

May 15, 2017

The Honorable Scott Pruitt  
Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

**Re:** Comments on Executive Order (EO) 13777, “Enforcing the Regulatory Reform Agenda.” (EPA-HQ-OA-2017-0190; 82 Fed. Reg. 17793).

Dear Administrator Pruitt,

The Renewable Fuels Association (RFA) appreciates the opportunity to provide comments to the U.S. Environmental Protection Agency (EPA) in regard to regulations that are appropriate for repeal, replacement, or modification in accordance with Executive Order (EO) 13777, “Enforcing the Regulatory Reform Agenda.” (EPA-HQ-OA-2017-0190; 82 Fed. Reg. 17793).

RFA is the leading trade association for America’s ethanol industry. Its mission is to advance the development, production, and use of fuel ethanol by strengthening America’s ethanol industry and raising awareness about the benefits of renewable fuels. Founded in 1981, RFA serves as the premier meeting ground for industry leaders and supporters. RFA’s 300-plus members are working to help America become cleaner, safer, more energy secure, and economically vibrant.

Renewable fuels like ethanol decrease our nation’s reliance on imported petroleum, reduce consumer fuel prices, curtail emissions of harmful pollutants, and generate jobs and economic activity. Driven by favorable blending economics and the Renewable Fuel Standard (RFS), ethanol production and use in the United States has grown significantly over the past decade.

In recent years, our industry has invested billions of dollars in capacity expansions that would allow further increases in ethanol production and use. However, a number of burdensome EPA regulations are stifling growth in ethanol production and demand, inhibiting job creation, imposing unnecessary costs on both industry and consumers, and preventing renewable fuels from reaching their full potential. Based upon the criteria outlined in EO 13777, we believe EPA could “alleviate unnecessary regulatory burdens” on both the U.S. ethanol industry and American consumers by taking the following regulatory reform actions.

- Eliminate the EPA-imposed regulatory barrier to E15 and other mid-level ethanol blends. Amend 40 CFR 80.27(d)(2) to establish regulatory parity in the Reid vapor pressure (RVP) volatility limits for *all* fuel blends containing more than 9% ethanol.
- Streamline survey programs intended to monitor and verify fuel quality and regulatory compliance, and consider eliminating costly surveys that offer little or no regulatory benefit.

- Reform the petition process in 40 CFR 1065 for new certification fuels (e.g., high octane mid-level blends like E25 or E30) and eliminate unreasonable criteria for approval.
- Eliminate unnecessarily burdensome and costly requirements related to the registration process for new fuels and additives as required under 40 CFR 79.
- Revise the “R-factor” for fuel economy (CAFE) compliance calculations to better represent modern engines and fuels, as recommended by the Department of Energy and automakers.
- Level the playing field for credit generation for *all* alternative fuel vehicles, including flexible fuel vehicles (FFV), under the 2017-2025 fuel economy and light-duty vehicle greenhouse gas program (CAFE/GHG).
- Include the impact of fuel properties (e.g., octane rating) on fuel economy and emissions in analyses related to the Midterm Evaluation of 2022-2025 CAFE/GHG standards.
- Eliminate the detergency requirement under 40 CFR 80.141 for the gasoline portion of “flex fuels” containing 51-83% ethanol.
- Reject the results of the EPA/V2/E-89 Fuel Effects Study and suspend further use or development of the MOVES2014 model until a new emissions study based on appropriate test fuels is conducted.
- Reduce EPA’s workload and eliminate a costly administrative burden by revising the Agency’s outdated lifecycle greenhouse gas (GHG) analysis of corn ethanol.
- Eliminate unnecessary barriers to cellulosic ethanol production from corn kernel fiber.
- Eliminate the Mandatory GHG Reporting Program under 40 CFR 98, which is a costly and unnecessary administrative burden and is duplicative of other EPA programs in which GHG emissions data are collected and inventoried.

More detail on each of these recommended regulatory reforms is provided in the attached comments. Thank you again for the opportunity to comment on the EO 13777, “Enforcing the Regulatory Reform Agenda,” and the need for modification or elimination of certain EPA regulations. We look forward to working with EPA on initiatives that promote an expanded role for renewable fuels in our nation’s transportation fuel market and remove barriers to increased production and use.

Sincerely,



Bob Dinneen  
President & CEO

**COMMENTS OF THE  
RENEWABLE FUELS ASSOCIATION (RFA)  
IN RESPONSE TO  
U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUEST FOR COMMENT  
REGARDING  
EXECUTIVE ORDER 13777, “ENFORCING THE REGULATORY REFORM AGENDA”**

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In accordance with Executive Order (EO) 13777, “Enforcing the Regulatory Reform Agenda,” the U.S. Environmental Protection Agency (EPA) is seeking input on regulations that “may be appropriate for repeal, replacement, or modification.”<sup>1</sup> Specifically, EPA is soliciting feedback on regulations that “eliminate jobs, or inhibit job creation”; “are outdated, unnecessary, or ineffective”; “impose costs that exceed benefits”; and “create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies.”<sup>2</sup>

RFA believes a number of current EPA regulations meet these criteria. Accordingly, we provide the following comments recommending reform or repeal of specific regulations that significantly affect the U.S. ethanol industry and American consumers.

**1. Eliminate the EPA-imposed regulatory barrier to E15 and other mid-level ethanol blends. Amend 40 CFR 80.27(d)(2) to establish regulatory parity in the Reid vapor pressure (RVP) volatility limits for *all* fuel blends containing more than 9% ethanol.**

EPA’s disparate volatility limits for various ethanol blends during the summer ozone control season continue to serve as the single largest impediment to growth in renewable fuel consumption. The maximum volatility limit for gasoline during the high ozone season was established at 9.0 pounds per square inch (psi) Reid vapor pressure (RVP), with EPA having the authority to set more stringent limits under certain circumstances (e.g., for non-attainment areas). However, in a 1987 rulemaking, EPA allowed blends containing a *minimum* of 10% ethanol to exceed RVP limits by 1.0 psi.<sup>3</sup> In 1989, EPA provided an interim RVP allowance that was 1.0 psi higher “for gasoline-ethanol blends commonly known as gasohol.”<sup>4</sup> EPA explained that “[s]uch blends must contain *at least* 9% ethanol (by volume) and their maximum ethanol content may not exceed any applicable waiver conditions under section 211(f)(4).”<sup>5</sup>

In a later rulemaking, EPA asserted that the 1.0 psi waiver only applies to blends containing “between 9 and 10 per cent ethanol (by volume),” presumably because 10% ethanol blends (E10) was the only fuel at that time to which a waiver had been granted under 211(f)(4).<sup>6</sup> The 1.0 psi RVP waiver effectively raised the maximum RVP limit for E10 to 10.0 psi in “conventional gasoline” areas where more restrictive RVP limits did not apply.

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<sup>1</sup> 82 Fed. Reg. 17793

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

<sup>3</sup> 52 Fed. Reg. 31305

<sup>4</sup> 54 Fed. Reg. 11868, 11879

<sup>5</sup> 52 Fed. Reg. 31274, 31305 (emphasis added)

<sup>6</sup> 56 Fed. Reg. 64704, 64708

According to EPA, the purpose of the original 1.0 psi waiver provision was “to facilitate the participation of ethanol in the transportation fuel industry while also limiting gasoline volatility resulting from ethanol blending.”<sup>7</sup> It was also recognized that “...gasoline and ethanol are mixed after the refining process has been completed. ... [T]o require ethanol to meet a nine pound RVP would require the creation of a production and distribution network for sub-nine pound RVP gasoline. The cost of producing and distributing this type of fuel would be prohibitive to the petroleum industry and would likely result in the termination of the availability of ethanol in the marketplace.”<sup>8</sup> The Agency also concluded, after extensive air quality modeling, that the 1.0 psi waiver would not result in increased ozone formation because reductions in exhaust hydrocarbons and carbon monoxide would offset the impact of potentially higher evaporative emissions.

The same conditions that led EPA to provide the original 1.0 psi interim RVP waiver in 1989 (i.e., the need to facilitate ethanol’s participation in the marketplace, a lack of appropriate sub-RVP gasoline blendstock, and no adverse air quality impact) were again present when the Agency approved E15 blends for use in MY2001 and newer vehicles in 2011. Yet, this time EPA failed to extend the 1.0 psi waiver to E15, meaning the fuel is subject to a 9.0 psi RVP maximum in conventional gasoline markets during the summer ozone control season while the RVP limit for E10 remains at 10.0 psi.

This disparity in RVP limits for E10 and E15 has been a substantial barrier to growth in renewable fuel consumption. EPA’s current RVP provisions are “outdated, unnecessary, or ineffective.” Retailers who have chosen not to offer E15 consistently cite EPA’s unbalanced application of the 1.0 psi waiver as the primary factor in their decision.<sup>9</sup> Meanwhile, the retail gas station owners in conventional gasoline areas who *have* made the investment to offer E15 are faced with a hopeless decision every spring: stop selling E15 during the summer volatility control season, or secure the appropriate low-RVP gasoline blendstock. For most retailers, neither of those options are economically acceptable business decisions. Indeed, some retailers who initially invested in E15 dispensing equipment have subsequently stopped offering the fuel, largely because of the RVP barrier.<sup>10</sup> In letters to former Administrators Lisa Jackson and Gina McCarthy, RFA has repeatedly asked that EPA remove this arcane barrier to renewable fuel expansion and we have proposed several potential solutions to this dilemma.<sup>11</sup> We again call upon EPA to act immediately on one of the pathways described below to resolve this barrier.

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<sup>7</sup> U.S. EPA. June 2011. “Regulation to Mitigate the Misfueling of Vehicles and Engines with Gasoline Containing Greater Than Ten Volume Percent Ethanol and Modification to the Reformulated and Conventional Gasoline Programs, Summary of Public Comments and Supplemental Response to Comments,” at 82.

<sup>8</sup> S. Rep. No. 101-228, at 110 (1989)(Conf. Rep.); reprinted at 5 Leg. Hist. at 8450 (1993).

<sup>9</sup> See, for example, Truitt, Gary. Hoosier Ag Today. “A New Approach to Promoting Ethanol Discussed at Indiana Forum.” May 11, 2017. (“Matt Nichols, with the fuel retailer Thornton’s, told the forum *they will not put E-15 into a station unless they can sell it all year* (emphasis added).” <https://www.hoosieragtoday.com/a-new-approach-to-promoting-ethanol-discussed-at-indiana-forum/>

<sup>10</sup> See, for example, Lawhorn, Chad. *Lawrence Journal-World*. “In sign of times, Lawrence gas station owner pulls back a bit on alternative fuels; reports show summer gas prices likely to be higher.” May 3, 2017. [http://www2.ljworld.com/weblogs/town\\_talk/2017/may/3/in-sign-of-times-lawrence-gas-station-ow/](http://www2.ljworld.com/weblogs/town_talk/2017/may/3/in-sign-of-times-lawrence-gas-station-ow/)

<sup>11</sup> Robert Dinneen, President & CEO, Renewable Fuels Association to the Honorable Lisa Jackson, Administrator, U.S. Environmental Protection Agency. May 14, 2010. Available at: <http://ethanolrfa.org/wp->

**a. Apply the existing 1.0 psi Reid vapor pressure (RVP) volatility waiver for E10 (9-10% ethanol by volume) to all fuel blends containing more than 9% ethanol by volume.**

We believe EPA can and should utilize the same rationale and regulatory authority it used in 1987 to allow blends containing “a minimum of 10% ethanol” to exceed RVP limits by 1.0 psi, which it relied upon again in 1989 to grant the interim 1.0 psi waiver.

Section 211(h)(4) of the Clean Air Act provides EPA with the authority to extend the 1.0 psi waiver to E15 fuels. Although the text of Section 211(h)(4) may be somewhat ambiguous with regard to whether “10 percent” is a maximum or minimum, or a precise numerical requirement, the legislative language, legislative history and Congressional intent all support EPA’s extension of the RVP waiver to E15. Congress, in authorizing the 1.0 psi RVP waiver in Section 211(h)(4), determined that ethanol fuels should have preferential treatment over E0 with regard to evaporative emissions. Furthermore, EPA would be acting arbitrarily and inconsistently if it were to take the position that E10 and E15, which both have comparable evaporative emission profiles (the RVP of E15 is actually slightly lower than the RVP of E10), should be subject to two different RVP standards.

However, in order to fully level the playing field between E10 and E15, EPA must not only amend its regulations at 40 CFR 80.27 but also revise its E15 Partial Waiver issued under the authority of Section 211(f) to clarify that the RVP of E15 is limited to 10.0 psi. Although EPA has previously indicated<sup>12</sup> that it considers the provisions separate, Section 211(h)(4) and 211(f)(4) exist within the same statutory scheme and are mutually reinforcing to the point of almost being circular. The Section 211(f)(4) waiver is explicitly referenced in Section 211(h)(4) and effectively sets the ceiling for the volume of ethanol in a blend eligible for the 1.0 psi RVP waiver. Likewise, the Section 211(h)(4) waiver impacts Section 211(f)(4) by providing implicit Congressional consent for the additional evaporative vehicle emissions that would result from using an ethanol blend of at least 10 percent that has a RVP 1.0 psi higher than otherwise allowed in the certification test fuel.

**b. Alternatively, EPA could promulgate rules requiring a 1.0 psi reduction in the maximum allowable RVP of conventional gasoline blendstock during the summer ozone control season.**

While we continue to believe EPA has the authority to extend the existing 1.0 psi waiver to all blends containing more than 9% ethanol, alternative approaches to resolving this barrier have also been suggested. One such alternative solution proposed by both RFA and the Alliance of Automobile

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[content/uploads/2015/09/RFA-Letter-to-Jackson-re-E15-and-RVP-5-14-10.pdf](http://www.ethanolrfa.org/wp-content/uploads/2015/09/RFA-Letter-to-Jackson-re-E15-and-RVP-5-14-10.pdf); Robert Dinneen, President & CEO, Renewable Fuels Association to the Honorable Lisa Jackson, Administrator, U.S. Environmental Protection Agency. March 27, 2012. Available at: <http://www.ethanolrfa.org/wp-content/uploads/2015/10/RFA-Letter-to-EPA-Administrator-Jackson-on-E15-and-RVP.pdf>; Robert Dinneen, President & CEO, Renewable Fuels Association to the Honorable Gina McCarthy, Administrator, U.S. Environmental Protection Agency. September 5, 2014. Available at: <http://bff.738.myftpupload.com/wp-content/uploads/2015/09/RFA-Letter-to-EPA-on-Fuel-Volatility-Regulations-and-E15.pdf>

<sup>12</sup> 76 Fed. Reg. 4765

Manufacturers, which is cited by EPA in a recent proposed rulemaking<sup>13</sup>, would be to adopt rules that universally reduce the maximum allowable volatility of all conventional gasoline blendstock by 1.0 psi during the summer RVP control season (i.e., limit the volatility of CBOB gasoline blendstock to 8.0 psi).<sup>14</sup> This would effectively render the existing 1.0 psi waiver irrelevant and put all ethanol blends on evening footing.

**2. Streamline survey programs intended to monitor and verify fuel quality and regulatory compliance, and consider eliminating costly surveys that offer little or no regulatory benefit.**

There is currently a significant amount of overlap and inefficiency in EPA’s fuel survey programs, and certain programs (e.g., the “E15 survey” required under 40 CFR 80.1502) have undoubtedly “impose[d] costs that exceed benefits.” For example, a single retail station may be visited multiple times throughout the year by different surveyors seeking information and fuel samples for different EPA fuel survey programs (e.g., E15 survey, RFG survey, ULSD survey, etc.). Each unique site visit and each unique fuel sample adds cost to these programs, with fuel producers and distributors bearing this financial burden. It would be far more cost effective to combine management of the fuel surveys such that the information and samples required by each of the different survey programs can be obtained during a single site visit. The costs associated with a harmonized compliance survey program would be much lower than the costs currently borne by fuel producers, distributors and retailers. In addition, the costs of these survey programs should be divided appropriately amongst fuel market participants based on fuel volumes produced (e.g., it is unreasonable for fuel ethanol producers to bear the majority of the cost for the E15 survey, when the program is primarily collecting compliance information more pertinent to E10 gasoline refiners and blenders).

Further, the survey programs should be revised so that surveyors are soliciting and receiving *only the information needed to verify compliance* with EPA fuel regulations. For example, the overwhelming majority (90%+) of fuel samples collected for the E15 compliance survey are, in fact, samples of E10—not E15. Thus, most of the information acquired via the E15 fuel survey has little or no relevance to verifying compliance with the E15 misfueling mitigation plan.

Moreover, the information required to verify compliance is often readily available in records (e.g., product transfer documents, invoices, etc.) maintained by fuel producers, distributors and retailers. This means physical fuel sampling is often unnecessary and adds needless cost and administrative burden to these survey programs. EPA should use recordkeeping audits to demonstrate compliance in lieu of costly fuel sampling whenever possible.

In summary, we strongly encourage EPA to streamline and harmonize its fuel survey programs, including any new survey requirements that may arise out of the recent EPA “Renewables Enhancement and Growth Support” proposed rule.

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<sup>13</sup> 81 Fed. Reg. 80851

<sup>14</sup> See, Robert Dinneen, President & CEO, Renewable Fuels Association to Christopher Grundler, Director, Office of Transportation and Air Quality, U.S. Environmental Protection Agency. December 8, 2015. Available at: [http://www.ethanolrfa.org/wp-content/uploads/2016/01/Request-for-EPA-Action-to-Reduce-RVP-Cap-of-Summer-Conventional-Gasoline\\_RFA\\_2015-12-08.pdf](http://www.ethanolrfa.org/wp-content/uploads/2016/01/Request-for-EPA-Action-to-Reduce-RVP-Cap-of-Summer-Conventional-Gasoline_RFA_2015-12-08.pdf)

**3. Reform the petition process in 40 CFR 1065 for new certification fuels (e.g., high octane mid-level blends like E25 or E30) and eliminate unreasonable criteria for approval.**

EPA's Tier 3 Motor Vehicle Emission and Fuel Standards included provisions (codified at 40 CFR 1065.701(c)) allowing engine manufacturers to petition the Agency for approval of an alternative certification fuel, including fuels with "higher octane [and] higher ethanol content" than the prescribed test fuel.<sup>15</sup> While we strongly support a petition process for alternative certification fuels, EPA's criteria for approving such petitions are impractical, discourage innovation, and deter engine manufacturers from seeking approval of new certification fuels.

Specifically, EPA stated that petitioners seeking approval of an alternative certification fuel must demonstrate that such a fuel "would be readily available nationwide" and that "vehicles would not operate appropriately on the other available fuels."<sup>16</sup> These unreasonable conditions create a "chicken vs. egg" dilemma that discourages engine manufacturers from pursuing approval of new certification fuels. That is, fuel blenders and retailers will not make a fuel "readily available nationwide" unless a substantial share of automobiles on the road are certified and approved to use the fuel. But automakers cannot certify new automobiles on an alternative certification fuel unless the fuel is "readily available nationwide." This circuitous requirement virtually guarantees that engine manufacturers will be unable to secure approval of alternative certification fuels. EPA should clarify that a fuel need not be "readily available nationwide" as a condition of approval of new certification fuel petitions.

Similarly, the requirement to demonstrate that "vehicles would not operate appropriately on other available fuels" discourages flexibility and innovation, and deters engine makers from pursuing approval of alternative certification fuels. As an example, an engine manufacturer may design a high-compression ratio engine that is optimized and requires high octane fuel (e.g., 98 RON); the automaker may wish to certify the vehicle on a high octane test fuel. In this case, the key variable allowing efficient operation of this engine is the octane rating. However, that octane rating can be achieved commercially using many different gasoline blending components. Since octane rating is the key enabler of efficiency in this engine, the engine could be designed to operate appropriately both on ethanol-free premium gasoline with 98 RON octane and on splash-blended E30 with 98 RON octane. However, the current regulatory requirements to show that the vehicle "would not operate appropriately on other available fuels" would prohibit engine manufacturers from embracing flexible approaches to engine design.

**4. Eliminate unnecessarily burdensome and costly requirements related to the registration process for new fuels and additives as required under 40 CFR 79.**

Current regulations governing the registration of new fuels and fuel additives are unnecessarily complex and costly, and have effectively shielded incumbent motor fuels from competition. While the general requirements for registering a new fuel are prescribed in CAA 211(b) and CAA 211(f), EPA's interpretation of these provisions, and the resultant regulations promulgated by EPA, are overly expansive and burdensome. The cumbersome and costly process to register E15

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<sup>15</sup> 79 Fed. Reg. 23528

<sup>16</sup> *Id.*

(and the unwieldy conditions of EPA's approval of a CAA 211(f) waiver for E15) serves as a poignant example of the superfluous nature of EPA's administration of the fuel registration process.

First, EPA's overly narrow interpretation of what constitutes "substantially similar" under CAA 211(f) effectively prevents new fuels from obtaining registration, and forces producers of those fuels to instead pursue a waiver from CAA 211(f) requirements. EPA's restrictive interpretation that new fuels must have the same "elemental composition" as the gasoline used to determine compliance with emissions standards virtually guarantees that no renewable fuel or new ethanol/gasoline blend will ever be deemed "substantially similar" (incidentally, different gasolines can have distinctly different "elemental composition," yet EPA treats all gasolines as being of homogenous composition).

Thus, manufacturers of these new fuels must pursue a CAA 211(f) waiver to show that the fuel will not "cause or contribute" to the failure of emissions control devices. The process established by EPA to secure such a 211(f) waiver is lengthy, costly, and uncertain. EPA requires extensive exhaust and evaporative emissions testing over the "full useful life" of vehicles and engines, robust materials compatibility testing, and subjective "driveability" testing. These tests can cost tens of millions of dollars to perform.

Once all of the tests are completed, the manufacturer of the new fuel must submit an application with all test results to EPA. Acceptance of the materials by EPA is not guaranteed. However, if the Agency accepts the application, a public docket is established and EPA has up to 270 days to respond to the applicant. Further, EPA may decide that approval of a CAA 211(f) waiver application is conditional upon fuel manufacturers meeting additional requirements as determined by the Agency (e.g., EPA implemented an additional "misfueling mitigation" regulation as part of its CAA 211(f) waiver approval for E15).

In addition to the CAA 211(f) waiver requirements described above, the manufacturer of a new fuel must also conduct "...tests to determine potential public health and environmental effects of the fuel..." as required by CAA 211(b). Again, EPA's interpretation of this statutory requirement is overly expansive and financially exorbitant. EPA requires detailed analysis of exhaust emissions, including speciation of a wide variety of compounds. The Agency also requires animal testing to determine the potential health effects of exposure to the fuel's evaporative emissions. Finally, recently promulgated Tier 3 motor fuel regulations essentially give EPA free rein to determine whether any other additional health effects tests are needed to satisfy the requirements of CAA 211(b).

Taken together, these EPA fuel registration requirements form an arduous barrier and unreasonable standard for approval of new fuels. As a consequence, new renewable fuel blends that provide distinct and well-known environmental and human health benefits are effectively shut out of the market and incumbent fossil fuels are insulated from competition. While EPA's expansive and liberal interpretation of statutory fuel registration requirements may be prudent for entirely new or novel fuel molecules, compounds, or blends about which little is known, it is unnecessary for fuels and blends that have been thoroughly analyzed and are well understood.

Ethanol has been used as a motor fuel component for decades. The existing information and data regarding ethanol's composition, emissions impacts, materials compatibility, effects on "driveability," and health effects is more than sufficient to support EPA decision-making about registration of new gasoline/ethanol blends for use in compatible gasoline engines.

When the effects of gasoline/ethanol blends like E20, E25, and E30 are already well-known, it makes no sense for EPA to interpret the requirements of 211(b) and 211(f) as rigidly and expansively as it has done in the past for new fuels. It is time for EPA to modernize, simplify and streamline its interpretation of statutory fuel registration requirements. Doing so would truly open the market to competition, remove barriers to expanded use of renewable fuels, stimulate job creation, and drive down consumer fuel costs.

**a. EPA should clearly exempt novel fuels used in test/demonstration fleets from the fuel registration requirements under 40 CFR 79 for the duration of the demonstration program.**

Fleet testing is an important phase of fuel and engine research that provides proof of performance under actual operating conditions. Testing new fuels or engines in a controlled demonstration fleet allows developers to scale up new technologies from the laboratory, serving as an important step in the research and development process.

As described above, EPA regulations governing the commercial introduction of a new fuel or engine require extremely onerous and costly testing, registration and certification processes. These requirements have deterred innovation, discouraged the introduction of new fuels and engines, and shielded incumbent fossil fuels from competition.

While we believe the entire fuel and fuel additive registration process should be simplified and streamlined, it is especially unreasonable to require full registration of novel fuels designated for use in a demonstration or test fleet. Because new fuel and/or engine demonstration programs are conducted over relatively short periods of time using a small number of vehicles, EPA should not be concerned by the trivial emissions impacts of test vehicles running on novel fuels.

Existing EPA provisions governing the use of new fuels or engine technologies in controlled demonstration fleets are unclear at best. The Agency should clarify that new or novel fuels used in a demonstration fleet for the purposes of real-world proof of concept are exempt from fuel registration requirements for the period of the demonstration program. Similarly, engines/vehicles used in the demonstration program should be exempt from emissions certification requirements during the pendency of the demonstration. EPA should establish a simple process by which applicants conducting demonstration programs could secure approved exemptions from full fuel and engine testing, registration, and certification requirements.

The lack of clarity surrounding regulation of test/demonstration fleets is serving as an impediment to programs that seek to prove the benefits of new fuels in new engines in a real-world setting. For example, the State of Iowa Energy Plan identifies "Demonstration of High Octane Fuel Vehicles (HOFVs)" as a strategy for achieving an objective to "Increase biofuel production and

usage in Iowa.”<sup>17</sup> The Iowa program seeks to “facilitate the development of a pilot program to demonstrate the real world benefits of HOFVs.” The pilot program would “analyze the benefits of HOFVs in a manner that is controlled, yet reflective of real world driving conditions. The performance of these vehicles could be closely monitored and documented, which would provide valuable proof of concept data and information to auto manufacturers, fuel producers, regulators, and others.”<sup>18</sup> It would be completely unreasonable to require the fuels and engines that would be part of this Iowa program to undergo the full gamut of EPA testing, registration, and certification requirements.

**5. Update the “R-factor” for fuel economy (CAFE) compliance calculations to better represent modern engines and fuels, as recommended by the Department of Energy and numerous automakers.**

EPA incorporates the use of a so-called “R-factor” in fuel economy calculations in order to address concerns about the impacts of test fuel property variations on corporate average fuel economy (CAFE) compliance. The R-factor is defined as the ratio of the percent change in fuel economy to the percent change in volumetric heating value for tests conducted using two differing fuels.

Based on outdated 1980s-era vehicle testing data, EPA requires that automakers use an R-factor of 0.6 in CAFE compliance calculations. However, recent reassessments of the R-factor were conducted to determine the impacts of adjustments to the properties of certification gasoline under EPA’s Tier 3 regulations. Specifically, the new Tier 3 certification fuel contains 10% ethanol by volume, and EPA allows automakers to petition the Agency for approval to use certification fuels with even higher levels of ethanol (e.g. 25% or 30% ethanol by volume). Because ethanol has a lower heating value than gasoline, the inclusion of ethanol in certification fuels is expected to result in a significant deviation from the CAFE baseline test fuel heating value. Thus, the accuracy of the R-factor in predicting fuel economy changes resulting from heating value changes becomes increasingly important. Recent studies by Oak Ridge National Laboratory, Ford Motor Company, and others have found that the R-factor for modern engines and vehicles is very close to 1.0.<sup>19</sup> Based on these findings, many stakeholders encouraged EPA to raise the R-factor to 1.0 during the Tier 3 public notice and comment period. However, the Agency has so far neglected to adjust the R-factor to account for the efficiency of modern engines.

EPA’s continued failure to raise the R-factor serves to discourage automakers from pursuing certification and commercialization of engines designed to operate on higher levels of ethanol. In fact, using the EPA-required R-factor of 0.6 instead of 1.0 would result in a substantial 4.7%

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<sup>17</sup> Iowa Economic Development Authority and the Iowa Department of Transportation. “Iowa Energy Plan.” December 2016, at 60. <http://www.iowaenergyplan.org/docs/IowaEnergyPlan.pdf>

<sup>18</sup> *Id.*

<sup>19</sup> See, Sluder, C., West, B., Butler, A., Mitcham, A. et al., “Determination of the R Factor for Fuel Economy Calculations Using Ethanol-Blended Fuels over Two Test Cycles,” *SAE Int. J. Fuels Lubr.* 7(2):551-562, 2014, doi:10.4271/2014-01-1572; and Sluder, C. Scott and Brian H. West. Oak Ridge National Laboratory. “Preliminary Examination of Ethanol Fuel Effects on EPA’s R-factor for Vehicle Fuel Economy.” June 2013. ORNL/TM-2013/198

certification fuel economy penalty for a vehicle designed for E30 and a 2.4% penalty for using E15.<sup>20</sup> Clearly, penalties of this magnitude are a strong deterrent to automakers interested in designing engines that are optimized to use higher-ethanol blends.

We strongly encourage EPA to revise the R-factor to 1.0, which is justified by the latest scientific literature. Doing so would encourage—rather than deter—innovation in engine design and remove yet another EPA-erected barrier to expanded renewable fuel use.

**6. Level the playing field for credit generation for *all* alternative fuel vehicles, including flexible fuel vehicles (FFV), under the 2017-2025 fuel economy and light-duty vehicle greenhouse gas program (CAFE/GHG).**

The 2017-2025 Light-duty Vehicle GHG Emissions and Corporate Average Fuel Economy Standards (CAFE/GHG) finalized by EPA and NHTSA in 2012 created powerful and lucrative incentives for automakers to increase production of certain alternative fuel vehicles. Specifically, EPA created an “incentive multiplier” for all electric vehicles (EVs), plug-in electric vehicles (PHEVs), fuel cell vehicles (FCVs) and compressed natural gas vehicles (CNGVs) sold in model year 2017-2021.<sup>21</sup> In essence, the incentive multiplier allows these alternative fuel vehicles to count as more than one vehicle in the manufacturer’s GHG compliance calculation (meaning emissions from one vehicle are spread across multiple vehicles, diluting the emissions value per vehicle). In addition, EPA entirely ignored the upstream (well-to-tank “lifecycle”) emissions impacts of electricity production and set the emissions value for EVs at 0 grams of CO<sub>2</sub>/mile.<sup>22</sup> EPA further provided generous “utility factors” to dual-fueled CNGVs and PHEVs, which assume those vehicles will be fueled with the lower-GHG alternative fuel most of the time.

Meanwhile, the provisions of the 2017-2025 CAFE/GHG rules strongly discourage automakers from further production of FFVs. For FFVs, EPA originally proposed requiring automakers to demonstrate actual usage of alternative fuel in the vehicle in order to generate the associated credit toward compliance with GHG standards. Of course, this is impractical and unreasonable, so EPA also finalized an alternative approach whereby the Agency would issue “early guidance” to automakers establishing a standard E85 utility factor (“F factor”) based on national weighted average E85 consumption.<sup>23</sup>

In early 2013, EPA issued a draft of its first “early guidance” document outlining the FFV weighting factor to be used for Model Years 2016-2019. The EPA draft proposed an F factor of 0.2, meaning EPA projected that 20% of a MY 2016-2019 FFV’s lifetime miles would be driven on E85.<sup>24</sup> Several stakeholder groups, including RFA, commented on the draft guidance and

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<sup>20</sup> Woebkenberg, William. Mercedes-Benz Research & Development North America. “Mid-Blend Ethanol Fuels – Implementation Perspectives.” Presentation to Society of Automotive Engineers. July 25, 2013.

<sup>21</sup> 77 Fed. Reg. 62628

<sup>22</sup> 77 Fed. Reg. 62651

<sup>23</sup> 77 Fed. Reg. 62830

<sup>24</sup> 78 Fed. Reg. 17660

demonstrated why a higher F factor in the range of 0.4-0.6 was warranted.<sup>25</sup> In response to these comments, EPA issued final guidance in late 2014 that further reduced the F factor for MY 2016-2018 FFVs to just 0.14.<sup>26</sup> Meanwhile, EPA discontinued in MY2015 the use of a separate incentive—the 0.15 “alternative fuel economy divisor” factor—which in the past strongly encouraged FFV production. Thus, the 2017-2025 standards provide almost no incentive to automakers to build FFVs, while other alternative fuel vehicles receive generous credits and incentives. The impacts of EPA’s discriminatory credit regimen are already being felt in the marketplace—FFV production in MY2015 was down nearly 1 million vehicles, or 34%, from the record output level in MY2014, according to EPA’s own data.<sup>27</sup>

While we agree with EPA that automakers should be encouraged to produce vehicles that “[r]educ[e] petroleum consumption to improve energy security”, “save the U.S. money” and “[r]educe climate change impacts,”<sup>28</sup> we believe incentives to stimulate the production of such vehicles should be constructed fairly and consistently. EPA should restore an equitable utility factor for FFVs in the range of 0.4-0.6 through MY2025.

**7. Include the impact of fuel properties (e.g., octane rating) on fuel economy and emissions in analyses related to the Midterm Evaluation of 2022-2025 CAFE/GHG standards.**

Consensus is building around the need for high-octane fuels to enable greater engine efficiency and reduced emissions. Automotive engineers and executives, government scientists, expert panels, and university researchers have called for a higher minimum octane rating for future fuels. These experts have clearly demonstrated that high-octane fuels would enable high compression ratio engines and other advanced internal combustion (IC) engine technologies, which in turn would improve engine efficiency and reduce emissions.

Liquid fuels and IC engines combine to form highly integrated systems. One component of this system is ineffectual without the other. Thus, any effort to examine the potential impacts of new and emerging advanced IC engine technologies on fuel economy and emissions must also take into account the effects of the fuels being used by the engines. Unfortunately, fuels are little more than an afterthought in the original Midterm Evaluation (MTE) of the 2022-2025 CAFE/GHG standards conducted by EPA and NHTSA. Where fuel-related assumptions were unavoidable, the agencies were unclear, inconsistent, and used information that conflicts with current and future expectations about in-use liquid fuels.

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<sup>25</sup> Comment by Bob Dinneen, President & CEO, Renewable Fuels Association re: Draft Guidance for Industry and Staff: E85 Flexible Fuel Vehicle Weighting Factor for Model Years 2016-2019 Vehicles under Light-duty Greenhouse Gas Emissions Program. April 22, 2013. (EPA-HQ-OAR-2013-0120-0008).

<sup>26</sup> U.S. EPA to Auto Manufacturers. “E85 Flexible Fuel Vehicle Weighting Factor for Model Year 2016-2018 Vehicles.” Nov. 12, 2014.

<sup>27</sup> U.S. EPA. November 2016. “Greenhouse Gas Emission Standards for Light-Duty Vehicles: Manufacturer Performance Report for the 2015 Model Year.” EPA-420-R-16-014

<sup>28</sup> 76 Fed. Reg. 75164-75165

For these reasons, RFA was pleased to see EPA’s decision in March 2017 to reconsider the MTE “final determination” and commitment to revisit the assumptions, data, and analyses that served as the foundation for EPA’s MTE process.<sup>29</sup>

RFA strongly recommends that EPA and NHTSA follow the lead of DOE’s Co-Optima program by treating engines and fuels as a system in any further analysis supporting the MTE process. Specifically, the agencies should give consideration to the liquid fuel properties—such as octane—that can best enable near term, low-cost advances in IC engine technologies.

**8. Eliminate the detergency requirement under 40 CFR 80.141 for the gasoline portion of “flex fuels” containing 51-83% ethanol.**

EPA regulations require the addition of certain detergent additives to all gasoline including “the gasoline component of fuel mixtures of gasoline and alcohol fuels.”<sup>30</sup> However, certain detergents and other additives have demonstrated chemical incompatibilities with the alcohol portion of some marketplace flex fuels (blends containing 51%-83% denatured ethanol and 17-49% gasoline; often called “E85”). Specifically, some additives appear to be insoluble in fuels with a high level of ethanol. Use of incompatible gasoline additives in ethanol flex fuels can cause issues with filtration systems and pumps at retail stations. Moreover, there is no compelling evidence that the detergent additives offer any benefit or are necessary from a quality standpoint in ethanol flex fuels. Thus, we recommend 40 CFR 80.141 be modified to remove the requirement for fuel deposit control additive in gasoline that is being used for ethanol flex fuels containing 51-83% denatured fuel ethanol. Alternatively, EPA could modify the regulations to allow only the use of chemically compatible detergents and additives in the hydrocarbon portion of flex fuels.

**9. Reject the results of the EPA/V2/E-89 Fuel Effects Study and suspend further use or development of the MOVES2014 model until a new emissions study based on appropriate test fuels is conducted.**

According to a number of independent third-party reviews, EPA’s newest vehicle emissions modeling system (MOVES2014) is inadequate and unreliable as a tool for estimating the exhaust emissions of gasoline blends containing more than 10% ethanol. This is important because state air agencies use the MOVES modeling system to demonstrate compliance with Clean Air Act requirements. In its current condition, the model would likely discourage states from pursuing the use of higher ethanol blends as a strategy for reducing mobile source emissions.

The flaws in MOVES2014 with regard to ethanol blends stem from the model’s use of data from the EPA/V2/E-89 Fuel Effects Study. RFA strongly recommends suspending further use or development of the MOVES2014 model until a new emissions study is conducted using test fuels that more accurately represent real-world fuel blends.

In early 2016, a detailed analysis of the MOVES2014 model conducted by scientists from Wyle Laboratories and the Volpe National Transportation Systems Center concluded that, “Overall,

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<sup>29</sup> 82 Fed. Reg. 14671

<sup>30</sup> 40 CFR 80.141(b)(1)

it was found that the predictive emissions results generated by MOVES2014 for mid-level ethanol blends were sometimes inconsistent with other emissions results from the scientific literature for both exhaust emissions and evaporative emissions...results and trends from MOVES2014 for certain pollutants are often contrary to the findings of other studies and reports in the literature.”<sup>31</sup>

Of particular concern is that the MOVES2014 model predicts increased exhaust emissions of nitrogen components and particulate matter as the ethanol content in gasoline increases, even though real-world emissions testing based on mid-level ethanol blends has shown distinctly opposite trends. “The results from other researchers often show ethanol-related emissions trends that are different than the MOVES2014 results obtained for this study...” the study found. “In some cases not only were magnitudes different but different [directional] trends were presented.”<sup>32</sup>

The model’s questionable predictions for certain emissions results from its use of data that misrepresents the actual parameters and composition of mid-level ethanol blends. Specifically, the default ethanol blend data in the MOVES2014 model is based on arcane “match blending” methods intended to “match” specific fuel parameters, rather than “splash blending” methods that are used in the real world. This data comes from the EPA/V2/E-89 Fuel Effects Study. According to Wyle and Volpe experts, “...real-world splash blends may not have the same attributes as the modeled default match blends used in MOVES, and actual emissions may be different than the emissions predictions from MOVES.”<sup>33</sup>

These likely distortions are then multiplied through the use of overly restrictive adjustment factors and equations. The authors write that “...the trends used to determine constants in the model’s equations may need to consider many more variables than are now being considered,” and “the adjustment factor approach may need to be more robust and consider the changes to emissions as a function of all properties, not independently.” In an attempt to simulate the emissions of mid-level ethanol blends created using real-world “splash blending” practices, the Wyle and Volpe scientists performed an analysis where certain fuel parameters were modified. However, the model still produced questionable results that suggested increases in emissions of nitrogen components and PM as ethanol content increases.

To correct the deficiencies with the MOVES2014 model, the Wyle and Volpe scientists recommend obtaining new mid-level ethanol blend emissions data using blends that better represent real-world fuel properties and blending practices. They write that “...additional vehicle exhaust testing from mid-level ethanol blends with well-defined fuel properties is recommended.” RFA agrees with the conclusions and recommendations of the Wyle/Volpe study and encourages EPA to suspend further usage of the MOVES2014 model until a new emissions study is conducted.

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<sup>31</sup> Wayson, R., Kim, B., and Noel, G. January 2016. “Evaluation of Ethanol Fuel Blends in EPA MOVES2014 Model.” Conducted for the Renewable Fuels Association. Available at: <http://ethanolrfa.org/wp-content/uploads/2016/01/RFA-MOVES-Report.pdf>

<sup>32</sup> *Id.*

<sup>33</sup> *Id.*, see also: J.E. Anderson, T.J. Wallington, R.A. Stein, W.M. Studzinski, “Issues with T50 and T90 as Match Criteria for Ethanol-Gasoline Blends,” SAE Int. J. Fuels Lubr. 7(3):2014, doi:10.4271/2014-01-9080, November, 2014.

## **10. Reduce EPA’s workload and eliminate a costly administrative burden by revising the Agency’s outdated lifecycle greenhouse gas (GHG) analysis of corn ethanol.**

In the pre-ambule for the RFS2 final rule, EPA acknowledged that lifecycle GHG analysis is an evolving science, and that updates to the Agency’s analysis would be undertaken as better data and methodologies became available. EPA wrote that it “...recognizes that as the state of scientific knowledge continues to evolve in this area, the lifecycle GHG assessments for a variety of fuel pathways will continue to change.”<sup>34</sup> The Agency further stated that it “...plans to continue to improve upon its [lifecycle] analyses, and will update it in the future as appropriate...”<sup>35</sup> and “...the Agency is also committing to further reassess these determinations and lifecycle estimates.”<sup>36</sup>

Yet, nearly eight years after EPA promised to update its lifecycle analysis as newer data and better methods became available, the Agency has failed to honor its commitment. In a November 2012 letter to former Administrator Lisa Jackson, and in subsequent communications with the Agency, RFA has urged EPA to make good on its commitment to update its lifecycle GHG analysis of corn ethanol.<sup>37</sup> Our 2012 letter included extensive references to newly published studies and newly available data that significantly improved the understanding of corn ethanol’s lifecycle GHG impacts. In the four years since we sent our letter, the state of science and the data available have continued to improve.

A recent analysis conducted by ICF International for the U.S. Department of Agriculture found that today’s average 2014-era corn ethanol reduced lifecycle GHG emissions by 43% compared to EPA’s 2005 petroleum baseline.<sup>38</sup> In contrast, EPA’s analysis suggests average corn ethanol will reduce lifecycle GHG emissions by only 21% relative to the 2005 baseline, but asserts that such reductions won’t be achieved *until 2022*. Notably, the ICF analysis takes the same general approach to estimating corn ethanol emissions that was taken by EPA for the RFS2 analysis. However, the use of more current and more robust data dramatically changes the outcome.

RFA again calls upon EPA to update its outdated analysis of corn ethanol lifecycle GHG emissions. An updated analysis by EPA is necessary to help inform regulatory decision-making and public policy debates about the climate benefits of the RFS and renewable fuels in general.

Moreover, updating EPA’s lifecycle GHG analysis of corn ethanol would significantly reduce the EPA staff workload related to the processing of unnecessary petitions from ethanol producers for new RIN generation “pathways” under the RFS2. Currently, ethanol producers who wish to expand production capacity or build new facilities must submit a detailed petition to EPA demonstrating that the renewable fuel produced by their new or expanded capacity will reduce GHG emissions by 20% or more *today* compared to the 2005 petroleum baseline. These petitions are costly

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<sup>34</sup> 75 Fed. Reg. 14765

<sup>35</sup> 75 Fed. Reg. 14677

<sup>36</sup> *Id.*

<sup>37</sup> Robert Dinneen, President & CEO, Renewable Fuels Association to the Honorable Lisa P. Jackson, Administrator, U.S. Environmental Protection Agency. November 30, 2012. Available at: <http://ethanolrfa.org/wp-content/uploads/2015/09/EPA-Letter-Nov2012.pdf>

<sup>38</sup> Flugge, M., J. Lewandrowski, J. Rosenfeld, C. Boland, T. Hendrickson, K. Jaglo, S. Kolansky, K. Moffroid, M. Riley-Gilbert, and D. Pape, 2017. A Life-Cycle Analysis of the Greenhouse Gas Emissions of Corn-Based Ethanol. Report prepared by ICF under USDA Contract No. AG-3142-D-16-0243. January 30, 2017.

to prepare and administratively burdensome for both the petitioner (i.e., ethanol producer) and EPA staff. To date, 79 corn ethanol plants (nearly 40% of the industry) have spent the time and money to prepare a petition simply to prove a fact (i.e., that today's corn-based ethanol reduces lifecycle GHG emissions by far more than 20%) that is already broadly acknowledged by the scientific community and other federal and state agencies. We estimate that the ethanol industry has collectively expended approximately \$5 million to prepare and submit these pathway petitions to EPA; meanwhile, EPA staff has spent countless hours processing these petitions. Further, ethanol producers have forgone revenues from expanded production as they await approval of the petitions they submitted to EPA; in some cases, these approvals have taken 18 to 24 months.

This substantial drain on both industry resources and EPA resources could be easily alleviated simply by revising EPA's 2010 lifecycle GHG analysis of corn ethanol and confirming that corn ethanol produced at dry mills currently reduces GHG emissions by more than 20%.<sup>39</sup>

#### **11. Eliminate unnecessary regulatory barriers to cellulosic ethanol production from corn kernel fiber.**

In recent years, a number of corn starch ethanol facilities have invested in new technologies and processes that allow them to also produce small volumes of higher-value cellulosic biofuel from the cellulosic constituents of the corn kernel. We estimate that more than 95% of the cellulosic ethanol RINs generated under the RFS2 to date have come from these "bolt-on" technologies.

If broadly adopted across the entire existing corn ethanol industry, these technologies have the potential to generate more than 1 billion gallons of cellulosic ethanol. However, several regulatory barriers are slowing or discouraging the wider adoption of "bolt-on" cellulosic ethanol technologies by the existing corn ethanol industry. Two key barriers, described below, can be easily rectified with administrative action by EPA.

##### **a. EPA should adjust its current approach to administering the Cellulosic Waiver Credit (CWC) program.**

EPA is required by Clean Air Act section 211(o)(7)(D)(ii) to issue cellulosic waiver credits (CWCs) whenever it acts to waive any part of the RFS2 cellulosic biofuel volumetric standard pursuant to its authorities and obligations under section 211(o)(7)(D)(i). The purpose of the CWC is to allow obligated parties a means of complying with their cellulosic biofuel blending requirements even in the event that the actual physical availability of cellulosic biofuels is lower than the standard finalized by EPA.

One of the key questions raised by stakeholders in recent years is how much authority EPA has to control the number of CWCs issued in any given year. While section 211(o)(7)(D)(iii) clearly specifies that the number of CWCs made available may not exceed the applicable volume of cellulosic biofuel (i.e., the cellulosic biofuel RVO for that calendar year), it clearly *does not* establish

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<sup>39</sup> While recent studies confirm that ethanol from *dry mills using natural gas* as a power source (the technology configuration used by ~90% of the industry today) reduce lifecycle GHG emissions by far more than 20% compared to petroleum, EPA may wish to continue requiring site-specific lifecycle GHG analyses and petitions from *coal-fired* wet mills and dry mills to demonstrate compliance with the 20% GHG reduction requirement for non-grandfathered capacity.

a minimum number of CWCs that must be made available by EPA. Congressional intent would suggest that EPA should only issue an amount of CWCs that would be equal to the difference between the final cellulosic biofuel standard and the amount of physical cellulosic biofuels and cellulosic RINs available to comply with the standard. In other words, the CWC was intended to narrowly serve as a means of offsetting any shortfall in the availability of cellulosic biofuels and RINs to meet annual standards.

Unfortunately, EPA has decided to issue an amount of CWCs that is “equal to” the cellulosic biofuel RVO for that year.<sup>40</sup> Thus, EPA’s administration of the CWC program allows obligated parties to secure CWCs in lieu of securing available physical cellulosic biofuel gallons and/or RINs. This has resulted in the devaluation of physical cellulosic biofuel gallons and RINs, because obligated parties are not truly required to secure them and can instead comply with the cellulosic biofuel requirements by securing CWCs from EPA.

RFA and other stakeholders<sup>41</sup> have repeatedly raised this concern with EPA and proposed a simple solution: EPA should only issue an amount of CWCs annually that coincides with any shortfall in the availability of physical gallons of cellulosic biofuels and RINs to meet the final standards. For example, if the combination of actual production of cellulosic biofuel and available RINs exceeds the final cellulosic biofuel RVO in a given year, EPA should not issue any CWCs at all. Ensuring that the maximum volume of CWCs issued corresponds with the shortfall in physical gallons or RINs needed to meet the RVO would sharpen the incentive for obligated parties to secure offtake of actual cellulosic biofuel gallons, which is inarguably the purpose of the statute.

**b. EPA should allow ethanol producers to use approved Efficient Producer Pathways to generate D6 RINs while simultaneously generating D3 RINs for cellulosic ethanol made from corn kernel fiber.**

As discussed above, about 40% of existing corn ethanol plants have applied for, and received EPA approval of, D6 RIN generation pathways for new or expanded ethanol production capacity (i.e., above “grandfathered” limits). Many of these facilities have utilized EPA’s “Efficient Producer Pathway” petition process, which was intended to reduce the administrative burden and reduce the wait time associated with applying for a new pathway.

RFA was recently made aware that several ethanol plants considering adoption of corn kernel fiber cellulosic ethanol technologies have been advised by EPA that they would not be able to use their approved Efficient Producer Pathway to generate D6 RINs while concurrently generating D3 RINs for cellulosic ethanol. This preclusion apparently stems from EPA’s belief that current lifecycle GHG accounting methods and verification practices are unable to appropriately allocate energy use and emissions to both ethanol streams (i.e., corn starch and corn kernel fiber).

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<sup>40</sup> See CFR §80.1456, accessed at 75 FR 14892. U.S. EPA states that “[t]he total cellulosic biofuel waiver credits available will be equal to the reduced cellulosic biofuel volume established by EPA for the compliance year.”

<sup>41</sup> See memorandum from RFA and Advanced Biofuels Business Council. “Issuance of Cellulosic Biofuel Waiver Credits as part of the RFS.” Jan. 7, 2015. Submitted to Christopher Grundler, Director of EPA Office of Transportation and Air Quality, Jan. 16, 2015.

This decision by EPA is discouraging innovation in the biofuels industry and deterring ethanol producers from investing in “bolt-on” technologies to expand cellulosic ethanol production. We strongly encourage EPA to rectify this situation as soon as possible so that ethanol plants can simultaneously generate D3 RINs for cellulosic ethanol and utilize Efficient Producer Pathways to generate D6 RINs. As stated above, the simplest way to remedy this situation would be to revise EPA’s lifecycle GHG analysis of corn ethanol, which would make Efficient Producer Pathways no longer necessary or relevant since an updated analysis would surely show all dry mill corn ethanol reduces GHG emissions by far more than 20%.

**12. Eliminate the Mandatory GHG Reporting Program under 40 CFR 98, which is a costly and unnecessary administrative burden and is duplicative of other EPA programs in which GHG emissions data are collected and inventoried.**

Many ethanol facilities are subject to the requirements of the Mandatory Greenhouse Gas Reporting Program. This annual reporting requirement is a costly and resource-intensive burden for both EPA and ethanol plants, many of which are small businesses with limited staff. The cost of this program clearly outweighs the benefit, as the regulatory purpose and practical utility of this data remain unclear. Further, much of the data reported under the program is already available to EPA through other channels, such as Title V and Prevention of Significant Deterioration (PSD) permitting programs and the U.S. Greenhouse Gas Inventory Report.

We believe EPA should suspend or eliminate the GHG Reporting Program, or at a minimum, significantly increase the threshold level of GHG emissions that trigger a reporting requirement.