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The Honorable Andrew Wheeler
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building Mail Code: 1101 A
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: 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 ID No. EPA–HQ–OAR–2019–0136; FRL–9996–53–OAR

PBF Holding Company LLC, a subsidiary of PBF Energy Inc. ("PBF"), respectfully submits these comments in response to the Environmental Protection Agency's (EPA's) "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," (EPA–HQ–OAR–2019–0136; FRL–9996–53–OAR) (the "proposed RVO"). PBF is a member of and acknowledges the comments submitted by the American Fuel & Petrochemical Manufacturers (AFPM) (the "AFPM comment letter"). PBF's comments are intended to complement and emphasize those raised in the AFPM comment letter. In addition, this document addresses relevant issues from the unique perspective of PBF's role as a merchant refiner.

PBF is one of the largest independent petroleum refiners and suppliers of unbranded transportation fuels, heating oil, petrochemical feedstocks, lubricants and other petroleum products in the United States. The company currently owns and operates five domestic oil refineries in five states – Delaware, New Jersey, Ohio, Louisiana and California - and related assets with a combined processing capacity of approximately 900,000 barrels per day. PBF employs more than 3,000 people nationally. As one of the largest U.S. merchant refiners - with the most East Coast refining capacity - the Renewable Fuel Standard (RFS) has a significant, negative impact on PBF.

I. The 2020 proposed conventional biofuel volumes should be lowered to avoid severe economic harm. Recent experience indicates setting unreasonable volume targets does result in such harm, but does NOT appreciably do anything to overcome the challenges of the blendwall and advance the RFS program's objectives.

This overly aggressive proposal threatens to increase RIN compliance costs, raise consumer prices, and put highly skilled domestic refining industry jobs at risk. To avoid this, EPA should use its waiver authority to reduce the proposed 15 billion gallon de facto conventional biofuel requirement to a level under 10 percent of projected gasoline demand, based on annual U.S. Energy Information Administration (EIA) demand projections, rather than EPA estimates. This reduction would accurately reflect the ethanol volume all vehicles and infrastructure can safely handle, 10 percent ethanol concentration which is referred to as the "E10 blendwall," while accounting for consumer E0 demand. Reducing the de facto conventional requirement is necessary to avoid severe economic harm to merchant and small refiners.

As the AFPM comment letter notes, EPA is also statutorily required to reset the RFS mandates, taking into account, among other factors, impacts on jobs, consumer costs and "the sufficiency of infrastructure to deliver and use renewable fuel."[1]

A. EPA has already acknowledged that skyrocketing RIN costs previously resulted in severe economic harm in accepting the Philadelphia Energy Solutions (PES) bankruptcy settlement agreement. The continued need to grant Small Refiner Exemptions (SREs) is also evidence of excessive harm.

As stated in PBF's 2019 RVO comments, the government's acceptance of the PES bankruptcy settlement agreement is recognition and proof that a poorly structured RIN market, coupled with an overly aggressive Renewable Volume Obligation (RVO), resulted in skyrocketing compliance costs that caused severe economic harm.[2] Given this experience, it is arbitrary and capricious for EPA to set a conventional requirement which EPA knows could result in a return to the market conditions that threatens the viability of small and merchant refiners. The excessive volumetric targets are even more unreasonable given the fact that several stakeholders, including PBF, predicted the harm to merchant refiners, in comments to the proposed 2018 RVO. When a company is spending twice its annual payroll on RFS compliance credits, without such costs advancing the objectives of the regulation, it is obvious that the system is broken. As noted in the AFPM comment letter, the fact that several small refiners have met the regulatory criteria for and been granted SREs is further evidence of the harm the program is inflicting on fuel manufacturers.[3] EPA has a responsibility to recognize these realities and reduce the conventional biofuel requirement to ensure an ample supply of RINs are available to prevent a return to the market conditions that have already proven to cause harm.

B. Market experience over the last several years indicates there is no correlation between RIN price and ethanol blending. Given this fact, it is arbitrary and capricious to set a standard EPA knows could result in exorbitant RIN costs without appreciably advancing the objectives of the RFS.

i. <u>Available data continues to show robust biofuel consumption as RIN prices have fallen and numerous retroactive SREs have been issued.</u>

The AFPM comment letter accurately states that in refusing to assess likely RIN generation from E15 and E85, EPA neglects its responsibility to project reasonably attainable volumes of renewable fuel. Furthermore, an honest assessment of market experience over the last several years indicates there is no correlation between RIN price and biofuel blending. As a result, in setting an unreasonable volume standard, EPA is advancing a regulation that history shows will result in almost no benefit, but will likely result in extremely high costs.

PBF's comments to the 2018 and 2019 proposed RVO highlight the lack of correlation between RIN prices and the blend rate over the history of the program.[4] Nothing has changed in the market since these comments were filed. In fact, much new analysis only reinforces PBF's previous comments on this matter.

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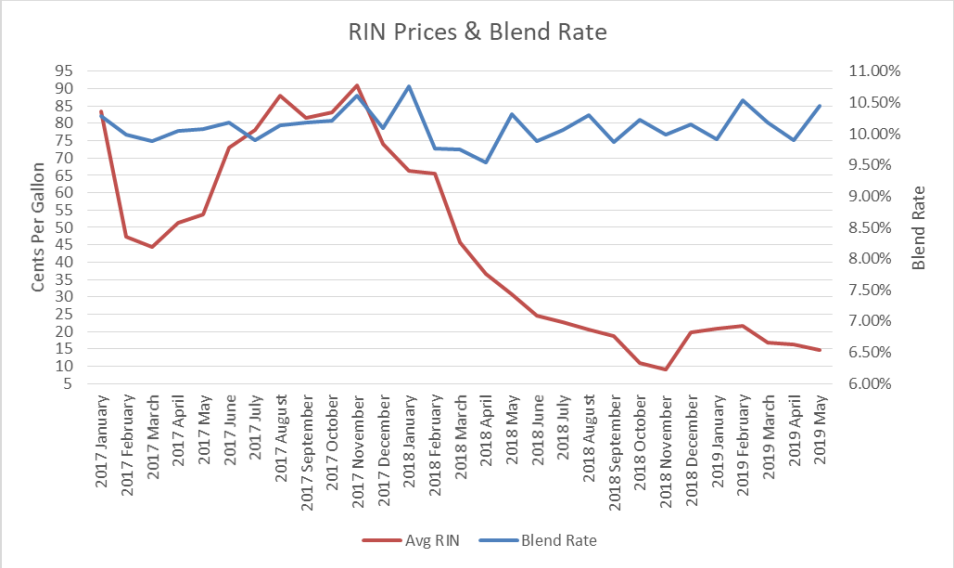
[1] Clean Air Act (CAA) Sec. 211(o)(2)(B)(ii)(I)-(VI)

[2] See comments from PBF Holding Company LLC (PBF)(Docket No. EPA-HQ-OAR-2018-0167)

[3] See comments from the American Fuel & Petrochemical Manufacturers (AFPM)(Docket No. EPA-HQ-OAR-2019-0136-0021)

[4] See comments from PBF Holding Company LLC (PBF)(Docket No. EPA-HQ-OAR-2017-0091 and EPA-HQ-OAR-2018-0167)



U.S. Energy Information Administration (EIA), Monthly Energy Review; Argus RIN Price

As the chart above highlights, RINs have swung wildly over the last few years, but the blend rate has gradually increased around the blendwall limit. This is consistent with how the RIN market and blending rate have operated over the history of the program. It is important to emphasize that both the blend rate and overall ethanol use have neither appreciably increased when RINs were high, nor has ethanol consumption d*ecreased* when RIN prices drop (even when such drops are significant). In fact, the graph seems to indicate an *inverse* correlation between RINs and blending; meaning blending appears to *decrease* as RIN prices increase.

Market experience during the last two years reinforced the fact that EPA can set a volumetric standard below the blendwall in a manner that avoids severe economic harm, without adversely impacting biofuel blending. In the wake of falling RIN prices and retroactive SREs, the Renewable Fuels Association (RFA) claimed Administrative actions on SREs "effectively lowered the volumetric obligations by at least 1.6 billion gallons"[5] and have continuously lamented alleged "demand destruction" for biofuel use. More recently, Growth Energy claimed 2.6 billion gallons of "demand destruction" over the last two years.[6] Reality tells a different story.

EIA data shows that the ethanol blend rate in 2018 matched the 2017 blend rate of approximately 10.1%. From January through May of 2019, the period for which we have the most recent EIA monthly data, the cumulative ethanol blend rate has been 10.19 percent, higher than the 10.03 percent rate during the same period in 2018.[7] Total physical ethanol consumption is up almost 100 million gallons thus far this year compared to last, as is biodiesel consumption.[8] Statistical analysis reinforces these facts. Regression analysis comparing current year D6 RIN prices with the ethanol blend rate suggests there is no

[5] https://ethanolrfa.org/2018/04/epa-data-shows-small-refiner-waivers-have-lowered-2016-2017-rfs-blending-obligations-by-1-6-billion-gallons/

[6] Growth Energy Press Release. "Trump EPA Shatters Hopes with 31 New Refinery Exemptions."

[7] U.S. Energy Information Administration. *Monthly Energy Review*. July 29, 2018. Available at: https://www.eia.gov/totalenergy/data/monthly/

[8] Ibid.

correlation between D6 RIN prices and ethanol blending – and a scatter plot of D6 RIN prices against the ethanol blend rate reinforces that observation.[9] Finally, EPA data shows that net domestic D6 RIN supply available for compliance (e.g. domestic generation minus exports) has increased in each of the last three years.[10] The only decrease in ethanol demand seems to be in relation to exports, which are down approximately 150 million gallons compared to 2018.

Such data indicates EPA does not have to set a market forcing standard that will result in high RIN prices to advance domestic ethanol blending, because market experience proves ethanol blending is economic regardless of the RIN price (and even regardless of SREs). PBF detailed the positive economics of ethanol blending in comments submitted regarding EPA's Notice of Data Availability Concerning Potential Reductions in the Volume Requirements for the 2018 Renewable Fuel and 2019 Biomass-Based Diesel under the Renewable Fuels Standard Program ("the 2017 NODA").[11] More recently, ethanol executives have also elaborated on such positive economics. In the company's Q1 2019 earnings call, Green Plains CEO stated, "…our cost competitiveness is very favorable to gasoline even with lower RINs as it looks to stay that way with low corn and soy prices sticking around for a while."[12] Pacific Ethanol's CEO noted: "Wholesale ethanol prices are currently trading at $0.70 discount to wholesale gasoline prices, which also is helping drive both new domestic and export ethanol demand."[13]

Robust ethanol use not only applies to E10 in the current environment. Significantly lower RIN prices in 2018 and thus far in 2019 compared to prior years do not seem to be holding back E15 sales either. The RFG Survey Association estimated earlier this year that there are 1,289 stations selling E15.[14] Growth Energy indicates the fuel is sold at more than 1,800 stations[15] and PBF analysis identified 1,444[16] via independent research. The low end of this station count represents a 21 percent increase over the 1,065 E15 stations EPA identified in the 2019 proposed RVO, with the high end representing 70 percent growth.

Very high percentage volume growth accompanied this significant expansion in stations offering E15. As EIA notes (emphasis added):

> "EIA does not collect E15 sales data, and state-level information is limited. The Minnesota Commerce Department reported 59.4 million gallons of E15 sales in the state in 2018, ***nearly triple 2017 levels***. According to an Iowa Department of Revenue report, state E15 sales were about 35.5 million gallons of E15 in 2018, ***almost a 30% increase over the previous year***."[17]

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[9] AFPM. "Biofuel Blending is Up. EIA Data Shows No Demand Destruction from SREs." August 22, 2019. Blog post available at: https://www.afpm.org/newsroom/blog/biofuel-blending-eia-data-shows-no-demand-destruction-sres

[10] EPA EMTS Data for 2016-2018. Available at: https://www.epa.gov/fuels-registration-reporting-and-compliance-help/public-data-renewable-fuel-standard

[11] See comments from PBF Holding Company LLC (PBF)(Docket No. EPA-HQ-OAR-2017-0091; FRL-9968-70-OAR)

[12] GPRE Q1 2019 Earnings Call Transcript. Available at: https://seekingalpha.com/article/4262229-green-plains-inc-gpre-ceo-todd-becker-q1-2019-results-earnings-call-transcript

[13] Pacific Ethanol Q1 2019 Earnings Call Transcript. Available at: https://seekingalpha.com/article/4259349-pacific-ethanol-inc-peix-ceo-neil-koehler-q1-2019-results-earnings-call-transcript?part=single

[14] RFG Survey Association to EPA re: Registered E15 Locations, EPA-HQ-OAR-2019–0136

[15] U.S. Energy Information Administration. "New EPA ruling expands sale of 15% ethanol blended motor gasoline." *Today In Energy.* July 16, 2019. Available at: https://www.eia.gov/todayinenergy/detail.php?id=40095

[16] Appendix A

[17] EIA. "New EPA ruling expands sale of 15% ethanol…." *Today In Energy.* July 16, 2019.

Minnesota is home to approximately 24 percent of national outlets offering the fuel, and is one of the only states that regularly reports E15 sales. In August, the Minnesota Bio-Fuels Association touted record E15 sales to date and stated: "On an annualized basis, E15 sales in Minnesota would hit 73 million gallons this year, well above the 59.4 million gallons achieved in 2018."[18]

The facts are clear: neither SREs nor low prices have had any impact on ethanol blending. As a result, it is arbitrary and capricious for EPA to propose a standard that it knows is very likely to significantly raise compliance prices for obligated parties without advancing the program's objectives.

ii. Market experience and comments EPA has received in relation to other RFS related proposals indicate the RIN is NOT a factor that puts pressure on the market to exceed the blendwall.

History proves neither the RIN price nor aggressive volumetric standards play a significant role in impacting the "relative pricing of E15 and E85 versus E10"[19] or result in any noticeable ability to affect such pricing. The primary reasons for the ineffectiveness of the RIN to advance the program objectives are the misaligned point of obligation, which incentivizes blenders capturing RIN profits rather than investing in infrastructure to advance fuel with higher level ethanol blends, coupled with significant vehicle and infrastructure barriers noted in the AFPM comment letter and EPA memos in the 2019 RVO docket. Without addressing these core issues, EPA has a responsibility to set a standard that will avoid the economic harm associated with skyrocketing RIN costs, particularly since EPA has received comments indicating that a high cost RIN market not only fails to advance the goals of the RFS program, but actually *disincentivizes* greater domestic biofuel blending.

EPA has long recognized the inability of E85 to appreciably close the gap between the blendwall and the 15 billion de facto conventional mandate implicit in statute. The focus more recently has been on whether E15 can do any better. Biofuel interests have long indicated the belief that simply allowing the one pound Reid vapor pressure (RVP) waiver to apply to E15 would help advance the objectives of the RFS and lower RIN prices, under the claim that "more E15 means more RINs" and, thus, lower RIN prices. However, one of the primary reasons that the current RIN program fails to advance the objectives of the program is that in a flat motor fuel demand environment, it is nearly impossible for E15 to make up the gap between the blendwall and an RVO requiring 15 billion gallons of conventional biofuel. Such a fact holds true even given the significant percentage growth in E15 stations over the last few years.

The AFPM comment letter details the extreme challenges that prevent E15 from being able to bridge the blendwall gap. EIA fuel demand projections, coupled with the previously mentioned E15 sales data, reinforce the fact that E15 will not enable the nation to consume 15 billion gallons of conventional ethanol anytime soon (despite significant year on year percentage volume growth). EIA's Annual Energy Outlook (AEO) projects that motor gasoline consumption will decrease 26 percent by 2050[20] and the Agency's Short Term Energy Outlook (STEO) indicates gasoline consumption will decrease for the second year in a row.[21] In such a declining fuel demand environment, each gallon of E15 replaces an E10 gallon. Thus, each gallon of E15 only generates another 0.05 incremental RIN per gallon sold for compliance. As

[18] Minnesota Bio-Fuels Association. "6.29 MILLION GALLONS OF E15 SOLD IN JUNE." Blog Post. August 7, 2019. Available at: https://www.mnbiofuels.org/media-mba/blog/item/2635-6-3m-gallons-of-e15-sold-in-june

[19] "Market impacts of biofuels in 2019," June 26, 2018, EPA-HQ-OAR-2018-0167-0025.

[20] U.S. Energy Information Administration. *Annual Energy Outlook*. January 24, 2019.

[21] U.S. Energy Information Administration. *Short Term Energy Outlook.* August 6, 2019.

a result, if one were to assume the approximately 100 million gallons of E15 EIA identified as being sold in 2018 were to double this year, it would only generate an additional 10 million RINs over the status quo. EIA's gasoline consumption estimates for next year indicates an E10 blendwall of 14.3 billion gallons[22]; which is 700 million gallons short of the 15 billion gallon de facto conventional requirement in the proposed RVO. It would take approximately 14 billion gallons of E15 sales to generate enough RINs to overcome the blendwall, which represents 10 percent of all fuel consumed in a flat – let alone declining – demand environment. E15 sales would need to double each year for several years before the fuel could appreciably make any progress towards overcoming the blendwall.

The sheer magnitude of E15 that would need to be sold to make up the blendwall gap, coupled with the enormous hurdles detailed in the AFPM comment letter and empirical data showing no correlation between RIN prices and ethanol blending – even in relation to E15 – proves that changes in RIN price will result in neither the "small increases in ethanol volume above 10%" nor, "pressure on the market to exceed the E10 blendwall,"[23] as EPA states in the 2014-2016 final RVO (which was referenced in EPA's memo on "Market Impacts of Biofuels in 2019" in the 2019 RVO docket).

iii. <u>Since there is empirical evidence proving that neither the RIN price nor the volumetric requirement incentives greater biofuel blending, EPA has an obligation to change the RFS point of obligation to the "rack seller," as detailed in PBF's comments on the point of obligation petition.</u>

In comments to EPA's "Proposed Denial of Petitions for Rulemaking to Change the RFS Point of Obligation," PBF detailed how the misaligned point of obligation prevents merchant refiners from recovering RIN costs to the financial benefit of integrated refiners and non-obligated blenders.[24] Without rehashing the mountain of evidence in the record affirming this fact, and regardless of EPA's point of obligation petitions denial, it is worth emphasizing that neutral parties have long noted how the misaligned obligation creates a disincentive to advance greater biofuel blends. As Magellan Midstream Partners – which controls one of the largest midstream refined products networks and whose customers include all entities in the fuel supply chain, from refiners to ethanol producers and marketers – stated in comments on the 2017 RVO:

> "The current definition of obligated party and the RIN compliance scheme can act as a deterrent for renewable fuel demand and infrastructure investment which works against the policy objectives of the Renewable Fuels Standard…. The current definition of an obligated party does not provide the right party with the motivation to increase renewable fuel demand at the retail location."[25]

A review of the data regarding stations offering E15 reinforces the fact that a misaligned point of obligation could act as a deterrent to renewable fuels demand. In the 2017 RFS RVO, EPA recognized the blendwall, but indicated it felt compelled to force "opportunities that exist for pushing the market to overcome those constraints."[26] PBF's point of obligation comments noted how high D6 RIN values – which

[22] Ibid.
[23] 80 Fed. Reg. at 77,457
[24] See comments from PBF Holding Company LLC (PBF)(Docket Item No. EPA-HQ-OAR-2016-0544)
[25] See comments from Magellan Midstream Partners, L.P. (Docket ID No. EPA-HQ-OAR-2016-0004)
[26] 81 Fed. Reg. 89,746

averaged 53 cents[27] from 2010 through 2017 – had failed to incentivize retailers to offer fuel with greater concentrations of ethanol:

> "Of the 124,000 retail motor fuel stations in the country, PBF identified 564 selling E15, or 0.4 percent of all fueling stations. In relation to the large retailers referenced in EPA's Proposed Denial, very few of them have significant E15 offerings. For example, only 1.4 percent of Murphy USA's 1200 stores, 2.5 percent of RaceTrac's 670 stores, and none of QuikTrip's 700 stores offer E15. None of Casey's General Stores' 1900 locations carries E15, despite the Iowa Renewable Fuels Association spearheading a consumer petition calling on the business to offer consumers the fuel. Additionally, none of the "hypermarkets" mentioned in the previous section – which are responsible for nearly 14 percent of U.S. gasoline sales - were listed as offering E15."[28]

PBF updated its analysis to assess changes in the marketplace since 2017, where average RIN prices have been much lower, averaging 25 cents,[29] and SREs more numerous than in the years prior. Of the 122,000 retail motor fuel stations in the country,[30] PBF was able to identify 1,444 stations selling E15. This represents a near tripling in the number of stores selling E15 in less than three years compared to stores offering the fuel in the high priced RIN years. The percentage of large, independent retailer owned stores selling E15 has also increased significantly. More specifically, Kum & Go now offers E15 at over 30 percent of its stores, Sheetz offers the fuel at nearly 14 percent of its more than 1600 stores, Kwik Trip sells E15 at close to 35 percent if its 530 stores. This all occurred in absence of the E15 RVP waiver, which did not go into effect until this summer. Despite such increases in E15 offerings, there remain a large number of retail chains that still do not sell any of the fuel. For example, almost none of the "hypermarkets" (e.g. Costco, Safeway, Kroger, Walmart, etc.) that now represent 16 percent[31] of all U.S. gasoline sales offer E15.[32]

The data from the retail offering survey reinforces several key facts regarding the ineffectiveness of the current RIN system and the futility of a de facto 15 billion gallon conventional biofuel mandate. First, the data reinforces Magellan's comment about the current point of obligation inhibiting renewable fuel infrastructure investment. In an environment with fewer SREs, RIN-long entities leveraged perceived scarcity to drive up RIN prices, creating an excessive cost that acted as a significant barrier to entry. The situation gave RIN suppliers high bargaining power over RIN purchasers with no threats of substitutes (since obligated parties without blending capabilities have to purchase RINs) and an extremely low threat of new entrants (due to the high cost of capital necessary for entering large scale blending and marketing operations). The non-competitive RIN market resulting from this misaligned point of obligation allowed RIN-long entities to employ a high price, low volume strategy. However, as RIN prices came down due to SREs, coupled with the reality that ethanol is economic regardless of a mandate, RIN-long entities were unable to leverage perceived scarcity. The result forced a lower price, higher volume strategy that led to more E15 being offered. Appendix B applies Michael Porter's Five Forces framework to the RIN market to elaborate on these RIN market dynamics in more detail.[33]

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[27] OPIS RIN price data.

[28] See comments from PBF Holding Company LLC (PBF)(Docket Item No. EPA-HQ-OAR-2016-0544)

[29] OPIS RIN price data.

[30] NACS. "Selling America's Fuel." Blog Post. August 12, 2019. Available at: https://www.convenience.org/Topics/Fuels/Who-Sells-Americas-Fuel

[31] Ibid.

[32] In relation to the "hypermarkets," the only one selling any E15 that PBF was able to identify was Kroger, which offers E15 at three out of its 2000 stores.

[33] Appendix B

In addition to showing that the RIN market – given a misaligned point of obligation - is working contrary to what EPA intended when instituting the program, the retail offering survey data reinforces the arbitrary and capricious nature of setting a de facto conventional biofuel requirement that exceeds the blendwall. The significant percentage growth in stations offering E15 during a period where more SREs were offered and RIN prices plummeted provides additional proof about both the lack of relationship between RIN price and biofuel blending, as well as the insignificance of the actual volume requirement in driving more ethanol consumption. Coupled with the data presented earlier and in the AFPM comment letter regarding the magnitude of E15 needed to reach 15 billion of ethanol consumption, the retail data also highlights that despite very large percentage growth, there in insufficient market incentive to offer enough ethanol blended fuel to achieve the de facto conventional requirement via conventional biofuel anywhere in the near future.

The facts become more and more clear: there is no correlation between RINs and ethanol blending, even in relation to mid-level ethanol blends like E15. Therefore, an overly aggressive conventional biofuel requirement does nothing except raise compliance costs in a manner that fails to achieve the RFS' objectives and has already resulted in severe economic harm. Given this reality, EPA not only has a responsibility to use its waiver authority to lower the conventional biofuel requirement to a level below the blendwall, but also change the point of obligation to provide appropriate incentives that will better advance the RFS program goals. Doing so will prevent further losses of American manufacturing jobs without adversely impacting biofuel consumption or production.

II. The proposed cellulosic, biomass-based diesel (BBD) and advanced volumetric requirements for 2020 and 2021 are overly aggressive. They will continue resulting in higher RIN costs and a de facto foreign biofuel mandate. As a result, EPA should lower the requirements to better reflect accurate domestic production.

A. The proposed cellulosic volumes are unrealistic.

PBF agrees with the AFPM comment letter's assertion that EPA should decrease the proposed "cellulosic" biofuel requirement using a methodology that takes better aim at accuracy and addresses biogas quality issues. EPA has continuously overestimated cellulosic production and continues to rely on what have historically proven to be extremely uncertain future growth projections. In addition to proposing questionable volume increases for "cellulosic" biofuel – which still does not actually exist in commercial quantities, resulting in biogas being the predominant source of "cellulosic" RINs – EPA should also err on the side of caution given the fact that the cellulosic RIN market is not very competitive. As PBF noted in previous comments, there are never more than two or three entities offering D3 RINs for sale in the market at any given time. A history of missed projections, along with a non-competitive D3 RIN market, justifies EPA lowering proposed cellulosic volumes for 2020.

B. Since the advanced and BBD requirements are essentially one and the same, and since this portion of the mandate is also the primary cost driver in relation to the conventional requirement, EPA must reduce the proposed volumes for advanced and BBD. Such an action is necessary to meet EPA's statutory requirement to assess the cost of the biodiesel mandate, as well as its impact on energy security, and to avoid severe economic harm.

The proposed RVO recognizes that due to significantly reduced imports of sugarcane ethanol, imprecise estimates of potential future sugarcane ethanol imports and the lack of any significant volumes

of other advanced biofuel, "…BBD continues to fill most of the gap between the BBD standard and the advanced standard."[34] Given these facts and averaging the weighted nature of the biodiesel and renewable diesel RIN (at 1.55 RINs per averaged gallon), EPA acknowledge that the proposed RVO equates to a de facto 2.826 billion gallon bio/renewable diesel mandate for next year.[35]

The requirement is much bigger when taking into account the fact that refiners need to over-comply with BBD to make up for the blendwall. As previously discussed, based on the latest EIA data,[36] the gap between the 15 billion gallon proposed conventional biofuel requirement and the blendwall will be 700 million RINs, which cannot feasibly be bridged using conventional biofuel RINs associated with E15 and E85 (for the reasons highlighted previously and in the AFPM comment letter).[37] As a result, the overly aggressive conventional requirement creates a de facto BBD mandate of approximately 452 million gallons[38] *in addition to the advanced and BBD biofuel proposed standards*. In other words, the combined impact of EPA's proposal is a 3.278 billion gallon advanced biodiesel/renewable diesel mandate. This volume necessitates foreign biofuel, contrary to the energy security goals of the RFS statute. [39]

Despite three years of specific and de facto (due to lack of other advanced biofuel) BBD RVOs in excess of 2 billion gallons, domestic biodiesel producers have failed to produce greater than 1.844 billion gallons annually,[40] despite ample production capacity to do so.[41] Failure of domestic producers to make adequate volumes resulted in the use of as much as one billion gallons of foreign biodiesel last year. As PBF stated in comments to the 2017 NODA, relying on costly, tariff-laden, questionable foreign biodiesel supplies to meet the RFS is in direct contrast to Congress' original intent to bolster domestic biofuel supplies when passing the Energy Independence and Security Act of 2007 (EISA).[42]

The trend of reliance on foreign BBD to meet the RFS continues, despite the December 2017 tariffs the U.S. International Trade commission levied on Argentinian and Indonesian BBD imports (which represented the largest source of foreign BBD supplied to the U.S. market prior to this action). EIA notes that U.S. domestic biodiesel production has increased in each of the last three years.[43] However, EIA still projects annual domestic biodiesel production will fall just short of 2 billion gallons.[44] EIA projects domestic production of 2.2 billion gallons next year, which is short of the 2.43 billion gallon requirement. Renewable diesel production allows the nation to barely meet the BBD requirement, but is insufficient to achieve compliance with the advanced and total renewable standards. Domestic renewable diesel

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[34] 84 Fed. Reg. at 36,795

[35] 84 Fed. Reg. at 36,781

[36] U.S. Energy Information Administration. Short Term Energy Outlook. August 6, 2019.

[37] Note that this also assumes EPA's projection for gasoline consumption of 9.33 million barrels per day holds true. EIA currently projects we end this year with 9.31 barrels per day of motor gasoline consumption, which would result in the second consecutive year of gasoline consumption declines.

[38] 700/1.55 RIN weighting = ~452 million gallons of bio/renewable diesel.

[39] EPA states in a footnote 158 "displace conventional fuels" as has occurred in the past, making the D4 the marginal RIN, but it does not see this occurrence repeating itself, as "conventional biodiesel and renewable diesel have and will likely continue to play that role." (84 Fed. Reg. at 36,796) This is an admission that a 15 billion gallon de facto requirement is unachievable.

[40] 84 Fed. Reg. at 36,782

[41] U.S. Energy Information Administration. *Monthly Biodiesel Production Report.* July 31, 2019. Available at: https://www.eia.gov/biofuels/biodiesel/production/

[42] See comments from PBF Holding Company LLC (PBF)(Docket No. EPA-HQ-OAR-2017-0091; FRL-9968-70-OAR)

[43] EIA. *Monthly Biodiesel Production Report.* July 31, 2019

[44] EIA. *STEO*. August 6, 2019.

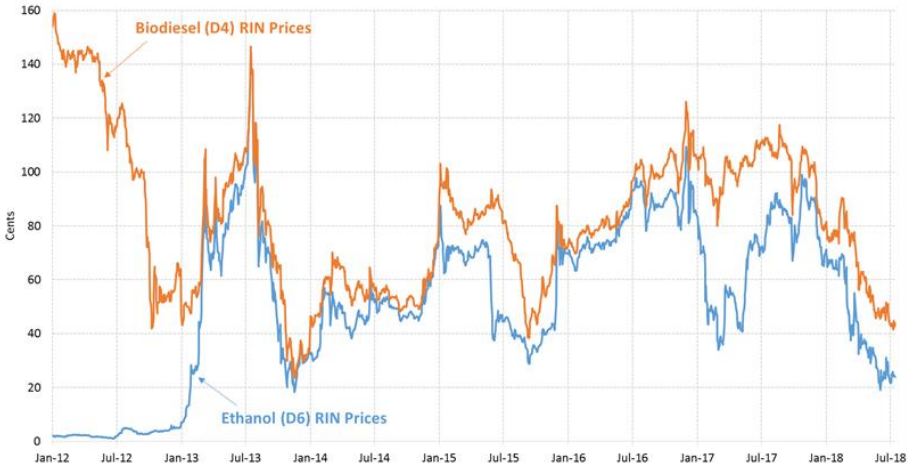
production, which EPA estimates was 306 million gallons in 2018,[45] would have to grow by more than 200 million gallons to help meet just the BBD mandate. This would represent quadrupling of domestic renewable diesel's highest year over year growth rate.[46] However, such volumes would *still* fall about 850 million gallons short of what would be needed to meet the proposed 2020 RVO.

EPA EMTS data tells a similar story. If we assume domestic biodiesel manufacturers hit the EIA projection of about 1.962 billion gallons this year,[47] and combined it with annualized domestic renewable diesel RIN generation to date (which indicates production could hit 441 million gallons if no fuel is exported), then about 2.4 billion gallons of domestically produced D4 fuel will be available for 2019 compliance.[48] This volume falls 770 million gallons short of the advanced biofuel requirement, let alone the de facto biodiesel mandate attributable to an unachievable conventional proposal (which, if it were met with all bio or renewable diesel, would require yet another 451 million gallons). Furthermore, foreign biofuel represents nearly 19 percent of all 2019 D4 RIN generation to date.

It is important to note that when discussing the discrepancies between the mandated volumes and RIN generation, the figures are not precise. The reason being that the RVO turns the volumetric estimates into a percentage standard that refiners apply to the petroleum fuel they manufacture. As such, the actual volume required will ebb and flow with gasoline and diesel demand. Regardless, EPA data indicates there has been between a one and two *billion* RIN gap between the volumetric requirement promulgated in the RVOs and the net available supply of RINs from domestically produced fuel *in each of the last three years.*[49] There was a greater than 1.4 billion RIN gap last year, despite the previously mentioned tariffs on what used to be America's largest foreign supplier. Were this met with all bio and renewable diesel, it equates to approximately just over 900 million gallons. EPA data on imports and the RIN bank drawdown verify this figure. EMTS indicates that refiners relied on 695 million RINs from imports and the proposed RVO indicates a drawdown of 200 million advanced biofuel RINs. Since the U.S. was a large net importer of advanced biofuel in each of the previous three years, it is reasonable to assume these RINs came from foreign fuel.

The effects of the de facto foreign biodiesel proposed mandate are exacerbated when both the cost of biodiesel on consumers and to the rest of the RFS requirements are taken into account. Since the D4 RIN becomes the marginal gallon required to meet the D6 portion of the mandate (due to the previously mentioned constraints in generating 15 billion D6 RINs), the price of D6 RINs becomes tied to the higher priced D4 RIN, greatly increasing the costs of RFS compliance.

[45] 84 Fed. Reg. at 36.782
[46] Ibid.
[47] EIA. STEO. August 6, 2019.
[48] EPA EMTS Data for 2019. Available at: https://www.epa.gov/fuels-registration-reporting-and-compliance-help/public-data-renewable-fuel-standard
[49] EPA EMTS Data for 2016-2018. Available at: https://www.epa.gov/fuels-registration-reporting-and-compliance-help/public-data-renewable-fuel-standard



Source: Oil Price Information Service (OPIS)

In other words, the D6 price essentially becomes the D4 price due to the necessity to use biodiesel to meet overly aggressive BBD, advanced *and* conventional requirements. We have seen a disconnect between the D6 and D4 price over the last year due to market perceptions surrounding SREs and talks within the Administration about controlling RIN costs. However, small shifts in perception would easily result in BBD raising the D6 price to the D4 level once again. The excessive advanced requirement could lead to such changing expectations. This risk of reverting back to a high cost RIN market is heightened when one considers that the brunt of the conventional requirement should essentially cost nothing, since ethanol is economic to blend in the absence of the mandate. As previously discussed, market experience this year reaffirms this fact and PBF's NODA comments from 2017 detail biofuel industry recognition of ethanol's economic viability in the absence of a mandate.[50]

The market has already experienced severe economic harm associated with excessive biofuel requirements in relation to the PES bankruptcy and as evidenced by the need to issue a substantive number of SREs. If the high RIN price environment were to materialize due to EPA's proposed RVO, refiners would once again be put at risk, threatening both jobs, energy security and higher consumer costs associated with domestic fuel supplies that may not be available if a refinery closes down.

Additionally, EPA has are responsibility to assess consumer cost when setting the biodiesel mandate. As the AFPM comment letter notes, "Biodiesel has consistently cost more than fifty cents per gallon than diesel and at times more than two dollars a gallon more."[51] To the extent that BBD is likely to become the marginal RIN for RFS compliance, as has occurred in the last three years, the high cost of this fuel raises the cost of the entire mandate exponentially. A recent study verifies this fact. Energy Ventures Analysis (EVA) used EIA'S National Energy Modeling System (NEMS) to assess the impact of various RFS scenarios. EVA concluded that if the de facto conventional requirement were eliminated, with the advanced requirement remaining at 2018 levels, consumers would save $3.7 billion in 2025 and $5.3 billion in 2030. The result is attributable to the fact that such a scenario removes, "the reliance on advanced biofuels like biodiesel to support the total mandate (e.g. the de facto conventional biofuels

[50] See comments from PBF Holding Company LLC (PBF)(Docket No. EPA-HQ-OAR-2017-0091; FRL-9968-70-OAR)
[51] See comments from the American Fuel & Petrochemical Manufacturers (AFPM)(Docket No. EPA-HQ-OAR-2019-0136-0021)

mandate)…."[52] EVA elaborates on the cost of the BBD requirement later in its analysis, stating: "Based on 2018 actual prices, the biodiesel mandate cost consumers somewhere between $2.5 billion and $4.0 billion dollars."[53]

EPA received evidence on how the higher cost of biodiesel itself was hitting consumers last year. As noted in a National Public Radio story:

> "'This is an easy one, economically. Biodiesel is very expensive, relative to petroleum diesel,' says Scott Irwin, an economist at the University of Illinois, who follows biofuel markets closely. He calculates that the extra cost for biodiesel comes to about $1.80 per gallon right now, meaning that the biofuel law is costing Americans about $5.4 billion a year."[54]

EPA has a responsibility to recognize the potential of an overly aspirational RVO to raise compliance and consumer costs, risking severe economic harm and adversely impacting American energy security. PBF agrees with the AFPM comment letter's conclusion that a de facto foreign biodiesel requirement runs contrary to the energy security goals of the RFS and will raise both consumer and refiner costs substantially. As such, EPA should set the advanced requirement for next year and the BBD standard for 2021 at a level that better reflects likely actual domestic production of bio and renewable diesel.

III. EPA correctly recognizes the importance of a robust RIN bank and PBF supports the Agency's proposal NOT to intentionally draw it down. However, EPA must also reduce the volumetric requirement to avoid a RIN bank drawdown. Additionally, PBF supports the Agency's decision to reject calls from the biofuel industry to illegally "reallocate" volumes associated with SREs.

PBF agrees with both the AFPM comment letter and EPA's own statements on the necessity of a robust RIN bank to enhance liquidity and act as an insurance policy against potential market disruptions.[55] However, PBF also agrees with the AFPM comment letter on the point that high volume proposals, coupled with significant RIN bank drawdowns, contradict EPA's stated intentions. The fact that EPA cited a 400 million RIN drawdown in the RIN bank,[56] representing a 35 percent decrease that leaves banked supply at nearly half of the 20 percent carry is cause for alarm. It certainly indicates "a significant drawdown of the carryover RIN bank,"[57] that could lead to scarcity, resulting in an even more dysfunctional RIN market.

Additionally, it is important to emphasize that the RIN bank is not a communal pot of RINs available to all market participants. The public and market participants do not know exactly which entities hold what quantities of RINs. General market knowledge infers RIN-long obligated parties control the RIN bank and there is no requirement that such entities ever need to offer these RINs for sale in any market situation. This circumstance further warrants the RIN bank remain as robust as possible to ensure it is liquid enough to act as needed in the event of a market disruption.

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[52] Energy Ventures Analysis. "An Assessment of the Renewable Fuel Standard Using EVA-NEMS." July 17, 2019. p. 5. Available at: https://www.evainc.com/wp-content/uploads/2019/07/EVA_RFS_REPORT-final.pdf

[53] Id, p. 17.

[54] Charles, Dan. "Turning Soybeans Into Diesel Fuel Is Costing Us Billions." National Public Radio. January 16, 2018. Available at: https://www.npr.org/sections/thesalt/2018/01/16/577649838/turning-soybeans-into-diesel-fuel-is-costing-us-billions

[55] 84 Fed. Reg. at 36,767

[56] Ibid.

[57] Ibid.

Furthermore, we applaud EPA for rejecting calls from the biofuel industry to "reallocate" volumes associated with SREs. First, as previously discussed, there is nothing to "reallocate," because retroactive waivers have had zero impact on biofuel blending. Additionally, it would be arbitrary and capricious to assume future volume exemptions that may or may not occur in the context of the RVO formula. Biofuel industry calls for "reallocation" are simply attempts to try and force EPA into promulgating an RVO that exceeds the de facto statutory cap of 15 billion conventional biofuel gallons and EPA was wise to recognize and reject such proposals.

More importantly, EPA lacks authority to "reallocate" *any* waived volumes in *any* circumstance. This fact holds true whether EPA grants SREs retroactively or before setting a final RVO. The entire statutory construct of the RFS is crafted in a manner that *only* allows for downward adjustments. The language is clear in expressing Congress' recognition that the targets in the statute may be overly aggressive and, as a result, instituted a series of waiver authorities expressly intended to allow EPA to *reduce* the RFS requirement.

The various waiver authorities are all geared towards downward adjustment; including waivers for "inadequate domestic supply,"[58] severe economic harm,[59] reduction of the cellulosic requirement,[60] reduction of the biodiesel requirement,[61] and even a reduction in the requirement associated with SREs.[62] On this specific front, the statute exempts small refiners until 2011 and then allows for their exemption for an indeterminate amount of time thereafter. It also directly addresses renewable fuel that will be blended with small refiner production in spite of the exemption. Specifically, the statute says the Administrator shall make adjustments, "to account for the use of renewable fuel during the previous calendar year by small refineries that are exempt."[63] In other words, the statute recognizes that small refiners may still blend renewable fuel regardless of the exemption in a manner that equates to over-compliance with the federal statute.

Given the statutory text and overall construct, EPA must *only act to reduce the overall requirement*: "to account for the use of renewable fuel during the previous calendar year by small refineries that are exempt."[64] The law does not say EPA shall make up a deficit for renewable fuel NOT used due to the small refiner exemptions, nor does it state small refiner exemptions should be addressed through an increase in the obligation for non-exempt refiners. Congress said that any use of renewable fuel by exempted refineries should be accounted for in reducing the percentage obligations for non-exempt refineries. With this provision, Congress had a chance to address exempted volumes in another way but did not. As a result, EPA has no authority other than to adjust the RFS requirement downward to take into account what is essentially over-compliance when small refiner produced fuel is blended with renewable fuel, which the data suggests has been occurring over the last several years.

In responding to similar arguments filed in relation to the 2019 RVO, EPA claimed such comments were beyond the scope of the rulemaking and cited decade old Agency statements in the Federal Register. Specifically, EPA cited the following:

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[58] 42 U.S.C. § 7545(o)(7)(A)(ii)
[59] *Id.* § 7545(o)(7)(A)(i)
[60] *Id.* § 7545(o)(7)(D)(i)
[61] *Id.* § 7545(o)(7)(E)(ii)
[62] *Id.* § 7545(o)(3)(C)(ii)
[63] *Ibid.*
[64] *Ibid.*

"CAA section 211(o) requires that the small refinery adjustment also account for renewable fuels used during the prior year by small refineries that are exempt and do not participate in the RFS2 program. Accounting for this volume of renewable fuel would reduce the total volume of renewable fuel use required of others, and thus directionally would reduce the percentage standards. However, as we discussed in RFS1, the amount of renewable fuel that would qualify, i.e., that was used by exempt small refineries and small refiners but not used as part of the RFS program, is expected to be very small. In fact, these volumes would not significantly change the resulting percentage standards. Whatever renewable fuels small refineries and small refiners blend will be reflected as RINs available in the market; thus there is no need for a separate accounting of their renewable fuel use in the equations used to determine the standards."[65]

More recent events make EPA's 2010 comments irrelevant. First, it is no longer possible to say the "amount of renewable fuel that would qualify…expected to be very small."[66] EPA's own data indicates the RINs associated with the "Estimated Renewable Volume Obligations (RVO) Exempted" were 1.82 billion and 1.43 billion in 2017 and 2018 respectively.[67] Additionally, regardless of whether biofuel blended with small refiner fuel is reflected as RINs available in the market, that does not negate EPA's statutory responsibility to, "reduce the total volume of renewable fuel use *required of others* (emphasis added)…."[68] Even if SREs make more RINs available and have the practical impact of easing the burden of the RFS on obligated parties, that does not negate EPA's statutory obligation to reduce the actual requirement of others to purchase RINs. The fact that biofuel consumption has increased in spite of SREs, as previously discussed, provides empirical evidence that biofuel is being blended into fuel produced by small refinery volumes that are exempt from the RFS. EPA has a statutory responsibility to reduce the overall requirement to reflect this reality. This statutory duty also supports the fact that any sort of "reallocation" associated with SREs is unlawful.

Finally, PBF concurs with the AFPM comment letter regarding EPA's response to the remand of the 2016 rulemaking and also agree with EPA's decision that, "In light of the fact that (the Agency) can no longer incent additional renewable fuel generation in 2016, and the significant burden on obligated parties of imposing an additional standard, (the Agency is) proposing to retain the original 2016 total renewable fuel standard."[69] Any other course would simply compound the existing threat of severe economic harm associated with the proposed RVO without advancing the RFS program objectives.

IV. EPA should include RIN trading reforms in the RVO. EPA took comment on such reforms in several proposals and there is clear evidence that the RIN market is not functioning. These facts warrant EPA advancing RIN trading reforms sooner rather than later.

PBF's 2019 RFS RVO comments, as well as the company's comments to the E15 RVP waiver/RIN market reform rule provided extensive recommendations regarding needed RIN market reforms.[70] As previously stated, the RIN market is broken. There are many examples, starting with the fact that only up

[65] 75 Fed. Reg. at 14,717
[66] Ibid.
[67] EPA EMTS Data. Available at: https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rfs-small-refinery-exemptions
[68] 75 Fed. Reg. at 14,717
[69] 84 Fed. Reg. at 36,788
[70] See comments from PBF Holding Company LLC (PBF) (Docket ID No. EPA-HQ-OAR-2018-0167); (Docket ID No. EPA–HQ–OAR–2018–0775; FRL–9991–04–OAR)

to three companies control all of the cellulosic RINs for sale in a given year - usually at take it or leave it prices. Extensive volatility across most RIN categories – often resulting in hundreds of percent swings over very short intervals - that occurs in periods of time when there is no significant impending regulatory action or market event provides even more proof of uneconomic, manipulative trading. Even biofuel interests have noted the need to address potential market manipulation. PBF believes EPA should advance the reforms detailed in the company's previous comments, which would eliminate the ability of entities to use RIN trading exclusively as a profit center, while ensuring both liquidity and that the primary obligated parties, refiners, have more RIN market flexibility than non-obligated parties.

EPA's comments in relation to its response to the remand of the 2016 rulemaking also provide potential evidence of RIN market gaming. Specifically, EPA notes that only 2015 and 2016 RINs could be used to comply with the 2016 RVO and that, "…there are far fewer 2015 and 2016 RINs available today (i.e. RINs that are valid but have not already been retired to comply with the 2015, 2016 or 2017 standards) than would be needed to comply with a supplemental standard…."[71] The Agency continues: "Additionally, the few 2015 and 2016 RINs available are unevenly held between obligated parties; because of the small number of RINs, any parties who held excess 2015 and 2016 RINs could attempt to sell them at a high price, creating dysfunction within the RIN market."[72] A critical question EPA must answer is: Why are there **any** valid 2015 and 2016 RINs left? Such a fact indicates some entities could be holding RINs past expiration to exacerbate real and perceived scarcity, particularly since the RIN bank is decreasing in size and has never come close to the 20 percent carry over limit. The fact that there are still any valid 2015 and 2016 RINs available could indicate that hoarding is occurring and support PBF's comments on the need for RIN market reforms.

V. EPA should also advance other changes to ensure RIN market liquidity and limit compliance costs.

Echoing its 2019 RVO comments, PBF believes EPA should allow RINs currently retired when biofuel is exported to be made available for RFS compliance. As detailed in PBF's 2018 RVO comments,[73] EPA has the authority do advance this policy. Allowing RINs from exported fuel to be used for compliance would add liquidity, while increasing the production of renewable fuels and enhancing energy security by furthering both the RFS's and Administration's stated policy objectives of American energy security and dominance respectively. Ensuring that both denatured and undenatured ethanol gallons can generate RINs for RFS compliance is also important to advance this objective, since much of the ethanol the U.S. exports travels to markets that require undenatured gallons due to differing fuel specifications and other considerations.

Such a policy change would greatly increase RINs available for compliance, partially alleviating the adverse impact of excessive RIN costs on the refining sector while simultaneously incentivizing biofuel production pursuant to the RFS. It would also remove a self-imposed non-tariff barrier to ethanol trade. We urge EPA to make such a change in the final 2019 RVO.

PBF also supports measures to directly control the cost of a D6 RIN through the use of a price fixed government RIN, much as is done with the cellulosic waiver credit (CWC). As previously discussed, ethanol blending is economic regardless of RIN price. Market experience over the last few years shows there is

[71] 84 Fed. Reg. at 36,788

[72] Ibid.

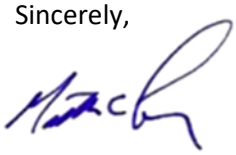
[73] See comments from PBF Holding Company LLC (PBF)(Docket No. EPA-HQ-OAR-2017-0091)

no correlation between ethanol blending and RIN price. Given these realities and to avoid the potential for severe economic harm, the government should generate and sell RINs to obligated parties at a low, fixed price that they could use for D6 compliance if they are unable to obtain RINs cost effectively in the marketplace. Refiners would have the option of obtaining a RIN through blending, buying it off the market, or buying the RIN from the government. The government RIN should be made available at all times with no restriction on the number of credits.

Biofuel advocates have noted that such a proposal will not adversely impact ethanol blending up to E10.[74] Previously referenced available data on E15 shows that mid-level ethanol blends will also grow in a price fixed government RIN environment. Additionally, experience with the CWC indicates such mechanisms control costs without inhibiting biofuel growth. Despite the existence of the CWC, physical D3 RIN generation still occurs and has increased each of the prior three years.[75]

Finally, PBF echoes comments from last year and the AFPM comment letter in support of EPA revising its treatment of the CWC so that it can be used for advanced biofuel and total renewable fuel compliance. There is no basis in the Clean Air Act for preventing CWCs to be used in the nested nature as D3 RINs generated from physical biofuel. The purpose of the credit was to allow a compliance mechanism during times when statutory cellulosic volumes are unavailable, not to serve as a tax that is additive to the advanced biofuel requirement. Allowing CWCs to be used for compliance across all categories will help mitigate the cost of the cellulosic requirement, which is particularly relevant given the fact that the cellulosic RIN market is not competitive.

Sincerely,



Matthew Lucey
President

[74] Irwin, Scott. "The Grand Bargain? Trading an E15 RVP Waiver for a RINs Price Cap." farmdocDAILY blog. February 28, 2018. Available at: https://farmdocdaily.illinois.edu/2018/02/the-grand-bargain-trading-an-e15-rvp-waiver.html

[75] EPA EMTS Data on D3 RIN Generation: https://www.epa.gov/fuels-registration-reporting-and-compliance-help/2015-renewable-fuel-standard-data