, inter alia, that “[f]or the 2008/2009 corn crop marketing year, . . . the likelihood that the RFS will determine ethanol demand in the U.S. is low, and . . . the most likely result is that the RFS would have no impact on ethanol demand”); see also EPA, Request for Comment on Letters Seeking a Waiver of the Renewable Fuel Standard, 77 Fed. Reg. 52715, 52716 (Aug. 20, 2012), available at http://www.gpo.gov/fdsys/pkg/FR-2012-08-30/pdf/C1-2012-21066.pdf (requesting comment on “any matter that might be relevant to EPA’s review of and actions in response to [North Carolina’s and Arkansas’ waiver] requests, specifically including . . . information on . . . to what extent, if any, a waiver would change demand for ethanol” and “the amount of ethanol that is likely to be consumed in the U.S. during the relevant time period, based on its value to refiners for octane and other characteristics and other market conditions in the absence of the RFS volume requirements”); Letter to EPA Administrator Lisa P. Jackson from North Carolina Governor Beverly Eaves Perdue (Aug. 14, 2012), available at http://www.epa.gov/otaq/fuels/renewablefuels/documents/north-carolina-rfs-waiver-request.pdf (requesting waiver on theory of severe economic harm); Letter to EPA Administrator Lisa P. Jackson from Arkansas Governor Mike Beebe (Aug. 13, 2012), available at http://www.epa.gov/otaq/fuels/renewablefuels/documents/arkansas-rfs-waiver-request.pdf (same).
supply-related) factors in making a “severe harm” waiver decision unless such considerations help EPA determine whether severe harm in fact would occur.

Thus, for example, in ruling in the “Texas Waiver Decision” in 2008 on Texas’s request for a waiver made on severe harm grounds, EPA noted that commenters had raised questions about ethanol production capacity “and whether distribution facilities would be able to accommodate the increased amount of renewable fuels required.” Commenters had also argued “that granting the waiver request would allow a smoother transition to biofuels in terms of production capacity and distribution by allowing more realistic development of infrastructure to support the renewable fuels industry,” and “that granting the waiver request might create an incentive to develop more advanced biofuels more quickly and move away from grain-based ethanol.” EPA nonetheless concluded that such considerations “are not relevant to the threshold issue in this waiver proceeding — whether implementation of the RFS mandate, during the time period at issue, would severely harm the economy.”

The text of sub-subparagraph (o)(7)(A)(i) makes it crystal clear that modest – or otherwise less than severe – economic or environmental harm is not a sufficient basis for triggering the “would severely harm” waiver provision. But under EPA’s interpretation of sub-subparagraph (o)(7)(A)(ii), “inadequate domestic supply” becomes a highly flexible grant of discretion to EPA to rely on demand-related factors to waive RFS requirements so as to avoid less-than-severe “harm” to economic actors who would otherwise be affected by these requirements. This is implausible. It is also inconsistent with EPA’s past position on how to interpret the general waiver provision. As EPA said in 2008, interpreting the “would severely harm” prong of the general waiver provision: “Texas’ interpretation would amount to a very open-ended and wide ranging waiver provision; EPA does not believe this is what Congress intended.” EPA was correct in 2008. Congress intended “a more limited waiver provision,” which “will better implement Congress’ overall desire to promote the use of renewable fuels, reflected in enacting the expanded RFS program and mandating the increased utilization of renewable fuels over a number of years.”

44 Texas Waiver Decision 47182.
45 Id.
46 Id. “EPA recognizes that Texas and many parties, both those supporting the waiver and those opposing the waiver, have raised issues of great concern to them and to others in the nation concerning the role of the increased use of biofuels. However[,] the issue before the Agency in this case is a much more limited one, as described above.” Id.
47 Texas Waiver Decision 47171 (emphasis added).
48 Id.
“might disrupt the expected growth in use of renewable fuels” and undermine “the necessary level of stability for this program that Congress intended.”

EPA points to other CAA statutory language in an effort to justify its interpretation, but its reasoning is not persuasive. For example, EPA relies on certain provisions in CAA section 211(k)(6). But these provisions are of limited relevance to the general waiver provisions – not least because section 211(k)(6)(B) uses “supply” as a verb, not as a noun; as EPA has said in the past in construing the general waiver provision, Congress’s choices in this regard are significant. Anyone’s “capacity to supply” any substance is of course affected by constraints on the system for distributing the substance to the recipient or recipients; that tells one nothing about how to construe the noun “supply.”

Similarly, EPA errs in believing that 42 U.S.C. § 7545(c)(4)(C)(ii) significantly aids its argument. That provision allows for a waiver of certain requirements if certain “extreme and unusual fuel or fuel additive supply circumstances exist in a State or region of the Nation which prevent the distribution of an adequate supply of the fuel or fuel additive to consumers,” where the “supply circumstances” result from “a natural disaster, an Act of God, a pipeline or refinery equipment failure, or another event that could not reasonably have been foreseen or prevented and not the lack of prudent planning on the part of the suppliers of the fuel or fuel additive to such State or region.” Here, “supply” is used as an adjective, again altering the contextual meaning of the word; the term “fuel or fuel additive supply circumstance” could simply mean “supply-related circumstance.” In any event, section (c)(4)(C)(ii) has limited utility for interpreting subparagraph (o)(7)(A), which relates to a renewable fuel obligation that falls on obligated parties subject to the RFS statute, who have considerable control over infrastructure and distribution equipment. As noted above, the supply of domestic renewable fuel is specifically available to obligated parties, who do not face infrastructure or distribution constraints in obtaining renewable fuel of the sort that EPA suggests are relevant to ultimate end-consumers of transportation fuels, and who obtain further benefit and flexibility from the RIN credit trading system established under paragraph (o)(5) of the statute.

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49 Id. at 47172, 47183.
50 Proposed Rule 33111-12, 33114.
51 See Texas Waiver Decision 47171 n.10 (“Even the sentence structure used by Congress indicates that the harm is to come from the RFS mandate itself. Adding the idea of significant contribution would call for changing the way ‘harm’ is used from a verb (would * * * harm) to a noun (would contribute significantly to harm), and changing the kind of harm from the adverb severely to the adjective severe. Congress however did not write it that way.”).
As explained below, protecting obligated parties from incurring potential marketing or other burdens and costs is not a permissible basis or reason for departing from the statutory mandates. Moreover, the statute provides for limited hardship exceptions. And EPA lacks the authority to craft additional hardship exceptions. As the D.C. Circuit has said: “The statute set[s] the renewable fuel obligation, and [refiners and others] ha[ve] no legally settled expectation that EPA w[ill] exercise its waiver authority to reduce that obligation.”

In establishing the RFS statute and program, Congress (and EPA) expected, and in fact intended, that significant burdens and costs would arise as incentives to innovate and invest in new technologies. In parts of the proposed rule, EPA acknowledges this fundamental element and purpose of the statutory scheme. Yet in other parts, the proposed rule cites this very incentive structure as a reason to waive the statutory requirements that generate the incentives. In essence, the proposed rule suggests that compliance with the statute should be waived because the costs of compliance are significant. To do so would ignore and undermine the statutory mandates and purposes. And compliance costs are not a basis for waiving the statutory requirements.

55 Monroe Energy, 750 F.3d at 920.
56 See, e.g., Proposed Rule 33102 (“The fact that Congress chose to mandate increasing and substantial amounts of renewable fuel clearly signals that it intended the RFS program to create incentives to increase renewable fuel supplies and overcome limitations in the market.”); id. at 33106 (“The proposed volume requirements for 2015 and 2016 reflect the growth rates in both categories of renewable fuel that can be attained under a program explicitly designed to be “market-driving,” and that would not be expected to occur in the absence of those volume requirements.”); id. at 33128 (“We recognize that the market would need to compel E85 prices to be increasingly favorable relative to E10 in order to provide the incentive for FFV owners to purchase E85, but this is exactly how a fully functional market will react to standards designed to drive growth in renewable fuel as Congress intended.”); id. at 33134 (“We believe that the advanced biofuel and total renewable fuel standards are significant factors in the amount of biodiesel produced and imported into the United States. We also believe that the advanced and/or total renewable fuel standards can continue to drive BBD supply in 2015–2017. [W]e are proposing volumes of advanced biofuel and total renewable fuel for 2015–2016 that require substantial growth beyond the volumes supplied in 2014. We expect that the advanced biofuel and total renewable fuel standards will continue to provide incentives for BBD supply that exceeds the BBD standard.”).
57 See, e.g., Proposed Rule 33112 n.25 (arguing for interpretation of “inadequate domestic supply” to include demand factors, and suggesting that the contrary interpretation “would be extremely problematic” because, inter alia, (1) “any further growth in ethanol use requires the time consuming installation of costly new E15 or E85 pumps and tanks,” and (2) “infrastructure improvements would be needed throughout the country at the same time to increase the nation’s ability to consume renewable fuels at levels corresponding with production capacity”).
58 See Monroe Energy, 750 F.3d at 919 (“[S]o long as sufficient RINs exist for obligated parties to meet the fuel standards, the court has no ground to conclude the 2013 standards are unlawful simply because RINs are costlier than in prior years, especially as 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.”).
B. EPA Precedent Also Undermines Its Current Interpretation

EPA’s precedent in interpreting its general waiver authority also undermines EPA’s current reading of that authority.

For instance, EPA concluded in its final rule implementing the RFS2 program that “it is ultimately the availability of qualifying renewable fuel, as determined in part by the number of [Renewable Identification Numbers (RINs)] in the marketplace, that will determine the extent to which EPA should issue a waiver of RFS requirements on the basis of inadequate domestic supply.” As explained above, this is the correct and natural reading of the statutory text, and is also the most natural reading of EPA’s repeated and recent statements about the provision. In short,

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the amount of available renewable fuel – not consumption-related or infrastructure-related considerations – determines whether there is inadequate domestic supply. Moreover, as the statutory treatment of RIN credits suggests – and as EPA has indicated – RINs should be counted as part of the supply of qualifying renewable fuel that should be used to determine the extent to which EPA should issue a waiver for reasons of inadequate domestic supply.  

This conclusion is also supported by EPA’s 2008 decision on Texas’ request for a partial RFS waiver based on severe harm. In the Texas Waiver Decision, EPA concluded that Congress had intended its general waiver authority to be interpreted narrowly based on the plain meaning of the text on its face without reading into it or enhancing it based on additional language or words used in other parts of the CAA, including other parts of the RFS. EPA emphasized the fact that Congress intended for the RFS to increase renewable fuel volumes and, therefore, that the Agency must interpret its authority to require a high bar before waiving any required RFS volumes. Accordingly, EPA rejected Texas’ assertion that the Agency should reduce RFS volumes if it found that the RFS contributed to severe economic harm. Instead, based on the plain meaning of the text, EPA found that it would need to find that “implementation of the RFS program itself must be the cause of the severe harm.”

In explaining this conclusion, EPA noted that it had considered “numerous examples in section 211 and other sections of the CAA where Congress authorized EPA action based on the contribution made by a factor or activity and worded the statute to clearly indicate this intention.” The Agency concluded that “Congress did not use such language in this [general] waiver provision, and the omission of any reference to contribution or similar terms in section 211(o)(7)(A) indicates Congressional intent to limit the availability of a waiver to situations where implementation of the

61 See Final RFS2 Rule 14698 (availability of qualifying renewable fuel, “as determined in part by the number of RINs in the marketplace, . . . will determine the extent to which EPA should issue a waiver of RFS requirements on the basis of inadequate domestic supply”); see also 42 U.S.C. § 7545(o)(5)(B) (providing that credits may be used or transferred “for the purpose of complying with” § 7545(o)(2), which governs renewable volume requirements) (emphasis added).

62 See Texas Waiver Decision 47171 (refusing to interpret EPA’s general waiver authority under CAA section 211(o)(7)(A)(i) to include consideration of instances when the RFS would “contribute to” severe economic harm and finding clear Congressional intent that EPA not use such consideration where it had omitted the phrase in that section of the Clean Air Act while including it in others).

63 Id.

64 Id.

65 Id.
RFS program itself would severely harm the economy.” EPA made it clear that, although it was ruling specifically on a request that invoked the “severe economic harm” component of CAA section 211(o)(7)(A) – and thus did not need to provide any more specific guidance on requests that invoke the separate components of severe environmental harm and “inadequate domestic supply” – “the guidance discussed in the Texas Waiver Decision would apply in general terms to these requests as well.” That is, the guidance set forth in the decision applies to all requests to “grant a waiver based on severe harm to the environment of a State, a region, or the United States, or inadequate domestic supply.”

Indeed, the Texas Waiver Decision provides powerful precedent for how to avoid an inappropriate interpretation of “inadequate domestic supply” under CAA section 211(o)(7)(A)(ii). Specifically, just as Congress’s omission of any reference to the RFS “contributing to” severe economic harm prevented a broad interpretation of that prong of the general waiver authority, Congress’s omission of any reference to “consumption,” “distribution capacity” or “blendwall” or similar terms under the “inadequate domestic supply” prong of that same authority limits EPA’s legal authority in this regard. As EPA acknowledged in 2007, “Congress’s clear intent was to limit EPA’s authority to provide relief” under the general waiver provision. Congress’s goal was not to provide EPA with a broad grant of discretion to reduce renewable fuel volume requirements based on policy considerations; Congress instead limited EPA’s waiver discretion by specifying discrete statutory criteria that must be satisfied before the requirements may be waived.

C. Understanding “Supply” in the Text of the RFS Statute’s General Waiver Provision to Mean Only RFS Qualified Renewable Fuel Gallons Comports Best with The Structure and Purpose of the RFS

Understanding “supply” under CAA 211(o)(7)(a)(ii) to mean only RFS qualified renewable fuel gallons fits best with the structure and purpose of the RFS statute. Both the structure and purpose of the statute show that Congress intended to drive the creation of a new and robust market for renewable fuels, including by creating some burdens for obligated parties. The burdens in fact were intended by Congress to create incentives for investment and to force technological innovation. Thus the limited waiver provisions of 42 U.S.C. § 7545(o)(7), including the general waiver provision set forth in subparagraph (o)(7)(A), are limited exceptions to EPA’s

66 Id.
67 Texas Waiver Decision 47184.
68 Id. (emphasis added).
69 Final RFS1 Rule 23928 (emphasis added). Thus, for example, “EPA is not authorized to grant other more targeted relief such as reducing the percentage for some refiners and not others or refusing to count towards compliance renewable fuel that is produced or used in certain parts of the country.” Id.
baseline obligation to “ensure” that “at least” the Congressionally prescribed minimum volumes are met each year.70

As EPA explains in the proposed rule and has explained in past regulations and guidance, Congress intentionally set the RFS annual volume requirements at ambitious levels while understanding that renewable fuel production and distribution capabilities would necessarily have to catch up to those levels. Congress did this to encourage investment in the production of biofuels in the U.S. so that the required volumes (or supply) of such biofuels would be used by obligated parties in transportation fuel by 2022. Additionally, Congress intended to drive obligated parties and their partners to invest in the infrastructure and marketing necessary to deliver the required amounts of renewable fuels contained in transportation fuel to ultimate consumers. The fact that the RFS demanded robust corn ethanol requirements, which have helped sustain the E10 market, illustrates this fact.

EPA recognized as much in its publication of the Regulatory Impact Analysis (“RIA”) accompanying final rules for the RFS2, writing: “Over the past decade, ethanol use has grown rapidly due to oxygenated fuel requirements, MTBE bans, tax incentives, state mandates, the first federal renewable fuels standard (‘RFS1’), and rising crude oil prices.”71

Nevertheless, EPA conducted a lengthy analysis within its RIA detailing the need to increase E85 availability and providing it at a competitive price in order to meet the goals of the RFS. EPA included estimates of the costs of expanding E85 retail facilities in its analysis of the overall costs to refiners of the program.72 EPA fully recognized that the necessary lower pricing of E85 to attract consumer use and necessary investment in E85 infrastructure “contains a significant amount of transfer payments from the refining industry to consumers and other entities.”73 And EPA reiterates the point, saying, “[T]he lower E85 price to account for reduced E85 availability is purely a transfer payment from the refiner to the FFV owner.”74 EPA nonetheless concluded, “[W]hile gasoline refiners and markets will always have a greater profit margin selling ethanol in low-level blends to consumers based on volume, they should be able to maintain a profit selling it as E85 based on energy content in the future.”75

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72 Id. at 781-782.
73 Id. at 814.
74 Id.
75 Final RFS2 Rule 14762; see also RFS2 RIA 255-56.
It should be noted that EPA conducted this analysis and reached its conclusion with full knowledge that gasoline demand was expected to decline in the future. The agency’s analysis for the final RFS2 rule and Regulatory Impact Analysis is based on the 2009 Annual Energy Outlook and the October 2009 Short Term Energy Outlook, recognizing the impact that the economic recession and increased fuel efficiency standards would have on future consumption of gasoline. EPA’s contention that there are now new constraints on supply “driven in part by lower gasoline consumption than was expected in 2007” seems mistaken.\(^{76}\)

Today U.S. transportation fuel contains approximately 10 percent ethanol, which may be attributed to a significant extent to the volumetric requirements under the RFS set by Congress in 2005 and enhanced in 2007. Congress knew and intended at the time it passed the legislation that the RFS could displace a substantial portion of the petroleum contained in the nation’s transportation fuel system. That was the point: Congress intended to force a market for the prescribed levels of renewable fuels in order to increase the energy security of the United States. It knew that the statutory levels of renewable fuels would necessarily replace a percentage of the petroleum in the nation’s transportation fuel and that the obligated parties would incur the initial, short-term marginal costs to blend, price and market the required levels. Obligated parties are the only parties who can actually use renewable fuels because it is they who are solely capable of using or blending them into transportation fuel. Moreover, obligated parties and their partners are the only ones who can and do directly set prices for and market transportation fuel. The ultimate consumers can access and use only this final, blended product.

Indeed, EPA acknowledges this point. As EPA says in the proposed rule, the renewable fuel volumes required by the statute by 2022 “were far beyond the industry’s abilities at the time of EISA’s enactment, strongly suggesting that Congress expected the RFS program to compel the industry to make dramatic changes in a relatively short period of time.”\(^{77}\) “In the longer term, sustained ambitious volume requirements are necessary to provide the certainty of a guaranteed future market that is needed by investors; the development of new technology won’t occur unless there is clear profit potential, and it requires multiple years to build new production, distribution, and consumption capacity.”\(^{78}\) These statements are correct; but EPA’s proposed action, and EPA’s proposed justification for the action, is not consistent with the statements. For this reason alone, both the action and the justification would be arbitrary and illegal if EPA adopts them in the final rule.

There may be market-related constraints and factors — including delays and inaction by EPA itself — that have significantly increased the costs of blending

\(^{76}\) Proposed Rule 33104.

\(^{77}\) Id. at 33118 (emphasis added).

\(^{78}\) Id. (emphasis added).
additional E10 to comply with the statutory levels of total renewable fuel. But the same constraints do not exist or operate in the same way for other higher blends such as E15 or E85, as well as biofuel use in the diesel pool and in the non-road, heating oil and jet fuel markets. As a recent study found, obligated parties have the ability today to blend, price and market enough of the required volumes of ethanol over the purported E10 “blendwall” to comply with the statutory levels of total renewable fuel, and the “blendwall” is wholly irrelevant to biodiesel use, for example.\textsuperscript{79} EPA in its proposed rule appears to be defining “inadequate domestic supply” in such a way as to protect obligated parties from incurring foreseeable and necessary initial expenses or burdens. This defies EPA’s past interpretation and guidance.

As EPA suggested in its 2012 \textit{RFS Waiver Decision}, obligated parties have known their blending obligations since 2007 and since that time should have made the proper plans and investments to comply with the law, which they have had and continue to have the ability to do.\textsuperscript{80} With respect to the so-called “Ethanol Blendwall,” EPA explained that during the comment period leading up to the 2012 \textit{RFS Waiver Decision}, “[c]ommenters state[d] that once ethanol in gasoline hits this E10 saturation point, blending additional ethanol into gasoline will not be a viable strategy to comply with RFS-required volumes.”\textsuperscript{81} EPA responded to this suggestion clearly and forcefully:

\begin{quote}
Ethanol has been the dominant domestic renewable fuel for several years, and during development of the law and regulations stakeholders in the fuel sector reasonably expected that ethanol would play a significant role in fulfilling the RFS volume requirements. As pointed out by commenters, E10 is approaching the point at which it saturates the gasoline market. As a result, \textbf{if obligated parties choose to achieve their required RFS volumes using ethanol they should work with their partners in the vehicle and fuel market to overcome any market limitations on increasing the volume of ethanol that is used. Stakeholders in the refining sector have been aware of the E10 blend wall since passage of EISA in December of 2007.}
\end{quote}


\textsuperscript{81} Id. at 70772.
As the market has approached the E10 blend wall, the ethanol industry has worked to support the introduction of E15 into the market, and domestic auto manufacturers have increased production of vehicles capable of running on even higher ethanol blends. Over ten million flex-fuel vehicles (FFVs) are now in the existing fleet. **FFVs currently consume E85 only about 0.4% of the time, but were they to be regularly fueled on E85, such vehicles would be capable of consuming billions of additional gallons of ethanol. The affected industries have had and continue to have the ability to achieve widespread adoption of E85 through working with partners in the retail and terminal infrastructure sectors to increase the number of stations that offer E85 or other intermediate ethanol blends and improve the pricing structure relative to E10. As noted above, however, other fuel options are available to meet RFS requirements.**

As EPA recognized in the 2012 *RFS Waiver Decision*, the biofuels industry has done its job to support widespread adoption of RFS qualified renewable fuels. In its current proposed rule, however, EPA argues “that biofuel producers [like obligated parties] could have taken appropriate measures, and that nothing precludes biofuel producers from independently marketing E85 or increasing the production of non-ethanol renewable fuels.” EPA believes that it is “placing appropriate pressure on all stakeholders to act within their powers to increase renewable fuel production and use,” and that its approach “provides an appropriate balance.” These statements reflect a mistaken view of the statute and the scheme that it establishes. EPA’s legal duty in setting annual volume obligations is not to provide a “balance” between the interests of “stakeholders,” but to “ensure” that U.S. transportation fuel “contains at least the applicable volume of renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel” set forth in the statute, unless the statute’s discrete waiver provisions are triggered.

As EPA recognized in its 2012 waiver decision, obligated parties and their partners are the only parties that can price and market transportation fuels (containing renewable fuels) to ultimate consumers. To place that burden on biofuels producers ignores market realities; biofuels producers do not market their fuels to the general public, because the only parties that can use them are obligated parties. Moreover,

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82 Id. at 70772-73 (emphasis added).

83 Proposed Rule 33114.

84 Id.

putting the burden on biofuels producers – together with other EPA actions and failures to act – suggests that EPA is biased toward helping protect the economic interests of obligated parties now that it is obvious eight years into the enhanced RFS program that they have not taken the steps necessary to comply with the law.

The responsibility to help achieve widespread adoption of higher blends of ethanol lies squarely with obligated parties and their partners. In the Agency’s own words, they “have had and continue to have the ability to achieve widespread adoption of E85” and higher blends of ethanol. 2012 RFS Waiver Decision 70773. If they had been responsibly planning to comply with their RFS RVO requirements, obligated parties would have been taking the necessary steps for compliance since passage of EISA in 2007. It is now 2015. Yet most obligated parties and other impacted stakeholders have not taken the steps necessary for widespread adoption of higher blends of ethanol. To reward obligated parties for their failure to take such steps would only further undermine the program, and the goals and requirements of the statute. Also, as EPA acknowledges, the possibility of increases in RIN costs caused by activities such as RIN banking is not a justification for loosening compliance obligations.\footnote{\textsuperscript{86} “Such practices [as widespread RIN banking that could result in shortfalls for parties who “have not entered into sufficient contracts with blenders or other parties to acquire sufficient RINs”] are possibilities in any competitive marketplace, and we believe that obligated parties have had sufficient experience with the RFS program to have taken precautionary measures to avoid such results and to be prepared to comply with applicable standards potentially as high as the statute requires. Even where they have not done so, and find compliance with a given year’s standards infeasible, they may avail themselves of the option of carrying a compliance deficit forward for that compliance year to the next.” Proposed Rule 33108.}

As explained in detail in other parts of these comments, biofuel producers are working hard and making significant progress toward increasing the production of nonethanol renewable fuels. To suggest, however, that “nothing precludes biofuel producers from independently marketing E85 or increasing the production of nonethanol renewable fuels”\footnote{\textsuperscript{87} Id. at 33114.} places the burden on the wrong parties, and seems to show that EPA does not appreciate the importance of its stable and consistent implementation of the RFS as the fundamental driver of investment in greater production of biofuels in the United States, especially cellulosic and advanced biofuels, many of which are nonethanol renewable fuels. As EPA acknowledges in the proposed rule, and as we have discussed at length in other parts of these comments, the weakness of, and instability generated by, the initial 2014 proposal and the fact that EPA has not issued a final 2014 or 2015 RFS rule have had a major negative impact on this investment.\footnote{\textsuperscript{88} See Proposed Rule 33102 (“We recognize that our delay in issuing standards for 2014 and 2015 has created additional uncertainty in the marketplace. We are committed to returning our standard-setting process to the statutory schedule, to provide the certainty that will allow the biofuels sector and the RFS program to succeed.”).} EPA’s failure to act in a timely way is not merely a technical violation of the statute, but is also a violation of law that undermines the fundamental goals and requirements of what Congress directed the
agency to do. EPA’s actions and inactions – combined with the ongoing dilatory tactics of the obligated parties to avoid their RFS compliance obligations – are important causes of why biofuel producers may not be able to increase production of nonethanol renewable fuels as much as they otherwise might. But EPA’s and obligated parties’ failure to comply with the statute and to plan in accordance with the statute are not permissible excuses or justifications for ignoring and rewriting the statute’s requirements, or for giving obligated parties a pass on volume requirements in a manner that undermines fundamental statutory purposes. The statute does not give EPA the freedom to make volume-setting waiver decisions in order to benefit obligated parties.

The importance of market certainty and a stable regulatory framework as a driver for investment highlights one of the basic problems with the interpretation of the waiver authority set forth in EPA’s proposed rule. “Clear, predictable regulatory expectations can . . . create the level playing field that encourages companies to make long-term investments in innovative energy technologies.” This is, in fact, a primary goal of the RFS statute. But EPA’s interpretation of its general waiver authority makes it impossible to forecast how the waiver authority could be exercised in the future. EPA says that under the approach set forth in the proposed rule, “[o]ne way of expressing” EPA’s objective is to say we are seeking to determine the maximum volumes of renewable fuel that can be expected to be achieved in light of supply constraints [as construed using EPA’s counterintuitive definition of “supply”]. This is a very challenging task not only in light of the myriad complexities of the fuels market and how individual aspects of the industry might change in the future, but also because we cannot precisely predict how the market will respond to the volume-driving provisions of the RFS program. Thus the determination of the maximum achievable volumes is one that we believe necessarily involves considerable exercise of judgment.

The complexity and the challenges here are largely of EPA’s own making. EPA should stick to the more straightforward task, mandated by statute, of determining whether an adequate supply of renewable fuel will be available to meet the statutory requirements. The petroleum industry is inviting EPA to embark on a “multiyear voyage of discovery” under which EPA will be called on to “decide, on an ongoing basis,” how to set volumes based on an opaque and unpredictable forecasting process. EPA should not take upon itself the extrastatutory responsibility of determining the volumes “which in [EPA’s] judgment are as

90 Proposed Rule 33104-5.
91 Utility Air Regulatory Group, 134 S. Ct. at 2446.
ambitious as can reasonably be justified,\textsuperscript{92} relying on policy considerations that lie outside EPA’s limited authority.

Congress recognized that obligated parties would need to incur some cost to ensure that the ambitious statutory amounts of renewable fuels set by Congress would be blended into the nation’s transportation fuel. Nonetheless, Congress did not set obligated parties an impossible task: indeed, ethanol (e.g., E85), biodiesel, and other capabilities exist today for obligated parties to comply with the RFS beyond the E10 saturation point. To some extent, the proposed rule acknowledges the significance of this proposition:

\begin{quote}
[I]t is highly unlikely that Congress expected the very high volumes that it specified in the statute to be reached only through the consumption of E10; indeed the statute does not explicitly require the use of ethanol at all. . . . [W]e do not believe that Congress intended the renewable fuels market to be ultimately constrained by the E10 blendwall or any other particular limitation that may exist in supplying renewable fuels.\textsuperscript{93}
\end{quote}

Nonetheless, the proposed rule does not fully come to grips with the implications of what it acknowledges. To the extent that blendwall factors are used as justification or excuse for loosening volume requirements, the core features of the program itself are undermined and Congress’s intentions are defeated. Rather than smooth the path to ultimate compliance with the goals and requirements of the RFS statute, EPA’s proposal, if implemented, would have the regrettable effect of undermining the likelihood that those requirements and goals will be ultimately achieved.

Moreover, Congress gave obligated parties two limited escape valves to avoid overall compliance with RFS requirements – the general waiver provisions set forth in subparagraph (o)(7)(A). These provisions specifically protect obligated parties (1) in cases of “severe” (not moderate or burdensome) harm to the economy or environment of a state, a region, or the United States (not merely to a particular economic sector or stakeholder within such a geographic unit), and (2) in cases of actual “inadequate domestic supply” – that is, real impossibility. It is most consistent with the structure and purpose of the RFS to read “inadequate domestic supply” to mean solely volumes of renewable fuel, which are available to obligated parties to use or blend.

\textsuperscript{92} Proposed Rule 33106.

\textsuperscript{93} Proposed Rule 33118.
D. EPA’s Proposed Use of the Cellulosic Waiver Provision to Reduce Advanced and Total Renewable Fuel Volume Obligations is Unreasonable

In its proposed rule, EPA has failed properly to justify its use of its cellulosic waiver authority\(^\text{94}\) to reduce the advanced and total renewable fuel volumes to the same extent that it is proposing to reduce RVOs for cellulosic biofuels. EPA has failed to show that there are insufficient potential gallons of advanced and total renewable fuels, used along with carryover RIN credits, to meet the full RVO requirements. In addition, EPA has not shown that obligated parties are incapable of blending higher volumes of ethanol beyond the so-called E10 blendwall point. For EPA to reduce the RVOs in the absence of a persuasive (and persuasively explained) rationale for doing so would be arbitrary and capricious.

Until now, EPA has interpreted its authority to reduce volumes of advanced and total renewable biofuel RVOs under its cellulosic waiver authority by focusing on the Agency’s ability under the law, based on the likely availability of advanced and total renewable fuels to obligated parties, to maintain the RFS statutory RVOs for those fuels in spite of any annual reductions to the cellulosic biofuel RVOs. For instance, EPA opted to maintain the 2012 and 2013 RVOs for advanced and total renewable fuels because it determined that there would be sufficient production volumes of qualifying advanced biofuels in those years to make up the reduced amounts of cellulosic biofuels in the same years.\(^\text{95}\) EPA thus has correctly placed a premium on following Congress’s mandate to implement the RFS in a way that results in the increased production and use of renewable fuels as provided under the law.\(^\text{96}\)

The proposed rule evinces a concern that the E10 “blendwall” has come nearer (though as discussed below, EPA has not actually shown that any firm “blendwall” constraint has actually arrived) because obligated parties and other stakeholders have not acted reasonably to take prudent steps to overcome such potential limitations. Yet as EPA pointed out in its 2012 RFS Waiver Decision, obligated parties have known these steps to be necessary and desirable to comply with their RFS obligations since the enactment of the RFS2 statute in 2007. Taken in isolation, the blendwall factor – which is foreign to the purposes of the RFS statute, and thus its consideration is inconsistent with Congressional intent – does not and


\(^{96}\)2012 RFS Final Rule 1331 (“[EPA] believe[s] that it would not be consistent with the energy security and greenhouse gas reduction goals of the [RFS] statute to reduce the applicable volumes of advanced biofuels set forth in the statute if there are sufficient volumes of advanced biofuels available, even if those volumes do not include the amount of cellulosic biofuel that Congress may have desired”).
should not qualify as a justification for making any reductions to the advanced and total renewable RVOs, even under the broader cellulosic waiver authority provision.

EPA’s cellulosic waiver authority, though broader than EPA’s general waiver authority, is more constrained than some might argue. EPA has “considerable discretion” in exercising the authority. And this is significantly more discretion than EPA has in exercising the general waiver authority. At the same time, EPA’s discretion to make reductions to advanced biofuel or total renewable fuel volumes under the cellulosic waiver provision is not unbounded. For example, as EPA indicates, reductions in any specific volume requirement should be made “only to the extent necessary to remove” an actual “inadequacy in supply.” More generally, decisions about reductions must be made to comport with the statute’s overall purposes, which are technology-forcing and forward-looking, and are not meant to perpetuate existing constraints, real or imagined, related to renewable fuels.

EPA has not reasonably and persuasively demonstrated that actual 2014 volumes of advanced and total renewable fuels, plus carryover RINs, will be inadequate to meet the 2014 RFS RVOs. EPA would thus be acting improperly if EPA were to rely on its cellulosic waiver authority provision to make its proposed reductions to those 2014 RVOs. And even if EPA were to conclude that some reductions were warranted, it would be improper for EPA to make additional reductions that are unnecessary. As noted above, we agree with EPA that reductions should be made “only to the extent necessary to remove” any real “inadequacy in supply” that exists, and no further. EPA is correct to say that its exercise of its waiver authorities should result in “applicable volumes that reflect the maximum volumes that can reasonably be expected to be produced” (though BIO disagrees with the added words “and consumed”). Any other approach would violate the statute. As EPA acknowledges, EPA’s “exercise of the waiver authorities” must be “consistent with the objectives of the statute to grow renewable fuel use over time,” and may not work against those objectives. As EPA has said (particularly referring to advanced biofuel volumes), maintaining statutory renewable fuel volumes “will result in reduced GHG emissions from the transportation sector and could also contribute to energy security objectives. We do not believe it is appropriate to forgo such benefits when they are physically achievable.”

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97 Proposed Rule 33117 n.46.

98 Id. at 33104, 33117 (emphasis added).

99 Id. at 33104.

100 Id. (emphasis added).

101 Id. (emphasis added).

For this reason, BIO is concerned by statements in the proposed rule that suggest that EPA may not be selecting proposed numbers that truly reflect minimum reductions in volumes. For example, the proposed rule states: “As the volume requirements we are proposing for 2016 represent significant increases from 2014, we believe it would be unreasonable to expect the market to supply more than the proposed volumes.”\textsuperscript{103} The proper standard is not whether EPA is proposing “[s]ignificant increases” in a particular renewable fuel volume from a prior year, but whether EPA has proposed the minimum reduction in a renewable fuel volume that is needed to remedy inadequate domestic supply of renewable fuel.

The D.C. Circuit’s decision in American Petroleum Institute v. EPA (API v. EPA) provides support for the conclusion that reductions in any specific volume requirement should be made only to the extent necessary to remove an actual inadequacy in supply.\textsuperscript{104} In the API case, the court held that EPA exceeded the scope of its cellulosic waiver authority when it failed to reduce the 2012 RFS cellulosic biofuel RVOs to the level of actual expected production.\textsuperscript{105} EPA had erred by “deliberately indulging a greater risk of overshooting than undershooting” in order to force the development and production of cellulosic biofuel technology.\textsuperscript{106} In other words, under its cellulosic waiver authority, EPA must “take a neutral aim at accuracy” when setting the annual RFS cellulosic RVOs.\textsuperscript{107} Similarly, in this situation, EPA may not deliberately “undershoot” projections or estimates, whether out of a desire to address potential E10 blendwall concerns or for other reasons.

Indeed, as EPA acknowledges in the context of projecting advanced biofuel and total renewable fuel volumes, “estimating the maximum volumes that can be achieved from a responsive market” is “implicitly required by the statute.”\textsuperscript{108} Thus EPA may not act arbitrarily or capriciously by choosing an interpretation of the available data on actual supply of advanced and total renewable fuels that is not fair and accurate.

Finally, to the extent that EPA is concerned about burdens on obligated parties, “[o]bligated parties ha[ve] long been aware of the applicable volumes prescribed in the statute.”\textsuperscript{109} In any event, the RFS program itself contains a number of inherent flexibilities that can be used to mitigate or reduce such burdens, such as the use of

\textsuperscript{103} Proposed Rule 33126 (emphasis added).
\textsuperscript{104} 706 F.3d 474 (D.C. Cir. 2012).
\textsuperscript{105} See id. at 479-81.
\textsuperscript{106} Id. at 479.
\textsuperscript{107} Id. at 476.
\textsuperscript{108} Proposed Rule 33117.
\textsuperscript{109} Monroe Energy, 750 F.3d at 920.
carryover RINs and the option to carry compliance deficits forward.\[110\] In addition, EPA may consider extending relevant compliance deadlines (as it has done in the past), as a preferable alternative to the more extreme and improper course of unnecessarily reducing volumes below statutory requirements.\[111\] In a specific factual context, the D.C. Circuit upheld EPA’s extension of a compliance deadline as a “way to balance obligated parties' interest in regulatory certainty with EPA's statutory obligation to ensure the renewable fuel volumes are annually met.”\[112\] At the same time, EPA must avoid unnecessarily extending compliance deadlines, which can further destabilize the program, and which could in some circumstances exceed EPA’s legal authority. EPA must also take care to avoid approving compliance deadline extensions that adversely affect the value of RINs, undermining the incentives that are essential to the success of the program as Congress designed it.

### III. EPA Has Not Adequately Explained Its Specific Choices of Volumes for 2014, 2015, and 2016, Which Would Be Too Low Even if EPA’s Waiver Authority Were Broader

Quite apart from the legal flaws in the Agency’s interpretation of its waiver authority, EPA has failed to persuasively explain or justify its choice of volumes for 2014, 2015, and 2016. The evidence relevant to EPA’s decision shows that EPA’s proposed volumes are simply not high enough. This is an independent reason why EPA must revise its proposed RVO numbers in the final rule.

One of the fundamental flaws in EPA’s narrative on this topic is that EPA has failed adequately to acknowledge – much less to account for – the reality that EPA’s recent actions have undercut the supply of advanced biofuels and have undermined the goals of the RFS statute. To renew robust investment in advanced biofuel capacity and to meet the statutory goals, EPA must correct its course in a number of key respects. EPA’s duty to explain its decisions requires it to confront this issue head-on.

EPA’s actions have significantly hindered the market-forcing incentives in the RFS that would otherwise drive obligated parties toward working with their partners, including their advanced biofuel partners, to ensure the capacity to produce and use renewable fuels at the levels required under the program. As further explained below, EPA’s delays and its proposed decision to destabilize the statutory waiver provisions have significantly dampened investments in capacity to meet the RFS volume goals. Because EPA’s new proposed rule contains many of the same errors as EPA’s now withdrawn November 2013 proposed rule for 2014 RVOs, the new proposed rule can be expected to continue to undermine investor confidence in the program and to discourage investment in the development and commercialization

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\[110\] *Proposed Rule* 33108.

\[111\] See generally *Proposed Rule* 33108, 33149-50.

\[112\] 750 F.3d at 920.
of advanced biofuels. To revitalize investment in advanced biofuels, EPA must return to the consistent approach employed in its RVO decisions from 2010 to 2013.

Further, EPA’s ongoing delays in approving advanced and cellulosic biofuel pathways hinder the advanced biofuel industry’s ability to generate sufficient RINs to meet the statutory volume requirements. EPA fails to justify excluding from the RVOs potential volumes from both foreign advanced biofuel producers and others for which it has delayed pathway approval. EPA’s delays and exclusions risk creating a self-fulfilling prophecy of long-term advanced biofuel shortages, keeping these fuels out of the marketplace and subverting the goals of the RFS. EPA must address the backlog of advanced and cellulosic pathway petitions and work with the advanced biofuel industry to encourage all potentially available volumes be brought to the market to meet the ambitious goals of the RFS.

EPA’s delay in establishing the 2014 proposed volumes – essentially allowing the market to set volumes as if the RFS statute did not exist – resulted in a measurable increase in greenhouse gas emissions during 2014. The proposal to transition the program to a “go slow” approach will continue to increase greenhouse gas emissions in 2015 and 2016 and set the United States on course to miss achievable GHG reductions through 2022. EPA must return to the successful approach it employed in setting prior RVOs in order to ensure the U.S. transportation system achieves maximum reductions in greenhouse gas emissions.

As is further explained below, EPA’s analysis of the so-called blendwall is inaccurate, and the Agency has not accurately assessed the facts regarding what actually happened in 2014. The Agency notes that publicized data on RIN prices primarily reflect spot market prices for separated RINs – only one segment of the RIN market.

EPA’s proposed approach to setting the 2014 and 2015 RVOs based on available RINs generated during the year is arbitrary. EPA’s complete exclusion of consideration of carryover RINs is also arbitrary. As EPA notes, the availability of RINs in 2014 is dependent on settling the 2013 obligations, which the Agency has delayed at the request of obligated parties. EPA cannot use its unconscionable and arbitrary delays as justification for excluding consideration of carryover RINs. Instead, the Agency must set the 2014 and 2015 RVOs based on the full availability of RINs and without setting artificial and unwarranted limits based on purported infrastructure constraints.

A. Estimating Chilled Investment for Advanced Biofuels Due to RFS Uncertainty

EPA admits that its unlawful delays in promulgating 2013 and 2014 standards have lowered actual supply of biofuels that would otherwise be available to satisfy RFS requirements. EPA states, “[w]hile the standards for 2013 were not finalized until August 15, 2013 and the standards for 2014 have not yet been finalized, we do not
believe that these delays are the only reasons that actual supply fell short of the statutory volumes.”\textsuperscript{113} And further, EPA avers, “[t]here are reasons to believe that the November 2013 NPRM [notice of proposed rulemaking, now withdrawn, proposing lower RVOs for 2014] was not the only factor resulting in actual supply falling short of the statutory volumes,” even though the Agency does not explain its reasons to believe this.\textsuperscript{114} Nevertheless, EPA acknowledges that its delays failed to drive the market for advanced biofuels, as it states, “the 2014 standards we are proposing are what would have happened in the marketplace absent a rulemaking.”\textsuperscript{115} This, of course, is flatly inconsistent with the statutory goal. As EPA has said, the “purpose of setting a mandate is to stimulate more rapid increases in the rate of production” than would likely occur in the absence of such mandate.\textsuperscript{116} EPA’s delays have been a major cause preventing advanced biofuels from reaching the statutory volumes. EPA thus has worked against, rather than to further, “the long term goal of the statute to increase volumes of renewable fuels over time such that in the longer term they are more likely to be available to offset the need for crude oil.”\textsuperscript{117}

EPA’s delays in rulemaking over the past two years have chilled necessary investment in advanced and cellulosic biofuels just as they have reached commercial deployment. As explained below, the result has been that the advanced biofuel industry has experienced an estimated $13.7 billion shortfall in needed investment.

The advanced biofuel industry has invested billions of dollars since 2009 to build first-of-a-kind biorefineries around the world, even during a global economic recession. Companies commercializing new advanced biofuel pathways have spent years building and operating pilot and demonstration facilities in order to assure investors – and satisfy requirements of the USDA and DOE biorefinery loan guarantee program – of the viability of projects.\textsuperscript{118} Several cellulosic biofuel producers now have achieved commercial production, and additional companies continue efforts to commercialize new processes, even though the cellulosic industry has not yet achieved the volumes envisioned in the RFS. At the same time, overall advanced biofuels met the RFS goals every year that annual volume obligations were established (2010-2013), primarily through existing capacity for

\textsuperscript{113} Proposed Rule 33120 (emphasis added).

\textsuperscript{114} Id. (emphasis added).

\textsuperscript{115} Proposed Rule 33131 (emphasis added).


proven biofuel technologies. Instability in the administration of the RFS has hampered investment in new advanced biofuel technology and new feedstocks within the United States.

In 2009, Bio Economic Research Associates ("bio-era"), in a report commissioned by BIO, modeled the expected U.S. economic impact of building an advanced biofuel industry from the ground up to meet the goals of the RFS. Drawing on available pre-commercial biorefinery engineering and design studies, bio-era estimated that more than $95 billion in cumulative capital investments would be needed between 2009 and 2022 for construction of nearly 400 advanced biofuel biorefineries with the capacity to produce 23 billion gallons of advanced biofuel. Figure 1 below shows bio-era’s estimated annual and cumulative capital investments needed to maintain the production ramp up envisioned in the RFS. Added to the annual investment for construction costs are the annual operating costs for that new capacity.

Figure 1: Projected Annual and Cumulative Investments Needed to Build RFS Advanced Biofuel Capacity

In 2009, bio-era estimated construction costs of $5.50 per gallon and operating costs of $1.60 per gallon for the first advanced biofuel biorefineries. Given the challenges of simultaneously constructing biorefineries and building supply chains for new energy crops, the actual capital requirements for some first-of-a-kind

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cellulosic and advanced biorefineries have been higher than originally projected. Investors have required that the advanced biofuel industry engage in a capital-intensive process of ramping up pilot and demonstration biorefineries before building commercial ones.\textsuperscript{120} The advanced biofuel industry has now reached a commercial stage where additional biorefineries can be built and operated based on existing designs and optimized processes, which can rapidly lower capital costs for biorefineries. For example, Fulcrum BioEnergy recently awarded Abengoa Bioenergy – which opened and registered for the RFS program one of the first commercial-scale cellulosic ethanol plants in the United States – a contract to engineer and construct the 10 million gallon per year Sierra BioFuels plant, located approximately 20 miles from Reno, Nevada.\textsuperscript{121} More such partnering activity is necessary and would be expected under a properly functioning RFS program.

To reach the 2015 RFS goal of producing 5.5 billion gallons of advanced biofuels, bio-era estimated the need for 110 operating plants requiring $20.34 billion dollars in cumulative investment. Prior to the extreme instability in the RFS program, the U.S. advanced biofuel industry (including biodiesel producers, renewable diesel producers, and advanced ethanol producers) was on track building capacity to meet the 2014, 2015 and 2016 statutory volumes for advanced biofuels. If anything has put the 2014 and 2015 statutory volumes beyond the industry’s reach (and we do not believe that EPA has in fact shown that this is the case), it is EPA’s own delays, if anything, that have done so. Many projects have been put on hold since 2013. The chill in investment has had the heaviest impact on the cellulosic biofuel industry.

As of July 2015, there are five commercial or pilot cellulosic biorefineries with a combined capacity of more than 50 million gallons registered and operating to meet the goals of the RFS, along with several pilot and demonstration plants that have contributed volumes. Additionally, there are 29 biorefineries generating cellulosic biogas and registered to participate in the program.\textsuperscript{122} Taking into account additional renewable diesel producers deploying novel technologies, such as Altair, REG, and Diamond Green, the advanced biofuel industry has reached the level of investment (roughly $3 billion) and production capacity (600 million gallons per year) that bio-era originally projected for 2011.\textsuperscript{123} The advanced biofuel industry’s cumulative capacity-building delay, corresponding to a shortfall in investment of more than $20.6 billion, can be attributed to a variety of factors, including: the

\textsuperscript{120} John May, Financing Genomes: Turning Transformative Innovation into Market Success, Presentation at BIO International Convention (June 16, 2015).


\textsuperscript{122} EPA, Part 80: EPA Fuels Programs Registered Company/Facility ID List, \textit{available at} \url{http://www.epa.gov/otaq/fuels/reporting/programsregistration.htm} (last visited July 26, 2015).

\textsuperscript{123} BIO data.
policy instability created by EPA, the general economic recession, and the challenges of scaling up new technologies.

EPA issued rules in a timely manner in both 2011 and 2012. Therefore, the shortfall in cumulative investment for 2011 and 2012 of $6.9 billion should be attributed to factors other than EPA delays. Nevertheless, the agency was nine months late finalizing the 2013 RVOs, failed to finalize the 2014 rule before the end of that year, and is proposing to finalize the 2015 rule more than 12 months late and only one month before the 2015 compliance year ends.

As EPA itself acknowledges, a substantial portion of the remaining $13.7 billion shortfall in investment for cellulosic and new advanced technologies should therefore be attributed to EPA’s delays in issuing timely rules.

It is well worth noting that more than $600 million has been invested overseas in biorefineries that commercialized new technologies researched and developed here in the United States. Additional companies originally planning to commercialize biorefineries in the United States are now looking for locations overseas or have simply put projects on hold indefinitely. With commercialization of cellulosic and advanced technologies, companies will continue to seek economic opportunities to deploy them. But if there is continued policy instability in the RFS program, it will likely drive companies to continue deployment in other countries.

BIO’s estimate of the maturation of the advanced biofuel industry and the decline in investment caused by EPA’s delays is corroborated and further illustrated by data from Bloomberg New Energy Finance (BNEF). BNEF maintains a dataset of bioenergy deals (including partnerships and mergers, venture capital or private equity, and asset financing) announced since 2004 as well as the value of those deals. Further, BNEF breaks down the investment by first generation (corn ethanol and soy biodiesel) and second generation (advanced and cellulosic biofuels) production.

As the data in Figure 2 below demonstrate, investment in second generation biofuel (commercial production as well as piloting and demonstration of advanced biofuel, excluding soy biodiesel) was increasing over time from the establishment of the RFS2 in 2007 through 2012. The type of investment in second generation technologies was also shifting from early stage venture capital and private equity to partnerships and mergers and asset financing (or debt equity), which is more characteristic of a maturing industry.
BNEF’s data on the number of announced second generation production deals display the same pattern, with the raw number of deals climbing through 2012 but sharply dropping in 2013 and 2014, as shown in Figure 3 below. Instability in the implementation of the RFS has undercut the high-value asset finance or partnering investments necessary to continue progress in building large-scale production facilities. While the number of such announcements in 2014 was similar to the number in 2011, the overall value of the deals was reduced by half. Several of the first-of-a-kind cellulosic biofuel biorefineries are designed as bolt-on additions or co-located facilities to existing first-generation assets. A significant portion of planned future growth in advanced and cellulosic biofuel production is predicated on a model of licensing technology to existing conventional biofuel producers, who are able to engage in high-value asset financing and partnering investments. EPA’s proposal to use its general waiver authority to reduce the market for first generation biofuel below existing capacity will severely hinder the industry’s future ability to make such investments, regardless of the level of advanced biofuel RVOs that EPA sets (though a lower advanced biofuels level than appropriate will, of course, be unhelpful). It will devalue existing assets and reduce industry income, hindering asset financing and partnering investments. EPA is severely misguided in proposing to reduce market space for conventional biofuels at a more aggressive rate than for advanced biofuels.
Figure 3: Annual and Cumulative Number of Second Generation Biofuel Deal Announcements by Type, 2004-2014

The pattern contrasts with investment patterns in first-generation (corn ethanol and soy biodiesel) biofuel production. As Figure 4 below indicates, announced investments in first-generation biofuel production peaked in 2006 – as the RFS1 spurred a rapid increase in renewable fuel production to meet increasing requirements – and primarily consisted of asset financing, characteristic of a more technologically mature industry. Importantly, additional investments – primarily through venture capital or partnerships – in new processes and in innovation to increase productivity and efficiency continue today. The conventional biofuel industry has reached the capacity to produce 15 billion gallons, enough to fill the market that Congress made available to them in setting the statutory volumes. But as a comparison of the charts shows, the bulk of new investment was shifting from first generation to second generation biofuels by 2008 to meet the goals of the RFS2. EPA’s delays and flawed proposals have halted and stymied that progress.

Moreover, EPA’s proposal to limit market space for renewable fuels and force competition among renewable fuel producers (rather than between renewable fuel and fossil fuel producers) undercuts the value of the recent investment in first generation fuels (which includes soy biodiesel, an advanced fuel). It forces companies to make a difficult choice of which investment to continue following
through on and which to cut losses on.\textsuperscript{124} BIO is concerned that EPA’s proposal will destroy investor confidence in the program and continue to undercut investment in advanced biofuels (if not in all renewable fuels).

Figure 4: Annual Investments in First-Generation Biofuel Production by Type, 2004-2014

\begin{figure}[h]
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\caption{Annual Investments in First-Generation Biofuel Production by Type, 2004-2014}
\end{figure}

EPA’s November 2013 proposed rule for the 2014 RVOs signaled to advanced and cellulosic biofuel producers and their investors that there would be little to no market for additional advanced biofuels in the near term. The shortfall in investment was a foreseeable result. Investors are unwilling to risk hundreds of millions of dollars to produce advanced biofuels for which there is no room in the market.

EPA requests comment on “an alternative approach to characterizing expected growth in renewable fuels” by projecting “the share of the fuel pool that can reasonably be expected to be comprised of renewable fuel over time. In this way, increases or decreases in gasoline demand would be reflected in corresponding increases or decreases in mandated renewable fuel volumes.”\textsuperscript{125} This alternative approach is inconsistent not only with the text of the RFS statute, but also with the fundamental goals of the statute and the program that the statute creates. The


\textsuperscript{125} \textit{Proposed Rule} 33109.
alternative approach can easily be foreseen to generate the same outcome as EPA’s failure to set RVOs for 2014 – it would be a signal to biofuel producers and their investors that the market share for advanced biofuels will perpetually remain limited by artificially constructed blendwall constraints, and will remain to a significant degree under the control and influence of competing fuel producers who are not obligated to make room for alternatives in the marketplace.

B. EPA’s Specific Proposed Numerical Targets Would Disincentivize Investment in Advanced Biofuel

Individual refiners and importers can choose among several options for meeting their compliance obligations under the RFS2 program and can be expected to choose the lowest-cost options, according to their individual business models. Because RVOs are nested, the value of each RIN category impacts the others. The overall obligation can be met with RINs from any of the nested categories. Only the cellulosic renewable fuel (D3 and D7) and Biomass-based Diesel (D4) categories have specific mandates for use; however, these obligations can be met through use of many different types of fuels, including home heating oil. The advanced renewable fuel obligation can be met with any type of RINs except D6. The overall obligation can be met with any type of RIN, including D6. Although most D6 RINs have been generated with volumes of ethanol, they are not exclusive to ethanol. If EPA sets the level of the overall RVO according to the amount of ethanol that can be consumed in a blend of E10 and well below the industry’s production capacity, as the agency proposes, it would improperly create a likelihood that the entire overall RVO above the advanced RVO would be met with conventional ethanol, rather than with additional advanced biofuels other than ethanol.

C. EPA’s Proposal to Lower the Advanced Biofuel Obligation for 2014, 2015 and 2016 Will Create a Disincentive for Purchasing Cellulosic Biofuel by Artificially Lowering the Cost of the Alternative Method of Compliance

Several first-of-a-kind cellulosic and advanced biofuel biorefineries have been commissioned and are producing fuel, with additional ones nearing construction completion and operational startup. The licensing of available and proven technology or investment in construction of a new biorefinery to secure RINs could for some obligated parties be a lowest-cost choice. Yet, EPA’s proposal would obviate this choice.

127 While cellulosic RINs have fallen short of the obligated volumes, their price has been controlled by the value of the Cellulosic Waiver Credit. The value of cellulosic biofuel as a fuel can be calculated from the alternative RFS2 compliance option, which is to purchase the credit and a replacement gallon of advanced biofuel with a RIN. See BIO, The value proposition for cellulosic and advanced biofuels under the US federal renewable fuel standard, 7 Industrial Biotechnology 111, 111-17 (2011).
EPA’s proposed rule will destroy incentives to invest in development of advanced and cellulosic biofuels by eliminating both incentives for new methods of compliance beyond E10 and the profits of conventional biofuel producers who are most likely to be first-adopters of the technology. As Matt Merritt, a spokesman for POET, put it, “Anything you do to hurt the profitability of the grain ethanol producers is going to hinder their ability to invest in this new technology as well.”

D. EPA Continues to Delay Approval of New Advanced and Cellulosic Pathways, Thus Impeding the Achievement of Congress’s Intent in Enacting the RFS Statute; In Order to Meet Statutory Goals and Obligations, EPA Must End Its Practice of Delays and Must Expeditiously Review Pathway Petitions

EPA claims that it “continues to support the ongoing development of cellulosic biofuels through actions such as the evaluation of new pathways with the potential to generate cellulosic biofuel RINs.” Yet EPA’s delays in evaluating and approving pathways – particularly advanced and cellulosic pathways – have prevented companies from generating RINs to meet the required volumes of biofuels under the RFS.

EPA received 102 petitions for new pathway approvals pursuant to 40 CFR 80.1416 between April 2010 and June 2015. To date, EPA has approved 71 of the petitions, denied only two, and resolved two additional petitions as covered under existing approved pathways. Four pathway petitions are currently open for public comment. During 2014, 22 new petitions were submitted to EPA; EPA took action on 19 petitions (including some submitted prior to 2014), approving 16. In the first five months of 2015, 21 new petitions were submitted to EPA; EPA has taken action on 34 petitions (new and old), approving 30. The majority of EPA’s approvals in 2014 and 2015 – 42 of the 49 – were for conventional biofuel pathways under the new “efficient producer” petition process announced in 2014. These petitions come from biorefineries that utilize an approved pathway that guarantees a 20 percent reduction in greenhouse gases compared to gasoline’s 2007 baseline. The graph in Figure 5 shows the average time in months that companies filing new biofuel production pathway petitions under CFR §80.1416 have waited for approval from EPA. As of July 2015, 22 petitions still await EPA action – either approval or denial – and the average time that the submitters of those petitions have waited


130 Proposed Rule 33138.

now exceeds 34.8 months, as shown in Figure 5 below. The majority of these petitions – 20 – are for advanced or cellulosic pathways.

Figure 5: Average Time for EPA to Address New RFS Biofuel Pathways Submitted between April 2010 and May 2015

Companies filing cellulosic biofuel pathway petitions have faced the longest wait times for resolution. Among the 12 that have been approved, the average wait time was over two years (25.3 months). At least two companies (BP Biofuels and Terrabon, Inc.) discontinued plans for commercial cellulosic projects while awaiting approval; once approved, the projects were never built. The five cellulosic companies still awaiting a decision have been waiting an average of more than three years (42.6 months). Advanced biofuel companies have faced similar delays on pathway petitions. Companies still awaiting a resolution on their petitions have had an average wait of more than 3 years (37.3 months). Those that have received approval waited, on average, over one and a third year (27 months).

The lengthy wait for approval of new pathways discourages investment in commercial production of advanced and cellulosic biofuels. Without a pathway to the fuel market, companies find it difficult to attract investment necessary to initiate, continue, and complete the construction and startup of new facilities. EPA should expedite the pathway review and approval process in order to increase the available supply of advanced and cellulosic biofuels to meet the RVOs.
In addition, while setting the 2014, 2015 and 2016 RVOs, EPA should include anticipated volumes from companies that are expected to receive pathway approval and begin production during the compliance period. EPA’s delay in approving a pathway should not be a reason to exclude a company from EPA’s projection for the RVO. Such exclusions give rise to inaccurate projections of biofuels production figures, which are inconsistent with the requirements of the governing statute and do not conform with the Court’s admonition to take neutral aim at accuracy.132 For example, EPA’s November 2013 proposed rule mistakenly excluded volumes from cellulosic CNG and LNG producers, who eventually generated more than 33 million D3 RINs during 2014. The requirement of a neutral aim for accuracy cuts in more than one direction. Neutrality forbids overshotting the mark, but also forbids undershooting the mark. Thus the Agency may not interpret its waiver authorities, or attempt to exercise its (real or purported) discretion in any other way, to “undershoot” its projections, no matter the motives or intentions at play.

Finally, BIO is surprised that EPA is proposing to change the definition of algal oil among the approved pathways in Table 1 to 40 CFR 80.1426 without taking definitive action to approve a pathway for non-photosynthetic algae. EPA states, “Companies wishing to produce biofuels from algae grown with a nonphotosynthetic stage of growth must apply to EPA for approval of their pathway pursuant to 40 CFR 80.1416.”133 EPA neglects to mention that EPA has already had ample opportunity to evaluate the lifecycle emissions impact of such algae, but has neglected to do so. EPA has had a pathway petition for such non-photosynthetic algae under consideration since May 9, 2012, and has failed to act on it for more than three years. EPA should promptly act on the petition and should make a concerted effort to review the backlog of advanced and cellulosic petitions and eliminate this roadblock – and other roadblocks of EPA’s making – to full compliance with the letter and spirit of the RFS statute. EPA’s proposed treatment of this issue is arbitrary and capricious.

E. EPA Must Consider All Supplies of Cellulosic Biofuel in Setting RVOs

In setting the cellulosic RVO each year, EPA conducts a careful survey of the production intentions of commercial-scale cellulosic biofuel producers in the United States. A neutral assessment of these direct discussions with producers generates the best available projection of what will actually happen in the market during the coming year. With one discrete exception, EPA’s methodology for setting the annual cellulosic and advanced RVOs was upheld by the Court when challenged in API v. EPA.134 Changes to EPA’s approach along the lines described in the proposed rule impermissibly put a thumb on the scale on the side of unwarranted pessimism, inhibiting the very industrial growth for cellulosic and advanced biofuels that

132 See API v. EPA, 706 F.3d at 476.
133 Proposed Rule 33148.
134 See API v. EPA, 706 F.3d at 477-78, 480-81.
Congress intended when it enacted the statute. The law does not allow EPA to put such a thumb on the scales. If there is a projected shortfall in cellulosic production, EPA must reduce the cellulosic volume requirement “to the projected volume available during that calendar year."\textsuperscript{135} No higher, but also no lower.

EPA has proposed to violate this requirement. In an across-the-board fashion, EPA has unilaterally decided to treat its direct discussions with producers as inherently inaccurate, stating, “we have decided to treat these company projections as the high end of a potential production range unless this volume exceeds the volume calculated using our six-month straight-line rampup period methodology, suggesting that these company projections are unreasonably high.”\textsuperscript{136} Such unilateral dismissal of company projections as “unreasonably high” – without regard to the particular facts and circumstances relevant to each company at issue – is arbitrary and non-neutrally tilted toward inaccuracy in one particular direction. EPA should continue to hold discussions with the identified producers to update its projections; additionally, EPA should hold discussions with identified foreign cellulosic biofuel producers and with producers awaiting pathway approvals to assess their intentions and relevant factual circumstances and include them as appropriate in setting the cellulosic requirement. EPA has expressed its awareness that its projections can change market behavior,\textsuperscript{137} and it should be as wary of setting the RVOs too low as it is of setting them too high.

EPA also proposes to set the low-end of a projected range for cellulosic biofuel RVOs “based on the volume of RIN-generating cellulosic biofuel the company has produced in the most recent 12 months for which data is available.”\textsuperscript{138} And for the 2014 and 2015 final rules, EPA states, “We intend to update the low end of the projected production range for each company using data from the most recent 12 months for which data is available.”\textsuperscript{139} The American Fuel and Petrochemical Manufacturers advocated the adoption of this methodology for setting the cellulosic biofuel RVOs,\textsuperscript{140} and it is not a neutral methodology. Because the advanced biofuel industry is currently starting up first-of-a-kind biorefineries, the past 12 months of production is an intentionally low estimate of future production. Only through consultation with the individual producer can EPA confirm an accurate and neutral pace of production scale up.

\textsuperscript{135} 42 U.S.C. § 7545(o)(7)(D)(i).
\textsuperscript{136} Proposed Rule 33142.
\textsuperscript{137} See id. at 33104 (”[W]hile the standards that we set must be achievable, we believe that they must also reflect the power of the market to respond to the standards we set to drive positive change in renewable fuel production and use.”).
\textsuperscript{138} Id. at 33141.
\textsuperscript{139} Id. at 33144.
EPA should not arbitrarily exclude from its 2015 and 2016 projections all foreign cellulosic biofuel producers and imports of cellulosic biofuel. The agency has identified facilities that have approved pathways for generating RINs and has registered several facilities for the program. To exclude these companies produces an obvious error in the projections. EPA excluded foreign producers from its November 2013 proposed rule for the 2014 RVO, and yet more than 50,000 D7 RINs came from imports during 2014, according to data from the EPA Moderated Transaction System (EMTS). To date, more than 3.3 million D3 and more than 170,000 D7 RINs have come from imports in the first half of 2015, again according to EMTS data. EPA is demonstrably incorrect to exclude foreign generation or importation of cellulosic biofuels. Such exclusions are arbitrary and without a basis in the statute or regulations.

Several overseas cellulosic biofuel companies have completed the lengthy and costly Part 80 registration process to qualify to generate D3 or D7 RINs. EPA should work with additional overseas companies to complete the registration process for facilities in an expedient manner, enabling them to contribute volumes to meet the 2015 and 2016 Renewable Volume Obligations. EPA’s exclusion of the facilities from the RVOs discourages these companies both from completing the registration process and from exporting volumes to the U.S. fuel market. The lower RVO numbers thus become a self-fulfilling prophecy. EPA should include these companies in its projections. Moreover, EPA should do so using the same neutral approach it has used for projecting domestic commercial production, based on a careful survey of each individual producer’s intentions. In addition, EPA should streamline the registration process wherever feasible, to reduce unnecessary delays and costs that impede the achievement of the statutory goals.

EPA has also excluded volumes of cellulosic biofuels from pathways that have yet to be approved. This all-or-nothing exclusion decision, which tilts in a direction away from accurate prediction, chills investment for the identified companies and discourages these companies – and others – from completing the lengthy approval processes for pathways and renewable fuel producers. EPA should anticipate (and actively work to complete) the timely approval of pathways and registration processes and should accurately include in the 2015 and 2016 RVOs all reasonably anticipated volumes from companies that intend to begin producing during the compliance years.

Finally, it should be noted that in proposing to exercise its waiver authority on the basis of infrastructure constraints (an approach that is subject to the defects explained above), EPA has not in fact carefully considered the market’s so-called

ability to supply various fuels to the cars that can use them. In implementing the cellulosic waiver authority to reduce the advanced and overall volumes of biofuels, EPA states: “Our proposed justification for doing so is a limitation in the availability of qualifying advanced biofuel and constraints on the ability to supply qualifying renewable fuels to the vehicles that use them.” The agency projects that cellulosic RVOs for 2014-2016 will be met primarily with CNG and LNG fuels. Yet EPA has not done any analysis of the availability of vehicles that can utilize cellulosic CNG or LNG fuels or any other advanced biofuel.

BIO is confident that EPA has underestimated the cellulosic industry’s ability to supply such fuels. According to DOE’s Alternative Fuels Data Center and Clean Cities 2015 Vehicle Buyer’s Guide, in the United States there are currently 143,000 vehicles that utilize LPG (representing 10 vehicle models) and 2,600 fuel stations to supply the fuel to the vehicles that can use them. There are additionally 150,000 vehicles that utilize CNG (representing 17 vehicle models) and 750 fueling stations. EPA’s inconsistency in applying its proposed approach further demonstrates that it has not adequately considered or justified the approach. Even if EPA’s proposed approach were proper, EPA would be required to take full account of the actual capacity of the industry to supply CNG, LNG, and other fuels, and to adjust its volume predictions accordingly.

F. If Adopted in a Final Rule, EPA’s Proposal Would Continue to Increase U.S. Greenhouse Gas Emissions

The RFS is the only congressionally authorized program for reducing greenhouse gas emissions from the transportation sector. EPA recognizes the global importance of “limiting GHGs from major emitting sectors, such as electricity production and transportation.” Yet EPA’s failure to establish RFS volumes for 2014 resulted in a measurable increase in greenhouse gas emissions. Further, if the volumes EPA proposes for 2015 and 2016 are finalized, the United States will continue to increase greenhouse gas emissions from the transportation sector and to forego attainable reductions.

The RFS was designed to reduce U.S. greenhouse gas emissions by displacing fossil fuels with less carbon intensive biofuels. In its proposal, EPA acknowledges that Congress’s intent in establishing the RFS “was not simply to increase production of renewable fuel, but rather to provide that certain volumes of renewable fuel be used by the ultimate consumer as a replacement for the use of fossil based


143 Proposed Rule 33110-11.


transportation fuel. The very definition of ‘renewable fuel’ requires that the fuel be ‘used to replace or reduce the quantity of fossil fuel present in a transportation fuel.’” And again, “The purpose of the RFS program is to ensure that renewable fuels are increasingly used to replace or reduce the use of fossil-fuel based transportation fuel.” EPA’s failure to set RFS volumes that guarantee an increasing displacement of fossil fuels over time subverts the intent of Congress and the design of the program.

The greenhouse gas intensity of petroleum fuels, measured in carbon dioxide equivalents (CO2e), has grown worse since 2007. At the same time, the greenhouse gas intensity of biofuels has improved, as production has become more efficient. EPA’s proposal for 2014, 2015 and 2016 cuts short the emission reduction potential of the RFS program by limiting market space for renewable fuels and guaranteeing more market space for petroleum fuels.

The use of more petroleum in 2014 compared to 2013 automatically increased greenhouse gas emissions from the U.S. transportation sector year to year. As EPA concedes, EPA’s delay in issuing a rule essentially resulted in a market that operated as if the RFS statute did not exist, and caused an estimated year over year increase of 60.5 million metric tons of CO2e. If EPA had maintained the RFS at the statutory volumes, even waiving the cellulosic RVO to projected levels, the United States could have limited this significant increase in emissions. EPA’s failure to establish 2014 RVOs at achievable statutory volumes resulted in an increase of 17.4 million metric tons of CO2e, which is the equivalent of putting an additional 3.6 million cars on the road during the year, as shown in Figure 6 below.

For 2015, gasoline and diesel consumption are both projected to increase compared to 2014, again automatically increasing greenhouse gas emissions. EPA’s proposed volumes for 2015 would result in an automatic increase of 19.6 million tons of CO2e for the year compared with the achieved levels in 2014. By failing to maintain the

146 Proposed Rule 33113.
147 Id. at 33121.
151 See Proposed Rule 33131.
statutory volumes for 2015 – even assuming the waiver of cellulosic volumes to 100 million gallons, as EPA proposes – the agency is causing an increase of 34.9 million metric tons of CO2e above achievable levels, the equivalent of putting 7.3 million additional cars on the road for 2015.

Figure 6: Additional CO2e Emissions and Equivalent Cars on the Road under EPA Proposal 2014-2016

Although gasoline use is projected to decline slightly in 2016, diesel use is expected to increase, resulting in emissions of CO2e similar to 2015. EPA’s failure to keep the RFS volumes on course, however, will result in an increase of 56.2 million tons of CO2e compared to achievable levels under the statute. This is equivalent to putting an additional 11.7 million cars on the road in 2016, compared to 2015.

The emissions compound over time. The U.S. Energy Information Administration (“EIA”) projects an increase in gasoline use in 2015, before consumption declines through 2022. Diesel consumption rises slowly through 2022, from 57.2 billion gallons in 2014 to 60.7 billion gallons in 2022, according to EIA.152 If EPA finalizes the 2014, 2015 and 2016 RVOs at the proposed volumes, undercutting investment in cellulosic and advanced biofuel and potentially triggering a rewrite of statutory volumes for 2017 and afterward, the increases in diesel consumption will likely result in increased petroleum (above 2013 volumes) use through 2020. As a result,

GHG emissions would spike in 2015 and 2016, likely returning to levels below 2013 only after 2020. By failing to maintain the statutory levels of renewable fuel use, EPA is unjustifiably forgoing an opportunity to further the statutory goals by ensuring that U.S. emissions from the transportation sector rapidly decline through 2022. EPA should set RVOs to include all renewable fuels that can be produced up to the statutory volumes, in order to secure the maximum benefit in greenhouse gas emission reductions.

G. RIN Costs Are Not Passed to Consumers

Renewable Identification Numbers (RINs) are used in the RFS program in the same way as tradable compliance credits in other Clean Air Act programs. They should be a familiar tool to many, if not most or all, participants in the program. The rise in RIN prices during the first half of 2013 came about largely because some obligated parties adopted ineffective or counterproductive strategies for meeting the RFS requirements. EPA notes “that RINs can serve as a mechanism to increase the production, distribution, and consumption of renewable fuels,” but “that this is dependent on the marketplace working efficiently.”\(^{153}\) EPA’s delays and flawed proposals have continued and would continue to prevent the market from working efficiently. Counter to the intent of the statute, EPA proposes to “reduce compliance costs,”\(^{154}\) which in this context means undercutting the value of RINs and subverting them as a mechanism to increase production of renewable fuels.

RFS RINs are effectively designed to force technological improvements, and compliance costs have not been passed to consumers at the pump. There is no correlation between RIN prices and retail fuel prices, as demonstrated in Figure 7 below, which is a sufficient indication that RIN costs are not reflected in pump prices. EPA has correctly noted that “rising RIN prices did not result in an increase in retail transportation fuel prices in 2013.”\(^{155}\) Competitive pressure among obligated parties employing varying RFS compliance strategies protects consumers from the costs of RINs.

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\(^{153}\) Proposed Rule 33119.
\(^{154}\) Id. at 33135.
While some refiners must purchase RINs when their compliance strategy falls short, they must either obtain them from other market participants who have blended the renewable fuel or defer their obligation. In statements to their shareholders, a few refiners have acknowledged this zero-sum nature of the RIN market. For instance, CVR Energy, which operates both refineries and logistics, informed its investors in early November 2013, “Many petroleum refiners blend renewable fuel into their transportation fuels and do not have to pass on the costs of compliance through the purchase of RINs to their customers. Therefore, it may be significantly harder for the petroleum business to pass on the costs of compliance with RFS to its customers.”156 Northern Tier Energy acknowledged to its shareholders that the costs of RFS compliance would be borne by shareholders, not customers, stating the program “could have a material adverse effect on our results of operations and financial condition, and our ability to make distributions to our unit holders.”157

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H. The Proposed Rule Misanalyzes RIN Costs and Availability

Numerous economists have theorized that the rapid rise of RIN prices in 2013 signaled that the RFS statutory volumes were pushing the refining industry past the so-called blendwall, defined as a 10 percent limit on use of ethanol in the gasoline pool. But by any measure, the hypothetical blendwall was breached in 2012, even while EPA maintained the statutory volumes for the annual RVO, and RIN prices remained stable (and inexpensive) throughout that year. This is demonstrated by the application of EPA’s percentage RVOs (final for years 2011-2013 and proposed for 2014-2016) to the volumes of non-renewable fuel used in the lower 48 states and Hawaii, taken from EIA’s May 2015 STEO. There is no technological, legal, or practical “wall” to widespread consumption of gasoline with more than ten percent ethanol. Gasoline with ethanol content above ten percent exists, as do millions of cars that can run on it. And other non-ethanol biofuels are available that can be used to satisfy RFS requirements.

Figure 8 below compares annual RVOs (actual percentage standards for 2011 – 2013 and proposed percentage standards for 2014-2016 applied to the actual or projected use of non-renewable fuel) with the amount of ethanol used (or projected) and the hypothetical blendwall (9.7 to 10 percent of gasoline use). Whether we look at the portion of the annual RVOs that can be satisfied with D6 RINs (termed “Conventional RVO” in the graph) or at the portion of the RVO that is not specifically reserved to biodiesel (termed “Ethanol Obligation” in the graph), it is clear that the 2012 RVOs exceeded 9.7 to 10 percent of the gasoline pool. EPA is not justified in considering the hypothetical blendwall or the supply of fuel to vehicles that can use them as even a partial justification for waiving renewable fuel volumes for 2014, 2015 and 2016.

Clearly, the 2012 statutory volumes were met despite the existence of the so-called blendwall. And EPA has again acknowledged in the current proposal, “The total volume of renewable fuel in the form of ethanol that could realistically be supplied to vehicles as either E10 or higher ethanol blends given various constraints was not a limiting factor in the standard-setting process in prior years.”

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159 Proposed Rule 33106.
** Calculates subtraction of Biomass-based Diesel (BBD) RVO from Overall RVO (assumes all advanced and cellulosic obligations met with ethanol). The RVOs are calculated by applying the percentage set by EPA to the volumes specified in EIA’s May 2015 STEO. Non-renewable fuel use equals EIA gasoline and diesel volumes minus EIA ethanol and biodiesel use

*** Calculates subtraction of entire Advanced RVO from Overall RVO (assumes all advanced and cellulosic met with non-ethanol fuel)

EPA has proposed to set 2014 and 2015 RVOs at or below the levels of EIA calculated and projected ethanol use. In 2016, the RVOs would again exceed the hypothetical blendwall if gasoline use remains at EIA projections. EPA indicates that its proposal is intended to provide “relief to obligated parties” and “reduce compliance costs,” yet the agency does not explain why such relief is necessary or justified. Instead, EPA cites considerable evidence that undermines the notion that “relief” for obligated parties is necessary or desirable. For instance, EPA correctly notes that RIN prices reported by the “Oil Price Information Service (OPIS), may overstate the average RIN price” actually paid by obligated parties for

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160 Proposed Rule 33114.
161 Id. at 33135.
compliance. Further, EPA enforced the statutory volumes in 2012 that were above the so-called blendwall without causing a rise in compliance costs or non-compliance by obligated parties.

RIN prices are determined by supply and demand. Demand for RINs is determined by the RFS obligations. The supply of RINs is determined by the amount of qualifying renewable fuel produced within the United States. All evidence that EPA has presented to date indicates that the supply of RINs is sufficient to meet demand. EPA recently published data on aggregate annual RIN sales, by year, RIN vintage, and type of program participant. The data show that there has been consistent, active selling of RINs during each year of the program, sufficient to indicate that a shortage of RINs was not the cause of RIN price spikes in 2013.

The price of RINs also contains an opportunity cost and a projection of future demand. The steep rise in D6 RIN prices that began in February 2013 reflected the perception among some obligated parties that demand for this category of RINs would outstrip the supply within the foreseeable future. Spot market RIN prices rose to reflect the opportunity costs some obligated parties created for themselves in choosing to obtain their entire RVO through transferred credits acquired from other parties, rather than through blending. The perception of a potential shortage was exacerbated by obligated parties’ apparent deferral of as much as 2 billion gallons of the 2012 overall obligation (the portion that can be satisfied by D6 RINs; there was an apparent surplus of D4 and D5 RINs). The deferral automatically increased the 2013 overall obligation. It was this perceived shortage rather than any hypothetical blendwall that prompted the rapid rise in spot RIN prices (the 2012 obligation exceeded the blendwall only by 750 million gallons, not the 2 billion that was deferred). More than 1.8 billion 2012 vintage RINs remain unused and available to meet the deferred 2012 obligation and artificially higher 2013 obligation.

EPA inaccurately asserts, “In 2012 the available BBD RINs were slightly less than the BBD standard.” In making this assertion, EPA compares the statutory volumes to the number of generated RINs; to correctly assess RIN availability, the agency must compare the obligation as a function of RVO percentages applied to actual fuel volumes. The BBD RVO for 2012 was 0.91 percent of a total non-

162 RIN Market Dynamics at 1 fn.2.
166 Proposed Rule 33133.
renewable fuel volume of 171.4 billion gallons of non-renewable fuel, or roughly 1.56 billion RINs (equivalent to 1 billion gallons of biomass-based diesel). More than 1.47 billion 2012 vintage D4 RINs have been retired, and more than 355 million 2011 vintage D4 RINs were retired in excess of the 2011 RVO, indicating they were rolled over to meet the 2012 obligation. This was apparently more than enough to satisfy the 2012 obligation, since an additional 182 million 2012 vintage RINs are still available for compliance in future years, and more than 176 million were held by obligated parties as of April 1, 2015.167 At a minimum, EPA's assertion of a shortage of 2012 D4 RINs needs more justification and explanation. EPA has not stated explicitly whether obligated parties fully satisfied the 2012 RVOs.

EPA further asserts that there was a shortfall of RINs to meet the 2013 RVOs, stating, “Because the applicable volume requirement for total renewable fuel in 2013 was 16.55 bill gal, but actual supply was only 15.54 bill gal, there was a shortfall of about 1 billion RINs needed for compliance.”168 EPA again erroneously compares the statutory volumes to the number of RINs generated. The agency must instead apply the 2013 overall RVO percentage to the amount of non-renewable fuel actually used in the lower 48 states and Hawaii. The agency’s assertion is directly at odds with its estimate of a pool of 1.8 billion carryover RINs available for 2014,169 and its recently published estimate that obligated parties hold as many as 1.8 billion 2012 vintage RINs as of April 1, 2015.170 EPA therefore fails to reasonably support its justification for using waiver authority based on “[s]hortfalls in production and import capability of non-ethanol renewable fuels and constraints on the supply of ethanol to vehicles.”171 The agency should instead utilize the successful and statutorily proper approach employed in previous annual rules that ensures market space for all renewable fuels that are produced.

I. EPA Should Consider Use of Carryover RINs as Part of Available Domestic Supply

Elsewhere in its proposal, in direct contradiction of its estimate of available carryover RINs, EPA states that it is not able to accurately assess RIN availability, saying for instance, “We are not now in a position to confidently assess the volume of carryover RINs currently available [for 2014], since obligated parties and exporters have not yet submitted their compliance demonstrations for 2013.”172 Further, the agency says, “EMTS includes data on RINs retired for export, but the values are incomplete as of this writing since the 2013 compliance deadline has not

168 Proposed Rule 33120 fn.51.
169 Id. at 33115 n.33.
171 Proposed Rule 33120.
172 Id. at 33130.
yet passed.” EPA cites this uncertainty – which EPA’s delays caused and continue to cause – to justify its decision to “not set the annual standards for 2014–2016 at levels that would clearly necessitate a reduction in the current bank of carryover RINs.” The agency acknowledges that its previous consideration of and reliance on the availability of carryover RINs in setting the 2013 RVOs was upheld by the U.S. Court of Appeals for the District of Columbia Circuit, in Monroe Energy, LLC v. EPA, 750 F.3d 909 (D.C. Cir. 2014), yet it now proposes to arbitrarily exclude consideration of carryover RINs in setting 2014, 2015 and 2016 volumes. EPA has failed adequately to explain its change in course on this issue.

EPA’s assertions of paralyzing uncertainty are at direct odds with other statements in the proposal, including the statement that “[t]here is a considerable bank of carryover RINs that can be used to comply with up to 20% of the 2014 RVOs, and to the extent it is not used, that bank of carryover RINs can be rolled forward to assist in compliance with 2015 and 2016 requirements.” Moreover, the agency’s exclusion of consideration of carryover RINs contradicts its reasoning that consideration of carryover RINs “may decrease [obligated parties’] compliance flexibility, increase their risk of noncompliance, and affect their incentives to build-up carryover RIN balances.” EPA’s proposal, as the agency acknowledges, will lower the value of RINs (thereby reducing compliance costs and providing relief to obligated parties). Yet, for those obligated parties currently holding valid RINs, EPA’s proposal is providing direct economic harm. EPA’s issuance of a proposal had an immediate and strong impact on the spot RIN market, causing a plunge of more than 20 percent in one day. If finalized, the exclusion of carryover RINs would likely leave the RINs to expire unused, further harming RIN holders without achieving any useful countervailing purpose. This would directly diminish market participants’ incentives for building carryover balances in the future.

EPA’s decision to exclude consideration of carryover RINs would also damage incentives (plainly intended by Congress when it enacted the statute) for increasing infrastructure for higher blends of ethanol and for producing additional advanced biofuels. Strong RIN prices encourage blending of ethanol even when gasoline prices are low and, indeed, are essential to the achievement of Congress’s purposes. To the extent that EPA is concerned about so-called blendwall issues,

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173 Id. at 33133 n.90.
174 Id. at 33114.
175 See 750 F.3d at 916-18.
176 Proposed Rule 33108.
177 Id. at 33130.
179 See EIA, Higher RIN prices support continued ethanol blending despite lower gasoline prices, Today in Energy (Feb. 23, 2015), available at http://www.eia.gov/todayinenergy/detail.cfm?id=20072; see also Proposed Rule 33119 (RFS program, acting through mechanism of RIN system, “operates to provide an incentive for renewable
robust RIN prices are part of the solution to any such concerns. Moreover, companies that have appropriately made investments in blending capacity to comply with increasing future renewable fuel requirements will bear a disproportionate cost of compliance if the RVOs are set to minimize the value of RINs. Such companies would in effect be supplying compliance at a low cost to companies that refused to make similar investments. Likewise, pipeline companies and blending terminals that have made investments in infrastructure to supply biofuel blends would be unable to recover the costs of those investments through RIN sales. By lowering the value of RINs, EPA’s proposed alteration of the RFS has already negatively affected these companies.

EPA also asserts that “[p]reserving the current bank of carryover RINs at this time will reduce the risk that waivers may be needed after the 2014, 2015 and 2016 standards are in place to address unforeseen circumstances.”\(^{180}\) This reasoning is not persuasive. For one thing, it is not clear that EPA has the authority under the statutory scheme to take actions that artificially increase the stock of carryover RINs to provide a hypothetical “means of compliance when natural disasters cause unexpected supply limitations.”\(^{181}\) Other provisions of the RFS scheme, such as the general waiver provision for severe economic harm and built-in compliance flexibilities, are adequate to address such potential hypothetical risks. Indeed, EPA’s attempt to “preserv[e]” a “bank” of carryover RINs appears to be a back-door method of expanding its general waiver authority to reduce volume obligations based on severe economic or environmental harm pursuant to sub-subparagraph (o)(7)(A)(i) of the statute. Using carryover RINs as another means to prevent less than severe harm would appear to be inconsistent with the limits on EPA’s waiver authority embodied in that provision and recognized by EPA. Moreover, 2014 is over; much of 2015 has already passed; and most of the rest of 2015 will be over before the agency issues a final rule. The risk of relevant “weather-related damage to renewable fuel feedstocks”\(^{182}\) in 2014 is moot; and for 2015, it is increasingly unlikely. There is a far more substantial risk that the bank of carryover RINs for 2013 will increase substantially; yet EPA fails to give consideration to this issue. Oil industry trade groups API and AFPM have

\(^{180}\) Proposed Rule 33130.

\(^{181}\) Id. at 33114.

\(^{182}\) Id. at 33129.
unresolved cases before the U.S. Court of Appeals for the District of Columbia Circuit that could further affect 2013 obligations. The trade associations have challenged EPA’s use of a May 2013 projection of gasoline and diesel use for 2013 in place of the statutory October 2012 projection. If API and AFPM are successful in their unresolved litigation, the 2013 RVOs could be reduced by several hundred million gallons, increasing even further the number of unused RINs available to carry over to 2014. Even if “holding back” some number of carryover RINs from consideration for purposes of RFS compliance were permissible and reasonable (and it is not), EPA would be unreasonable to completely exclude consideration of use of all carryover RINs for purposes of assessing available supply of renewable fuel for purposes of satisfaction of annual volume obligations for 2014, 2015, and 2016. 

In addition, it would be arbitrary and capricious – and irreconcilable with the purposes of the statute and the program – for EPA to allow any RINs to simply expire unused, including but not limited to 2012, 2013, and 2014 RINs. The destruction of RIN value by setting volume obligations that result in expiration of unused RINs does not serve any legitimate purpose and violates Congress’s directive to the agency to increase renewable fuel use, while making RIN credits available “for the purpose of complying with” the renewable volume obligations.

In sum, EPA has not justified its exclusion of carryover RINs in its consideration of supply available to meet volume obligations for these years. To comply with Congress’s directive to encourage growth in the use of renewable fuels in the future, EPA must take into consideration the use of all available carryover RINs to meet volume obligations.

J. BIO Is Concerned That EPA’s Proposed Volumes Would Unnecessarily and Improperly Trigger Additional Waiver Authority

Under the law’s various waiver authorities (set forth at 42 USC § 7545(o)), subparagraph (o)(7)(F) (“Modification of applicable volumes”) (the “(7)(F) waiver” provision) grants EPA the authority to modify the standards for any of the individual tables in paragraph (2)(B) after 2016 if the agency has waived volumes in “the table concerned” by at least 20 percent in two consecutive years or by at least 50 percent in any single year. Through its rule for 2013 – the last annual rule the agency finalized – EPA did not waive statutory volumes from the advanced biofuels table, the biomass-based diesel table, or the overall total renewable fuels table.

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186 Id. § 7545(o)(7)(F).
However, for 2014, 2015, and 2016 EPA has proposed consecutive-year waivers of the volumes in the advanced biofuels and overall renewable fuels categories that would appear to trigger the (7)(F) waiver for 2017-2022. The proposed and statutory volumes (in billions of gallons) for the advanced table are below in Table 2, followed by corresponding calculated waiver percentages:

Table 1: Proposed Waiver of 2014-2016 Advanced Biofuel as a Percentage of Statutory Volumes

<table>
<thead>
<tr>
<th>Year</th>
<th>Proposed Volume</th>
<th>Statutory Volume</th>
<th>Percentage Waived</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>2.68</td>
<td>3.75</td>
<td>28.5%</td>
</tr>
<tr>
<td>2015</td>
<td>2.90</td>
<td>5.5</td>
<td>47.3%</td>
</tr>
<tr>
<td>2016</td>
<td>3.40</td>
<td>7.25</td>
<td>53.1%</td>
</tr>
</tbody>
</table>

The proposed and statutory volumes (in billion gallons) for the overall renewable fuel table are below in Table 3, followed by corresponding calculated waiver percentages:

Table 2: Proposed Waiver of 2014-2016 Overall Renewable Fuel as a Percentage of Statutory Volumes

<table>
<thead>
<tr>
<th>Year</th>
<th>Proposed Volume</th>
<th>Statutory Volume</th>
<th>Percentage Waived</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>15.93</td>
<td>18.15</td>
<td>12.2%</td>
</tr>
<tr>
<td>2015</td>
<td>16.30</td>
<td>20.50</td>
<td>20.5%</td>
</tr>
<tr>
<td>2016</td>
<td>17.40</td>
<td>22.25</td>
<td>21.8%</td>
</tr>
</tbody>
</table>

EPA’s proposal of volumes that would appear to trigger the (7)(F) waiver has been remarked on by investment analysts. Commenters during the interagency review of a draft of the current proposed rule under executive orders 12866 and 13563 also noted “that if the volumes proposed in the NPRM become final, it will trigger the mandatory reevaluation of the Advanced Biofuels volumes in 2016.” EPA has been publicly encouraged by oil refiners to set the annual RVOs at levels that would trigger a potential (7)(F) rewrite. EPA failed to analyze the availability of RINs and other relevant factors in choosing the proposed volumes; for this and other reasons, BIO and its members are concerned that the agency has arbitrarily and

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187 See, e.g., T. Cheung et al., Senate Takes a Crack at RFS Reform, ClearView Energy Partners (June 18, 2015).


impermissibly selected the volumes in such a way as to trigger, at least potentially, the (7)(F) waiver.

Triggering the (7)(F) waiver for advanced biofuel volumes and total renewable fuel volumes is unnecessary and inappropriate in 2015 and 2016. For all the reasons discussed in these comments, a proper calculation of available domestic supply of renewable fuels shows that either no waiver at all, or a substantially smaller waiver – at most – of advanced biofuel and total renewable fuel volumes is all that is needed for 2015 and 2016. EPA can and should elect to defer to another year the decision whether to consider waiving volumes, using the cellulosic waiver or general waiver statutory authorities (or some combination thereof), that would have the effect of triggering the (7)(F) waiver for advanced biofuel and/or total renewable fuel volumes.

In addition, it need hardly be said that triggering the (7)(F) waiver cannot be a permissible justification or reason for reducing volume obligations under either the statutory provision governing the cellulosic waiver authority or the statutory provision governing the general waiver authority. A desire or intention to trigger the (7)(F) waiver simply is not relevant to the legal criteria for triggering either of these statutory provisions.

K. EPA Has Not Adequately Assessed “What Actually Happened” in 2014 and Should Recalculate 2014 Volumes Using the Proper Data and Criteria

What actually happened in 2014 is a direct result, as the agency acknowledges, of EPA’s failure to set RVOs in a timely manner, allowing obligated parties to act as if the statute did not exist. EPA does not convincingly demonstrate or support claims of legal and practical constraints on the use of either cellulosic, advanced or overall renewable fuels. EPA claims that “[s]ince 2014 has passed, we are proposing to base the applicable volume requirements for that year on the number of RINs supplied in 2014 that are expected to be available for use in complying with the standards.” Yet, EPA is ignoring many RINs that have been supplied and are available for use, including carryover RINs. EPA successfully implemented a methodology for cellulosic biofuel in 2013 based on the demonstrated volume of qualifying fuel produced with validly generated RINs. Importantly, the agency should limit its use of waiver authority in a manner consistent with its stated goal “to reduce volumes of advanced biofuel and total renewable fuel only to the extent necessary to remove the inadequacy in supply.”

190 Proposed Rule 33121.


192 Proposed Rule 33104.
The agency drafted its proposed 2014 volumes, presented in TABLE II.C.1–1 in the proposal, using March 2015 data from EMTS as well as export data from EIA.\textsuperscript{193} However, since that time, the availability of RINs for 2012, 2013, 2014, and 2015 shown in EMTS has changed considerably, even as demonstrated by EPA’s posting of April 2014 EMTS data to the docket. A one-time snapshot of EMTS data is therefore an inherently inaccurate estimate of the availability of RINs for compliance for 2014 and 2015.

EPA excludes consideration of “RINs retired for reasons other than compliance with the annual standards, as these RINs are not available to obligated parties.”\textsuperscript{194} Since the agency did not post to the docket the March 2015 data it used in calculating the 2014 RIN supply, it is impossible for stakeholders to guess how it arrived at volume corrections. If EPA excludes RINs retired for Enforcement Obligations, Remedial Action - Retirement Pursuant to 80.1431(c), and Remediation of Invalid RIN Use for Compliance, then it is unjustified. By definition such RINs were retired by obligated parties and were therefore available to them.

Further, EIA’s estimate of ethanol exports is not an accurate assessment of RINs that will be unavailable for compliance. EPA mistakenly assumes that RINs were attached to every gallon of ethanol exported in 2014 and will therefore have to be retired, making them unavailable to other obligated parties. EPA subtracts total 2014 ethanol exports of 846 million gallons, as reported by the Energy Information Administration in its May 2015 STEO. RINs were never generated for nearly half of 2014 ethanol exports – a minimum of 370 million gallons of exported ethanol and a maximum of 393 million gallons. EPA must correct this mistake, and the determinations proposed to be made based on it, in EPA’s final rule.

The export data reported by EIA (and relied upon by EPA) come from U.S. Census Bureau data. According to the Census Bureau, 836 million gallons of ethanol for fuel use and industrial use were exported from the United States in 2014. Of this amount, 370.2 million gallons of fuel and industrial ethanol exports were undenatured and would not have generated a RIN. The RFS regulations require that ethanol be denatured in order to qualify as renewable fuel and generate RINs. Exporters of undenatured ethanol do not incur an exporter RVO because they are not exporting renewable fuel as defined by 40 CFR 80.1401.

Moreover, 12.5 million gallons of denatured industrial ethanol were exported, and it is unlikely that RINs were ever generated on this product (i.e., because it is not used as transportation fuel, heating oil, or jet fuel). The fact that EPA is miscalculating the export burden can be demonstrated comparing EIA data to EMTS data on the 2012 and 2011 RVOs. In 2012, EIA reports that 741.5 million gallons of ethanol were exported. Yet EMTS shows that only 170.6 million RINs were

\textsuperscript{193} Id. at 33122.

\textsuperscript{194} Id. at 33140.
separated from exported fuel. In 2011, 1,195 million gallons of ethanol were exported, yet only 327.5 million RINs were separated from exported fuel.

EPA estimates that 83 million gallons of biomass-based diesel were exported in 2014, representing the maximum amount estimated by EIA. However, similar to ethanol exports there is no reason to believe that every gallon carried a RIN. In 2012, EIA reports that 128 million gallons of biomass-based diesel were exported; yet, only 69.4 million RINs were separated from exported fuel (representing 46.3 million gallons). For 2012, EIA estimates 196 million gallons were exported; yet only 159 million RINs were reported separated from exported fuel (representing 106 million gallons). EPA is likely overestimating biodiesel exports by a factor of two (2). Denatured fuel ethanol exports totaled 453 million gallons in 2014. To date, 236.7 million 2014 vintage D6 RINs have been reported as exports.

A recalculation of TABLE II.C.1–1 using EMTS data updated to May 2015 and including potential carryover RINs represents our recommendation of the actual supply of RINs available to obligated parties for 2014. EPA need not draw down the entire stock of available RINs (which the agency estimates at 1.8 billion) in order to remove the inadequacy of supply of renewable fuels in 2014 – which was caused primarily by EPA actions. The agency has not published data on its estimate of carryover RINs and what type are available. Nevertheless, excess advanced biofuel RINs can be used to satisfy the overall volume obligation if D6 RINs are not available to carryover. By counting carryover RINs, the agency can avoid gratuitous exercise of the general waiver provision in 2014.\textsuperscript{195}

\textsuperscript{195} In a memorandum to the docket for this rulemaking (entitled “Calculation of ethanol export estimates for 2014”) that was posted on July 24, 2015, EPA indicated that it would be addressing the error described herein in its final rule. EPA acknowledged that ethanol that is exported in undenatured form “would not have generated RINs” and that such ethanol “thus should not have been subtracted from the total number of RINs generated for fuel ethanol in 2014 for purposes of calculating the available supply of RINs for 2014 in the proposal.” (Emphasis added.) BIO appreciates EPA’s commitment to addressing such issues as EPA staff continue to work to improve the proposed rule.
Table 3: Recalculation of Available RINs for the 2014 RVO (in millions) from EPA’s TABLE II.C.1-1

<table>
<thead>
<tr>
<th>D code</th>
<th>Domestic production</th>
<th>Imports</th>
<th>Exports</th>
<th>Correction</th>
<th>Carryover RINs</th>
<th>Net supply *</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
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<td>496</td>
<td>-109</td>
<td>-86</td>
<td>350</td>
<td>2,865</td>
</tr>
<tr>
<td>5</td>
<td>79</td>
<td>64</td>
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<td>0</td>
<td>0</td>
<td>143</td>
</tr>
<tr>
<td>6</td>
<td>14,017</td>
<td>336</td>
<td>-453</td>
<td>-268.5</td>
<td>768.5</td>
<td>14,400</td>
</tr>
<tr>
<td>All advanced biofuel</td>
<td>2,326</td>
<td>560</td>
<td>-109</td>
<td>-86</td>
<td>350</td>
<td>3,041</td>
</tr>
<tr>
<td>All Renewable fuel</td>
<td>16,343</td>
<td>896</td>
<td>-562</td>
<td>-354.5</td>
<td>1,118.5</td>
<td>17,441</td>
</tr>
</tbody>
</table>

* Totals may not add up due to rounding.

L. EPA Should Seek to Maximize Renewable Fuel Use in 2015 and 2016

EPA is similarly unjustified in proposing to set the 2015 RVOs according to “what actually happens” in 2015 and in consideration of “constraints imposed by the ability of vehicles and engines to use renewable fuels, particularly ethanol.” EPA has not attempted an adequate analysis of the availability of such vehicles or the availability of RINs in 2015 sufficient to justify such a claim. EPA should fully consider setting the 2015 and 2016 RVOs at the statutory volumes, or adequately justify why it cannot do so, and must set volumes at the maximum numbers achievable.

The conventional biofuel industry has a demonstrated capacity to generate 15 billion gallons of renewable fuel and supply it to obligated parties. Further, the industry continues to invest in additional capacity and efficient production. Since November 2014, nearly one-fifth (41) of existing conventional biofuel producers have been approved under the efficient producer program, recognizing their ability to reduce greenhouse gas emissions compared against gasoline even as they expand production.

The agency acknowledges that U.S. use of advanced biofuels “reached 2.92 billion gallons in 2013” at a time when gasoline and diesel use were lower than projected for 2015. EPA also acknowledges that U.S. importation of advanced

196 Proposed Rule 33122.
197 Id.
biofuels in 2014 fell by “370 million gallons,”198 due to the agency allowing the market to operate as though the RFS did not exist. “If this reduction had not occurred in 2014, total advanced biofuel volumes could have been above 3.00 billion gallons.”199 The agency is proposing to allow obligated parties to establish the market for renewable fuels for a second year in a row “absent a rulemaking,”200 which will create a situation where “actual supply in 2015 may be no different than it was in 2014.”201

The Coalition for Renewable Natural Gas estimates that more than 150 million ethanol equivalent gallons of cellulosic CNG/LNG will be dedicated for transportation fuel in 2015 and more than 295 million gallons in 2016. The coalition notes that these estimates could be higher if EPA acted in a more timely manner on proposed rules, pathway petitions, and approval of new production facilities. EPA admits that it has “not received any projection of cellulosic biofuel production for 2015 or 2016 from the Energy Information Administration, as is required under the law.”202 EPA also admits that it has not itself developed “a unique production probability distribution for each company based on the available information.”203 And in justification, EPA cites the “poor accuracy of the individual company estimates in previous years.”204 With its newly proposed methodology, EPA deliberately sets the risk of underestimation to outweigh the risk of overestimation. Through the first six months of 2015, cellulosic CNG/LNG producers generated more than 48 million RINs. That is already equal to 69 percent of the 70 million gallons that EPA estimates as the industry sector’s total production capacity for the entire year. EPA thus is demonstrably underestimating the cellulosic sector’s production potential, and the final rule should correct this undershooting problem. The final rule should use the most accurate, relevant, and reliable data available, and should not rely on stale information that may lead to inaccurate underestimation.205

New cellulosic biofuel eligibility (e.g. biogas) and new cellulosic biofuel capacity creates an overarching risk (especially in the next few years) that D3 RIN production will exceed the annual RVOs on a year-to-year basis. EPA must instead set the cellulosic RVOs for 2015 and 2016 according to a neutral methodology that fully accounts for industry’s intentions to produce the fuel. Undershooting the numbers would create a substantial risk that volumes of qualifying fuel would be blocked from reaching the market and that cellulosic RINs would be devalued. BIO

198 Id.
199 Id.
200 Id. at 33131.
201 Id. at 33122.
202 Id. at 33139.
203 Id. at 33142.
204 Id.
205 Cf. id. at 33139 & n.107.
recommends establishing the cellulosic RVO for 2015 at no less than 157 million gallons and for 2016 at no less than 350 million gallons.

Further, EPA must require that available cellulosic RINs be retired before allowing refiners access to cellulosic biofuel waiver credits. These credits were included in the RFS to balance prices and to protect refiners against potential monopolies on D3 or D7 RINs among competing refiners. However, producers are now reporting that obligated parties are indicating that they will pursue a compliance strategy to secure alternate advanced biofuel RINs and cellulosic biofuel waiver credits as opposed to D3 RINs – even if D3 RINs are available at lower cost. EPA’s current approach to issuing cellulosic waiver credits needs to be augmented to prevent obligated parties from taking advantage of the availability of waiver credits and leveraging more overarching uncertainty in the D3/D7 marketplace. We are confident that, with this relatively minor adjustment to the current waiver credit regime, EPA can improve the administration of the cellulosic biofuel waiver credit program to: (a) ensure that the RFS2 delivers robust incentives for cellulosic biofuel production, with each D3 RIN generated and available being required for compliance; and (b) improve the year-to-year accuracy of the annual RVOs for cellulosic biofuel so as to restore a more balanced marketplace for cellulosic biofuel.

In light of the expected shortfall of cellulosic biofuel volumes, EPA would have the authority (subject to the constraints discussed above) to consider waiving equivalent volumes from the advanced and overall RVOs. EPA has signaled its intention to waive advanced RVOs by a lesser amount than the theoretical maximum that could be arguably allowed under the cellulosic waiver. BIO respectfully asks the agency, for the reasons explained herein, to set higher volumes than proposed and to take into account potential carryover RINs in doing. BIO further opposes EPA’s proposed use of the general waiver authority as legally and factually unjustified, for the reasons explained above.

IV. Conclusion

To sum up some key elements of BIO’s comments:

1. BIO recommends establishing the cellulosic RVO for 2015 at no less than 157 million gallons and for 2016 at no less than 350 million gallons.

2. EPA should set the 2015 and 2016 RVOs for advanced and overall RVOs at the full statutory volumes. EPA has not met its burden to reduce the volumes.

3. In the alternative, if EPA were to conclude that it can adequately justify utilizing its cellulosic waiver authority to diminish the market for advanced and overall renewable fuels without running afoul of the statutory goals, then BIO would respectfully propose, without prejudice to the potential assertion of different arguments in the future,
a. that EPA set advanced RVOs at the highest numbers feasible, which (at minimum) would be no less than 3 billion gallons for 2015 and 3.5 billion gallons for 2016;

b. and that EPA likewise set overall renewable fuel RVOs at the highest numbers feasible, which (at minimum) would be no less than 18 billion gallons for 2015 and 18.5 billion gallons for 2016.

c. No reductions need be made – and no reductions should be made – on the basis of the general waiver authority.

4. In setting the volumes, EPA should take into account the availability of RIN credits, as explained above, and should not exclude them from its calculation of available domestic supply of renewable fuel to be used in satisfying the statutory volume requirements.

5. Statutory volume obligations should be set at the highest numbers possible. As recognized by EPA in the proposed rule, this must be done to comply with the statutory requirements and goals and Congress’s intent.

Among other things, requirements set at no less than these proposed volumes (and quite possibly at higher volumes) are necessary to revive confidence in this program among advanced biofuel producers and their investors. If EPA continues to rely on an improperly expansive conception or use (or both) of its waiver authority, the likely outcome will be continued uncertainty and a continued loss of the confidence and the investment that are necessary to build capacity for advanced biofuels so as to meet the medium-term and long-term requirements and goals of the program that Congress directed EPA to implement.

The RFS has been a critical piece of our nation’s energy and climate policy. It has driven the investment of billions of dollars in the development and commercial deployment of ultra-low-carbon biofuels. It has spurred innovation beyond biofuels to the development of greener technologies and manufacturing processes while curbing our dependence on foreign oil. These developments were intended by Congress when Congress created the RFS program.

Unfortunately, as explained in our comments, EPA’s new interpretation of its statutory authority to waive the requirements of the RFS statute is impermissibly broad and goes beyond the bounds set by Congress. As a result, the method EPA has used to set the volumes based on its mistaken view of its waiver authority has already chilled investment for advanced biofuels and has increased U.S. greenhouse gas emissions. If EPA issues a final rule that adopts the approach set forth in the proposed rule, the result will be continued market uncertainty and market constraints that will further disincentivize sustained investment in advanced biofuels. Further, the proposed rule would improperly and unnecessarily select volumes that would potentially trigger a rewrite of the RFS, which would generate
even greater market uncertainty. As also explained above and by other commenters, EPA’s proposal is flawed in a number of other significant respects that lead it to undercalculate the correct volumes to select.

We submit that this outcome can be avoided. EPA can get the program back on track and can help drive the growth of the advanced and cellulosic biofuels industry in the manner that Congress intended and, indeed, required. To this end, EPA should continue to expedite the approval of new advanced and cellulosic biofuels pathways and should work to properly calculate all supplies of cellulosic biofuels to more accurately set the appropriate annual RVOs. And EPA should avoid a reading of the statute that would empower incumbent fuel producers – who want to see the program fail – by giving them the ability to define future RFS blending obligations by their own inaction and their efforts frustrating the statutory purpose.

We respectfully urge the Agency to work with BIO, the biofuels industry, and other stakeholder groups – within the bounds of the Agency’s authority set by Congress – to ensure that the RFS remains the global gold standard for biofuels, to develop new innovation, and to combat climate change. We look forward to working with you toward these goals.

Sincerely,

Brent Erickson, Executive Vice President
Biotechnology Industry Organization (BIO)