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Administrator Lisa Jackson
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 1101A
Washington, DC 20460

Subject: Comments on EPA's notice on RFS waiver petitions
Docket EPA-HQ-OAR-2012-0632

Dear Administrator Jackson:

AFPM, the American Fuel and Petrochemical Manufacturers (formerly known as the National Petrochemical and Refiners Association), is pleased to provide comments on Renewable Fuel Standard (RFS) waiver petitions. AFPM represents high-tech American manufacturers - fueling and building America's future. AFPM members produce virtually all refined petroleum products and petrochemicals manufactured in the United States, serving the American people responsibly and effectively. These manufacturers provide jobs, directly and indirectly, to 2 million Americans, economic and national security, and thousands of vital products to families and businesses throughout the United States.

AFPM appreciates the opportunity to submit suggestions on this subject. AFPM members have been RFS obligated parties since implementation of RFS1 in September 2007. We support the prudent development and use of biofuels to diversify our nation's transportation and nonroad fuels portfolio.

AFPM is sympathetic to the RFS waiver requests submitted and supported by several governors. However, the RFS is flawed and a waiver, especially one of limited duration, would not necessarily reduce ethanol use in the fuel supply nor solve the systemic problems caused by the RFS mandates.

If the Agency decides to grant a waiver for 2013, EPA should take this action as part of the final rule for the RFS RVOs in 2013 and also express its intent with regard to extending the waiver to future years. EPA should not establish a compliance period less than a calendar year as this will create market uncertainty.



High biomass-based diesel RIN prices indicate a market problem. If EPA grants a waiver of the biomass-based diesel RVO, then it should also reduce the advanced biofuel and total renewable fuel RVOs by at least the same amount.

EPA should remove the 20 percent limitation on the use of prior year's RINs to meet the current year's RVOs.

The effects of a waiver on the demand for biofuels will not be immediate. That is, a short-term waiver is likely to have little impact on biofuel demand because the petroleum industry needs time to plan and implement the transition.

Should EPA decide to grant the Governors' RFS waiver request, then the Agency should also reduce the advanced biofuel and total renewable fuel RVOs by at least the same amount.

Specific comments are available in the attachment.

Sincerely,

Charles T. Drevna
President

Attachment

cc: Docket EPA-HQ-OAR-2012-0632
Chris Grundler
Dallas Burkholder

**COMMENTS OF THE
AMERICAN FUEL & PETROCHEMICAL MANUFACTURERS
ON THE WAIVER PETITIONS OF THE
RENEWABLE FUEL STANDARD
RENEWABLE VOLUME OBLIGATIONS**

Docket ID No. EPA-HQ-OAR-2012-0632

77 FR 52715 (8/30/12)¹

A. INTRODUCTION

Our nation's domestic petroleum refiners are committed to manufacturing safe, reliable and clean transportation fuels. We take the confidence Americans place in our products – demonstrated by the millions of times each day that consumers purchase gasoline and diesel fuel – very seriously.

AFPM supports the sensible and workable integration of alternative fuels into the marketplace based on free market principles that reflect the true costs of each fuel and allow consumers to choose the fuels that best fulfill their needs. The foundation for an efficient economy is an open, competitive marketplace that allocates limited resources and capital to create maximum market value with minimal government regulatory oversight. AFPM opposes the mandated use of alternative fuels. Energy policy based on mandates ultimately disadvantages consumers. There is no free market if every gallon of biofuels – including those that do not exist – is mandated. Mandates distort markets and result in stifled competition and innovation. AFPM supports regulations based on sound science and free market principles, which create a stable environment for businesses to supply transportation fuels with the greatest societal benefits. Such regulations help avoid adverse unintended consequences and the need for waivers or other interventions.

There are numerous problems associated with the ill-crafted federal Renewable Fuel Standard (RFS). The existing program contains an extremely aggressive schedule for introducing a large amount of biofuels into the marketplace. Such an implementation schedule raises questions about feasibility and future viability of the program. If the existing RFS program is carried out without changes, it will create significant market and economic uncertainty.

The RFS faces several hurdles. AFPM highlights these hurdles to provide context for the pending Agency's decision on the RFS waiver requests. Some of the issues that EPA must consider in analyzing these waiver requests and the RFS program include:

- Blendwall,

¹ Extension of the comment period was published at *77 Federal Register* 57565 (9/18/12).

- Biomass-based diesel RIN prices, and
- Impacts on the domestic petroleum industry.

These comments document the flaws in the RFS. AFPM is sympathetic to the RFS waiver requests submitted and supported by several governors. However, it is important for the Agency to realize that a waiver would not solve the systemic problems caused by the RFS mandates. A waiver will not address the economic harm that will result from the RFS as the program continues to move forward.

In addition, a short-term waiver will not substantially reduce ethanol use. The gasoline distribution system is currently calibrated for using 10 percent ethanol and, thus, refiners make a petroleum base fuel mixture (RBOB or CBOB) that is formulated to be blended with 10 percent ethanol. Refiners could adjust the BOBs they produce to accommodate lower ethanol blends, but such changes will take time to plan and implement. Given this reality, if EPA decides to grant a waiver, the Agency should express its intent to issue not only an initial waiver, but also subsequent extensions covering future time periods, as ethanol shortages in the current year will have ramifications in future years.

Additionally, the Agency should eliminate the 20 percent RIN carryover limitation. The depressed corn crop this year will impact ethanol supplies next year. In order to ensure refiners have the ability to comply with the mandate, EPA should waive the 20 percent limit on the use of RINs in the next annual compliance period to provide needed flexibility and relieve market pressure to blend ethanol.

B. THE BLENDWALL WILL CONSTRAIN THE USE OF ETHANOL.

Given the existing fleet of motor vehicles, the U.S. faces a practical limit on the amount of ethanol that can be pushed into the fuel supply without causing significant consumer harm. This so-called “blendwall” will be reached when nearly all of the gasoline in the country contains 10 percent ethanol.

EPA permits up to 10 percent by volume ethanol in U.S. gasoline for use in all vehicles. The volumes of biofuels mandated in EISA are so large that even blending all gasoline with 10 volume percent ethanol will be an insufficient compliance strategy. For example, in the September 2012 Short-Term Energy Outlook, EIA projects that gasoline demand in 2013 will be 8.77 million barrels per day, or 133.8 billion gallons per year (bgy).² Ten percent of this amount is 13.38 bgy. By comparison, the implicit corn ethanol requirement in 2013 is 13.8 bgy (16.55 bgy for the total RFS less 2.75 bgy for the Advanced Biofuel requirement).³ Add more gallons of ethanol to meet the Advanced Biofuel (which can include sugarcane ethanol) and the

² Table 4a. Released on 9/11/12. Available at <http://www.eia.gov/forecasts/steo/tables/pdf/4atab.pdf>

³ The statutory implicit corn ethanol mandate increases to 14.4 billion gallons in 2014 and 15.0 billion gallons in 2015. When Congress passed EISA in 2007, the demand for gasoline was 142 billion gallons and growing.

Cellulosic Biofuel (which can include cellulosic ethanol) requirements and it is feasible that the blendwall will be a significant compliance constraint.

The Energy Policy Research Foundation (EPRINC) study of the RFS in 2011 highlighted the gasoline blendwall concerns:

The second problem [with the implementation of the RFS] is the volumetric mandate on the use of ethanol in the U.S. gasoline pool which will soon cross the threshold of 10% by volume. The RFS requires the placement of greater volumes of ethanol into the gasoline pool every year. When the RFS program was implemented in EISA (Energy Independence and Security Act) 2007 it was believed that corn ethanol would be cheaper than gasoline and that U.S. gasoline consumption would continually rise, therefore avoiding a blendwall problem. However, neither assumption has proven correct. The transportation fuels sector is now left with a program that mandates the blending of a fuel regardless of cost, demand, infrastructure, or value.⁴

E85 is not a solution.

E85 is a mixture of 85 percent ethanol and 15 percent gasoline and can only be used in Flexible Fuel Vehicles (“FFVs”) – cars capable of running on either gasoline or high percentage ethanol blends, such as E85. There are a relatively small number of these vehicles on the road and this percentage is projected to increase only slowly in coming years per EIA’s AEO2012. Consumers have been slow to accept E85 and it does not appear to be a viable RFS compliance option. In addition, FFV owners tend to fill up with gasoline more than E85, because when adjusted for the energy content of the fuel, E85 ends up being significantly more expensive than regular gasoline. Unfortunately, attempts by government to entice increased purchases of E85 by selectively lowering the street price of E85 via additional subsidies or mandates will also introduce the likelihood of improper fuel purchases by cost-conscious consumers that do not have FFVs and do not fully understand the ramifications of misfueling. This situation would cause an increase in fuel-related failures in incompatible motor vehicles and/or small engine equipment that are not designed for E85, since there are currently no physical means in the fuel distribution system to prevent consumers from using E85 fuel in non-compliant engines.

EPA knows that E85 usage is very small (EIA’s AEO2012⁵ estimates that E85 consists of approximately 0.1% of total gasoline demand in 2012.). EPA has also identified several key problems with this fuel:⁶ (1) The current fuel distribution infrastructure cannot handle E85 and a significant investment in E85 facilities would be required; (2) no complete E85 dispenser system has been certified by UL; (3) fuel retailers are not likely to invest in E85 dispensers and tanks unless they are confident that E85 sales will be sufficient to recover their large investment

⁴ Energy Policy Research Foundation, Inc., “Implementation Issues for the Renewable Fuel Standard - Part I,” April 28, 2011, page 3.

⁵ Annual Energy Outlook available at <http://www.eia.gov/analysis/projection-data.cfm#annualproj>

⁶ 75 *Federal Register* 14759 (5/26/10).

expense; and (4) given the lower energy content of E85, it may not be possible to price E85 at a level acceptable to consumers that recoups the investment in refueling infrastructure.

There is no expectation that E85 sales will substantially contribute to meeting the renewable mandates of EISA as long as the poor purchasing economics continue for the consumer. A gallon of ethanol has approximately 2/3 of the energy density of a gallon of gasoline. According to the Department of Energy’s Office of Energy Efficiency and Renewable Energy, FFVs get “about 20-30% fewer miles per gallon when fueled with E85.”⁷

A related issue understood by EPA is E85 refueling rates. The Agency estimates that the current E85 refueling frequency rate is only 4% for FFVs with reasonable access to E85. EPA projects that this will need to increase to 58 percent.⁸ Likely due to the fuel economy penalty, these low refueling rates highlight consumer reluctance to use E85 as a fuel even when it is an option. Therefore, increased use of E85 is, at best, an uncertain RFS compliance strategy rather than sound energy policy.

Significant investment requirements would be imposed on retail stations to offer E85 to a reluctant public. EIA has noted: “estimates for replacing one gasoline dispenser and retrofitting existing equipment to carry E85 at an existing fueling station range from \$22,000 to \$80,000 (2005 dollars), depending on the scale of the retrofit. By these estimates, the total investment cost for installation of biofuel pumps would range from \$0.8 billion to \$3 billion.”⁹

CARB published a cost estimate: “The necessary E85 infrastructure at an existing gasoline dispensing facility or service station includes a 10,000 gallon tank, one dispenser with two nozzles, and other piping. The estimated costs in Table VIII-5 are based on a recent E85 installation at an existing service station.”¹⁰

Cost of Installing E85 Dispensing Infrastructure
per Existing Service Station (2007 dollars)

<u>Equipment & Parts</u>	<u>Installation</u>	<u>Permits</u>	<u>Soil Disposal & Testing</u>	<u>Total</u>
\$72,000	\$87,000	\$5,000	\$8,000	\$172,000

CARB’s estimate of \$172,000 per existing service station and EPA’s projections of 900-1,820 new E85 retail facilities per year result in a large annual investment, \$155 - \$313 million. Over 10 years, this adds up to \$1.55 - \$3.13 billion (very similar to EIA’s projection of \$0.8 -

⁷ U.S. Department of Energy (Office of Energy Efficiency and Renewable Energy) and U.S. EPA, <http://www.fueleconomy.gov/feg/flextech.shtml>

⁸ 75 *Federal Register* 14762 (5/26/10).

⁹ U.S. Energy Information Administration, “Energy and Economic Impacts of Implementing Both a 25-Percent Renewable Portfolio Standard and a 25-percent Renewable Fuels Standard by 2025,” August, 2007, p. 6.

¹⁰ “Proposed Regulation to Implement the Low Carbon Fuel Standard, Volume I, Staff Report: Initial Statement of Reasons,” March 5, 2009, p. VIII-14. *See* http://www.arb.ca.gov/fuels/lcfs/030409lcfs_isor_vol1.pdf

\$3.0 billion). This is a significant hurdle and may be daunting if the payback is uncertain, especially since the average pre-tax profit of a retail station in 2006 was less than \$34,000.¹¹

Marketing stakeholders have similar concerns on the economic challenges facing retail deployment of E85. A member of the National Association of Convenience Stores and the Society of Independent Gasoline Marketers of America testified on June 7, 2007 before the Subcommittee on Energy and Air Quality of the House Committee on Energy and Commerce:

The primary impediment to retailers converting a dispenser to E85 is equipment compatibility. Because E85 is more corrosive than regular gasoline or E10, it requires equipment that is certified compatible with the fuel. In preparation for this hearing, I inquired of my equipment supplier to determine what would be required to convert one of my newer stations to sell E85. These stations have the newest equipment and, therefore, hold the best chance for existing equipment compatibility. I learned that my new steel tanks and my fiberglass tanks were certified compatible with E85. Our automatic tank gauges were listed compatible as were our fiberglass piping systems. However, we would have to replace several of the ancillary fittings, including the submersible turbine pump, the overfill drop tube and others like flexible hoses, spill buckets, ball valves, etc. In addition, our hanging hardware, which includes conventional nozzles, swivels, breakaways and curb hoses would have to be replaced with nickel plated units at an increased cost. For all of these conversions, including tank cleaning, we estimated the cost to be between \$6,000 and \$7,000. However, this does not include the dispenser itself. The two dispenser manufacturers each charge an additional fee for a new E85 compatible dispenser -- \$8,000 for Dresser-Wayne and \$7,300 for Gilbarco. Thus, a typical E85 dispenser can cost upwards of \$17,000 per unit. And this cost is for equipment that has not yet been certified compatible with E85 by Underwriters Laboratories.... We have spoken with several retailers who lament their decision to install E85 equipment because they have been unable to generate sufficient sales from these fueling positions to support their overall business model.

The limited number of FFVs will become even more of a problem as significantly larger volumes of renewable fuels are to be forced into the market due to EISA mandates. There are 10 million FFVs on American roads¹² – a small fraction of the 240 million plus vehicles Americans are driving today. Some U.S. automakers produce new FFVs, but only for a portion of new car sales. Other automakers do not make FFVs. However, the automakers statements indicate that in addition to existing legacy vehicles (*i.e.*, cars that have been purchased up to this point in time

¹¹ Written testimony by the National Association of Convenience Stores and the Society of Independent Gasoline Marketers of America on June 7, 2007 before the Subcommittee on Energy and Air Quality of the House Committee on Energy and Commerce

¹² “2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards: EPA Response to Comments,” EPA-420-R-12-017, August 2012, pp. 6-134 and 6-135.

that run only on gasoline and won't be retired for several years), there will be a significant portion of newer vehicles entering the fleet that may be unable to operate on E85. The production of FFVs was incentivized with CAFE credits. However, some automakers do not produce FFVs and do not need these CAFE credits. Congress decided to phase-out FFV credits for compliance with CAFE standards in section 109 of EISA.¹³

To date, the drivers of flexible fuel vehicles have overwhelmingly refueled with gasoline and rarely chosen E85. The fuel for a FFV is a consumer choice. Even a future requirement mandating the production of more FFVs will not necessarily result in a large increase in sales of E85 because drivers of FFVs have the option to select gasoline.

EPA shares this perspective:

Similarly, EPA believes it is not appropriate to assume that ethanol FFVs will primarily use E85, as there is no extra vehicle cost to purchase an FFV (typically a consumer does not choose between an FFV and a non-FFV of the same vehicle model), E85 fuel is no cheaper and in fact usually more expensive per mile, and use of E85 reduces overall vehicle range since there is only one fuel tank (as opposed to PHEVs and dual fuel CNG vehicles which have two fuel storage devices and therefore the use of the alternative fuel raises overall vehicle range). Further, even with approximately 10 million ethanol FFVs in the US car and light truck fleet, fuel use data demonstrate that ethanol FFVs only use E85 less than one percent of the time.¹⁴

E15 is not a solution.

In November 2010, EPA published a decision for approval of a partial waiver, with conditions, that would allow gasoline containing 15 percent ethanol (E15) to be sold into the marketplace for use in vehicles that are model year (MY) 2007 and later (expanded a few months later to include MY 2001-2006 gasoline vehicles).¹⁵ This decision will create significant problems in the marketplace.

EPA's partial waivers and the fact that a large percentage of the existing fleet and all small engines cannot run on E15 introduce the possibility of consumer misfueling. This concern stems from several studies which show that gasoline blends containing more than 10 percent ethanol could lead to engine damage in older vehicles and non-road engines, such as chainsaws, lawnmowers, boats and snowmobiles. Incongruously, increased ethanol blends damage older cars' catalytic converters, installed to reduce emissions. Engine and catalytic control damage

¹³ *Id.* at 6-134 and 6-135. In addition, EPA decided not to include incentive multipliers for FFVs in this recent LDV rule.

¹⁴ *Id.* at 6-134.

¹⁵ 75 *Federal Register* 68094 (11/4/10). This was expanded by EPA in another partial waiver to include MY 2001-2006 gasoline vehicles (76 *Federal Register* 4662; 1/26/11). The use of E15 in older vehicles and all small engines remains prohibited by EPA. Therefore, this approval is "partial" because of this remaining prohibition.

could result in increased exhaust emissions. As ethanol content in fuel increases, it burns hotter. Furthermore, ethanol is corrosive, and as such increases the possibility for potential physical damage to tanks and fuel dispensing equipment, and negative impact on the environment.

In 2011, Rep. Sensenbrenner wrote to auto manufacturers and asked: Will E15 damage engines of model year 2001 and later? Will your warranties cover damage from E15? Will E15 negatively affect fuel economy? He received many replies.¹⁶ It is clear from these responses that automakers believe that E15 could damage engines and emissions control systems, void warranties, and reduce fuel efficiency, even in vehicles EPA has approved for use with the fuel.

Consumer safety is a paramount concern. Consumers should not be put at risk because of equipment malfunctions due to an incompatible fuel. Sufficient testing to assess the impact of fuel blends containing more than 10 percent ethanol on a wide range of automobiles – both old and new – as well as non-road engines has not been completed and testing to date has shown that these ethanol blends are problematic. A 2012 Coordinating Research Council durability study documented emissions failures on emissions for two popular MY 2001-2009 LDVs when operated on E15 as shown in the table below extracted from the CRC reference.¹⁷ We are surprised that EPA has not evaluated this study and determined whether this new information is material to the agency’s prior partial waiver decisions.

Description (All Duplicates)	E20	E15	E0
Vehicle 1	Passed	Not Req'd	Not Req'd
Vehicle 2	Failed	Failed	Passed
Vehicle 3	Failed	Failed	Passed
Vehicle 4	Waived*	Not Req'd	Not Req'd
Vehicle 5	Waived*	Not Req'd	Not Req'd
Vehicle 6	Waived*	Not Req'd	Not Req'd
Vehicle 7	Passed	Not Req'd	Not Req'd
Vehicle 8	Failed	Failed	Failed**

Industries ranging from outdoor power equipment manufacturers, to automakers to food producers have all expressed concern over the E15 partial waivers. EPA chose not to wait for data from the ongoing Coordinating Research Council E10+ testing program¹⁸ and made a premature decision to approve the fuel. EPA and DOE were aware of this on-going research and received many in-person updates.¹⁹ EPA could have decided to deny (or delay) the request from the ethanol industry to approve E15 until an adequate amount of scientific data are collected and analyzed, but chose to approve E15 partially and conditionally.

¹⁶ To view letters from companies and Rep. Sensenbrenner’s letter to EPA: http://sensenbrenner.house.gov/UploadedFiles/E15_Auto_Responses.pdf

¹⁷ “Intermediate-level Ethanol Blends Engine Durability Study,” April 2012, CRC Project CM-136-09-1B.

¹⁸ <http://www.crao.org/news/Mid%20Level%20Ethanol%20program/index.html>

¹⁹ Including meetings on 6/3/09, 9/16/09, 2/2/10, and 5/5/10.

Gasoline retailers have significant compatibility problems with E15. As highlighted in testimony by the National Association of Convenience Stores before the Subcommittee on Energy and Power of the House Committee on Energy and Commerce on May 5, 2011:

If I use non-listed equipment, I am in violation of OSHA regulations and may be violating my tank insurance policies, state tank fund program requirements, bank loan covenants, and potentially other local regulations. Furthermore, if my store has a petroleum release from that equipment, I could be sued on the grounds of negligence for using non-listed equipment, which would cost me significantly more than the expense of cleaning up the spill.

So, if none of my dispensers are UL-listed for E15, what are my options?

Unfortunately, UL will not re-certify any equipment. Only those units manufactured after UL certification is issued are so certified – all previously manufactured devices, even if they are the same model, are subject only to the UL listing available at the time of manufacture. This means that no retail dispensers, except those produced after UL issued a listing last spring, are legally approved for E10+ fuels.

In other words, the only legal option for me to sell E15 is to replace my dispensers with the specific models listed by UL. On average, a retail motor fuel dispenser costs approximately \$20,000.

EPA is also concerned about compatibility. Recently, the Agency issued the following:

... final guidance on how owners and operators of underground storage tanks (USTs) can demonstrate compliance with the federal compatibility requirement for UST systems storing gasoline containing greater than 10 percent ethanol or diesel containing greater than 20 percent biodiesel. Because it is common for tank owners to use their tanks for 30 years or more, most UST systems currently in use are likely to contain components not designed to store ethanol blends greater than 10 percent.... Please note that this action under the CAA [partial E15 waivers] has no legal bearing on the requirement for tank owners to comply with all applicable UST regulations, including the UST compatibility requirement in 40 CFR 280.32. Under the existing federal UST regulation, tank owners must meet the compatibility requirement for UST systems to ensure safe storage of any regulated substance, including higher ethanol and biodiesel blends.... If tank owners cannot demonstrate compatibility, they would not be able to store ethanol blends greater than 10 percent or biodiesel blends greater than 20 percent in the UST system.... To be in compliance with 40 CFR 280.32, owners and operators of UST systems storing ethanol-blended fuels

greater than 10 percent ethanol or biodiesel-blended fuels greater than 20 percent biodiesel must use compatible equipment.²⁰

E15 compatibility problems cannot be overlooked because (1) UL certification is not retroactive and no existing legacy gasoline dispensers are approved for E15; (2) EPA requires owners and operators of UST systems storing E15 to use compatible equipment; and (3) most UST systems currently in use are likely to contain components that are not designed for E15. As a result, large investments must be made at retail stations to upgrade the refueling infrastructure.

The potential for consumer misfueling is even recognized by the Agency. EPA issued a partial approval for E15 and on the same day released a proposal for E15 misfueling mitigation.²¹ The apparent necessity of this misfueling mitigation proposal and its release on the same day as the first partial approval for E15 clearly indicate EPA's concern about the potential for consumer misfueling.

On July 25, 2011, EPA published the E15 misfueling mitigation final rule.²² It includes a requirement for a retail pump label that is woefully inadequate and compounds the fundamental mistakes the Agency made in approving the sale of E15 in 2010. The rule is a terrible miscalculation and terrible news for millions of Americans who will inevitably face costly repair bills after misfueling their cars, trucks, motorcycles, boats, snowmobiles and outdoor power equipment with gasoline containing 15 percent ethanol.

The last time EPA allowed two types of gasoline to be sold side-by-side at retail stations – when leaded gasoline was phased out in the 1970s – EPA's own statistics reported that more than 20 percent of motorists mistakenly or intentionally misfueled their vehicles. This high rate of misfueling occurred even in the presence of EPA-mandated physical barriers – fill pipe restricters on vehicles and smaller nozzles on gasoline retail dispensers – in addition to pump labels. There are no physical barriers at retail stations in the case of the E15 partial waivers. EPA's apparent conclusion that pump labels will educate and warn consumers about the dangers of E15 misfueling flies in the face of the Agency's own experience and data.

AFPM is not anti-ethanol – our members blend it with gasoline every day to manufacture the E10 fuel that safely powers most American vehicles. We simply want to be sure that adding greater amounts of ethanol to gasoline is safe and will not cause engine damage. Following the old proverb to “look before you leap,” we believe learning more about E15 before approving its use is just common sense.

This discussion of both E15 and E85 above highlights some of the problems with the RFS. E15 and E85 are not reasonable pathways for the use of 1 or 2 billion more gallons of ethanol. Forcing this approach could result in significant economic harm through damage to engines from misfueling and costs to retailers for replacing tanks and dispensers. Short-term

²⁰ 76 *Federal Register* 39095 (7/5/11)

²¹ 75 *Federal Register* 68044 and 68094 (11/4/10)

²² 76 *Federal Register* 44406

solutions to address the waiver petitions would not address the serious flaws in the RFS2 program.

If a RFS waiver were issued, when it expires and the statutorily-mandated volumes exceed 13 billion gallons of corn ethanol apply, RFS compliance may not be feasible. Growth in gasoline demand will be constrained by the EPA GHG emissions/NHTSA CAFE standards; these regulatory requirements will operate to further constrain the safe use of biofuels in the gasoline marketplace. Only a substantial revision or repeal of the RFS by Congress can correct this flaw in the long run. Notwithstanding the need for a legislative action on the RFS, EPA has at its disposal tools to help ensure compliance. As such, EPA should relax the 20 percent limitation on the use of last year's RINs to meet the current year's RVOs.

C. HIGH BIOMASS-BASED DIESEL RIN PRICES INDICATE A MARKET PROBLEM.

The Agency acknowledged that high RIN prices would indicate a market problem and could assist the assessment of a waiver petition. The Preamble for the RFS2 final rule: "EPA decided that [RIN] price information has great programmatic value because it will help us anticipate and appropriately react to market disruptions and other compliance challenges, *assess and develop responses to potential waivers*, and assist in setting future renewable fuel standards."²³

EPA has not released aggregated RIN price information, but has collected this data in EMTS for two years. The Agency knows that biomass-based diesel RIN prices have been over \$1. This is high and warrants consideration of a volume adjustment. Effectively, this is a \$1.5 billion annual tax on the American driving public when the economic recovery is fragile.

If EPA decides to grant a waiver of the RFS requirement for biomass-based diesel due to the drought, then the Agency should also reduce the advanced biofuel and total renewable fuel RVOs by at least the same amount to ensure that the demand for biomass-based diesel is appropriately modified.

D. THE AGENCY SHOULD UNDERSTAND THE IMPACTS OF A WAIVER ON THE DOMESTIC PETROLEUM INDUSTRY.

Refiners have been producing gasoline blendstocks for oxygenate blending (BOBs) at refineries and shipping this product to terminals for blending with 10 vol% ethanol to make finished gasoline. There are billions of gallons of BOBs at terminals or in the distribution system. These BOBs need millions of gallons of ethanol to produce finished gasoline. Therefore, there will be a continuing demand for ethanol to avoid stranding billions of gallons of BOBs. The petroleum industry will continue to use ethanol at least until this inventory of BOBs is blended at terminals.

²³ 75 *Federal Register* at 14733 (emphasis added).

The federal one pound per square inch (psi) RVP waiver only applies to summer conventional gasoline with 9-10 percent by volume ethanol.²⁴ It is difficult to change a retail station during the summer from E10 conventional gasoline to a smaller amount of ethanol or E0 without violating RVP regulations. For example, if a delivery truck pulls up to a retail station in the summer with a load of E0 conventional gasoline and the underground retail tank has E10 conventional gasoline, then the RVP regulation may be violated because the retail tank would have less than 9 percent by volume ethanol (the average of summer conventional gasoline E10 still in the tank and the new delivery of E0 could result in less than E9 after the new delivery) and does not qualify for the 1 psi RVP waiver. Therefore, if the retail station starts the summer with conventional gasoline E10, it cannot readily convert to E0 until the summer season ends and the summer RVP regulation does not apply. This obviously constrains the conversion of conventional gasoline retail stations from E10 in the summer. Therefore, it is important to provide adequate lead time for the petroleum industry to plan for summer 2013 conventional gasoline RVP compliance.

Similarly, it is difficult to change a retail station during the summer from E0 (which could happen in response to a waiver) to E10 (because the waiver was short-term) without violating RVP regulations.

In addition, the petroleum industry needs time to plan to convert from handling BOBs to finished gasoline (*i.e.*, E0) at terminals and in fungible pipelines. The system is currently set up for BOBs to be moved in pipelines and blended with 10 percent by volume ethanol at terminals.

If EPA decides to waive in full or in part the mandated renewable fuel requirements, then the Agency should delete the restriction at 80.1427(a)(5) that caps the use of prior year RINs to meet the current year's RVOs. Unrestricted banking will serve the goal of the waiver.

E. OTHER CONSIDERATIONS

Congress decided that the RFS would require the use of renewable fuels on an annual average basis. Therefore, if issued, a waiver should reduce the 2013 standard(s) and not establish a shorter compliance period (*e.g.*, less than a calendar year).

The CAA²⁵ states that a RFS waiver shall terminate after one year, but may be renewed. Given the future impact that the current drought will have, if a waiver is issued, the Agency should explain that this waiver is very likely to be renewed for 2014.

If EPA decides to grant a waiver, then it should take this action as part of the final rule for the RFS RVOs in 2013. A waiver means a regulatory change to RVOs for 2013 and there are not any promulgated RVOs yet for 2013.

In the past when EPA has lowered the cellulosic biofuel RVO, the Agency has failed to also reduce the advanced biofuel and total renewable fuel RVOs by at the same amount. This

²⁴ See CAA section 211(h)(4). Except where prohibited (*i.e.*, New York, Pittsburgh and El Paso).

²⁵ See section 211(o)(7)(C).

approach has, in effect, resulted in the increased use of sugar-cane ethanol as a substitute for cellulosic ethanol. Should EPA decide to grant the Governors' RFS waiver request, then the Agency should also reduce the advanced biofuel and total renewable fuel RVOs by at least the same amount.

F. CONCLUSIONS

AFPM is sympathetic to the RFS waiver requests submitted and supported by several governors. However, the RFS is flawed and a waiver, especially one of limited duration, would not necessarily reduce ethanol use in the fuel supply or solve the systemic problems caused by the RFS mandates.

If the Agency decides to grant a waiver for 2013, EPA should take this action as part of the final rule for the RFS RVOs in 2013, and also express its intent with regard to extending the waiver to future years. EPA should not establish a compliance period less than a calendar year as this will create market uncertainty.

High biomass-based diesel RIN prices indicate a market problem. If EPA grants a waiver of the biomass-based diesel RVO, then it should also reduce the advanced biofuel and total renewable fuel RVOs by at least the same amount.

EPA should remove the 20 percent limitation on the use of prior year's RINs to meet the current year's RVOs.

The effects of a waiver on the demand for biofuels will not be immediate. That is, a short-term waiver is likely to have little impact on biofuel demand because the petroleum industry needs time to plan and implement the transition.

Should EPA decide to grant the Governors' RFS waiver request, then the Agency should also reduce the advanced biofuel and total renewable fuel RVOs by at least the same amount.