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**COMMENTS OF THE AMERICAN FUEL & PETROCHEMICAL MANUFACTURERS ON  
THE ENVIRONMENTAL PROTECTION AGENCY’S NOTICE OF PROPOSED  
RULEMAKING,  
“RENEWABLE FUEL STANDARD PROGRAM: STANDARDS FOR 2020 AND BIOMASS-  
BASED DIESEL VOLUME FOR 2021, RESPONSE TO THE REMAND OF THE 2016  
STANDARDS, AND OTHER CHANGES,”  
DOCKET No. EPA-HQ-OAR-2019-0136-0021  
84 FED. REG. 36,762 (July 29, 2019)**

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## I. EXECUTIVE SUMMARY

*EPA Should Use its Reset Authority to Lower Volumes.* Implementation of the RFS requires EPA to annually assess various factors affecting the transportation fuel market and to promulgate reasonably attainable volumes of renewable fuel using all its available authority under section 211(o) of the Clean Air Act. Originally meant to reduce dependence on foreign fuels and reduce greenhouse gas emissions, the RFS as amended by Congress in 2007, provided for statutory volumes for three different renewable fuels that extended to 2022, including large increases of yet-to-be-developed advanced biofuels. But Congress also provided that volumes of renewable fuel, advanced biofuel, and cellulosic biofuel could be waived if its original projections (now proven to be vastly optimistic) did not come to fruition. And in doing so, Congress also included a provision requiring EPA to "Reset" statutory volume targets if the Agency waived renewable fuel requirements above specified levels.

The RFS reset thresholds have now been met, but in the proposed rule EPA ignores its statutory duty to act even though the Agency knew in 2017 that Reset would be triggered for total renewable fuel, advanced biofuel, and cellulosic biofuel by the fall of 2019.<sup>1</sup> Thus, contrary to statute, EPA has arbitrarily disregarded a non-discretionary duty to implement the RFS Reset and must do so with respect to RFS volumes required in 2020. EPA cannot simply ignore the Reset and establish final volumes that will be applicable in 2020 as unadjusted by the Reset. Rather, as Congress intended, EPA must use all its available statutory flexibility to tailor the RFS program to address market realities and to minimize costs to the consumer.

*EPA Should Use Its Cellulosic and General Waiver Authorities to Mandate Reasonable Volumes.* EPA is proposing once again to use its cellulosic waiver authority to waive a large portion of the cellulosic mandate and make corresponding downward adjustments to the advanced biofuel and total renewable fuel volumes by the amount of the cellulosic waiver, as it should. Unfortunately, the cellulosic waiver by itself is inadequate to reduce the RFS mandates to achievable volumes, and thus EPA should use its general waiver authority to further reduce the RFS's unrealistic mandates. This would minimize the cost of the program until the RFS can be reformed by Congress.

Cellulosic biofuel, the main portion of advanced biofuel under the RFS, has not been produced in appreciable volumes, and EPA has used its cellulosic waiver authority to lower statutory mandates and the overall mandated volume. As detailed below, EPA should decrease cellulosic

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<sup>1</sup> See Renewable Fuel Standard Program: Standards for 2018 and Biomass Based Diesel Volume for 2019, 82 Fed. Reg. at 58487. "Real-world challenges, in particular the slower-than-expected development of the cellulosic biofuel industry, has slowed progress towards meeting Congressional goals for renewable fuels. Given the nested nature of the standards, the shortfall in cellulosic biofuels has made the volume targets established by Congress for 2018 for advanced biofuels and total renewable fuels beyond reach."



volumes further, and use its general waiver authority to further reduce the proposed renewable fuel volumes to ensure any implied or projected use of conventional ethanol remains at 10 percent of the estimated gasoline consumption and the non-cellulosic advanced categories remain achievable. Otherwise, higher than realistic volumes remain. While administratively convenient, such an increase is unjustified.

*Conventional Biofuel Volumes are Too High.* The proposed conventional biofuel volumes, as detailed below, depart from Congress’s original intent, are not reasonably achievable, and do not comport with the realities of the fuel market. The volumes for the conventional biofuel portion of the RFS were set by relying on the Energy Information Administration’s projection that gasoline demand would continually increase, reaching more than 150 billion gallons per year. This would allow for the statutory implied target of 15 billion gallons of conventional biofuel to be blended into gasoline without exceeding 10 percent of the gasoline pool. Beyond 10 percent of the gasoline pool, ethanol hits a “blendwall” – resistance in the marketplace to use more than an E10 blend because of constraints on fleets and infrastructure, as explained more in the comments below. Due to increasingly efficient vehicles and other factors, gasoline demand has not exceeded 144 billion gallons and is projected by EIA to be 143 billion gallons in 2020, meaning the maximum amount of conventional biofuel that can be blended up to the ten percent “blendwall” is, at most, 14.3 billion gallons – 700 million gallons lower than what Congress believed would be realistic.<sup>2</sup>

The expansion of the RFS poses extreme costs to other stakeholders and consumers. An expensive to-comply-with program is not better for conventional biofuels. Ethanol blending has increased to about 10 percent of the gasoline pool where it has remained regardless of volumes mandated. Higher mandates simply increase the cost of compliance in the form of higher RIN prices but have not succeeded in forcing ethanol blending beyond the E10 blendwall. Conventional ethanol blend rates have been consistent whether RIN prices were less than ten cents or more than a \$1.50. What has changed is the impact upon obligated parties and consumers, as blenders have realized windfall profits from an opaque RIN trading system. When there was room under the blendwall, conventional biofuel RINs cost pennies. Obligated parties were able to over comply with their conventional biofuel RVOs by blending at the E10 level. As a result, RIN costs remained low. When the blendwall was approached in 2013, ethanol blending did not increase appreciably, but costs for American manufacturing and consumers did, dramatically. Repeating those mistakes would harm the administration’s jobs and energy dominance agendas.

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<sup>2</sup> 82 Fed. Reg. at 34,212-3. In discussing this implied volume, however, EPA fails to acknowledge that Congress contemplated 15 billion gallons of ethanol would be blended into approximately 150 billion gallons of gasoline, based on projections of gasoline supply at the time Congress passed the Energy Independence and Security Act of 2007. This would result in roughly a 10% blending level. Simply put, Congress did not intend for ethanol to bust the blendwall.



Ethanol is now an important part of the gasoline supply as an octane booster. It would be used whether mandated or not. Before finished gasoline reaches a pump for consumer purchase, it is sold out of the refinery gate as an intermediate blend called a “BOB” or “blendstock for oxygenate blending.” Nearly all BOBs are formulated to be blended with ethanol to increase octane and become finished gasoline. Ethanol has a price advantage compared to other octane sources, especially now that infrastructure has been built over the last fifteen years. Ethanol is now a mature industry that can compete and succeed in the free market. As the Washington Post’s Editorial Board recently stated, “[g]overnment subsidies for biofuels should end.”<sup>3</sup>

*Cellulosic and Advanced Biofuel Volumes must be Reduced.* Congress originally envisioned cellulosic ethanol to be a backwards-compatible, liquid alternative fuel and intended it to comprise the predominant share of the RFS. Currently only a trickle of cellulosic ethanol is produced – a miniscule .00005 of the total gasoline supply<sup>4</sup> – and the overwhelming majority of RINs generated under the mandate for the cellulosic category are from biogas. For reasons discussed below, biogas volumes should not be set without considering fuel quality issues and EPA needs to go back to the drawing board on predicting volumes.

Advanced biofuel mandates, fulfilled mostly with biodiesel and renewable diesel, must also be reduced to minimize consumer costs. The advanced mandate should simply be the sum of its nested categories (i.e., BBD and cellulosic) plus a small amount of other domestic advanced.

*Expensive Biodiesel Volumes must be Reduced.* Biodiesel costs \$0.50 to \$1 per gallon more than diesel in 2018. EISA directs EPA to set the BBD mandate above 1 billion gallons, not at the maximum amount the domestic industry can produce. Given the high cost, EPA should not set the mandate above 1 billion gallons.

The agency’s proposed volume requirements miss the mark. Therefore, appropriate levels of volumes should be lowered. Specifically, advanced biofuel proposed volumes should be reduced to 4.285 billion gallons, BBD proposed volumes should be set at the statutory level of 1 billion gallons, and conventional renewable fuel volumes should be set at 14.03 billion gallons. This results in a total renewable fuel volume of 18.315 billion gallons, well below EPA’s proposed 20.04.

No one can credibly say that the RFS program is working as originally envisioned, or at a reasonable cost. EPA’s repeated attempts to breach the blendwall or incentivize cellulosic

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<sup>3</sup> Editorial Board (2019, August 12). We have no idea yet how to feed the planet without frying it. *The Washington Post*. Retrieved from [https://www.washingtonpost.com/opinions/we-have-no-idea-yet-how-to-feed-the-planet-without-frying-it/2019/08/12/21225228-b961-11e9-a091-6a96e67d9cce\\_story.html?noredirect=on](https://www.washingtonpost.com/opinions/we-have-no-idea-yet-how-to-feed-the-planet-without-frying-it/2019/08/12/21225228-b961-11e9-a091-6a96e67d9cce_story.html?noredirect=on).

<sup>4</sup> 7,000,000-gal cellulosic ethanol / 143,000,000,000 gasoline supply = .00005



production have consistently resulted in program cost spikes that injure obligated parties and consumers. For reasons set forth below, we urge EPA to apply the Reset criteria to the 2020 RFS or fully use its general and cellulosic waiver authorities to redress unachievable mandates and set volume requirements at levels that are in fact reasonably achievable. Volume mandates should be driven by data, not politics.

## **II. SPECIFIC ISSUES RAISED IN THE PROPOSAL**

### **A. CONVENTIONAL BIOFUEL SHOULD BE SET AT OR BELOW BLENDWALL**

EPA's proposal establishes an implied conventional ethanol level that exceeds the blendwall and must be revised downward to avoid increasing program costs, excess volatility in the RIN market, and economic harm with no environmental benefit.

The total conventional biofuel volume should be no higher than 10 percent of the U.S. Energy Information Administration's ("EIA") forecasted gasoline demand for 2020. This was Congress's intent in crafting the Energy Independence and Security Act of 2007 ("EISA").<sup>5</sup> Congress understood that the E10 blendwall was an issue during the consideration of EISA.<sup>6</sup> Currently, EIA is projecting 143.03 billion gallons per year of gasoline demand.<sup>7</sup> Therefore, given EIA's projection and the statutory structure of the RFS, EPA should not promulgate 2020 RFS standard that is based on the use of ethanol<sup>8</sup> that exceeds 14.30 billion gallons.

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<sup>5</sup> This intent is reflected in the structure of the RFS volume mandates. While Congress allowed for a ramp up period for conventional biofuels from 2009 to 2014, starting in 2015 the difference between the applicable volume of total renewable fuel and the applicable volume of advanced biofuel was set at 15 billion gallons. CAA §211(o)(2)(B)(i)-(ii). This 15 billion cap on conventional biofuel (defined specifically as "renewable fuel that is ethanol derived from corn starch") (CAA §211(o)(1)(F)) expresses a clear Congressional direction to EPA that the amount of conventional ethanol in gasoline is to be "flatlined" starting in 2015 and continuing for the remainder of the statutory volumes included in the RFS (eight compliance years). This hard cap coincides with information available to Congress at the time regarding when the level of 10% ethanol blending in gasoline would be reached.

<sup>6</sup> During consideration of H.R. 6 by the Senate (the House bill that was amended to include the Senate approved version of EISA), E10 was discussed in connection with amendments addressing U.S. tariffs on ethanol. During the debate, Senator Thune (R-SD) noted that "[a]dditionally, we have to keep in mind the limitations placed on ethanol demand due to blend restrictions. Right now, only E10, 10 percent ethanol and 90 percent gasoline, is approved for use in nonflex-fuel vehicles. There is a point at which we are going to hit the E10 wall. Domestic production, as you can see if you look at this chart of ethanol production in this country, is more than adequate to meet the full market potential for E10. Some industry analysts predict we will very soon have excess ethanol production capacity when we hit the E10 wall." CONG REC. at S8007, June 20, 2007.

<sup>7</sup> U.S. Energy Information Administration, August 2019 Short-Term Energy Outlook, [https://www.eia.gov/outlooks/steo/pdf/steo\\_full.pdf](https://www.eia.gov/outlooks/steo/pdf/steo_full.pdf).

<sup>8</sup> Corn, sugarcane, and cellulosic.



EPA has previously and repeatedly acknowledged the existence of the E10 blendwall.<sup>9</sup> But the proposed rule largely ignores this analysis and instead attempts to force more than 10 percent ethanol into the U.S. gasoline market as a political response to real-world market limitations on ethanol blending. This is demonstrated by the redefinition of the 15-billion-gallon cap on ethanol as an “implied mandate” for conventional biofuel, an interpretation of the RFS that is not grounded in the statute and the nested nature of its requirements. Specifically, the RFS provides definitions for five different renewable fuels (advanced biofuel, biomass-based diesel, cellulosic biofuel, conventional biofuel, and renewable fuel)<sup>10</sup> but it only mandates four of these five fuels.<sup>11</sup> The renewable fuel which is singled out and not mandated by Congress is conventional biofuel. Given this explicit statutory structure, EPA cannot create a mandate for this fuel.

EPA compounds errors in not providing a reasonable justification, based on information contained in the record, as to why an “implied mandate” for 15 billion gallons of ethanol should be imposed in 2020. In attempting to support the proposed 15 billion gallon implied conventional ethanol mandate, “EPA does not make specific projections for E0, E15 and E85.”<sup>12</sup> Instead EPA claims that the D.C. Circuit decision in *Americans for Clean Energy v. EPA*, 864 F. 3d 691 (2017) (“ACE”) precludes such an assessment.<sup>13</sup> We disagree. To the extent that ACE restricted EPA from analyzing demand side factors when using the inadequate domestic supply prong of EPA’s general waiver authority, this has no bearing on EPA’s duty to provide information necessary to support its proposed rulemaking under the CAA and to provide “factual data on which the proposed rule is based . . . [and] the major legal interpretations and policy considerations underlying the proposed rule.”<sup>14</sup>

EPA also offers no explanation as to why it did not analyze the proposed implied mandate of 15 billion gallons under its waiver authority based on “severe economic harm.” While EPA acknowledges that “the ways the market could make this volume available may still be generally relevant to whether and how EPA exercises its waiver authorities . . . such as our consideration

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<sup>9</sup> “[T]he rate of growth in the use of ethanol in the U.S. has decreased in recent years as a result of a number of factors, including that the gasoline market has to a large degree become saturated with gasoline that contains 10 volume percent ethanol (E10), favorable blending economics diminish for gasoline-ethanol blends beyond E10, gasoline demand has leveled off, and efforts to expand the use of higher ethanol blends such as E15 and E85 have not been sufficient to maintain past growth rates in total ethanol use.” Market impacts of biofuels, David Korotney, Office of Transportation and Air Quality, November 27, 2017 at 1. This same analysis was confirmed in mid-2018. Market impacts of biofuels in 2019, David Korotney, Office of Transportation and Air Quality, June 26, 2018 at 1. This same analysis has been substantially repeated in the docket for the proposed rule. Market Impacts of Biofuels in 2020, EPA-HQ-OAR-2019-0136-0067 “[W]e also believe that there are real constraints on the ability of the market to significantly exceed an average nationwide ethanol content of 10% in 2020.” *Id.* at 2.

<sup>10</sup> CAA §211(o)(1)(B),(D),(E),(F),(J).

<sup>11</sup> CAA §211(o)(2)(B)(i)(I)-(IV).

<sup>12</sup> 84 Fed. Reg. at 36,787, n.114.

<sup>13</sup> *Id.*

<sup>14</sup> CAA §307(d)(3)



of whether the volumes will cause severe economic harm”<sup>15</sup> the proposed rule offers no complementary analysis. Nor does the proposed rule consider whether exceeding the E10 blendwall might be averted through resetting volume mandates in 2020, which EPA has a statutory obligation to do for the 2020 compliance year.

EPA ignores that there is insufficient certified-compatible distribution infrastructure to fulfill an “implied mandate” of 15 billion gallons, including retail storage tanks and pumps.<sup>16</sup> EPA has presumed 15 billion gallons of ethanol for the past three years and not once has the market been able to reach this level of blending. Indeed, the recent report on potential policies to meet food, land-use, and greenhouse gas emissions goals in 2050 from the World Resources Institute claims that, “[i]n the past few years, the blend wall has effectively blocked expansion of ethanol in the United States.”<sup>17</sup> Higher than achievable volumes increase the cost of the program but do not materially increase blended ethanol. Instead, the artificially high assumptions of ethanol consumption have had unintended consequences, including RIN volatility, added programmatic costs, wealth transfer from obligated parties to blenders without the desired increase in infrastructure needed to accommodate additional ethanol, and adverse environmental impacts.<sup>18</sup>

Overall, despite having an RFS mandate for the past 14 years and despite having the benefit of tax credits and multiple federal and state programs to provide direct financial assistance and incentives to the renewable fuel industry, statutory levels of the RFS have remained unachievable. According to the Department of Energy’s Alternative Fuels Data Center, over 300 federal laws or incentive programs exist just pertaining to ethanol, and over 330 similar programs or laws exist for biodiesel.<sup>19</sup> EPA must acknowledge these market realities in assessing the reasonably achievable level of renewable fuel use in 2020.

In sum, EPA must consider all effects of the E10 blendwall and other constraints and conditions that limit the use of ethanol in transportation fuel – as well as the full range of its authority under CAA §211(o) to address volume requirements – in proposing RFS standards for 2020. Without

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<sup>15</sup> 84 Fed. Reg. at 36,787, n.113.

<sup>16</sup> U.S. Energy Information Administration, *New EPA ruling expands sale of 15% ethanol blended motor gasoline*, July 16, 2019 (“On a national level, however, less than 2% of retail fueling stations offer E15.”) <https://www.eia.gov/todayinenergy/detail.php?id=40095>.

<sup>17</sup> “Creating A Sustainable Food Future: A Menu of Solutions to Feed Nearly 10 Billion People by 2050,” World Resources Institute, July 2019. [https://wrr-food.wri.org/sites/default/files/2019-07/WRR\\_Food\\_Full\\_Report\\_0.pdf](https://wrr-food.wri.org/sites/default/files/2019-07/WRR_Food_Full_Report_0.pdf), pg. 115.

<sup>18</sup> See Covington & Burling, LLP, “An Analysis of the Renewable Fuel Standard’s RIN Market White Paper”, <https://www.api.org/~media/Files/Policy/Fuels-and-Renewables/2019/RIN-market-paper.pdf>; American Action Forum, “Even with New Reforms, the RFS is a Costly Policy,” <https://www.americanactionforum.org/insight/even-with-new-reforms-the-rfs-is-a-costly-policy/>; World Resources Institute, “Creating a Sustainable Food Future: A Menu of Solutions to Feed Nearly 10 Billion People by 2050, July 2019, [https://wrr-food.wri.org/sites/default/files/2019-07/WRR\\_Food\\_Full\\_Report\\_0.pdf](https://wrr-food.wri.org/sites/default/files/2019-07/WRR_Food_Full_Report_0.pdf).

<sup>19</sup> United States Department of Energy, “Alternative Fuels Data Center.” <https://afdc.energy.gov/laws/matrix>.

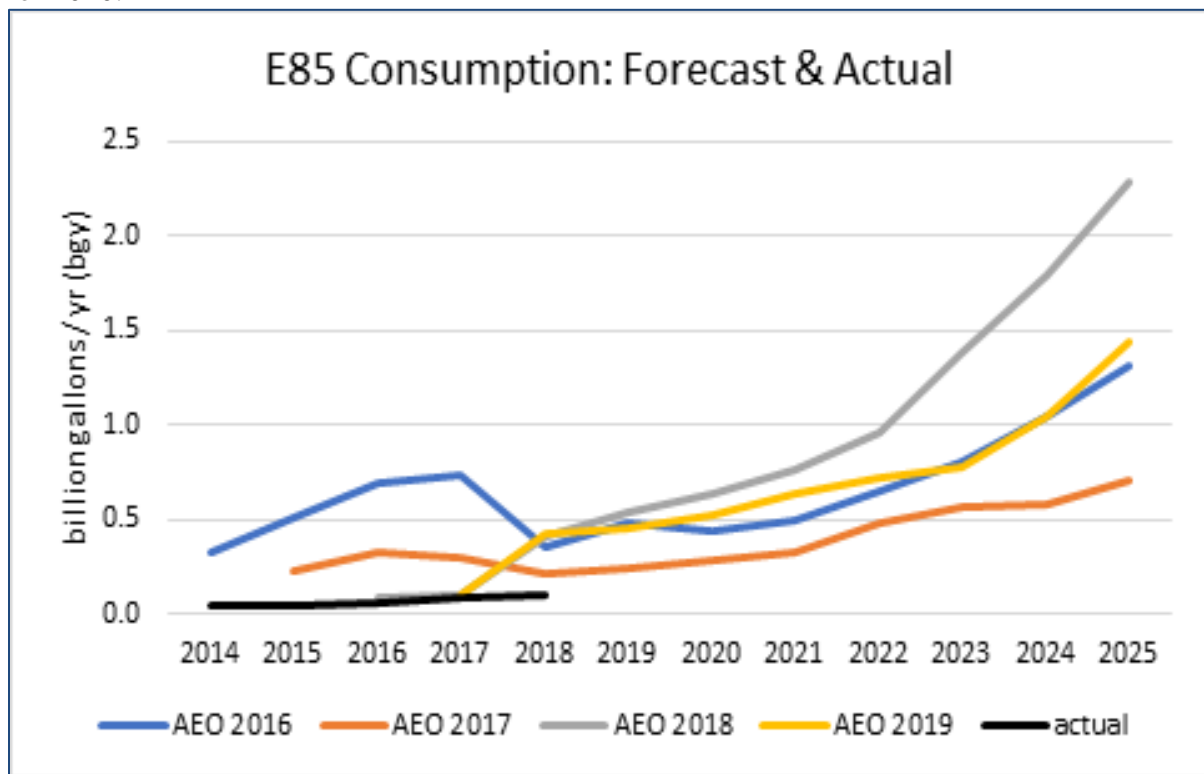




such careful consideration, the proposed mandated levels are contrary to statute and arbitrary and capricious.

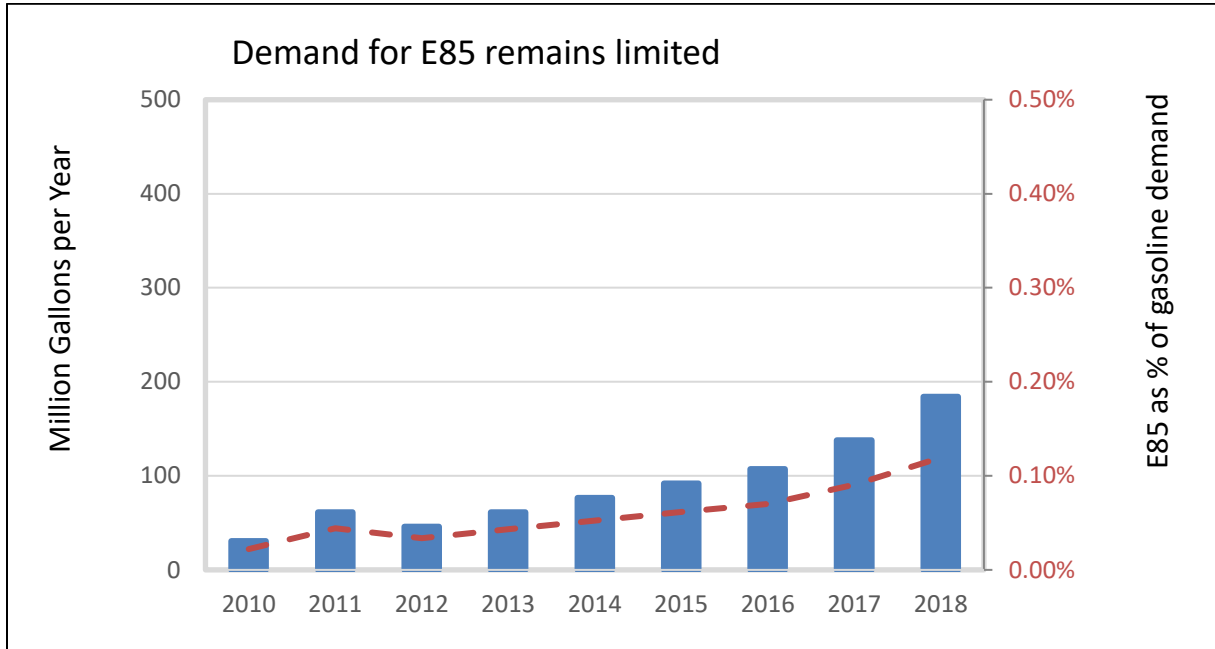
1. EPA must recognize that its assumptions of E85 penetration are erroneous

EPA's predictions for E85 penetration have been wildly optimistic. This is due, in part, because EIA's projections in its Annual Energy Outlook have consistently overpredicted its estimated consumption. The graph below shows the dramatic difference between EIA's projections and actual E85 consumption. It would be unreasonable for EPA to rely on these predictions as a basis for 2020.



E85 volumes have been low and will remain low in 2020, comprising less than 0.4 percent of gasoline demand.<sup>20</sup> Growth for E85 has not materialized as predicted, likely because only a limited number of vehicles and fuel dispensers are E85 compatible, using E85 significantly lowers fuel economy, it is more expensive, and less convenient.

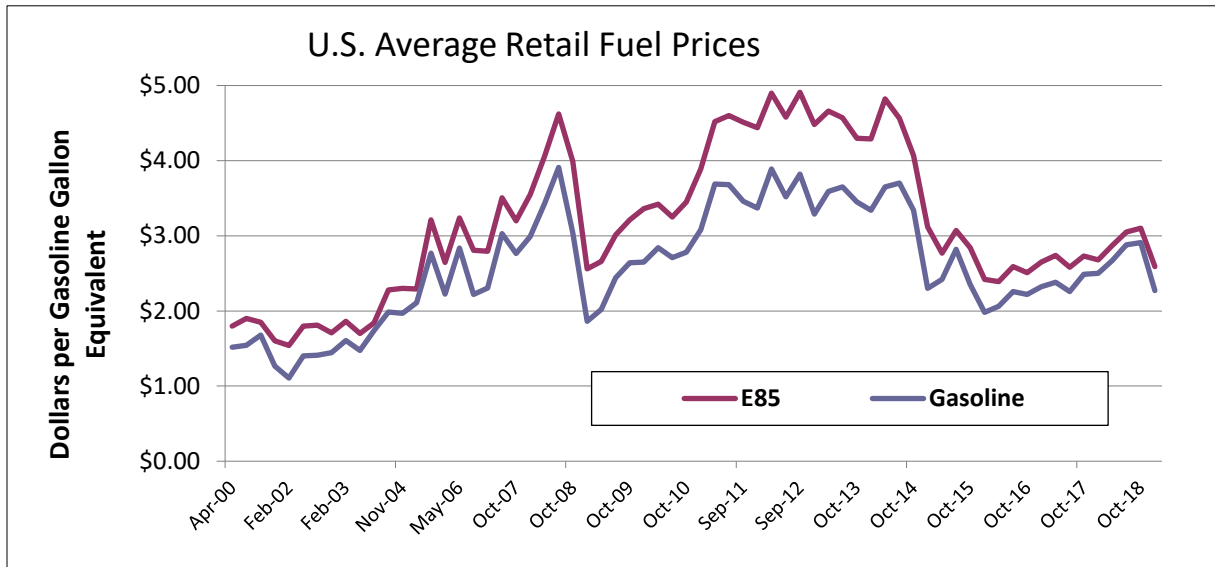
<sup>20</sup> U.S. Energy Information Administration. EIA, AEO2019 National Energy Modeling System. Table "Transportation Sector Energy Use by Mode and Type."



When E85 prices are compared on an energy equivalent basis, E85 has a higher average price than gasoline. This is because E85 has a lower energy density than E10 or E0, resulting in costs per mile approximately nine to 14 percent higher.<sup>21</sup> In addition to being more expensive, consumers typically prefer the convenience of the longer range they can achieve on a tank of regular gasoline, which results in less frequent refueling.<sup>22</sup>

<sup>21</sup> U.S. Department of Energy, “Ethanol.” <https://www.fueleconomy.gov/feg/ethanol.shtml>.

<sup>22</sup> As one example, a 2012 Chevrolet Impala using E85 would get 17 combined mpg versus 23 combined mpg using regular gasoline. This means that the Impala using E85 experiences a 100-mile (more than 25 percent) range reduction. See [www.fueleconomy.gov](http://www.fueleconomy.gov). Using E85 would also cost the consumer \$200 more per year, using the government website’s default values.



In addition to its cost and convenience disadvantages, E85 can only be used by vehicles that have been “hardened” to handle the increased corrosivity of E85, called flexible fuel vehicles (“FFV”). FFVs are less than 8 percent of the light duty vehicle fleet, and production of such models has plummeted as the Corporate Average Fuel Economy (CAFE) credits for FFVs have been phased-out.<sup>23,24</sup>

2. EPA cannot assume—without evidence and contrary to historical data—that use of E15 blends is likely to significantly grow

For purposes of setting RFS requirements in 2020, EPA cannot simply assume that E15 sales will fill the gap between 10 percent of the gasoline supply and 15 billion gallon mark because sales would have to increase dramatically in the face of several hurdles: (1) the majority of the retail fuel stations have not been hardened and certified in accordance with state weights and measures and fire code requirements to dispense E15; (2) the majority of the vehicle fleet is not warranted for use with E15; (3) several states prohibit the sale of E15; and (4) to date, consumers have not embraced E15.

*E15 sales would have to increase dramatically.* The difference between a 10 percent ethanol blend rate and use of 15 billion gallons of ethanol in 2020 is 700 million gallons. EPA failed to provide supporting information in the record to justify assuming that E15 sales will fill that gap.

<sup>23</sup> See United States Department of Energy, Alternative Fuels Data Center, “Flex Fuel Vehicles.” [https://afdc.energy.gov/vehicles/flexible\\_fuel.html](https://afdc.energy.gov/vehicles/flexible_fuel.html). See also 49 U.S.C. 32906.

<sup>24</sup> See U.S. Energy Information Administration, Annual Energy Outlook 2019, Table 40. Light-Duty Vehicle Stock by Technology Type.



For example, E15 sales would have to increase from less than one percent to roughly 12 percent of gasoline sales to meet the 15 billion gallon per year conventional biofuel proposal with E15 in 2020. This 12 percent figure does not account for any E0 in the market.<sup>25</sup> In sum, EPA has not substantiated this level of growth in the administrative record.

*E15 faces major infrastructure challenges.* To meet the 12 percent figure, retail stations selling E15 would have to increase from the current 1,300<sup>26</sup> to approximately 40,000. Retrofitting can cost up to \$300,000 per retail site,<sup>27</sup> making the total cost to accommodate 38,000 E15 retrofits cost per retail site, the cost associated with over 38,000 retail station upgrades to accommodate E15 sales is estimated at up to \$11 billion.<sup>28</sup> We have previously commented extensively on the fact that E15 is not a viable solution to the E10 blendwall because E15 is incompatible with most of the existing vehicle fleet and the existing refueling infrastructure, and due to the potential liability issues associated with marketing the fuel.<sup>29</sup> Moreover, there isn't sufficient existing E15-certified infrastructure available. As the Petroleum Marketers Association of America noted in their RFS regulatory comments just last year, “[t]ank owners are required to demonstrate that each of their UST system components are certified to E15 standards. This makes proving compatibility of existing UST systems almost impossible.”<sup>30</sup>

*Misfuelling with E15 is still a Major Concern.* Without corresponding reductions of mandated biofuel volumes, more E15 could be forced into the market, increasing the risk of consumer misfuelling. In fact, nearly three out of every four cars on the road today are not designed for E15, and many vehicle manuals warn drivers to not put any ethanol blend above E10 in their gas tank and that damage would not be covered by warranty. E15 is also incompatible with classic cars, motorcycles, boats, lawnmowers, and power equipment engines. In fact, it is illegal to fill up with E15 in all small engines, such as motorcycles, boats, and lawnmowers.<sup>31</sup>

### 3. The Path for Additional Ethanol Production is Exports

Even without an implied level of 15 billion gallons, additional sales of conventional ethanol are possible. For example, ethanol exports have and will continue to provide an avenue for increased domestic production. As EIA states, “[e]thanol operating margins are lower in 2019 in

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<sup>25</sup> The remaining pool would necessarily be E10 to meet the mandate.

<sup>26</sup> 84 Fed. Reg. 26986.

<sup>27</sup> See Petroleum Marketers Association of America Comments on 2019 Rule, Docket ID No.: EPA-HQ-OAR-2018-0167-1201. Renewable Fuel Standard Program: Standards for 2019 and Biomass Based Diesel Volume for 2020.

<sup>28</sup> 38,700 stations \* \$300,000 = \$11.610 billion

<sup>29</sup> See AFPM/API Comments on 2014-2016 RFS Rule at 28-34, EPA-HQ-OAR-2015-0111. See also API 2017 RFS Comments at page 17, EPA-HQ-OAR-2016-0004-0002.

<sup>30</sup> Renewable Fuel Standard Program: Standards for 2019 and Biomass-Based Diesel Volume for 2020, 83 Fed. Reg. 32024 (proposed July 10, 2018).

<sup>31</sup> 40 CFR § 80.1504 (a)(1).



part because ethanol production has been high despite limited domestic demand growth.”<sup>32</sup> The United States is the world’s largest ethanol producer with approximately 56 percent of world supply.<sup>33</sup> Furthermore, ethanol exports doubled from 2015 to 2018 and reached record highs in 2018. In fact, 1.7 billion gallons of ethanol, or roughly 11 percent of U.S. production, were exported in 2018. Once trade is normalized with China, it could be an enormous market for U.S. ethanol exports. In 2016, China was the U.S. ethanol industry’s third-largest export market and the country has recently announced a plan for nationwide E10 by 2020. The ethanol industry also exports more than 1 million barrels to Brazil, and that country has announced that it would eliminate its 20 percent tariff on U.S. ethanol, making Brazil an attractive growth market for U.S. ethanol producers.<sup>34</sup> Further, Mexico recently allowed E10 sales outside the major metropolitan areas of Monterey, Guadalajara, and Mexico City. This presents another large and new export opportunity for U.S. ethanol producers.<sup>35</sup>

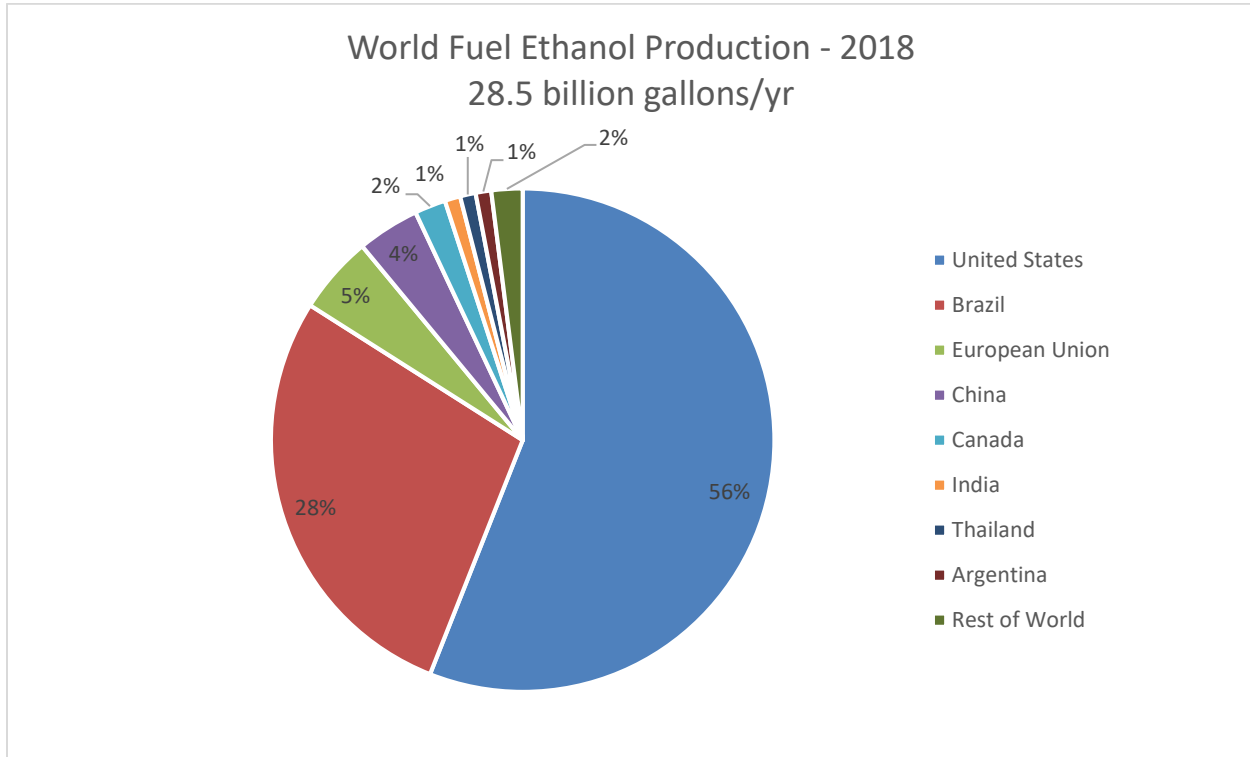
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<sup>32</sup> U.S. Energy Information Administration, “Today in Energy.” *Rising corn prices and oversupply push ethanol operating margins to multiyear lows*. August 8, 2019. <https://www.eia.gov/todayinenergy/detail.php?id=40813>.

<sup>33</sup> U.S. Department of Energy, Alternative Fuels Data Center. “Global Ethanol Production,” <https://afdc.energy.gov/data/10331>.

<sup>34</sup> USDA Foreign Agricultural Service, Global Agricultural Information Network. Report BR18017, August 10, 2018. Pg. 2.

<sup>35</sup> Feedstuffs, “Mexico adopts E10 ethanol policy.” <https://www.feedstuffs.com/news/mexico-adopts-e10-ethanol-policy>.



## B. CELLULOSIC BIOFUEL HAS FAILED TO DEVELOP

Prior to determining the scope of the cellulosic waiver, EPA must examine quality issues in the biogas industry before assuming the relatively large increases it has proposed when setting the cellulosic biofuel standard. EPA's projections for the production of cellulosic biofuel RINs from compressed natural gas or liquefied natural gas ("CNG/LNG") derived from biogas presume year-over-year growth with updated RIN generation data through March 2019.<sup>36</sup> Without further examination of whether the cellulosic mandate actually incentivizes biogas production that wouldn't happen otherwise, the inability to track this fuel in the supply chain, and newly identified fuel quality issues, EPA's proposed increase in this category of cellulosic biofuel is arbitrary and capricious.

Almost all RFS cellulosic biofuel is biogas.<sup>37</sup> Biogas is produced naturally by anaerobic bacteria in municipal-solid-waste landfills. Landfills meeting certain design capacity and emissions criteria are required to collect landfill gas and either flare it or use it for energy.<sup>38</sup> Waste

<sup>36</sup> 84 FR 36769.

<sup>37</sup> 84 FR 36770.

<sup>38</sup> 40 CFR § 60.32c.



companies are mandated to capture gas without RFS credit, which means the program is not furthering any additional environmental benefits. Indeed, EPA acknowledges this fact in their proposal when they state that, “EPA expects that landfills that produce high BTU gas in 2020 are likely to already have this infrastructure in place.”<sup>39</sup> Since this activity would occur without a mandate, basing increases of cellulosic biofuel on biogas is nothing more than a transfer of wealth from the refining industry, its employees, and American consumers to waste companies that would be capturing biogas in any event. Congress did not intend this outcome. EPA admits that cellulosic biofuel RIN value is 9 times the value of the fuel in 2018.<sup>40</sup> Consequently, EPA must be conservative in estimates of supply in order to avoid unjustified incentives contrary to the purpose of the RFS.<sup>41</sup>

The quality of biogas from municipal landfills is not equivalent to natural gas and contains siloxanes depending on the organic feedstock used to produce it. Biogas from wastewater treatment plants and landfills is likely to contain silicon compounds, i.e., siloxanes, because siloxane compounds are used in industrial processes, shampoo, deodorant, toothpaste, and cosmetics that are routinely disposed of in these landfills.<sup>42,43</sup> When biogas containing siloxanes is combusted in gas turbines, boilers, or combustion engines, deposits of solid silica or silicates can adhere to cylinder heads, pistons, turbine blades, and heat exchanger surfaces, causing wear, imbalance, fouling, and other serious problems.<sup>44</sup> The presence of siloxanes also poses a risk of LNG/CNG motor vehicle exhaust catalyst poisoning, which can contribute to pollution control device failure and increase emissions. EPA needs to resolve the uncertainty around siloxanes before increasing the landfill gas mandate.

When EPA’s methodology overstates production, as it has repeatedly over the 9 years that the cellulosic mandate has been in place, obligated parties are forced to purchase expensive cellulosic waiver credits from EPA. This amounts to nothing more than a tax on the refining industry and on fuel. Because EPA has chosen to use continually flawed methodology that dramatically over predicts cellulosic production, EPA should go back to the drawing board and use a more accurate methodology and must account for off-specification biogas.<sup>45</sup> It is arbitrary and capricious for EPA to use flawed methodology.

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<sup>39</sup> 84 FR 36790.

<sup>40</sup> 84 FR 36771.

<sup>41</sup> *API v. EPA*, 706 F. 3d. 474, 480 (D.C. Cir. 2013).

<sup>42</sup> Waste 360, The Challenges Siloxanes Pose to Landfill Gas-to-Energy Operations, <https://www.waste360.com/landfill-operations/challenges-siloxanes-pose-landfill-gas-energy-operations>.

<sup>43</sup> Some biomethane sources are not expected to contain siloxanes, e.g., digesters processing dairy manure, source-segregated organic waste or yard waste, or agricultural waste.

<sup>44</sup> Xebec, Treatment Solutions for Landfill Gas Fuel Applications, White paper October 2007, [https://www.xebecinc.com/pdf/e\\_white\\_paper.pdf](https://www.xebecinc.com/pdf/e_white_paper.pdf). Pg. 3.

<sup>45</sup> California Council on Science & Technology, Biomethane in California Common Carrier Pipelines: Assessing Heating Value and Maximum Siloxane Specifications An Independent Review of Scientific and Technical



### **C. OTHER ADVANCED BIOFUEL VOLUMES ARE EXPECTED TO REMAIN SMALL**

AFPM agrees with EPA's proposed small volume of other advanced biofuels in 2020. Production of advanced biofuel that is not cellulosic, not BBD, nor sugarcane ethanol has been small, totaling only about 100 million gallons per year. This aspect of the proposal matches historical production and is a reasonable estimate of this subcategory.

### **D. TOTAL ADVANCED BIOFUEL VOLUMES SHOULD BE REDUCED**

EPA proposes advanced biofuel volume requirement for 2020 of 5.04 billion gallons, which is 0.12 billion gallons higher than the advanced biofuel volume requirement for 2019 and is entirely the result of the increase in projected cellulosic biofuel. EPA's proposed advanced biofuel mandate is well above the sum of the promulgated BBD and proposed cellulosic biofuel and other advanced biofuel values. Total advanced biofuel should be reduced to a maximum of 4.285 billion RINs, the sum of cellulosic, other advanced, and BBD, and nothing more.<sup>46</sup>

EPA admits that summing the quantities of the nested advanced biofuels does not add up to 5.04 billion RINs; in fact, reasonably attainable levels stated above fall short of that number. It is arbitrary for EPA to defend its methodology as reasonable then ignore inconvenient results. EPA cannot have it both ways.

### **E. TOTAL RENEWABLE FUELS SHOULD BE FURTHER REDUCED**

As noted above, proper analysis of renewable fuel supply in 2020 and the severe economic effects of imposing statutory volumes dictate that EPA use all available authority within CAA §211(o) to further reduce volumes that it has proposed. As proposed for total renewable fuel in 2020, 20.04 billion RINs is well above the realistic 18.64 billion RIN sum.<sup>47</sup> EPA has the tools to further reduce renewable fuel volumes for 2020. AFPM urges the Agency to take appropriate steps to promulgate volumes for the 2020 RFS and 2021 BBD standard that are reasonably achievable and do not diminish the RIN bank.

### **F. EPA SHOULD ANALYZE AND UTILIZE ALL OF ITS WAIVER AUTHORITIES**

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Information, at 14 (“In the U.S., gas companies develop gas quality specifications for their system. These specifications are then approved by relevant regulatory bodies. For interstate pipelines, the proposed quality specifications, or tariff, is approved by the Federal Energy Regulatory Commission (FERC). Intrastate pipelines and local distribution companies (LDCs) typically have their specifications approved by a state-level, public utilities commission (PUC) or public service commission (PSC).”) <https://ccst.us/wp-content/uploads/2018biomethane.pdf>.

<sup>46</sup> ((2.43 BBD \* 1.5) + .54 cellulosic + .1 other) = 4.285 billion RINs.

<sup>47</sup> 20.04 - .7 (advanced) - .7 (conventional) = 18.64 billion RINs.





As described elsewhere in these comments, use of RFS general waiver authority is necessary to reduce the 2020 required levels of total renewable fuel and advanced biofuels to achievable volumes – while avoiding another draw down of the RIN bank.<sup>48</sup> EPA has solely relied on the cellulosic waiver in proposing RFS volumes for 2020. This was insufficient in 2018 and EPA must assess the use of all available authority to set final standards for advanced biofuels and total renewable fuel that are achievable.

Given the lack of precision in EPA’s analysis of individual ethanol blends and other renewable fuels that will be consumed in 2020, it is “fortuitous”—or, more likely, pre-ordained—that the amount exactly equals the amount of the cellulosic waiver. While EPA proposes to use the full extent of its cellulosic waiver authority, EPA appears to be rationalizing, after the fact, the required volumes of advanced and total renewable fuels based solely on the amount it can waive under that authority. This backwards methodology – analyzing the use of general waivers only after determining the permissible extent of cellulosic biofuel waivers – renders the required volumes arbitrary and capricious. The Agency should first determine reasonably achievable volumes and then assess whether it can use its RFS waiver authorities to lower RFS requirements to that level.

EPA should review available general waiver authority based on inadequate domestic supply and severe economic harm. *Americans for Clean Energy v. EPA* (“ACE”) indicated EPA could not use demand-side factors to issue a general waiver based on inadequate domestic supply, but the decision does not constrain EPA’s consideration of supply-side factors, including the availability of domestic renewable fuel to obligated parties.<sup>49</sup> In the proposed rule, EPA also impermissibly relies on imported renewable fuel in determining the achievability of its proposed standards, further skewing its regulatory analysis from statutory requirements.

EPA must also consider a general waiver based on the severe economic harm to the country, or a region, that would occur if it implemented statutory volumes of renewable fuel in 2020 that are clearly and demonstrably unattainable. While a general waiver is discretionary, any decision not to use the waiver authority must have a rational basis.

The continuing financial impact of the RFS is evident. EPA granted 35 of 37 SRE petitions in 2017 and 31 of 42 SRE petitions in 2018, demonstrating that economic dislocation is occurring due to the RFS. While AFPM cannot predict how EPA will address SREs for 2019 and 2020, the financial impact of the RFS on small entities belies EPA’s analysis that RINs just represent “pass-through” costs that have no impact on obligated parties.

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<sup>48</sup> EPA notes that there has been a 400 million RIN decrease in the RIN bank beyond projections it made less than a year ago in the 2019 final rule. 84 Fed. Reg. at 36,767.

<sup>49</sup> *Americans for Clean Energy v. EPA* (“ACE”), 864 F. 3d 691 (D.C. Cir. 2017).



The compliance options to meet the difference between EPA’s proposed 5.04 billion RINs for advanced biofuels in 2020 and 4.285 billion RINs are:

- Excess BBD, much of it imported,
- An extremely large (and very unlikely) increase in sugarcane ethanol imports from Brazil, and
- An intentional drawdown of banked RINs.<sup>50</sup>

These compliance options are not reasonable. The administrative record does not support a 5.04-billion-gallon-per-year proposal. Therefore, use of the general waiver is necessary to substantially reduce the difference between 5.04 and 4.285 billion RINs. Indeed, EPA is aware of this difference and believes that there will be excess BBD volumes in 2020. The Agency projects 2.826 billion wet gallons of BBD in 2020, or 4.38 billion RINs. This figure is clearly above the promulgated 2020 BBD standard of 2.43 billion gallons. Just because domestic and foreign supplies of BBD, as expensive as they were, were used to meet the mandate for advanced biofuels in the previous year, does not mean such volumes should be promulgated in this standard.

The Agency’s proposal for 2020 advanced biofuels (5.04 billion RINs) and total renewable fuels (20.04 billion RINs) volumes are not achievable in the market in 2020. EPA acknowledges the E10 blendwall as a constraint, and other fuels are not able to be substituted to reach either the level of the advanced biofuel or total renewable fuel mandate in 2020. Both the general and cellulosic waivers are necessary to promulgate achievable volumes in 2020.

#### **G. EPA HAS MULTIPLE AVENUES TO ADDRESS REMAND OF THE 2016 RFS**

In ruling on EPA’s 2016 RFS, the U.S. Court of Appeals for the D.C. Circuit vacated EPA’s use of the CAA §211(o)(7)(A) general waiver to address inadequate domestic supply based upon the “supply of renewable fuel to consumers for use in their vehicles.”<sup>51</sup> The court remanded the 2016 rule to EPA for further consideration in light of the court’s decision.<sup>52</sup> Thus, the decision affects 500 million RINs for total renewable fuels for the 2016 RFS compliance year.<sup>53</sup>

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<sup>50</sup> “We acknowledge that there is some uncertainty regarding whether the market will actually supply 5.04 billion gallons of advanced biofuel in 2020. In the event that the market does not supply this volume, the carryover RIN bank represents a source of RINs that could help obligated parties meet an advanced biofuel volume requirement of 5.04 billion gallons in 2020 if the market fails to supply sufficient advanced biofuels.” 84 Fed. Reg. 36787.

<sup>51</sup> *ACE*, 864 F.3d at 707.

<sup>52</sup> *Id.* at 703.

<sup>53</sup> 80 Fed. Reg. 77,420, 77439 (Dec. 14, 2015); 84 Fed. Reg. at 36,765.



AFPM supports EPA's proposal to retain the 2016 total renewable fuel standard in response to the remand.<sup>54</sup> In addition to the rationale EPA relies on to reach this result, we discuss additional rationale that compels this result.

### 1. EPA's Proposed Response to the Remand

EPA proposes to respond to the vacatur and remand of EPA's decision to invoke its general waiver authority for inadequate domestic supply by retaining the original required volumes.<sup>55</sup> This decision would avoid imposing new, retroactive RIN requirements on obligated parties through the 2020 RFS rule or any other mechanism. EPA bases its response to the remand on several factors:

- Any requirements imposed now or at some point in the future cannot alter either the production or use of renewable fuel in 2016;
- Reopening the 2016 RFS compliance year could have cascading effects on compliance for subsequent compliance years<sup>56</sup>;
- Compliance with an "additional standard" in 2020 would result in a drawdown of the carryover RIN bank, which is already lower than 2019 projections; and
- Any retroactive liability must be balanced against the burden on obligated parties.<sup>57</sup>

AFPM supports EPA's decision to avoid the imposition of unlawful retroactive standards on obligated parties. Imposing a retroactive standard for 2016 total renewable fuel production in 2020 would be beyond EPA's statutory authority, a violation of due process, and highly punitive given that obligated parties fully complied with EPA's 2016 standard, as promulgated, at the time that compliance was required.<sup>58</sup>

Prior case law that allowed retroactive RFS standards to be applied in 2010 is also inapposite. Unlike in *National Petrochemical & Refiners Ass'n v. EPA*, 630 F.3d 145 (2010), where the court cited a 2009 proposed rule as putting obligated parties on notice of possible requirements in advance of the compliance year, obligated parties in 2016 had no notice of what the D.C. Circuit would decide in 2017. The D.C. Circuit's determination that EPA exceeded its statutory authority in using its general waiver authority came well over a year after obligated parties had already complied with 2016 RFS standards. It would have been impossible for obligated parties to plan for the court's decision and resulting vacatur of the 2016 RFS.

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<sup>54</sup> 84 Fed. Reg. at 36,789.

<sup>55</sup> 84 Fed. Reg. at 36,763.

<sup>56</sup> *Id.* at 36,789.

<sup>57</sup> *Id.* at 36,788.

<sup>58</sup> *Monroe Energy LLC v. EPA*, 750 F. 3d 909 (D.C. Cir. 2014); *NPRA v. EPA*, 630 F.3d 145 (D.C. Cir. 2010).



EPA also correctly noted the cascading effect of reopening not only the 2016 RFS, but also the 2017 and 2018 RFS. Within the statutory structure of the RFS, which imposes annual compliance obligations, Congress clearly did not authorize the shifting of obligations from one year to the next apart from one explicit provision that allows obligated parties to carryover a RIN deficit from one year to the next.<sup>59</sup>

2. When EPA responds to the court’s remand in *ACE*, it must consider all its RFS authority and statutory obligations.

In *ACE*, as in the majority of decisions by D.C. Circuit, the court did not direct the manner in which EPA must respond to the court’s remand, or the time by which it must do so. But if EPA exerts its RFS authority to impose new standards on obligated parties, it must do so in compliance with CAA §211(o). Therefore, at the time EPA responds to the *ACE* remand, the Agency must consider the effect of any “new” 2016 volume mandate on its consideration of waiver authorities available to the EPA in 2016. This means that EPA must consider both the extent to which it needs to exert its cellulosic biofuel waiver authority as well as general waiver authorities.

In the 2014-2016 RFS rule, there was a need to waive X gallons of total renewable fuel. EPA chose to use a combination of its cellulosic and general waiver. To ensure that EPA’s decision to waive X is given its maximum effect, EPA should apply the full amount of the cellulosic waiver to the total renewable fuel category, which would account for 380 million of the 500 million RINs implicated by the DC Circuit remand. The court upheld EPA’s use of the cellulosic waiver authority to reduce the total renewable fuel requirement.<sup>60</sup> But had EPA understood the limitations that would later be placed on its use of the general waiver for inadequate domestic supply by the D.C. Circuit, it could have considered extending the *full amount* of the cellulosic waiver volume to the total renewable fuel category. This would have accounted for 380 million additional RINs. On remand, EPA may reconsider this policy decision based on its new understanding of the limits of its general waiver authority and waive an additional 380 million RIN-gallons of the total renewable fuel requirement for 2016.<sup>61</sup>

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<sup>59</sup> See CAA §211(o)(5)(C),(D).

<sup>60</sup> 80 Fed. Reg. at 77,439.

<sup>61</sup> It is worth noting that in *ACE*, the D.C. Circuit explicitly upheld EPA’s broad discretion over the factors it may consider in utilizing its cellulosic waiver authority. Citing *Monroe Energy*, the court reiterated that “[t]he cellulosic waiver provision grants EPA ‘broad discretion’ to consider a variety of factors – including constraints on the demand for advanced biofuel – when determining ‘whether and in what circumstances’ to reduce the advanced biofuel requirement.” *ACE*, 864 F.3d at 733. “That same reasoning controls here: EPA had discretion to consider a ‘range of factors’ in determining whether to exercise its cellulosic waiver authority, including demand side constraints that affect ‘the ability’ of advanced biofuels ‘to be consumed.’” *Id.* at 734.



To address the remand of 500 million 2016 RINs (or 120 million 2016 RINs for total renewable fuel that would remain after full exertion of its cellulosic waiver authority), EPA may also consider a general waiver based on severe economic harm. There is abundant evidence to support this determination. For example, within weeks of the final rule for 2018 RFS, Philadelphia Energy Solutions declared bankruptcy and cited the compliance burden of the RFS.<sup>62</sup> In addition, EPA recently granted 31 petitions for small refinery RFS exemptions based on the harm that would be imposed by requiring compliance with 2018 RFS percentage standards.<sup>63</sup> This followed the granting of 38 small refinery exemptions in 2017.<sup>64</sup>

When responding to remand, EPA must give maximum effect to its 2016 decision to waive “X” million gallons. To the extent that any response to the remand would affect compliance with current RFS rules, EPA may also consider use of its general waiver authority in current or future compliance years to address an inadequate domestic supply and/or severe economic harm.

EPA also should determine that since there are no 2015 or 2016 gallons of ethanol available to be blended, there is an inadequate domestic supply that justifies the use of the general waiver, even under the DC Circuit’s narrow reading of that provision.

3. EPA must account for the impact of 2016 RINs in whatever year they are imposed.

The court did not instruct EPA to address the remand by shifting the 500-million-gallon requirement to a subsequent year. Indeed, the Clean Air Act provides no such authority. EPA may properly consider the impact of these requirements during the timeframe in which they would be imposed. EPA must not exceed reasonably attainable levels of the RFS if it requires RIN retirements in 2020 or another compliance year as a response to the remand in *ACE*.

Specifically, if EPA took such action in the context of this rule, the Agency would need to correspondingly reduce the 2020 standards to account for the requirement to comply with 2016 RFS standards. EPA lacks statutory authority to simply “tack on” 500 million RINs to EPA’s estimate of the reasonable level for the RFS in 2020.

## **H. EPA MUST REDUCE EXPENSIVE BIOMASS-BASED DIESEL VOLUMES IN 2021**

1. EPA Has Ignored the Statutory Structure of the RFS and Costs in Proposing 2021 BBD Volume

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<sup>62</sup> Matt Egan, *Largest East Coast oil refinery goes bankrupt, blaming 'broken' EPA rules*, CNN (Jan. 22, 2018), <https://money.cnn.com/2018/01/22/investing/oil-refinery-bankruptcy-philadelphia-energy-solutions/index.html>.

<sup>63</sup> See RFS Small Refinery Exemptions, <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rfs-small-refinery-exemptions> (last updated August 15, 2019).

<sup>64</sup> *Id.*



EPA must reduce the volume of BBD for many different reasons. First, EPA may not rely on imported BBD as a basis for setting the domestic requirement for this renewable fuel. Second, as AFPM has previously pointed out, the differential statutory treatment of BBD with respect to RFS volume requirements – with no escalation of volumes past 2012 – weighs heavily against presuming that volumes should automatically increase for each compliance year. Third, due to its cost on a per-gallon basis, EPA should refrain from mandating higher volumes of BBD. Finally, an analysis of relevant statutory factors (more fully addressed in the next subsection of these comments) does not support an increase from 2019 to 2020 or maintaining the 2020 volume in 2021.

With regard to the statutory requirement that EPA base BBD levels on the basis of domestic BBD, AFPM has filed extensive comments on this issue in past rulemakings.<sup>65</sup> EPA’s increase in annual levels of BBD volume levels have incentivized imports of fuel at a higher rate than petroleum imports, contravening the primary purpose of the Energy Independence and Security Act.<sup>66</sup>

The statutory structure of the RFS also has implications for annual standard setting for BBD volumes. EPA cannot presume there is any statutory directive to increase BBD volumes since volumes for BBD were treated differently from all other renewable fuels and remain subject to only a statutory minimum of 1 billion gallons.<sup>67</sup> Between 2013 and 2022, Congress provided 10 years of annual increases for total renewable fuel, advanced biofuel and cellulosic biofuel, but no annual increase for BBD in any year after 2012.<sup>68</sup> This statutory structure was deliberate and indicative of legislative intent.

Another relevant consideration is cost. BBD is very expensive. EPA has estimated the cost difference between soybean biodiesel and petroleum diesel at \$0.74 to \$1.23 per gallon (a \$370 to \$610 million increase in overall costs in 2018).<sup>69</sup> EISA requires EPA to consider “the impact of the use of renewable fuels on the cost to consumers of transportation fuel and on the cost to

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<sup>65</sup> See Comments of the American Fuel & Petrochemical Manufacturers, “Renewable Fuel Standard Program: Standards for 2019 and Biomass-Based Diesel Volume for 2020, 83 Fed. Reg. 32,024 (7/10/18),” EPA-HQ-OAR-2018-0167-0672; and “Renewable Fuel Standard Program: Standards for 2018 and Biomass-Based Diesel Volume for 2019: Availability of Supplemental Information and Request for Further Comment, 82 Fed. Reg. 46,174 (Oct. 4, 2017),” EPA-HQ-OAR-2017-0091-4703.

<sup>66</sup> “Draft Statutory Factors Assessment for the 2021 Biomass Based Diesel (BBD) Applicable Volume,” EPA-HQ-OAR-2019-0136-0030.

<sup>67</sup> CAA 211(o)(2)(B)(iv).

<sup>68</sup> Statutory volume requirements for BBD end in 2012. See CAA 211(o)(2)(B)(IV). All other applicable volumes for renewable fuel extend to 2022. See CAA 211(o)(2)(B)(I)-(III).

<sup>69</sup> See Cost Impacts of the Final 2019 Annual Renewable Fuel Standards, Table 2-2. EPA-HQ-OAR-2019-0163-0027.



transport goods.”<sup>70</sup> EPA’s analysis of this factor barely spans a page in the docket.<sup>71</sup> In essence, EPA simply indicated that the market would determine “which advanced biofuels are used to meet the portion of the advanced standard that is not dedicated to BBD . . . [and therefore the factor] supports maintaining the BBD volume requirement at a level sufficiently lower than the advanced biofuel volume requirement to incentivize production of non-BBD advanced biofuels . . .”<sup>72</sup> Thus, while EPA quantified the cost differential between BBD and conventional diesel, it did not directly consider such costs when analyzing the relevant statutory factor. EPA’s analysis of this statutory factor is so deficient that, standing alone, it leads to an arbitrary and capricious conclusion regarding the level of the BBD standard in 2021.

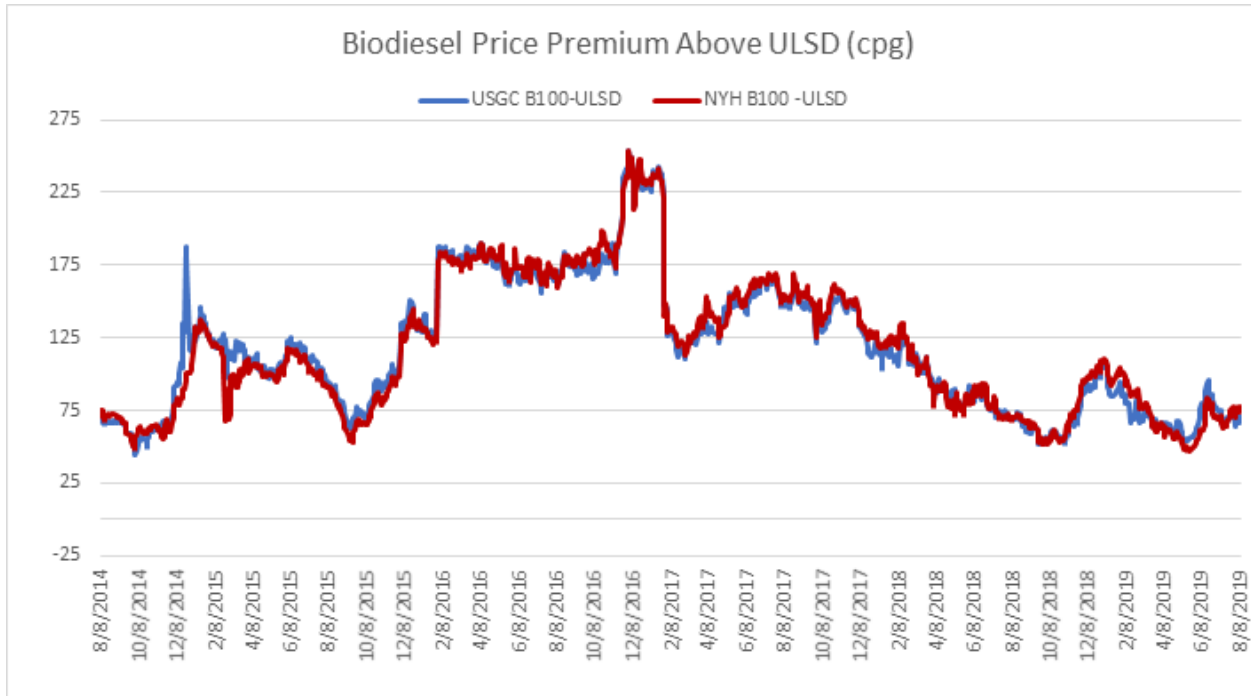
Biodiesel has consistently cost greater than 50 cents per gallon more than diesel and at times greater than \$2 a gallon more (see chart below). EPA cannot continue to overlook the substantial price difference between biodiesel and petroleum-based diesel. EPA can reduce the cost of the RFS program by promulgating a lower BBD volume for 2021. By lowering the level of the BBD standard for 2021 to the statutory minimum of 1 billion gallons, EPA would ensure that it achieved the lowest possible cost to consumers since the free market and other RFS volume mandates would dictate the actual use of BBD in 2021. By definition, any level above 1 billion gallons includes some degree of risk that EPA will tilt the advanced biofuel market among different fuels that are nested within the overall mandate.

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

<sup>71</sup> Draft Statutory Factors Assessment for the 2021 Biomass Based Diesel (BBD) Applicable Volume, EPA-HQ-OAR-2019-0136-0030 at 10-11.

<sup>72</sup> *Id.* at 11.



## 2. EPA's Consideration of BBD Statutory Factors is Arbitrary and Capricious

### a. Impacts on Environment

EPA has not updated its analysis of the projected environmental impact of the RFS in 9 years, and thus is outdated. The last comprehensive analysis was performed in 2010 as part of the RFS 2 Rule.<sup>73</sup> As EPA admits, this analysis showed that implementing RFS volume requirements would lead to increases in some criteria air pollutants and air toxics and decreases in others.<sup>74</sup>

Other parts of EPA's analysis are cursory. For example, EPA merely notes that the effect of increased renewable fuels on wetlands, ecosystems, and wildlife habitats will vary based on the extent crops are used as feedstocks for biofuel production.<sup>75</sup> EPA makes no attempt to calculate to what extent negative effects occur from setting the RFS BBD level at 2.43 billion gallons in 2020 and maintaining this level in 2021.

<sup>73</sup> Regulatory Impact Analysis (RIA). U.S. EPA 2010, Renewable Fuel Standard Program (RFS2) Regulatory Impact Analysis. EPA-420-R-10-006. February 2010. Docket EPA-HQ-OAR-2009-0161.

<sup>74</sup> Draft Statutory Factors Assessment at 4-5.

<sup>75</sup> Draft Statutory Factors Assessment at 7.





As recently pointed out in a letter to *Nature: International Journal of Science*, the authors estimate, “that the total GHG costs of consuming biofuels, rather than gasoline or diesel, range from 35% more for sugarcane ethanol to 230% more for soybean biodiesel.”<sup>76</sup> If BBD is \$1.20 per gallon more expensive and, as is currently supposed, reduces GHGs by 60-80 percent, then the cost of abatement is approximately \$175-233 per ton.<sup>77</sup> This figure is between 34 and 175 times as high as the estimated cost of carbon abatement in other regulations.<sup>78,79</sup>

#### b. Impact on Energy Security

The statutory factor requiring EPA to analyze the impact of renewable fuels on the energy security of the United States is not furthered if imports of biodiesel are increased due to mandated volumes above domestic production. “Counting” renewable fuel imported into the U.S. and available for use in calculating RFS requirements creates an unjustified incentive for foreign renewable fuel production.<sup>80</sup> And even if imported renewable fuel can be said to “diversify” the United States supply of transportation fuels, this ignores the possible disruption of such supplies and the much greater security of domestic produced and refined products.

EPA posits that if imported biodiesel and renewable diesel levels “remain constant at approximately 350 million gallons per year (the total volume of advanced biodiesel and renewable diesel imported in 2019) domestic production would need to increase by 240 million gallons annually in 2019 and 2020 to reach a total advanced biodiesel and renewable diesel supply of 2.83 billion gallons by 2020.”<sup>81</sup> Thus, as noted above, by maintaining the 2020 BBD level in 2021, EPA is continuing to impermissibly rely on imported biofuel.

Foreign renewable fuel production does not further energy security in the United States. Domestic production of transportation fuel is the securest form of liquid energy and furthers U.S. energy independence. Since other statutory factors such as the impact on infrastructure and rural economic development are inherently domestic concerns, EPA must read the required impact on energy security to include a similar domestic focus.

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<sup>76</sup> “Assessing the efficiency of changes in land use for mitigating climate change,” *Nature: International Journal of Science*. Timothy D. Searchinger, Stefan Wirseniuss, Tim Beringer & Patrice Dumas, *Nature* volume 564, pages 249–253 (2018). <https://www.nature.com/articles/s41586-018-0757-z>.

<sup>77</sup> Resources for the Future, “Calculating Various Fuel Prices Under a Carbon Tax.” (November 28, 2017), <https://www.resourcesmag.org/common-resources/calculating-various-fuel-prices-under-a-carbon-tax/>.

<sup>78</sup> “Regulatory Impact Analysis for the Review of the Clean Power Plan: Proposal,” October 2017. U.S. Environmental Protection Agency Office of Air and Radiation Office of Air Quality Planning and Standards, [https://www.epa.gov/sites/production/files/2017-10/documents/ria\\_proposed-cpp-repeal\\_2017-10.pdf](https://www.epa.gov/sites/production/files/2017-10/documents/ria_proposed-cpp-repeal_2017-10.pdf).

<sup>79</sup> Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis, (August 26, 2016). Table A1: Annual SC-CO<sub>2</sub> Values: 2010-2050 (2007\$/metric ton CO<sub>2</sub>). [https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc\\_tsd\\_final\\_clean\\_8\\_26\\_16.pdf](https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc_tsd_final_clean_8_26_16.pdf).

<sup>80</sup> *API v. EPA*, 706 F. 3d. 474, 480 (D.C. Cir. 2013).

<sup>81</sup> 84 Fed. Reg. at 36,786.



It is fundamentally illogical that a program designed to promote energy independence and security should incentivize the purchase of foreign-produced renewable fuel or RINs associated with the importation of such fuel. The EPA should not implement the RFS in a manner that subsidizes foreign biodiesel producers at the expense of American-manufactured fuels in the name of energy security, nor should consumers be effectively forced to purchase and subsidize foreign production at a cost of \$1 per gallon or more. EPA should therefore lower the final BBD volume to a level that does not impose undue costs on consumers.

c. Impact on future commercial production of renewable fuels

EPA must not set BBD mandates at levels that incentivize foreign biofuel production and importation into the United States. This would be contrary to the fundamental purpose of the RFS and to other specific factors regarding domestic infrastructure, job creation and the energy security of the United States. EPA notes that the “current total capacity of all registered biodiesel and renewable diesel production facilities in the United States is approximately 4.1 billion gallons.”<sup>82</sup> According to EPA and biodiesel advocates, there is spare capacity, indicating investment to expand is not needed, even if such were a permissible goal of CAA §211(o). This analysis is supported by the neutral terms of this statutory factor as well as prior precedent.<sup>83</sup>

Pursuant to this statutory factor EPA is to analyze “[t]he expected annual rate of future commercial production of renewable fuels, including advanced biofuels in each category (cellulosic biofuel and biomass-based diesel.)”<sup>84</sup> The “expected” rate of production is a neutral term requiring EPA to simply make an unbiased forecast of the production of BBD in future years. This factor does not allow EPA to “put its thumb on the scales” in its forecasts of future production.<sup>85</sup> In addition, the expected rate of production is not determinative; this factor must be balanced as against all of the other statutory factors as Congress did not intend for the BBD mandate to equal all BBD that may be produced regardless of its price, environmental impacts, or other listed factors.

d. Impact on Infrastructure

EPA determined that this factor does not “provide a basis for selecting any particular BBD applicable volume for 2021.”<sup>86</sup> Regarding the first statutory factor, AFPM notes that some of the

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<sup>82</sup> Draft Statutory Factors at 9.

<sup>83</sup> *API v. EPA* 706 F. 3d. 474, 480 (D.C. Cir. 2013).

<sup>84</sup> CAA §211(o)(2)(B)(ii)(III).

<sup>85</sup> *API v. EPA* 706 F. 3d. 474, 480 (D.C. Cir. 2013).

<sup>86</sup> Draft Statutory Factors Assessment at 9-10.



analysis that EPA relies upon has not been updated in 9 years. But overall, AFPM agrees that at current levels, there is no positive or negative infrastructure impact.

e. Impact on cost to consumers and cost to transport goods

As cited above (*See EPA Has Ignored the Statutory Structure of the RFS and Costs in Proposing 2021 BBD Volume*), EPA’s analysis is wholly insufficient to meet EPA’s statutory obligations. The consideration of costs is central to the implementation of the RFS; one of EISA’s primary goals is “to protect consumers.”<sup>87</sup> In implementing the RFS, the D.C. Circuit has also noted that “Congress did not pursue its purposes of increase renewable fuel generation at all costs.”<sup>88</sup> The less than one-page analysis contained in EPA’s analysis of statutory factors is wholly insufficient given the central role of costs in considering RFS annual obligations.

f. Impact on “Other Factors”

This statutory factor includes job creation and rural economic development. These are inherently *domestic* concerns that conflict with EPA’s evaluation of the role of imports in setting annual RFS requirements. Without any supporting analysis or statistics, EPA simply concludes that “there is unlikely to be any discernable impact on job creation and rural economic development from the BBD standard in either the short term or the long term.”<sup>89</sup>

g. Summary of Application of the Six Statutory Criteria to BBD

The mixed environmental benefits of biodiesel come at a high cost—too high to justify retaining the 2020 BBD level in 2021. Congress provided an “insurance policy” to biodiesel producers in the form of a 1-billion-gallon floor for the BBD mandate for annual volume requirements beyond 2012. But Congress did not provide further incentives or statutory expectations for increased volumes of BBD, a mature renewable fuel industry. Congress certainly did not tell the industry to expand indefinitely, expecting that any costs would be borne by others, *i.e.*, obligated parties and the general public. Thus, given other analysis regarding the benefits of different fuels competing under the advanced biofuel requirement, EPA should not exceed the 1-billion-gallon statutory floor and, in any event, cannot set a mandate for BBD that is dependent on or incentivizes imports of foreign-produced BBD.

## I. CELLULOSIC WAIVER CREDITS (“CWC”) SHOULD BE TREATED LIKE RINS

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<sup>87</sup> EISA, Pub. L. No 110-140, 121 Stat 1492 including protection of consumers in preface to Act.

<sup>88</sup> *ACE*, 864 F.3d at 714.

<sup>89</sup> Draft Statutory Factors Assessment at 12.



RFS regulations restrict CWCs to compliance with only the cellulosic biofuel standard. EPA should revise treatment of CWCs to ensure that these credits also count towards compliance with the nested obligations (i.e., advanced biofuel and total renewable fuel). That is, CWCs should be treated in the same way as RINs.<sup>90</sup> EPA's increase in cellulosic biofuel standards beyond available supply means that obligated parties will need to purchase such credits. EPA has implicitly reopened the issue of whether such credits can be used for other renewable fuel obligations. EPA should amend 40 CFR 80.1456(c)(4) as follows (additions underlined, deletion in strikethrough):

(4) Cellulosic biofuel waiver credits may ~~only~~ be used to meet an obligated party's cellulosic biofuel RVO, advanced biofuel RVO, and total renewable fuel RVO.

#### **J. EPA MUST PROTECT THE RIN BANK**

EPA's proposal correctly recognizes that a robust RIN bank is vital for managing market liquidity, unforeseen or uncontrollable events (e.g., droughts), and supply dislocations (e.g., transportation disruptions). In addition, carryover RINs are an important compliance tool for some obligated parties. EPA's proposed volume for advanced biofuels does not comport with its stated intent to avoid an intentional drawdown of the RIN bank.

EPA created the 20 percent regulatory cap on rollovers to create an "appropriate balance" between allowing carryovers and avoiding supply shortfalls, yet the total RIN bank has been reduced to 11 and 8 percent for total renewable fuel and advanced biofuel, respectively. It is inconsistent for the Agency to consider 20 percent a reasonable balance and an amount less than half that size similarly reasonable.

#### **K. RVOs of SMALL REFINERY EXEMPTIONS (SRE) SHOULD NOT BE REALLOCATED**

EPA's proposal not to reallocate SRE volumes if the SRE is granted after the final RFS rule is promulgated is in accordance with the statute which specifies that: (1) exemptions must be given when refineries demonstrate they face disproportionate economic harm;<sup>91</sup> and (2) exemptions can be applied for at any time and the Administrator "shall act" on such petitions.<sup>92</sup> Applicants for SREs cannot be expected to predict economic harm based on EPA's proposal of RFS volume requirements or an expectation of the stringency of a future final rule. Exemptions must not be reallocated after a compliance year has started to other refineries, who would have already negotiated contracts and implemented their compliance plans for the current year, and the CAA

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<sup>90</sup> There is nothing within the RFS credit provisions (CAA §211(o)(5)) or the CWC provisions (CAA §211(o)(7)(D)(ii)) that directs EPA to treat CWCs in the manner that it has done through regulation.

<sup>91</sup> CAA §211(o)(9)(A)(ii).

<sup>92</sup> CAA §211(o)(9)(B).



does not provide for such reallocation.<sup>93</sup> In any event, no harm to the ethanol industry has been established due to SREs.

a. The CAA and current regulations prohibit reallocation

Congress amended the RFS in 2007. As amended, CAA 211(o)(9) requires EPA to exempt small refineries that are disproportionately economically affected. Courts have held that relief is not optional if a refinery experiences disproportional effect. Existing regulations reflect not only the statutory structure of the RFS, but also provide a proper balance between granting waivers and providing obligated parties with certainty by requiring EPA to set standards in advance of the compliance year. EPA has consistently implemented the SRE program in the same fashion since 2010, using the same formula:

- $GE_i$  = The amount of gasoline projected to be produced by exempt small refineries and small refiners, in year  $i$ , in gallons in any year they are exempt per §§80.1441 and 80.1442.
- $DE_i$  = The amount of diesel fuel projected to be produced by exempt small refineries and small refiners in year  $i$ , in gallons, in any year they are exempt per §§80.1441 and 80.1442.
- $GE_i = DE_i = 0$  if no exemptions granted by Nov 30 of previous year.

SRE petitions are not subject to a specific statutory deadline; entities may petition EPA at any time if and when they conclude they are facing disproportionate economic harm. Furthermore, any small refinery compliance obligations that are exempted cannot be reallocated.<sup>94</sup> This statutory structure not only supports EPA's proposal to not reallocate SRE volumes, it requires this result.

In contrast, the RFS provides that renewable fuel obligations are prospective, providing obligated parties advance notice of their obligations for the next compliance year.<sup>95</sup> The RVOs of EPA-approved SREs thus cannot be reallocated to other obligated parties and EPA also lacks authority to address previously approved small refinery volume exemptions.

b. SREs do not harm ethanol industry or demand for ethanol

The ethanol industry has asserted that EPA-approved SREs have resulted in massive market destruction for ethanol. This is simply not true. Government data demonstrates that ethanol blending rates are steady and ethanol exports are at all-time highs. Independent analysis of the

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<sup>93</sup> CAA §(o)(3)(C). EPA has only limited authority to account for the "use" of renewable fuel by small refineries.

<sup>94</sup> CAA §211(o)(3)(C).

<sup>95</sup> CAA §211(o)(3)(B)(i).



data proves that, “...there is little if any evidence that the blend rate for ethanol has been reduced by SREs.”<sup>96</sup> Ethanol is a preferred, low-cost octane booster, an attribute that would remain even without a mandate. Indeed, “[t]he price competitiveness of ethanol in E10 means that the conventional ethanol mandate is non-binding up to the E10 blendwall.”<sup>97</sup>

The issuance of SREs is a symptom of a larger problem: current RFS mandates are unrealistic and do not comport with the realities of the fuel market. Nearly all gasoline today is blended with 10 percent ethanol, which equates to about 14.3 billion gallons of ethanol per year. The problem is that gasoline demand is much lower today than the government projected 14 years ago when the RFS was enacted, and so there are few places for the additional ethanol contemplated by the 15-billion-gallon conventional biofuel aspiration to go.

#### **L. RFS SRE PETITION IDENTIFICATION IS BAD PUBLIC POLICY**

We strongly oppose EPA sharing the small refineries’ petitions or supplemental information with the public. EPA proposes in this annual rulemaking to take further comment on items that remain under consideration from its Renewables Enhancement and Growth Support (“REGS”) Rule. In the REGS Rule, EPA proposed regulations that would release to the public the petitioner’s name, the location of the facility for which relief was requested, the general nature of the relief requested, the time period for which relief was requested, and the extent to which the EPA granted or denied the requested relief.<sup>98</sup>

Disclosure of small refiners’ names, locations, or relief requested has the potential to impact markets. The request for hardship relief and the extent to which relief was granted or denied would necessarily reveal information about the refinery’s viability, its ability to remain competitive and profitable, and/or whether it is at risk of shutdown. The company’s confidential financial information is evaluated in the context of defined metrics in the Department of Energy’s Small Refinery Exemption Study and the pendency of the petition, and the decision to grant or deny relief would necessarily reveal information about the company’s financial position. The disclosure of this information could adversely affect small refineries in the market, with lenders, and in transactions. Small refineries shared information with the EPA under claims of confidentiality, as part of their petitions for hardship, with the understanding that only the EPA and the Department of Energy would have access to it.

#### **M. ONLY ONE OF EPA’S PROPOSALS FOR DIESEL RVO CALCULATIONS IS FEASIBLE**

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<sup>96</sup> Irwin, S. “Small Refinery Exemptions and Ethanol Demand Destruction.” *farmdoc daily* (8):170, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, September 13, 2018.

<sup>97</sup> *Id.*

<sup>98</sup> 81 Fed. Reg. 80828.



With the convergence of motor vehicle, nonroad, locomotive, and marine (“MVNRLM”) diesel fuel, heating oil (“HO”), and emissions control area (“ECA”) marine fuel sulfur standards, some stakeholders have expressed confusion to EPA on accounting for 15 parts per million (“ppm”) distillate fuel that leaves the obligated party’s gate designated as HO, ECA marine fuel, or other non-transportation fuels, but is subsequently re-designated as either MVNRLM diesel fuel or ultimately used as MVNRLM diesel fuel by a downstream entity. Specifically, some obligated parties have asked whether they are required to add redesignated MVNRLM diesel fuel back to their RVO calculations while some downstream entities have asked whether they are required to incur an RVO for MVNRLM diesel fuel they redesignate from non-transportation fuel to transportation fuel. EPA offers no data as to the extent of this problem or alternative solutions. We therefore find it difficult to provide informed comment on the necessity of this change and offer advice on potential appropriate solutions.

EPA is also concerned parties may be excluding 15 ppm HO or 15 ppm ECA marine fuel from their RVO calculations, and that a downstream party may be re-designating this fuel as MVNRLM diesel<sup>99</sup> and not incurring an RVO. To alleviate the issue, EPA proposes new requirements that would allow parties in the fuel distribution system (i.e., downstream of the original refinery or import facility) to sell a new category of certified non-transportation distillate fuel (“NTDF”) as MVNRLM diesel fuel without incurring an RVO if the total volume of MVNRLM diesel fuel delivered during each compliance period does not exceed the amount of MVNRLM diesel fuel received during that compliance period. The onus for this determination must be placed in the only logical point: with the party performing the re-designation.

The only feasible alternative EPA puts forth to clarify the requirement for refiners and importers to include distillate fuel in their RVO compliance calculations is the first option that proposes to define a new category of distillate fuel: certified non-transportation 15 ppm distillate fuel (“certified NTDF”). However, due to the need for a new tracking system based upon EPA’s proposal, a phased-in approach will be necessary for implementation, and compliance should be enforced in 2021 or later.

The other two proposals put forth by EPA are far too impractical to harmonize with the complexity of the fuel distribution system. In the second proposal, EPA seeks comment whether or how downstream parties could feasibly trace a volume of fuel that was sold for non-transportation and report that back to the original refiner. This is not feasible. Take for instance the common carrier Colonial Pipeline that East Coast and Gulf Coast refiners utilize to place their production competitively. Colonial Pipeline consists of 5,500 miles in four main lines and several branch lines with a capacity of over 4.2 million barrels per day. It is virtually impossible to track molecules over this system and many others like it, but this is what the other two

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<sup>99</sup> Diesel fuel for use in motor vehicles and motor vehicle engines, and nonroad, locomotive, and marine vehicles and engines.



proposals expect. The third proposal is unreasonable because it also requires downstream parties to track individual batches produced at individual refineries. It also assumes that current demand for non-transportation distillate fuel will be the same or similar as past demand. Markets and companies change, and markets and business practices may change significantly with these and other new regulations.

#### **N. EPA MUST REEVALUATE POINT OF OBLIGATION**

It is arbitrary and capricious for EPA not to reevaluate the point of obligation. For all the reasons set forth in previous comments, briefs, and lawsuits, EPA has both sufficient justification and authority to grant AFPM's petition to move the point of obligation to the position holder at the rack. Doing so will make the RFS program more equitable, ease the administrative burden on EPA, and combat fraud. It could obviate the need for other forms of relief. EPA has an annual duty to examine the point of obligation. The definition of obligated party at 40 CFR 80.1406 should be revised as follows:

An obligated party is the entity that holds title to the gasoline or diesel fuel, immediately prior to the sale from the Bulk transfer/terminal system (as defined by IRS regulations) to a wholesaler, retailer or ultimate consumer and is required to report any federal excise tax liability on IRS Form 720 – Quarterly Federal Excise Tax Return. An obligated party also includes the entity that is the enterer (as defined by IRS Regulations in 40 CFR §48.4081-1) of the gasoline or diesel fuel into the U.S. outside of the bulk transfer/terminal system and is required to report any federal excise tax liability on its Form 720.

#### **O. EPA SHOULD REPORT ON RFS LIFECYCLE GHG EMISSIONS ANALYSIS**

EPA committed to further reassess its GHG lifecycle analysis in its Response to Comments on the 2010 RFS rule.<sup>100</sup> Additionally, in response to a 2016 EPA Inspector General investigation, EPA's Office of Air and Radiation committed to "develop or identify the process for evaluating the science relevant to lifecycle analysis and determining whether revisiting the original greenhouse gas threshold determinations is necessary." Recent research indicates that with new and more accurate accounting methods, using ethanol or biodiesel contributes two to three times the greenhouse gas emissions of petroleum-based gasoline or diesel over more than 30 years.<sup>101</sup>

EPA's report was to be completed by September 30, 2018. EPA's analysis should be reported and published as a Notice of Data Availability in this rulemaking. This information is necessary

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<sup>100</sup> 75 FR 14670.

<sup>101</sup> "Assessing the efficiency of changes in land use for mitigating climate change," *Nature: International Journal of Science*. Timothy D. Searchinger, Stefan Wirseniuss, Tim Beringer & Patrice Dumas, *Nature* volume 564, pages 249–253 (2018). <https://www.nature.com/articles/s41586-018-0757-z>.





for EPA's compliance with its RFS obligations. Moreover, since the level of the RFS depends on the domestic supply of qualified renewable fuels, this matter is central to the pending rulemaking.

### III. CONCLUSION

For the forgoing reasons, EPA must use the full extent of its waiver authorities to set the advanced biofuel standard below 4.285 billion gallons and the total renewable fuel volume below 18.315 billion gallons. EPA should also finalize a 2021 BBD standard of no more than 1 billion gallons.

Respectfully submitted,

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