Iowa Renewable Fuels Association

July 8, 2016

Air and Radiation Docket and Information Center
U.S. Environmental Protection Agency
Mailcode: 28221T
1200 Pennsylvania Ave., NW
Washington, DC 20460

RE: Docket ID No. EPA-HQ-OAR-2016-0004
Renewable Fuel Standard Program: Standards for 2017 and Biomass-Based Diesel Volume for 2018

With 43 ethanol refineries capable of producing more than four billion gallons annually, including nearly 55 million gallons of annual cellulosic ethanol production capacity, and 12 biodiesel facilities with the capacity to produce more than 315 million gallons annually, Iowa is the nation's premier renewable fuels producer. Iowa is also the largest producer of both corn and soybeans in the U.S. Therefore, the Iowa Renewable Fuels Association (IRFA) is uniquely suited to comment on the proposed rule setting the 2017 volume requirements and the 2018 biomass-based diesel volume requirement for the Renewable Fuel Standard (RFS).

The members of IRFA believe the proposed rule represents yet another missed opportunity for consumers, energy security and rural America. The proposed corn-based ethanol level for 2017 is below what was already produced in 2015, and it doesn't match the current reality of the nation's fuel sector. Low fuel prices have spurred increased driving habits, the USDA is projecting a historic excess supply of corn, and the number of stations offering fuel blends above E10 will dramatically increase this year through the USDA's Biofuels Infrastructure Partnership. For these reasons and more, IRFA urges the Agency to set the RFS level for undifferentiated renewable fuels at 15 billion gallons, as prescribed by Congress.

Further, the proposed rule did provide some much-needed certainty for biomass-based diesel, looking forward. Yet, the proposed level for 2018 is lower than what we'll use this year according to EPA's own data, and it does not account for the slew of foreign biodiesel imports currently entering the United States. The EPA's proposal should be a formula for growth in advanced biofuels, not an enshrinement of the status quo. For these reasons and more, IRFA urges the Agency to set the RFS level for biomass-based diesel at a minimum of 2.5 billion gallons.

Back on Track?

There has been much discussion over the last 18 months about getting the RFS "back on track," and numerous public statements by high ranking EPA officials have embraced this goal. Last year the EPA met the RFS deadlines and the Agency is on track to do so again this year. That is a positive step that shows the RFS can be implemented in a consistent manner, workable for producers and obligated parties alike. While we're pleased with the timing of the proposed rule, getting the RFS "back on track" should mean more than meeting calendar deadlines with numbers that simply memorialize what is already happening in the fuel market. It should mean getting the RFS back to pushing against the entrenched petroleum monopoly, and increasing consumer access to cleaner-burning, homegrown renewable fuels.

Getting the RFS truly back on track is not simply an academic exercise – it has critical real world impacts. A study released earlier this year found that ethanol and biodiesel production continue to power Iowa's economy; adding more than $4.6 billion to Iowa GDP, generating $2.3 billion in household income, and supporting more than 43,000 Iowa jobs.[1] However, for the first time in the more than a decade the annual economic impact studies have been done, all of those numbers took a step back from the year before. Reducing renewable fuels' positive economic impact is not getting the RFS back on track.

According to the most recent Creighton University Rural Mainstreet Index: "Due to reductions in farm income and agriculture commodity prices over the last three years, bankers have altered their farm lending practices. Almost three of four, or 73.5 percent increased collateral requirements, half boosted interest rates, more than one-third, or 35.3 percent rejected a higher percentage of farm loans."[2] The time frame of these changes, not coincidentally, correlates with the period when the EPA, first, failed to implement annual RFS rules, then, second, set the targets in last year's rule too low, and finally proposed lackluster targets in this year's RFS rule. These changes hit young and beginning farmers the hardest.

The farm economy remains weighed down by excess commodity supplies – supplies that could have, and should have, gone into renewable fuels production if the RFS had been implemented in 2014-2016 as Congress enacted it. Ending stocks for the 2015 marketing year (which ends August 31, 2016) are projected to be over 1.8 billion bushels, the highest since the RFS was implemented.[3] If Mother Nature cooperates, the USDA projects those ending stocks will increase to nearly 2 billion bushels the following year.[4]

The last two years have seen a dramatic downturn in the health and outlook of rural America. Corn prices have plummeted below the marginal cost of production,[5] land values have fallen for two straight years,[6] farm income plunged 38 percent in 2015 and is forecast to drop again in

[1] http://iowarfa.org/2016/03/study-renewable-fuels-economic-impact-in-iowa-takes-small-step-back-due-to-reduced-rfs-levels/
[2] https://www.creighton.edu/economicoutlook/mainstreeteconomy/
[3] http://www.worldofcorn.com/#us-corn-ending-stocks
[4] http://www.agweb.com/article/usda-brace-for-big-ending-stocks-naa-alison-rice/
[5] http://www.extension.iastate.edu/agdm/crops/html/a1-20.html
[6] http://www.card.iastate.edu/land-value/2015/

2016,[7] agribusinesses[8] have laid off[9] workers[10] by the thousands,[11] and tax revenue generated in Midwest states for both state and federal governments has dropped.[12]

Today, as farmers look toward the future, it is more often with angst than with optimism. And yet, being farmers, they will carry on. Quitting simply isn't in a farmer's DNA, but they could use some help. Farmers would embrace the chance to again farm for the market. As in the past, there are many factors that can impact this, but renewable fuels still stand out clearly as the best option for making a quick and meaningful impact for farmers and rural America.

Get the RFS Back on Track for Big Benefits

Getting the RFS truly back on track is important far beyond rural America. The production and use of renewable fuels provide multifaceted benefits to consumers across the country.

<u>Renewable fuels reduce harmful emissions</u>. It is helpful to think of renewable fuels as a form of solar energy. Energy from the sun is utilized to produce corn, soybeans, biomass and other renewable fuel feedstocks. From an environmental standpoint, this is essentially "free energy" because the sun was going to shine whether we produced renewable fuels or not. Obviously, there are energy and other inputs into producing, transporting, and processing feedstocks into finished renewable fuels. Yet, even when these are factored in, renewable fuels are strikingly positive for the environment.

Biodiesel is an important lubricity agent in low-sulfur diesel. Further, it reduces emissions of particulate matter (PM), carbon monoxide (CO), and hydrocarbons (HC)[13] – so much that it qualifies as an advanced biofuel. Finally, according to the latest study, biodiesel has the largest positive fossil energy balance of any commercial fuel, yielding 5.5 units of energy for every unit of fossil energy invested.[14]

Ethanol reduces tailpipe emissions of fine particulate matter (PM), carbon monoxide (CO), and toxics.[15] Also, if ethanol were not blended with gasoline to increase octane, aromatics and other

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7 http://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/highlights-from-the-farm-income-forecast.aspx
8 http://thegazette.com/subject/news/business/deere-company-announces-layoffs-more-than-550-coming-in-waterloo-20150123
9 http://www.desmoinesregister.com/story/money/2016/02/12/dupont-pioneer-job-cuts-climb-175-since-merger-plan/80282102/
10 http://www.desmoinesregister.com/story/money/2016/03/10/deere-continues-layoffs-cutting-125-workers-ankeny-dubuque/81600250/
11 http://www.thegazette.com/subject/news/business/kinze-manufacturing-lays-off-215-20150624
12 http://www.desmoinesregister.com/story/news/politics/2015/10/13/iowa-revenue-forecast-slashed-121-million/73882744/
13 http://www.afdc.energy.gov/vehicles/diesels_emissions.html
14 http://www.usda.gov/oce/reports/energy/EnergyLifeCycleSoybeanBiodieseI6-11.pdf
15 http://www.ethanolrfa.org/wp-content/uploads/2015/09/nec_whitten.pdf

petroleum components would be used. [16] Nearly all of these components, such as benzene, toluene and xylene, are highly toxic and known human carcinogens.

Improvement in both corn and ethanol production have led to an ever increasing positive fossil energy balance for ethanol. According to the most recent research from USDA[17], for every one fossil energy unit used to produce corn ethanol (full life cycle), ethanol returns 2.3 units of energy. Studies based on newer data suggest the more efficient producers are achieving returns of 3.4 units of energy.[18]

The positive fossil energy balance of biodiesel and ethanol are at the heart of why everyone from the EPA to the State of California has certified that renewable fuels lower greenhouse gas (GHG) emissions compared to petroleum fuels. Further, the carbon footprint of renewables is improving every year while the footprint of petroleum is getting worse.

<u>Renewable fuels boost U.S. energy security</u>.

Much has been made of recent gains in U.S. production of unconventional crude oil. When done appropriately, this development is certainly an American success story that has profound impacts on the economy and U.S. national security. However, despite heated messaging from the petroleum industry, this development does not erase the fact crude oil prices are driven by a foreign cartel, which includes many countries unfriendly to the U.S. And while U.S. imports of foreign oil have gone down, they have not ended. In fact, net petroleum imports accounted for 24 percent of petroleum consumed by the U.S. in 2015.[19] If you back out U.S. exports of crude oil, the import number jumps considerably higher. In fact, the most significant area of reduced dependence on foreign fuel sources is found in the reduction of finished gasoline imports. In 2005, the U.S. imported nearly 220 million barrels of finished gasoline. Last year, that number dropped to around 25 million barrels – or roughly 11 percent of the 2005 high.[20]

During that time, ethanol use expanded dramatically under the Renewable Fuel Standard (RFS). Therefore, it would be a mistake to overlook the impact of renewable fuels on energy security even in the aftermath of the advances in shale oil production. Ethanol provides important octane to the fuel supply not easily replaced by domestic oil. And while renewable fuels production continues to grow, every barrel of oil consumed –whether conventional or shale or tar sands – is one less barrel of oil that exists. We cannot escape the fact that fossil fuels are finite.

<u>Renewable fuels help lower consumer fuel prices</u>. By expanding overall fuel supplies and replacing higher priced blendstocks, renewable fuels put downward pressure on the prices that consumers pay at the pump.

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[16] http://www.eesi.org/papers/view/fact-sheet-a-brief-history-of-octane
[17] Gallagher, P., W. Yee, and H.S. Baumes (2016). "2015 Energy Balance for the Corn-Ethanol Industry," Office of Energy Policy and New Uses, U.S. Department of Agriculture.
[18] http://www.ethanolrfa.org/2016/03/rfa-analysis-finds-improvement-of-corn-ethanol-net-energy-balance/
[19] http://www.eia.gov/tools/faqs/faq.cfm?id=32&t=6
[20] https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MGFIMUS1&f=A

According to recent Energy Information Administration (EIA) data, U.S. ethanol production hovers just under one million barrels per day, and is on pace to well exceed 15 billion gallons for 2016.[21] This represents more than 10 percent of U.S. gasoline demand. Some in the petroleum industry try to downplay this impact, but could you imagine if – heaven forbid – a weather or geopolitical event knocked offline 10 percent of America's gasoline production? The impact on fuel prices would be swift and brutal. Some have even tried to suggest that ethanol is no longer needed because gasoline demand hasn't grown according to the forecasts made 10 years ago. Certainly the "Great Recession" had an impact on gasoline demand, but as the economy regains its footing, gasoline demand has increased rapidly. In fact, none other than the American Petroleum Institute (API) reported in February of this year, "gasoline demand rose to a new all time record for the month as drivers took advantage of the low prices."[22]

Numerous academic studies over the last several years have detailed the impact of renewable fuels on fuel prices. One such study with Iowa roots, done in 2012 by economists from Iowa State University and the University of Wisconsin for the Center for Agriculture and Rural Development (CARD), found that ethanol reduced wholesale gasoline prices by $0.29 per gallon on average over multiple years and can save motorists more than $1 per gallon during times of high crude oil prices.[23]

However the most important, and least understood, aspect of ethanol's cost-savings stems from the fact that ethanol (with the exception of E85 blends) is used as an octane enhancer. Using ethanol instead of relying solely on petroleum-based octane sources reduces costs – even if ethanol prices were above base gasoline prices. Researchers from the Department of Agriculture and Consumer Economics at the University of Illinois noted on February 3, 2016, "ethanol appears to have retained its position as the low cost octane enhancer even as ethanol prices have increased relative to gasoline prices."[24]

Since that Feb. 3rd report, crude oil prices have rebounded from around $33 per barrel to nearly $50 per barrel as of this writing.[25] The University of Illinois researchers' aromatics vs. ethanol price chart (available data went through March) demonstrates ethanol's economic advantage as an octane enhancer rebounded along with higher crude prices, roughly 50 cents per gallon at the end of March when crude oil prices were around $40 per barrel.

With permission, the FarmDoc Daily aromatics vs. ethanol price chart is reproduced below.

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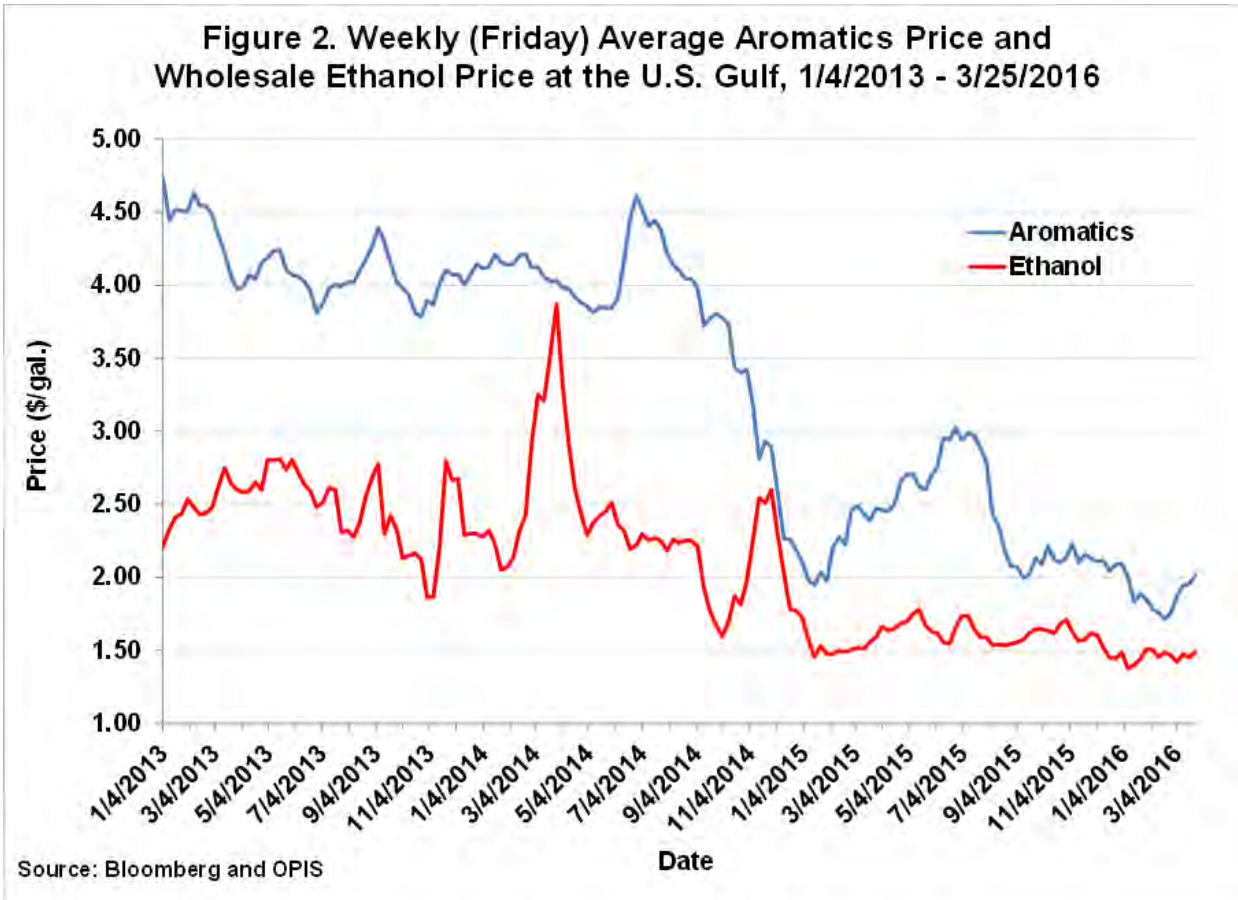
21 https://www.eia.gov/dnav/pet/pet_pnp_wprode_s1_w.htm
22 http://www.energyglobal.com/downstream/refining/18032016/API-reports-record-gasoline-demand-rise-in-petroleum-demand-for-February-2796/
23 http://www.card.iastate.edu/publications/dbs/pdffiles/12wp528.pdf
24 Irwin, S. and D. Good. "The Competitive Position of Ethanol as an Octane Enhancer." *farmdoc daily* (6):22, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, February 3, 2016.
25 http://www.bloomberg.com/energy. One-year price series.



The researchers correctly note that there are some scenarios where this relationship may not remain – in the case of a short corn crop, for instance. But it should also be noted that crude oil price spikes, and the resulting price impacts on petroleum-based octane components, have occurred with much greater frequency than meaningfully short corn harvests. Further, one must consider that the petroleum industry simply does not have 15 billion gallons of aromatics laying around in storage. If, and we stress if, ethanol prices ever eclipsed aromatic prices by a meaningful margin for a timeframe sufficient to encourage substitution, there would be sharp, upward pressure on the price of aromatics that would likely maintain the attractiveness of ethanol.

The petroleum industry has spent considerable money to fund convoluted studies questioning the simple fact that renewable fuels lower fuel prices. They twist logic into a pretzel in an attempt to "explain" that expanding the fuel supply with lower-cost alternatives actually increases fuel costs. Even though this "logic" stretches the credulity of most motorists, it has found a cheering section in the anti-renewable fuel Members of Congress. Therefore, to cut through all the academic jargon on both sides, a recent photo is reproduced below.

The following photo was taken on June 29, 2016, at the Kum & Go convenience store located at 5225 NW 86th Street in Johnston, Iowa. For those not familiar with Iowa, Super Unleaded is how most Iowa fuel retailers (including Kum & Go) describe 87-octane, E10 (10 percent ethanol blend). In other words, Super Unleaded in Iowa is the "standard" fuel purchased by most consumers nationwide. It typically costs 30 to 40 cents per gallon less than the non-ethanol 87-octane fuel available at many Iowa fuel retailers. (In Iowa, the unblended 87-octane gasoline is labeled simply "Unleaded.")

Source: IRFA staff photo, June 29, 2016

However, as you can see in this photo, Kum & Go has made additional ethanol blend options available to its customers. E15 (15 percent ethanol blend) is available for vehicle model years 2001 and newer.[26] Consumers choosing E15 – just 5 percentage points more ethanol than normal – save an additional 10 cents per gallon compared to E10. E85 (85 percent ethanol blend) is available for those driving flexible fuel vehicles. Those consumers can save a whopping 50 cents per gallon compared to E10.

Even at a time of relatively cheap crude oil, as ethanol content goes up, the price of the fuel blend goes down. No amount of petroleum industry pretzel logic will change that fact.

RINs Lower Ethanol Prices

Just as ethanol blending reduces fuel prices, RINs lower ethanol prices. One of the biggest frauds perpetuated by the petroleum industry is that, somehow, RINs increase the cost of fuel. While this notion defies common sense for those who understand the RIN and fuel markets, it quickly gained traction with opponents of the RFS in Congress and, it would appear at least for a period of time, inside the White House. Concerns over RINs driving up consumer fuel prices appeared to underpin the original 2014 RFS level proposal that was withdrawn.

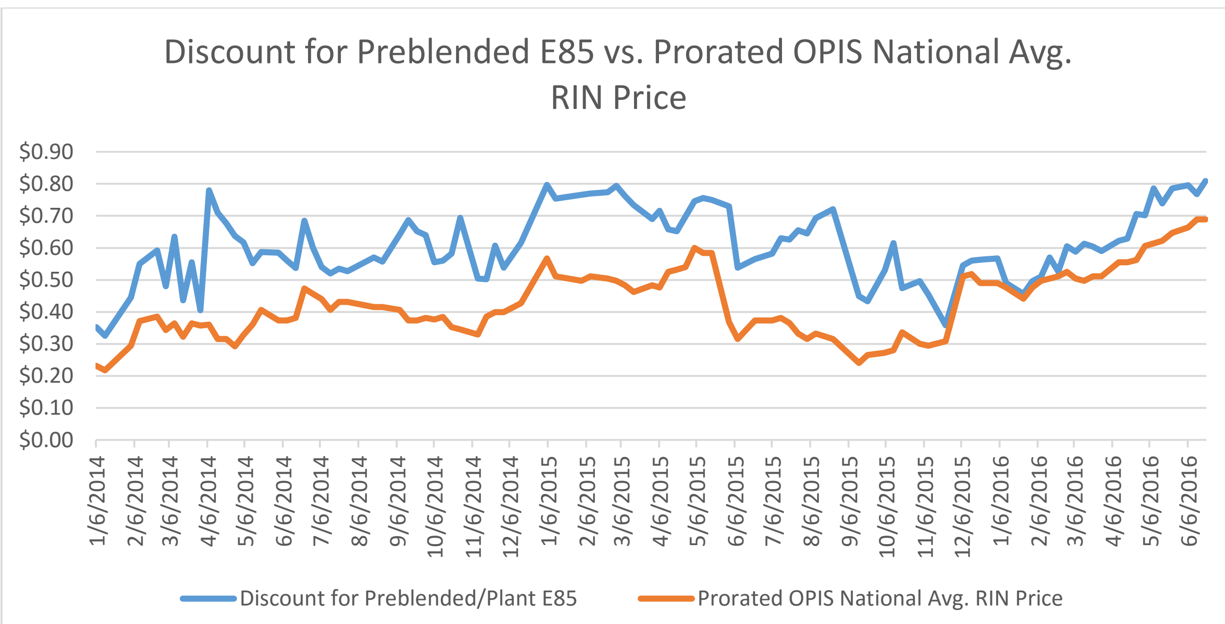
[26] From September 16th to May 31st of each year. The unnecessary summer restriction of E15 sales will be discussed in more detail below.

As during the public comment period on that proposal, IRFA will supply data to demonstrate, with public facts and figures, RINs in fact *lower* ethanol and blended fuel prices.

RIN prices reduce the wholesale and retail cost of fuels with high renewable content. Since the fall of 2013, IRFA has collected weekly wholesale prices of E85 from a number of suppliers in Iowa – both ethanol plant blenders (publically available data) and traditional terminal suppliers (courtesy of OPIS). Since that time, the wholesale price of E85 has been consistently lower than the cost of the components (gasoline and ethanol) used to produce it. As the EPA has noted: "The fuel blender can only profitably sell a blended fuel for less than the component costs of that fuel if they are realizing value elsewhere."[27]

Therefore, IRFA has taken the weekly average wholesale price of ethanol plants[28] offering E85 and compared it to the average cost of blending a gallon of E85 based on that week's wholesale component prices for V-grade gasoline and ethanol, as reported for the Des Moines terminal by OPIS. The discount for preblended E85 from the ethanol plants was then compared to the national average RIN price for that week prorated by the percentage of ethanol in the E85 blend at that time (actual ethanol content in E85 can vary from 70 to 85 percent based on the market and time of year). The full Iowa E85 wholesale price dataset can be found in Attachment A.

As you can see from the chart below, the discount for preblended E85 from ethanol plants closely tracks the RIN value associated with the ethanol content of the fuel blend.



[27] Burkholder, Dallas. "A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effects." *U.S. Environmental Protection Agency Office of Transportation and Air Quality* 14 May 2015. Page 24.

[28] We used the average ethanol plant E85 price because the data shows they are more motivated to pass RIN savings through to retailers in order to develop the E85 market compared to other potential E85 suppliers.

In fact, the ethanol plants on average sell E85 for even less than one would expect based on RIN value alone. This is the result of several factors including, but not limited to, direct access to ethanol (no supplier markup), no terminal storage or access charges, use of cheaper denaturants, and the difference between RINs sold under contract compared to the spot RIN prices reported by OPIS. (Note: The nature of comparing average E85 prices to average RIN prices can sometimes also lead to lags in correlation due to changes in the ethanol content during certain times of the year and the time for RIN values to work their way into E85 pricing calculations.)

Two things are clear: E85 is being sold both inside and outside the terminal for less than the cost of the components to produce the blend, and the E85 price discount largely tracks the value of RINs.

(The only way these market forces don't apply is if there is insufficient market competition. If that is the case, then do not lay the blame for higher prices on the RFS or renewable fuels. After all, the RFS only adds competition to the marketplace. Any lack of market competition only highlights the need for robust implementation of the RFS.)

Some eminent scholars in economics have disagreed with this point. There have been papers published suggesting the value of the RIN is not being passed through to consumers and, therefore, the RFS is failing to work as intended. IRFA does not possess the prestigious academic credentials of these experts, but our members do work in these markets each and every day. In short, the academic experts have been held back by three key factors. First, there is no (even remotely) reliable data on E85 retail prices nationally. The data sets being used do not correspond with what consumers actually see at the pump. This is not the fault of academics, but we all know the GIGO concept (garbage in = garbage out) when it comes to models or formulas.

Second, the models themselves do not yet sufficiently replicate the real world markets. The most noticeable flaw, referenced in our price data, is that RINs are almost never traded on the spot market between non-obligated blenders and obligated parties. Whether an ethanol plant or independent retailing chain, most blenders must compile RINs over time to amass a quantity large enough to be sold to an obligated party. How blenders incorporate the RIN value into the price of a gallon of E15 or E85 sold today when they won't monetize that value for weeks varies from company to company. For example, some take a 4-week rolling average of spot RIN prices when factoring in how to price their blends. But if nothing else, the RIN value being passed through tends to lag the RIN spot market. Factoring this time lag in can dramatically impact the mathematical correlation between RIN values and ethanol blend prices being reported in academic studies.

If the data and models are accurate, then the academic conclusion that RIN values are not being passed through to consumers should also be accurate. However, there is incontrovertible evidence that this conclusion (and therefore the models and data) is not correct. Not too long ago, as oil prices flirted with $30 per barrel, there was a six-month period where the wholesale price of ethanol was above the wholesale price of gasoline. If the RIN value of ethanol was not being factored into the retail price, then E85 would have been priced higher than E10 during this time. Yet, at the vast majority of E85 locations around the country, including all in Iowa, E85 remained cheaper at the pump than E10. Clearly, the data and/or models are missing something.

Finally, some academics have suggested the RFS is not working as intended because RIN values are not being passed through to consumers, therefore RINs are not driving demand for higher blends, and therefore the RFS won't work. IRFA submits that this definition of "success" for the RFS is not well-founded. As we have discussed above, the available data in Iowa clearly demonstrates that the RIN value is being passed through. However, Iowa benefits from a number of independent and competitive blenders, and a large number of competitive E85 retailers. There are undoubtedly places where ethanol is being blended and the RIN is not yet being passed through to consumers. IRFA believes strongly that even when the RIN value is not reflected in retail prices that does NOT mean the RFS is broken. If a blender or a retailer is putting the RIN value in their own pocket, while not ideal, it is still helping the RFS work. When competitors in the market see the RIN profits of others, they are incented to embrace more ethanol blending and higher blends as well. This results in greater demand for renewable fuels – the ultimate goal of the RFS. And, as it increases competition in their local market, it will ultimately help push the RIN value through to the consumer. If the academics acknowledge the incentive power to consumers of the RINs reducing ethanol blend prices, the same academics should acknowledge the incentive power of the RIN to other parties in the supply chain, like suppliers, blenders and retailers. RIN values impact all of these necessary links in the supply chain to encourage additional renewable fuel use.

While many markets are in the early stages of competitive forces moving RIN values into consumer prices, Iowa provides a perfect case study for how the process evolves. After all, the RFS is essentially a market mechanism that incents the sale of higher ethanol blends through the value of RINs. The blender of ethanol claims the RIN, essentially a commodity that came "free" with the price of the ethanol. That blender, if obligated, can turn the RIN into the EPA. Or that blender, if unobligated, can sell the RIN on the open market.

In a perfect world, the RIN value would pass through the supply chain and be reflected in the retail price of ethanol blends. The lower price for higher ethanol blends would result in greater demand, and one could conclude the RFS is working. This can and does occur where there is competition in the market. The Iowa data provided earlier proves it.

But how did Iowa get there? When RIN values first showed signs of life in 2013, many ethanol producers were disturbed that they did not see that value being passed through to consumers. The value was being held by blenders. So, some in the industry took action.

A handful of plants installed the necessary equipment and obtained the necessary approvals and permits to begin marketing E85 directly to retailers. Essentially they cut out the middle man – the traditional pipeline terminal or blender. The business model was simple – ethanol producers benefit from a vibrant and growing ethanol market. Therefore, the ethanol plants produce E85 and pass through to the retailer the vast majority of the RIN value. While retailers are free to make their own decisions, the plants encourage them to then pass the RIN value on to consumers. This is by-and-large what we have seen in Iowa (and in some other markets as well).

While ethanol plants led the charge in Iowa, it does not take an ethanol plant to create competition. Any blender can make a play for market share by passing the RIN value through.

Basic economics tells us that when the RIN value is large enough, this is exactly what will happen. To the extent we haven't seen it in some markets as of yet, that is simply more proof of the lack of competition in the fuels industry. If allowed to work, the RFS can help inject competition. IRFA believes we are starting to see this process expand and accelerate today. Large, independent fuel retailers are embracing higher ethanol blends as a way to differentiate themselves, attract new customers and drive in-store sales. They will certainly attract suppliers that pass through the RIN value.

Iowa shows that RINs are doing their job. RINs are incenting greater access to higher ethanol blends and driving renewable fuel use – even when their value is not reflected at the pump. And quickly, as we see new markets embrace higher blends, the added competition is pushing those RIN values toward the ultimate consumer which in turn will drive demand for higher ethanol blends to even greater heights.

The Disturbing Carryover RIN Flip-Flop

In an astonishing and confusing change of protocol in setting the 2014-2016 RFS levels, EPA announced the "availability of carryover RINs should not preclude reducing the applicable volumes."[29] A RIN is nothing more than the electronic signature of a physical gallon of qualifying renewable fuel. Carryover RINs represent actual, physical gallons of renewable fuel that were produced and remain available – in their electronic format – as part of the total renewable fuel supply for use by obligated parties in complying with their RFS requirements.

The RFS was enacted in order to break down petroleum monopolies and drive the market for renewable fuels. Therefore, carryover RINs (beyond a small amount for fungibility) are essentially the proof that the market has moved faster than the RFS. In order to get the RFS back on track, the annual RFS levels must take carryover RINs into account – the RFS needs to catch up to the market.

The decision by EPA to break with its own precedents of factoring carryover RINs into RFS supply considerations is disturbing. To ignore nearly 2 billion carryover RINs when determining available supply, while at the same time reducing statutory RFS levels, simply flies in the face of the clear intent of the program.

It also flies in the face of EPA's own precedents. When evaluating several requests for RFS waivers during the historic drought of 2012, just as when evaluating the 2008 waiver requests, the EPA clearly and specifically took into account the "available quantity of carryover RINs"[30] when determining whether a waiver was justified. The reduced yields and higher corn prices associated with the horrendous 2012 drought led to a significant pull-back in ethanol production. However, as "indicated by EPA's modeling, the impact of the RFS volume requirements is

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[29] Environmental Protection Agency. "Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017." *Federal Register* Vol. 80, No. 111, page 33111.
[30] Environmental Protection Agency. "Notice of Decision Regarding Requests for a Waiver of the Renewable Fuel Standard." *Federal Register* Vol. 77, No. 228, page 70753.

highly dependent on the volumes at issue, *the number of RINs carried over from prior years* and the relevant market commodity prices…" (emphasis added).[31] In discussing the importance of carryover RINs, EPA noted "the number of rollover RINs available during the 2012/2013 marketing year affects the impact of implementation of the RFS volume requirements in 2013."[32]

Had the "availability of rollover RINs"[33] not be been factored in to EPA's "stochastic modeling," it is fair to ask whether the decision to deny the 2012 waiver might have been different. Yet, history shows the decision by EPA to factor in carryover RINs was correct. Partly by using carryover RINs, obligated parties met their 2012 and 2013 obligations, and there was little meaningful impact from the RFS on other economic sectors. The drought induced price impacts dissipated and disappeared as the 2013 corn crop matured and was ultimately harvested.

Consistent with the 2008 and 2012 waiver request evaluations, EPA once again factored carryover RINs into their 2013 RFS level determination. In deciding not to reduce the 2013 statutory RFS levels, EPA stated: "There will also be a significant number of carryover RINs available from 2012 that can be used in lieu of actual volume in 2013 and which are sufficient in number *to address limitations in consumption of ethanol blends higher than E10…*" (emphasis added).[34]

In fact, in response to suggestions during the 2013 public comment period that EPA should not factor in carryover RINs when determining annual volume requirements, the EPA responded: "…the final rulemaking for the RFS1 program did not describe the purpose of carryover RINs in such narrow terms. Droughts were indeed provided as an example of a market circumstance that could limit the production of renewable fuels, but the RFS1 final rule also described the use of carryover RINs more broadly as a means for protecting against any potential supply shortfalls that could limit the availability of RINs."[35]

Even more importantly, after noting that carryover RINs "are a valid compliance mechanism" the EPA highlighted that their job is "estimating the adequacy of the availability and use of ethanol in 2013 for compliance purposes, and the availability of carryover RINs is certainly relevant in analyzing that issue. Therefore, we believe that it is appropriate to consider carryover RINs in the context of evaluating the comments received on the need for further compliance relief to address the E10 blendwall."[36] The EPA approach was challenged and upheld by federal courts.

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[31] Ibid.
[32] Environmental Protection Agency. "Notice of Decision Regarding Requests for a Waiver of the Renewable Fuel Standard." *Federal Register* Vol. 77, No. 228, page 70758.
[33] Environmental Protection Agency. "Notice of Decision Regarding Requests for a Waiver of the Renewable Fuel Standard." *Federal Register* Vol. 77, No. 228, page 70775.
[34] Environmental Protection Agency. "Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards." *Federal Register* Vol. 78, No. 158, page 49797.
[35] Environmental Protection Agency. "Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards." *Federal Register* Vol. 78, No. 158, page 49822.
[36] Ibid.

Despite this tried and true approach to carryover RINs, in a flip-flop with huge implications, the EPA decided in last year's RFS rule that it would be "prudent"[37] to set an RFS level that envisions absolutely no "draw-down in the bank of carryover RINs."[38] Unfortunately, ignoring the growing bank of carryover RINs undercuts claims by the EPA that the 2016 RFS level would put "pressure on the market to exceed the E10 blendwall."[39] Looking at the first six months of 2016, IRFA would not be surprised to see D6 RIN stocks actually increase this year while overall stocks will likely remain pretty close to where they are now.

The RIN system was designed as a compliance mechanism for obligated parties under the RFS. However, an equal—if not greater—amount of concern over flexibility for obligated parties also went into the final RIN system design. If the current EPA proposal to ignore carryover RINs is allowed to stand, then the "flexibility" of the RIN system becomes one-sided, to be used to unnecessarily reduce the RFS levels and to undermine the stated goals and implementation schedule of the RFS. IRFA urges the EPA to return to the commonsense approach of factoring carryover RINs into the decision-making process, as was done during the 2008 and 2012 waiver request determinations, and again when EPA set the 2013 RFS levels.

Cellulosic Ethanol Production Should Not be Undermined by EPA Credits

Iowa is home to three cellulosic ethanol plants. While this is an infant industry, millions of cellulosic gallons and their corresponding RINs have been produced. Unfortunately, EPA has utilized its authority in a manner that undermines the value of D3 cellulosic RINs, thereby undermining the ability to operate these plants, or the possibility of building new ones.

Ethanol plants want to invest in cellulosic technologies, but boards of directors and lenders currently evaluate cellulosic technology's potential return-on-investment without factoring in D3 RIN values because the market is so uncertain. The uncertainty is primarily caused by the EPA's decision to issue an unlimited supply of cellulosic waiver credits (CWC), regardless of the physical cellulosic ethanol gallons (and RINs) being available to purchase. The intent of the CWC program was not to offer an alternative compliance mechanism; rather it was intended to simply fill any gaps between the physical gallons of cellulosic biofuel available and the annual cellulosic biofuel standard. CWC's do not reduce carbon like cellulosic biofuels, and should not be used except in the case of D3 RIN production shortfalls.

EPA has the authority to administratively fix the D3 RIN price uncertainty limiting investment in cellulosic technologies. First, it should limit CWC's to cellulosic biofuel production shortfalls. Second, it should utilize a trading platform where cellulosic biofuels producers receive the same price that CWC's are being issued to obligated parties.

Cellulosic biofuels are being produced and EPA has the authority and opportunity to administer the RFS to create certainty to drive cellulosic investments, as intended by Congress.

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[37] Environmental Protection Agency. "Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017." *Federal Register* Volume 80, No. 111. page 33130.
[38] Ibid.
[39] EPA. Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017. Page 77.

The Illegal Distribution Capacity Waiver

There has been absolutely no scintilla of evidence brought forward to suggest that the implementation of the statutory RFS levels for undifferentiated renewable fuel in 2017 would cause severe economic harm, or that there is an inadequate domestic supply of renewable fuel. Absent such evidence, the EPA is simply not authorized to modify the statutory levels.

IRFA commends to the EPA, Iowa Attorney General Tom Miller's clear and concise review of the legal aspects of this point provided to the Agency on January 28, 2014, during the public comment period for the subsequently withdrawn proposed rule on 2014 RFS levels. For your convenience, IRFA incorporates this document into our comments as Attachment B.

In summary, AG Miller highlights that the structure of the statute is not ambiguous and only refers to the supply (or lack thereof) of renewable fuel, not blended fuel. In addition to the actual statute, Congressional legislative history makes clear that Congress' intent was not to include a "distribution capacity" waiver. Previous court rulings also bolster this interpretation. EPA's insistence on finalizing RFS levels based on the application of an illegal distribution capacity waiver has already led to an expensive court case. IRFA urges the EPA to embrace the clear letter of the law and Congressional intent. Doing so for the 2017 RFS rule will restore certainty to the program and make the court challenges moot going forward.

RFS Level Should Boost Biodiesel

EPA's proposal for biomass-based diesel volumes under the RFS for 2018 is moving in the right direction, but it still misses the mark. Biodiesel has been an unmitigated success under the RFS, as the U.S. biodiesel industry has produced over and above EPA's annual biomass-based diesel targets each and every year since 2010, even amidst excessive federal policy uncertainty. In fact, the U.S. is expected to use about 2.5 billion gallons of biomass-based diesel in 2016 – 400 million gallons more than the number EPA proposes to set for 2018 – two years from now. Finalizing the proposed level would simply memorialize the status quo while nearly 60 percent of U.S. biodiesel industry capacity sits idle. IRFA urges EPA to increase its biomass-based diesel target for 2018 to at least 2.5 billion gallons in the final rule.

The final RFS level for biomass-based diesel must account for the dramatic increase in biodiesel imports. Current estimates are that biomass-based diesel imports to the U.S. may exceed 850 million gallons in 2016. Through May of 2016, roughly 30 percent of the biodiesel market was imports, and the number continues to grow. Meanwhile, many U.S. biodiesel plants run at less than full capacity. Congress gave the EPA the authority to set the biodiesel level to ensure growth for this widely successful advanced biofuel. Factoring in imports, the proposed level does not achieve this goal. Setting the final level at 2.5 billion gallons would help get the RFS back on track.

In support of this request, we would like to share some Iowa-specific data, courtesy of the Iowa Department of Revenue, to demonstrate the remarkable growth in availability and use of higher biodiesel blends in our state over the past few years.

Since 2010, when the expanded RFS went into effect, both biodiesel production and biodiesel sales in Iowa have soared, multiplying by a factor of roughly five. Biodiesel production has jumped from 48 million gallons in 2010 to 242 million gallons in 2015,[40] while biodiesel distribution (B100 sales) in Iowa has increased five times over, expanding from 7.4 million gallons in 2010 to 37.5 million gallons in 2015.

Even more remarkable is the growth in the average blend level of biodiesel-blended gallons sold. In 2010, the average blend level of biodiesel-blended gallons sold in Iowa was 3.1 percent. By 2015, **the average biodiesel blend level in Iowa had more than tripled to 11.0 percent**—a level that simply could not have been reached without selling a significant amount of not just B11, but B15 and B20 as well. The table below illustrates the dramatic growth in biodiesel production and sales in Iowa since 2010.[41]

Biodiesel		**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Iowa Production		48 mg	169 mg	184 mg	230 mg	227 mg	242 mg
B100 Sales		7.4 mg	14.0 mg	23.3 mg	29.0 mg	33.3 mg	37.5 mg
Blended Gallons		239.9 mg	246.0 mg	285.8 mg	347.8 mg	354.7 mg	342.0 mg
Avg. Blend Level		3.1%	5.7%	8.1%	8.3%	9.4%	11.0%

It is important to remember that these record 2015 levels were achieved during a year when the biodiesel tax credit had been allowed to lapse. We expect much more robust sales in 2016 given the reinstatement of the tax credit. Further, any question on whether blends above B5 can be sold year-round are put to rest based on this data. Achieving a year-round, average B11 blend rate in Iowa sends a clear message that if higher biodiesel blends can be successfully utilized in Iowa, as well as other cold weather states such as Minnesota and Illinois, then there is no reason that this model cannot be replicated nationwide with the right policy framework in place. Most importantly, Iowa drivers simply haven't had any issues using increasingly higher blends of biodiesel—even in the cold winter months.

There is No Blend Wall; Only Lack of Consumer Access

The large petroleum companies and their trade associations continue to focus their efforts on creating the myth of a blend wall. They seek to create the image of a physical barrier that simply cannot be surmounted in a timely fashion. This is false. The only physical barrier to greater use

[40] http://iowarfa.org/2016/01/iowa-biodiesel-production-breaks-record-in-2015/

[41] https://tax.iowa.gov/report/Retailers-Annual-Gallons

of renewable fuels is the inability of the average motorist to pull up to a fuel pump and choose from a variety of fuel options.

This restriction on competition is not the result of consumer preference, equipment availability, or renewable fuel supply. Iowa retailers have had great success with higher ethanol blends like E15 and E85, when they are allowed to sell it. Customer demand is high. Contrary to the blatantly false claims that a "blend wall" exists, even more motorists would buy E15 and E85 if it were just available for them to choose.

According to a survey conducted by Convenience Store News,[42] 35 percent of motorists want to use E15 in their cars. With a five-cent discount to E10, 49 percent would likely buy E15 and 60 percent would likely buy E15 if it was priced a dime under E10. Well, that's exactly the price range in Iowa, so we have tremendous potential for selling massive volumes of E15 if consumers had more access.

Fuel choice is slowly becoming more prevalent for customers. Programs such as "Prime the Pump"[43] and USDA's Biofuels Infrastructure Partnership program[44] are focused on high volume stations that will move renewable fuels sales significantly higher. Here in Iowa, Kum & Go, one of the largest retailer chains and the largest E85 retailer in the state, recently made a commitment to add E15 to 100 stores this year.[45] And we're seeing E15 being adopted by other large retailers in other states, such as Sheetz,[46] Thorntons[47] and Mapco.[48]

Noting that customers can save 5 to 10 cents per gallon with E15 (compared to E10), Kum & Go's Vice President of Fuels Jim Pirolli noted: "It offers the sustainability component that aligns with our company strategy and also aligns with our strategy to offer customers a great value and great quality product."[49]

Iowa retailers are adopting E15 because Iowa motorists are buying it. The number of E15 stations in Iowa are expected to more than double by the end of the year. We commend the USDA's confidence in higher blends of ethanol as demonstrated by making available $100 million to install blender pumps so consumers have access to higher blends of ethanol, like E15 and E85. We also commend Iowa retailers who seized the opportunity afforded by USDA to apply for grants to increase the number of blender pumps across the state. The state of Iowa was awarded $5 million in USDA funding for 78 retail sites and provided a 1:1 match toward the

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[42] http://www.csnews.com/product-categories/fuels/e15-ok-consumers%E2%80%99-minds

[43] Schill, Susanne Retka. "Prime the Pump seeks to expand E15 infrastructure." *Ethanol Producer Magazine* 10 Dec 2014 http://www.ethanolproducer.com/articles/11734/prime-the-pump-seeks-to-expand-e15-infrastructure

[44] "USDA Begins Accepting Applications from States for $100 Million Biofuels Infrastructure Partnership." *USDA Office of Communications* 12 Jun 2015 http://www.usda.gov/wps/portal/usda/usdahome?contentid=2015/06/0170.xml&contentidonly=true

[45] http://www.csnews.com/product-categories/fuels/kum-go-ups-commitment-e15-fuel

[46] http://www.cspdailynews.com/fuels-news-prices-analysis/fuels-news/articles/sheetz-bringing-e15-nc-2016

[47] http://www.csnews.com/product-categories/fuels/thorntons-adds-unleaded15-pumps-chicago-area

[48] http://www.businesswire.com/news/home/20140115005879/en/MAPCO-offer-E15-Customers-2014

[49] http://www.cspnet.com/print/csp-magazine/article/csp-fuel-fuel-forward-thinking

USDA dollars. More than 225 new blender pumps will now be offering higher blends of ethanol due to this federal infrastructure assistance program.[50]

Iowa encourages and incentivizes retailers to expand the availability of higher blends of both ethanol and biodiesel through a state renewable fuels infrastructure grant program. This year saw a record number of applications, with 68 grants being awarded in a single quarter for a total of $3.2 million.[51] Iowa is doing its part to prove demand for ethanol beyond the 10 percent level exists and is achievable.

These examples demonstrate the growth potential for generating high-volume sales and additional revenue for retailers. To further prove the "blend wall" is fictitious, the IRFA collected sales data from several retailers with blender pumps (often this is just one blender pump among several standard dispensers). This data shows that Iowa retailers offering fuel choice to their customers are meeting the full <u>2022</u> RFS level today (factoring in biomass-based diesel contributions, it is estimated 18-19 percent renewable content would be needed in gasoline volumes).

One of the best attributes of the RFS is its flexibility. The RFS does not require any specific gallon of fuel to contain a specific amount of a specific renewable fuel at any specific time or location. The data from Iowa retailers show that this flexibility is working and there is not a one-size-fits-all solution. Retailers are making remarkable progress selling renewable fuels, but they're doing it in different ways.

For example, Fast Stop is a cardtrol station in Cresco, Iowa. They achieve an amazing 31.5 percent average ethanol content across their gasoline sales. While their E15 sales top 12 percent of overall sales, it is their flexible fuel vehicle (FFV) customer base that really drives their renewable content. E30 and E85 sales account for 32.5 and 20.9 percent of their gasoline sales, respectively.

On the other hand, New Century FS in Vinton and Star Energy with three locations have achieved 2022 levels of renewable content primarily through their promotion of E15. During the winter months, when E15 can be sold to all 2001 and newer vehicles, E15 accounts for an amazing 30.7 and 53.8 percent of overall gasoline sales, respectively. Along with solid E85 sales, their average ethanol content is 18.8 and 21.4 percent, respectively.

Finally, Farmers Coop has two locations in rural county seat towns. Neither their sales of E15 nor E85 set the standard in Iowa. But solid sales of both (E15 at 7.9 percent and E85 at 10.6 percent of overall gasoline sales) yield an average ethanol content of 17.8 percent. In other words, you don't have to move mountains to achieve the RFS goals. You just have to provide consumers the freedom to choose the ethanol blend of their choice.

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[50] https://governor.iowa.gov/2016/03/branstad-reynolds-northey-announce-second-round-of-funding-awards-for-%E2%80%9Cfueling-our-future

[51] http://iowarfa.org/2016/03/iowa-retailer-interest-in-offering-renewable-fuels-higher-than-ever/

The full gasoline sale data for these fuel retailers can be found in Attachment C. It should also be noted each of these retailers also offer various biodiesel blends to their customers, thereby boosting their overall renewable content even higher.

Remove E15 Vapor Pressure Barrier

Since the approval of E15 as a registered fuel, the IRFA has focused on making this new fuel widely available so Iowans have access to another fuel choice and the lowest-cost fuel on the market for the vast majority of vehicles on the road today. In addition to being approved by the Agency for all light-duty passenger vehicles 2001 and newer (which accounts for more than 80 percent of the U.S. passenger vehicle fleet), there are more vehicles on the road today expressly warranted by the manufacturer for the use of E15 than there are flexible fuel vehicles, diesel vehicles, or vehicles requiring premium fuel. In fact, 70 percent of 2016 model year vehicles have warranty coverage for E15 explicitly stated in their owners' manuals.[52] E15 clearly has the potential to become a large market for renewable fuels very quickly.

Despite large petroleum companies using restrictive branded supply contracts that either out-right prohibit the sale of E15 or make it too cumbersome or costly to offer a non-petroleum-controlled product, the largest obstacle to our efforts to make E15 widely available has been the inability for a retailer to offer E15 year-round. The summer blending restrictions have been the breaking point for several potential E15 retailers.

The ability to offer E15 year-round as a registered fuel (as opposed to offering it to only flexible fuel vehicles during summer months) is a serious issue. Retailers who have switched from offering E15 as a "flex-fuel only" to a registered fuel have seen their E15 sales increase by 93 percent.[53] Many Iowa retailers are seeing E15 capture 30 to 55 percent of their total fuel sales during the "winter" season.

Without access to low vapor pressure blendstock during the summer, the sale of E15 in states like Iowa (conventional gasoline only) is essentially prohibited as a registered fuel. During this time, E15 sales plummet. Describing it as "like clockwork" every year, a retailer in central Iowa says on the first day of the summer blend season his E15 sales drop by 50 percent.[54]

At best, retailers are unnecessarily losing revenue and consumers are paying more for fuel than they should have to. At worst, retailers are simply sitting back and waiting for E15 to become a year-round fuel before making it available to consumers. This is followed by a barrage of inquiries from customers who want to know why they can no longer purchase E15 for their 2001 or newer vehicle. Consumers want more choices and a consistent type of fuel to use in their vehicles all year. Fuel retailers want to meet their customers' needs, but are hampered by EPA's

[52] http://www.ethanolrfa.org/2015/12/rfa-analysis-shows-uptick-in-number-of-automakers-who-have-approved-e15-for-use-in-new-vehicles/
[53] Shared testimony from Iowa fuel retailer.
[54] http://whotv.com/2016/06/05/nevada-gas-station-owner-hopes-federal-law-changes-for-ethanol-blended-fuel/

failure to ensure that at any given time, the same gasoline blendstock can be used to blend both E10 and E15.

With motorists wanting more affordable, American-produced fuel choices, blending more ethanol in gasoline can be done, despite oil companies' statements to the contrary. The EPA has the power to take steps to ensure E15 and E10 can utilize the same gasoline blendstock in the summer. Doing so would enable E15 to become the "new normal" in the U.S. fuel market, boosting ethanol demand by 50 percent. The fuel distribution terminals owned by oil companies would have no choice then, but to meet demand and make E15 an available choice at the rack.

Retailers do not want to restrict the sale of E15 during the summer, or take the blame for denying their customers an affordable fuel choice. But until E10 and E15 are on a level playing field, retailers are becoming the scapegoat for flawed federal policy. Unfortunately, instead of hearing about work being done to solve this problem, IRFA hears rumors of plans that EPA may promulgate rules to essentially shut off E15 sales completely during the summer months in conventional gasoline areas. It is hard to comprehend the justification for making it more difficult, not easier, to sell a fuel that reduces evaporative and carbon emissions, while saving consumers money and enhancing U.S. energy security. We urge the EPA to remove artificial barriers to the sale of E15, not to create new ones.

Conclusion

The bottom line remains clear: there is no legal, marketplace, or consumer rationale for reducing the conventional biofuels level below the statutory RFS requirements. The EPA must enforce the RFS as Congress wrote the law. Let the RIN marketplace do its job in lowering fuel prices and incenting additional renewable distribution capacity.

This year's RFS rule will be the last by the Obama Administration. And despite all the promises of getting the RFS back on track, this proposal falls short. The goal of the RFS was to change the options consumers have when they purchase fuel. The advantages that the oil industry enjoyed in 2005 when the first RFS was enacted – including its Century of Subsidies and Federal Petroleum Mandate – remain intact. And consumer access to higher ethanol and biodiesel blends appears to be driven – at this point – more by state policy and the USDA than by the RFS.

In fact, just when the RFS was going to start making a meaningful impact, in 2013 the Obama Administration reversed course on the RFS, set aside several precedents (like considering banked RINs), and rewrote the dictionary definitions of supply and demand in order to pull the rug out from under the RFS. The best opportunity to inject competition into the fuel marketplace in over 100 years is being missed.

But that history is not yet written. This RFS rule is not yet finalized.

We urge the Obama Administration to reembrace the goals of the RFS that President Obama voted for in 2007, to level the playing field against 100 years of oil subsidies. We urge the Obama Administration to reexamine its support and aspirations for the RFS voiced back in 2008.

And we urge the Obama Administration to set RFS levels – in this, its final opportunity – that recommit the RFS to pushing for more competition, more energy security, more jobs, and a cleaner environment.

The correct answer to this year's RFS levels will not be found in letting artificial market barriers set the parameters of the debate as this proposed rule does. The correct answer lies in allowing the RFS to fulfill its promise as laid out a decade ago. Which renewables legacy does the Obama Administration want?

The members of IRFA recommend that the EPA maintain the 15 billion gallon level for undifferentiated renewable fuel, as prescribed by Congress for 2017. Further, by properly accounting for U.S. biodiesel production and consumption capacities along with surging biodiesel imports, IRFA urges the Agency to set the biomass-based diesel levels for 2018 at no less than 2.5 billion gallons.

We stand ready to work with you and to provide any further information or background on this issue where we may be of assistance. Please do not hesitate to contact me at mshaw@IowaRFA.org or 515-252-6249.

Sincerely,

Monte Shaw

Monte Shaw
Executive Director
Iowa Renewable Fuels Association
www.IowaRFA.org

Attachment A

	1/6/2014	1/13/2014	2/3/2014	2/10/2014	2/17/2014	2/24/2014	3/3/2014	3/10/2014	3/17/2014	3/24/2014	3/31/2014	4/7/2014	4/14/2014
Absolute Energy	**$1.97**	**$2.00**	**$1.76**	**$1.68**	**$1.65**	**$1.71**	**$1.87**	**$1.91**		**$2.13**	**$2.42**	**$2.36**	**$2.31**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%		70%	70%	70%	70%
Cenex													
Ethanol Content (%)													
Flint Hills Resources													
Ethanol Content (%)													
Hartland Fuel Products	**$2.10**	**$2.14**	**$1.98**	**$2.02**	**$1.81**	**$1.94**	**$2.05**	**$2.28**	**$2.29**	**$2.73**	**$2.87**	**$2.59**	**$3.09**
Ethanol Content (%)	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Hartland Fuel Products	**$2.14**	**$2.08**	**$2.02**	**$2.07**	**$1.88**	**$2.01**	**$2.12**	**$2.33**	**$2.33**	**$2.75**	**$2.87**	**$2.62**	**$3.11**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
HollyFrontier	**$2.23**	**$2.20**	**$2.12**	**$2.09**	**$2.04**	**$2.04**	**$2.13**	**$2.25**	**$2.36**	**$2.70**	**$3.05**	**$3.00**	**$2.97**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Little Sioux Corn Processors													
Ethanol Content (%)													
Quad County Corn Processors	**$1.98**	**$2.01**	**$1.76**	**$1.75**	**$1.79**	**$1.84**	**$2.06**	**$2.04**	**$2.25**	**$2.58**	**$3.08**	**$2.41**	**$2.44**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	75%	75%
RPMG	**$2.17**	**$2.10**	**$2.00**	**$1.92**	**$1.85**	**$1.85**	**$2.10**						
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%						
Siouxland Energy Cooperative	**$1.97**	**$2.01**	**$1.71**	**$1.70**	**$1.75**	**$1.77**	**$2.03**	**$2.03**	**$2.22**	**$2.57**	**$3.05**	**$2.54**	**$2.41**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	75%	75%	75%
The Andersons-Denison	**$1.99**	**$2.00**	**$1.67**	**$1.63**	**$1.53**	**$1.67**	**$1.92**	**$2.04**	**$2.32**	**$2.54**	**$2.83**	**$2.21**	**$2.28**
Ethanol Content (%)	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%
Valer Corp.	**$2.08**	**$2.11**	**$1.94**	**$1.90**	**$1.93**	**$1.97**	**$2.14**	**$2.23**	**$2.36**	**$2.70**	**$2.81**	**$2.68**	**$2.71**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**$2.16**	**$2.15**	**$2.01**	**$1.98**	**$1.95**	**$1.99**	**$2.14**	**$2.27**	**$2.37**	**$2.71**	**$2.89**	**$2.78**	**$2.86**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**$2.10**	**$2.14**	**$1.98**	**$2.02**	**$1.82**	**$1.94**	**$2.05**	**$2.28**	**$2.29**	**$2.73**	**$2.87**	**$2.59**	**$3.09**
Ethanol Content (%)	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
OPIS National Avg. RIN Price	$0.33	$0.31	$0.42	$0.53		$0.55	$0.49	$0.52	$0.46	$0.52	$0.51	$0.48	$0.42
OPIS Des Moines Terminal Avg. Regular Gas (E0)	$2.66	$2.73	$2.77	$2.86	$2.98	$3.04	$3.10	$3.14	$3.12	$3.08	$3.09	$3.12	$3.15
(for comparison)													
*All prices are rounded to the nearest penny													
Ave Comp. E85 Price (DM Terminal)	$2.33	$2.33	$2.17	$2.24		$2.34	$2.45	$2.64	$2.70	$3.01	$3.25	$3.16	$3.07
Ave Ethanol Plant Price	$1.98	$2.01	$1.73	$1.69	$1.68	$1.75	$1.97	$2.01	$2.26	$2.46	$2.85	$2.38	$2.36
Discount for Preblened/Plant E85	$0.35	$0.33	$0.45	$0.55		$0.59	$0.48	$0.64	$0.44	$0.56	$0.41	$0.78	$0.71
Prorated OPIS National Avg. RIN Price	$0.23	$0.22	$0.29	$0.37		$0.39	$0.34	$0.36	$0.32	$0.36	$0.36	$0.36	$0.32
(% of RIN to match % of Eth)	70%	70%	70%	70%		70%	70%	70%	70%	70%	70%	75%	75%
Plant Price Discount less Prorated RIN value	$0.12	$0.11	$0.15	$0.18		$0.21	$0.14	$0.27	$0.11	$0.19	$0.05	$0.42	$0.40

	4/21/2014	4/28/2014	5/5/2014	5/12/2014	5/19/2014	5/26/2014	6/2/2014	6/9/2014	6/16/2014	6/23/2014	6/30/2014	7/7/2014	7/14/2014
Absolute Energy	**$2.17**	**$2.02**	**$1.89**	**$1.90**	**$1.86**	**$1.91**	**$1.93**	**$1.83**	**$1.79**	**$1.64**	**$1.66**	**$1.67**	**$1.71**
Ethanol Content (%)	70%	70%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Cenex													
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Ethanol Content (%)	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Hartland Fuel Products	**$2.96**	**$2.81**	**$2.71**	**$2.33**	**$2.36**	**$2.38**	**$2.41**	**$2.31**	**$2.25**	**$2.19**	**$2.15**	**$2.17**	**$2.16**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
HollyFrontier	**$2.88**	**$2.79**	**$2.74**	**$2.72**	**$2.63**	**$2.57**	**$2.57**	**$2.51**	**$2.48**	**$2.44**	**$2.43**	**$2.43**	**$2.41**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Little Sioux Corn Processors													
Ethanol Content (%)													
Quad County Corn Processors	**$2.23**	**$2.08**	**$1.96**	**$2.03**			**$2.10**	**$1.99**	**$1.96**	**$1.76**	**$1.81**	**$1.87**	**$1.88**
Ethanol Content (%)	75%	75%	75%	75%			75%	75%	85%	85%	85%	85%	85%
RPMG				**$2.30**	**$2.30**	**$2.30**	**$2.30**	**$2.20**	**$2.20**	**$2.15**	**$2.08**	**$2.06**	**$2.00**
Ethanol Content (%)				70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Siouxland Energy Cooperative	**$2.20**	**$2.06**	**$1.91**	**$1.98**	**$2.03**	**$1.98**	**$2.05**	**$1.94**	**$1.94**	**$1.72**	**$1.77**	**$1.84**	**$1.85**
Ethanol Content (%)	75%	75%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
The Andersons-Denison	**$2.17**	**$2.05**	**$1.93**	**$1.92**	**$1.97**	**$2.00**	**$2.02**	**$1.96**	**$1.92**	**$1.78**	**$1.80**	**$1.86**	**$1.92**
Ethanol Content (%)	76%	76%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Valer Corp.	**$2.53**	**$2.36**	**$2.32**	**$2.25**	**$2.25**	**$2.29**	**$2.29**	**$2.20**	**$2.20**	**$2.16**	**$2.16**	**$2.12**	**$2.14**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**$2.71**	**$2.57**	**$2.49**	**$2.36**	**$2.36**	**$2.36**	**$2.38**	**$2.30**	**$2.27**	**$2.12**	**$2.19**	**$2.18**	**$2.19**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**$2.93**	**$2.77**	**$2.66**	**$2.29**	**$2.32**	**$2.33**	**$2.37**	**$2.26**	**$2.19**	**$2.24**	**$2.09**	**$2.11**	**$2.11**
Ethanol Content (%)	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
OPIS National Avg. RIN Price	$0.42	$0.39	$0.41	$0.45	$0.49		$0.45	$0.45	$0.46	$0.57	$0.55	$0.53	$0.49
OPIS Des Moines Terminal Avg. Regular Gas (E0)	$3.14	$3.13	$3.05	$3.02	$3.09	$3.13	$3.12	$3.10	$3.18	$3.23	$3.15	$3.09	$2.98
(for comparison)													
*All prices are rounded to the nearest penny													
Ave Comp. E85 Price (DM Terminal)	$2.87	$2.69	$2.54	$2.51	$2.54		$2.61	$2.49	$2.44	$2.41	$2.36	$2.35	$2.36
Ave Ethanol Plant Price	$2.19	$2.05	$1.92	$1.96	$1.95	$1.96	$2.03	$1.93	$1.90	$1.73	$1.76	$1.81	$1.84
Discount for Preblened/Plant E85	$0.68	$0.64	$0.62	$0.55	$0.59		$0.59	$0.56	$0.54	$0.69	$0.60	$0.54	$0.52
Prorated OPIS National Avg. RIN Price	$0.32	$0.29	$0.33	$0.36	$0.41		$0.37	$0.37	$0.38	$0.47	0.4565	0.4399	0.4067
(% of RIN to match % of Eth)	75%	75%	80%	80%	83%		83%	83%	83%	83%	0.83	0.83	0.83
Plant Price Discount less Prorated RIN value	$0.36	$0.35	$0.29	$0.19	$0.18		$0.21	$0.19	$0.16	$0.21	$0.14	$0.10	$0.11

	7/21/2014	7/28/2014	8/18/2014	8/25/2014	9/8/2014	9/15/2014	9/22/2014	9/29/2014	10/6/2014	10/13/2014	10/20/2014	10/27/2014
Absolute Energy	**$1.71**	**$1.70**	**$1.76**	**$1.83**	**$1.69**	**$1.51**	**$1.38**	**$1.26**	**$1.18**	**$1.26**	**$1.35**	**$1.34**
Ethanol Content (%)	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Cenex							**$2.08**	**$1.83**	**$1.71**	**$1.69**	**$1.75**	**$1.84**
Ethanol Content (%)							70%	70%	70%	70%	70%	70%
Flint Hills Resources							**$2.15**	**$2.00**	**$2.00**	**$1.70**	**$1.70**	**$1.90**
Ethanol Content (%)							70%	70%	70%	70%	70%	70%
Hartland Fuel Products	**$1.99**	**$2.05**	**$2.17**	**$2.10**	**$2.07**	**$1.93**	**$1.96**	**$1.69**	**$1.60**	**$1.63**	**$1.81**	**$1.84**
Ethanol Content (%)	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Hartland Fuel Products	**$2.05**	**$2.10**	**$2.22**	**$2.15**	**$2.12**	**$1.99**	**$2.01**	**$1.76**	**$1.66**	**$1.68**	**$1.86**	**$1.89**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
HollyFrontier	**$2.38**	**$2.36**	**$2.28**	**$2.35**	**$2.37**	**$2.26**	**$2.16**	**$2.05**	**$1.94**	**$1.90**	**$1.94**	**$1.92**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Little Sioux Corn Processors											**$1.46**	**$1.47**
Ethanol Content (%)											70%	70%
Quad County Corn Processors	**$1.84**	**$1.84**	**$1.94**	**$1.93**	**$1.82**	**$1.59**	**$1.44**	**$1.35**	**$1.33**	**$1.37**	**$1.49**	**$1.44**
Ethanol Content (%)	85%	85%	85%	85%	85%	85%	85%	85%	75%	75%	75%	75%
RPMG	**$1.93**	**$1.97**	**$2.05**	**$2.05**	**$2.00**	**$2.00**	**$2.00**	**$1.85**	**$1.55**	**$1.55**	**$1.65**	**$1.75**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Siouxland Energy Cooperative	**$1.81**	**$1.81**	**$1.91**	**$1.90**	**$1.79**	**$1.58**	**$1.43**	**$1.34**	**$1.29**	**$1.33**	**$1.45**	**$1.41**
Ethanol Content (%)	80%	80%	80%	80%	80%	80%	80%	80%	75%	75%	75%	75%
The Andersons-Denison	**$1.86**	**$1.82**	**$1.83**	**$1.79**	**$1.69**	**$1.49**	**$1.38**	**$1.29**	**$1.34**	**$1.36**	**$1.44**	**$1.42**
Ethanol Content (%)	85%	85%	85%	85%	85%	85%	85%	85%	76%	76%	76%	76%
Valer Corp.	**$2.13**	**$2.19**	**$2.33**	**$2.30**	**$2.19**	**$2.04**	**$1.97**	**$1.88**	**$1.78**	**$1.80**	**$1.92**	**$2.00**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**$2.13**	**$2.17**	**$2.24**	**$2.23**	**$2.18**	**$2.06**	**$1.99**	**$1.86**	**$1.75**	**$1.72**	**$1.80**	**$1.88**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**$1.99**	**$2.05**	**$2.17**	**$2.10**	**$2.07**	**$1.93**	**$1.96**	**$1.69**	**$1.60**	**$1.63**	**$1.81**	**$1.84**
Ethanol Content (%)	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
OPIS National Avg. RIN Price	$0.52	$0.52	$0.50	$0.50	$0.49	$0.45	$0.45	$0.46	$0.47	$0.48	$0.47	$0.46
OPIS Des Moines Terminal Avg. Regular Gas (E0)	$2.92	$2.90	$2.93	$2.95	$2.93	$2.81	$2.82	$2.85	$2.63	$2.52	$2.70	$2.83
(for comparison)												
*All prices are rounded to the nearest penny												
Ave Comp. E85 Price (DM Terminal)	$2.34	$2.32	$2.43	$2.42	$2.39	$2.23	$2.06	$1.95	$1.84	$1.89	$2.02	$2.11
Ave Ethanol Plant Price	$1.81	$1.79	$1.86	$1.86	$1.75	$1.54	$1.41	$1.31	$1.29	$1.33	$1.44	$1.42
Discount for Preblened/Plant E85	$0.54	$0.53	$0.57	$0.56	$0.64	$0.69	$0.65	$0.64	$0.56	$0.56	$0.58	$0.69
Prorated OPIS National Avg. RIN Price	0.4316	0.4316	0.415	0.415	0.4067	0.3735	0.3735	0.3818	$0.38	$0.38	$0.35	0.345
(% of RIN to match % of Eth)	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.8	0.8	0.75	0.75
Plant Price Discount less Prorated RIN value	$0.10	$0.10	$0.16	$0.14	$0.24	$0.31	$0.28	$0.26	$0.18	$0.18	$0.23	$0.35

		11/10/2014	11/17/2014	11/24/2014	12/1/2014	12/15/2014
Absolute Energy		**$1.62**	**$1.72**	**$1.82**	**$1.93**	**$1.57**
Ethanol Content (%)	83%	70%	70%	70%	70%	70%
Cenex		**$1.94**	**$1.98**	**$2.18**	**$2.22**	**$1.88**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%
Flint Hills Resources		**$2.10**	**$2.25**	**$2.25**	**$2.25**	**$1.90**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%
Hartland Fuel Products		**$1.82**	**$2.11**	**$1.97**	**$2.28**	**$1.68**
Ethanol Content (%)	75%	75%	75%	75%	75%	75%
Hartland Fuel Products		**$1.84**	**$2.10**	**$1.97**	**$2.26**	**$1.68**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%
HollyFrontier		**$2.04**	**$2.20**	**$2.31**	**$2.38**	**$1.98**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%
Little Sioux Corn Processors		**$1.70**	**$1.85**	**$1.94**	**$1.84**	**$1.50**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%
Quad County Corn Processors		**$1.75**	**$1.94**		**$2.17**	**$1.48**
Ethanol Content (%)	75%	70%	70%	70%	70%	70%
RPMG		**$1.75**	**$1.90**	**$1.98**	**$2.02**	**$1.60**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%
Siouxland Energy Cooperative		**$1.72**	**$1.90**	**$1.97**	**$2.12**	**$1.43**
Ethanol Content (%)	75%	70%	70%	70%	70%	70%
The Andersons-Denison		**$1.64**	**$1.83**	**$1.84**	**$1.95**	**$1.54**
Ethanol Content (%)	76%	76%	76%	76%	72%	72%
Valer Corp.		**$2.01**	**$2.01**	**$2.13**	**$2.15**	**$1.88**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.		**$1.95**	**$2.06**	**$2.13**	**$2.21**	**$1.68**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.		**$1.82**	**$2.11**	**$1.97**	**$2.28**	**$1.82**
Ethanol Content (%)	75%	75%	75%	75%	75%	75%
OPIS National Avg. RIN Price	$0.46	$0.47	$0.55	$0.57	$0.57	$0.61
OPIS Des Moines Terminal Avg. Regular Gas (E0)		$2.33	$2.18	$2.17	$2.07	$1.75
(for comparison)						
*All prices are rounded to the nearest penny						
Ave Comp. E85 Price (DM Terminal)		$2.19	$2.35	$2.50	$2.54	$2.12
Ave Ethanol Plant Price		$1.69	$1.85	$1.89	$2.00	$1.50
Discount for Preblened/Plant E85		$0.50	$0.50	$0.61	$0.54	$0.62
Prorated OPIS National Avg. RIN Price		0.329	0.385	0.399	0.399	0.427
(% of RIN to match % of Eth)		0.7	0.7	0.7	0.7	0.7
Plant Price Discount less Prorated RIN value		$0.18	$0.12	$0.21	$0.14	$0.19

	1/5/2015	1/12/2015	2/2/2015	2/9/2015	2/16/2015	2/23/2015	3/2/2015	3/9/2015	3/16/2015	3/31/2015	4/6/2015	4/13/2015	4/20/2015	4/27/2015
Absolute Energy	**0.84**	**0.85**	**0.85**	**0.8**	**0.8**	**0.84**	**0.84**	**0.9**	**0.92**	**0.9**	**0.94**	**0.95**	**0.95**	**1**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Cenex	**1.3**	**1.18**	**1.16**	**1.2**	**1.19**	**1.2**	**1.26**	**1.28**	**1.27**	**1.24**	**1.3**	**1.34**	**1.35**	**1.39**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Flint Hills Resources	**1.9**	**1.9**	**1**	**1.1**	**1.15**	**1.15**	**1.15**	**1.15**	**1.2**	**1.2**	**1.18**	**1.18**	**1.18**	**1.3**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Hartland Fuel Products	**1.19**	**1**	**0.98**	**1.03**	**1.07**	**1.08**	**1**	**1.15**	**1.14**	**1.13**	**1.22**			
Ethanol Content (%)	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%			
Hartland Fuel Products	**1.2**	**1.02**	**1.02**	**1.08**	**1.11**	**1.13**	**1.07**	**1.2**	**1.18**	**1.17**	**1.26**			
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%			
HollyFrontier	**1.41**	**1.34**	**1.2**	**1.24**	**1.29**	**1.28**	**1.34**	**1.34**	**1.29**	**1.34**	**1.35**	**1.36**	**1.39**	**1.45**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Little Sioux Corn Processors	**0.84**	**0.8**	**0.88**	**0.88**	**0.88**	**0.88**	**0.9**	**0.9**	**0.9**	**1**	**1.02**	**1**	**1**	**1**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Noble Mansfield	**1.19**	**1.05**												
Ethanol Content (%)	70%	70%												
Quad County Corn Processors	**1.04**	**0.94**	**0.88**	**0.96**	**0.99**	**0.95**	**1**	**1.05**	**0.98**	**1.08**	**1.11**	**1.12**	**1.14**	**1.15**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	75%	75%	75%
RPMG	**1.15**	**1**	**1**	**1.05**	**1.05**	**1.1**	**0.92**	**1.1**	**1.15**	**1.1**	**1.15**	**1.18**	**1.18**	**1.2**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Siouxland Energy Cooperative	**0.95**	**0.86**	**0.79**	**0.86**	**0.9**	**0.91**	**0.82**	**0.91**	**0.98**	**1.01**	**1.01**	**1**	**1.04**	**1.04**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	75%	75%	75%	75%
The Andersons-Denison	**0.96**	**0.73**	**0.72**	**0.75**	**0.79**	**0.8**	**0.82**	**0.83**	**0.85**	**0.91**	**0.99**	**0.99**	**1.01**	**1.02**
Ethanol Content (%)	76%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Valero Corp.	**1.33**	**1.18**	**1.22**	**1.25**	**1.22**	**1.24**	**1.21**	**1.25**	**1.21**	**1.21**	**1.28**	**1.29**	**1.31**	**1.32**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**1.28**	**1.16**	**1.12**	**1.17**	**1.17**	**1.19**	**1.19**	**1.23**	**1.21**	**1.21**	**1.27**	**1.27**	**1.29**	**1.33**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**1.19**	**1**	**0.98**	**1.03**	**1.07**	**1.08**	**1**	**1.15**	**1.14**	**1.13**	**1.22**			
Ethanol Content (%)	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
OPIS National Avg. RIN Price	$0.81	$0.73	$0.71	$0.73		$0.72	$0.71	$0.69	$0.66	$0.69	$0.68	$0.70	$0.71	$0.72
*All prices are rounded to the nearest penny														
Ave Comp. E85 Price (DM Terminal)	$1.72	$1.59	$1.59	$1.62		$1.65	$1.67	$1.68	$1.66	$1.67	$1.73	$1.67	$1.68	$1.74
Ave Ethanol Plant Price	$0.93	$0.84	$0.82	$0.85		$0.88	$0.88	$0.92	$0.93	$0.98	$1.01	$1.01	$1.03	$1.04
Discount for Preblened/Plant E85	$0.80	$0.75	$0.77	$0.77		$0.77	$0.79	$0.76	$0.73	$0.69	$0.72	$0.66	$0.65	$0.70
Prorated OPIS National Avg. RIN Price	$0.57	$0.51	$0.50	$0.51		$0.50	$0.50	$0.48	$0.46	$0.48	$0.48	$0.53	$0.53	$0.54
(% of RIN to match % of Eth)	70%	70%	70%	70%		70%	70%	70%	70%	70%	70%	75%	75%	75%
Plant Price Discount less Prorated RIN value	$0.23	$0.24	$0.27	$0.26	$0.00	$0.27	$0.30	$0.28	$0.27	$0.21	$0.24	$0.13	$0.12	$0.16

	5/4/2015	5/11/2015	5/18/2015	6/1/2015	6/8/2015	6/22/2015	7/6/2015	7/13/2015	7/20/2015	7/27/2015	8/3/2015	8/10/2015	8/24/2015	9/14/2015
Absolute Energy	**0.92**	**0.95**	**0.97**	**0.99**	**1.11**		**1.14**	**1.12**	**1.05**	**1.04**	**1.07**	**1.03**	**1**	**1.13**
Ethanol Content (%)	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Cenex	**1.42**	**1.46**	**1.49**	**1.52**	**1.6**	**1.54**	**1.62**	**1.64**	**1.62**	**1.55**	**1.53**	**1.44**	**1.46**	**1.4**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Flint Hills Resources	**1.3**	**1.4**	**1.45**	**1.45**	**1.45**	**1.55**	**1.5**	**1.5**	**1.65**	**1.65**	**1.65**	**1.65**	**1.5**	**1.4**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Hartland Fuel Products														
Ethanol Content (%)														
Hartland Fuel Products														
Ethanol Content (%)														
HollyFrontier	**1.49**	**1.53**	**1.56**	**1.67**	**1.81**	**1.78**	**1.8**	**1.78**	**1.75**	**1.71**	**1.64**	**1.59**	**1.65**	**1.57**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Little Sioux Corn Processors	**0.97**	**0.97**	**0.97**	**1.05**	**1.15**	**1**	**1.15**	**1.15**	**1.09**	**1.04**	**1.05**	**1.05**	**1**	**1.14**
Ethanol Content (%)	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Noble Mansfield														
Ethanol Content (%)														
Quad County Corn Processors	**1.14**	**1.17**	**1.2**	**1.19**	**1.19**	**1.17**	**1.3**	**1.29**	**1.21**	**1.18**	**1.21**	**1.16**	**1.14**	**1.23**
Ethanol Content (%)	75%	75%	80%	80%	83%	83%	83%	83%	83%	85%	85%	85%	85%	85%
RPMG	**1.2**	**1.25**	**1.27**	**1.55**	**1.45**	**1.39**	**1.5**	**1.47**	**1.45**	**1.4**	**1.36**	**1.29**	**1.35**	**1.31**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Siouxland Energy Cooperative	**1**	**1.05**	**1.07**	**1.1**	**1.24**	**1.12**	**1.26**	**1.24**	**1.16**	**1.14**	**1.18**	**1.12**	**1.1**	**1.21**
Ethanol Content (%)	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
The Andersons-Denison	**0.94**	**1.03**	**1.04**	**1.02**	**1.22**	**1.13**	**1.24**	**1.2**	**1.11**	**1.09**	**1.13**	**1.09**	**1.1**	**1.22**
Ethanol Content (%)	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Valero Corp.	**1.34**	**1.41**	**1.43**	**1.39**	**1.39**	**1.36**	**1.49**	**1.49**	**1.49**	**1.41**	**1.37**	**1.28**	**1.32**	**1.25**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**1.35**	**1.41**	**1.44**	**1.51**	**1.53**	**1.5**	**1.58**	**1.58**	**1.59**	**1.53**	**1.49**	**1.44**	**1.43**	**1.36**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.														
Ethanol Content (%)	75%	75%	75%	75%	75%	75%	75%	75%	75%					
OPIS National Avg. RIN Price	$0.75	$0.73	$0.73	$0.46	$0.38	$0.45	$0.45	$0.46	$0.44	$0.40	$0.38	$0.40	$0.38	$0.29
*All prices are rounded to the nearest penny														
Ave Comp. E85 Price (DM Terminal)	$1.74	$1.79	$1.80	$1.80	$1.72	$1.67	$1.80	$1.83	$1.75	$1.75	$1.77	$1.78	$1.79	$1.64
Ave Ethanol Plant Price	$0.99	$1.03	$1.05	$1.07	$1.18	$1.11	$1.22	$1.20	$1.12	$1.10	$1.13	$1.09	$1.07	$1.19
Discount for Preblened/Plant E85	$0.75	$0.76	$0.75	$0.73	$0.54	$0.57	$0.58	$0.63	$0.63	$0.66	$0.64	$0.69	$0.72	$0.45
Prorated OPIS National Avg. RIN Price	$0.60	$0.58	$0.58	$0.37	$0.32	$0.37	$0.37	$0.38	$0.37	$0.33	$0.32	$0.33	$0.32	$0.24
(% of RIN to match % of Eth)	80%	80%	80%	80%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Plant Price Discount less Prorated RIN value	$0.15	$0.17	$0.17	$0.36	$0.22	$0.19	$0.21	$0.25	$0.26	$0.32	$0.33	$0.36	$0.41	$0.21

	9/21/2015	10/5/2015	10/12/2015	10/19/2015	11/2/2015	11/9/2015	11/23/2015	12/7/2015	12/14/2015	12/21/2015
Absolute Energy	**1.17**	**1.18**	**1.17**	**1.14**	**1.18**	**1.13**	**1.07**	**0.86**	**0.89**	**0.84**
Ethanol Content (%)	83%	83%	83%	83%	70%	70%	70%	70%	70%	70%
Cenex	**1.44**	**1.49**	**1.52**	**1.46**	**1.42**	**1.4**	**1.25**	**1.08**	**1.14**	**1.1**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Flint Hills Resources	**1.4**	**1.4**	**1.45**	**1.45**	**1.45**	**1.45**	**1.4**	**1.14**	**0.87**	**0.85**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Hartland Fuel Products										
Ethanol Content (%)										
Hartland Fuel Products										
Ethanol Content (%)										
HollyFrontier	**1.61**	**1.68**	**1.64**	**1.59**	**1.66**	**1.57**	**1.53**	**1.56**	**1.54**	**1.47**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Little Sioux Corn Processors	**N/A**	**1.2**	**1.15**	**1.1**	**1.16**	**1.11**	**1.11**	**0.9**	**0.85**	**0.85**
Ethanol Content (%)	83%	83%	83%	83%	70%	70%	70%	70%	70%	70%
Noble Mansfield										
Ethanol Content (%)										
Quad County Corn Processors	**1.27**	**1.26**	**1.26**	**1.2**	**1.26**	**1.19**	**1.15**	**1.02**	**0.97**	**0.98**
Ethanol Content (%)	85%	75%	75%	75%	75%	70%	70%	70%	70%	70%
RPMG	**1.31**	**1.38**	**1.45**	**1.34**	**1.35**	**1.35**	**1.21**	**1.15**	**1.12**	**1.1**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Siouxland Energy Cooperative	**1.25**	**1.24**	**1.23**	**1.18**	**1.23**	**1.15**	**1.1**	**0.92**	**0.91**	**0.86**
Ethanol Content (%)	80%	75%	75%	75%	75%	70%	70%	70%	70%	70%
The Andersons-Denison	**1.21**	**1.22**	**1.21**	**1.14**	**1.19**	**1.12**	**1.06**	**0.87**	**0.84**	**0.8**
Ethanol Content (%)	85%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Valero Corp.	**1.28**	**1.39**	**1.33**	**1.25**	**1.35**	**1.4**	**1.36**	**1.39**	**1.41**	**1.38**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**1.39**	**1.46**	**1.46**	**1.39**	**1.43**	**1.43**	**1.35**	**1.23**	**1.14**	**1.1**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.										
Ethanol Content (%)										
OPIS National Avg. RIN Price	$0.32	$0.34	$0.35	$0.42	$0.40	$0.42	$0.44	$0.73	$0.74	$0.70
*All prices are rounded to the nearest penny										
Ave Comp. E85 Price (DM Terminal)	$1.66	$1.75	$1.82	$1.63	$1.70	$1.59	$1.46	$1.46	$1.45	$1.43
Ave Ethanol Plant Price	$1.23	$1.22	$1.20	$1.15	$1.20	$1.14	$1.10	$0.91	$0.89	$0.87
Discount for Preblened/Plant E85	$0.43	$0.53	$0.62	$0.47	$0.50	$0.45	$0.36	$0.54	$0.56	$0.56
Prorated OPIS National Avg. RIN Price	$0.27	$0.27	$0.28	$0.34	$0.30	$0.29	$0.31	$0.51	$0.52	$0.49
(% of RIN to match % of Eth)	83%	80%	80%	80%	75%	70%	70%	70%	70%	70%
Plant Price Discount less Prorated RIN value	$0.17	$0.26	$0.34	$0.14	$0.20	$0.16	$0.05	$0.03	$0.04	$0.07

	1/4/2016	1/11/2016	1/25/2016	2/1/2016	2/8/2016	2/15/2016	2/22/2016	2/29/2016	3/7/2016
Absolute Energy					**0.71**	**0.68**	**0.7**	**0.68**	**0.66**
Ethanol Content (%)					70%	70%	70%	70%	70%
Cenex	**1.05**	**0.98**	**1**	**1.09**	**1.02**	**1.05**	**1.06**	**1.04**	**1.01**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
Flint Hills Resources	**0.91**	**0.86**	**0.71**	**0.61**	**0.58**	**0.87**	**1.01**	**1.07**	**1.09**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
HollyFrontier	**1.38**	**1.29**	**1.28**	**1.23**	**1.16**	**1.18**	**1.24**	**1.28**	**1.23**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
Little Sioux Corn Processors							**0.74**	**0.74**	**0.7**
Ethanol Content (%)							70%	70%	70%
Quad County Corn Processors	**0.91**	**0.83**	**0.79**	**0.83**	**0.87**	**0.83**	**0.83**	**0.85**	**0.86**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
RPMG	**1.06**	**0.98**	**0.95**	**0.97**	**0.97**	**0.93**	**0.95**	**1.03**	**1.03**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
Siouxland Energy Cooperative	**0.83**	**0.73**	**0.79**	**0.81**	**0.78**	**0.72**	**0.75**	**0.74**	**0.76**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
The Andersons-Denison	**0.73**	**0.69**	**0.71**	**0.74**	**0.68**	**0.57**	**0.6**	**0.61**	**0.62**
Ethanol Content (%)	75%	75%	75%	75%	75%	75%	75%	76%	75%
Valero Corp.	**1.33**	**1.21**	**1.22**	**1.25**	**1.2**	**1.21**	**1.22**	**1.28**	**1.3**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**1.22**	**1.13**	**1.13**	**1.15**	**1.11**	**1.09**	**1.13**	**1.16**	**1.16**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS National Avg. RIN Price	$0.70	$0.68	$0.63	$0.68	$0.71	$0.72	$0.73	$0.75	$0.72
*All prices are rounded to the nearest penny									
Ave Comp. E85 Price (DM Terminal)	1.39	1.24	1.22	1.29	1.27	1.27	1.25	$1.33	$1.31
Ave Ethanol Plant Price	$0.82	$0.75	$0.76	$0.79	$0.76	$0.70	$0.72	$0.72	$0.72
Discount for Preblened/Plant E85	$0.57	$0.49	$0.46	$0.50	$0.51	$0.57	$0.53	$0.60	$0.59
Prorated OPIS National Avg. RIN Price	$0.49	$0.48	$0.44	$0.48	$0.50	$0.50	$0.51	$0.53	$0.50
(% of RIN to match % of Eth)	70%	70%	70%	70%	70%	70%	70%	70%	70%
Plant Price Discount less Prorated RIN value	$0.08	$0.01	$0.02	$0.02	$0.01	$0.07	$0.02	$0.08	$0.08

	3/14/2016	3/21/2016	3/28/2016	4/11/2016	4/18/2016	4/25/2016	5/2/2016	5/9/2016	5/16/2016
Absolute Energy	**0.69**	**0.68**	**0.68**	**0.8**	**0.86**	**N/A**	**0.83**	**0.79**	**0.83**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	83%	83%	83%
Cenex	**1.01**	**1.04**	**1.05**	**1.14**	**1.08**	**1.22**	**1.18**	**1.16**	**1.18**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
Flint Hills Resources	**1.08**	**0.96**	**0.96**	**1.11**	**1.1**	**1.12**	**1.13**	**1.1**	**1.16**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
HollyFrontier	**1.28**	**1.26**	**1.28**	**1.44**	**1.38**	**1.4**	**1.41**	**1.39**	**1.47**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
Little Sioux Corn Processors	**0.75**	**0.75**	**0.75**	**0.84**	**0.85**	**0.89**	**0.85**	**0.85**	**0.85**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	83%	83%	83%
Quad County Corn Processors	**0.87**	**0.87**	**0.9**	**1**	**1.03**	**0.99**	**1.02**	**0.96**	**1.01**
Ethanol Content (%)	70%	70%	70%	75%	75%	75%	80%	80%	80%
RPMG	**1.1**	**1.05**	**1.06**	**1.13**	**1.17**	**1.21**	**1.21**	**1.18**	**1.22**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
Siouxland Energy Cooperative	**0.81**	**0.81**	**0.79**	**0.88**	**0.91**	**0.9**	**0.91**	**0.86**	**0.91**
Ethanol Content (%)	70%	70%	70%	75%	75%	75%	80%	80%	80%
The Andersons-Denison	**0.68**	**0.67**	**0.69**	**0.79**	**0.83**	**0.78**	**0.82**	**0.74**	**0.79**
Ethanol Content (%)	75%	75%	75%	75%	75%	75%	83%	83%	83%
Valero Corp.	**1.36**	**1.34**	**1.35**	**1.46**	**1.47**	**1.51**	**1.5**	**1.45**	**1.26**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS Des Moines Terminal Rack Avg.	**1.12**	**1.17**	**1.18**	**1.28**	**1.27**	**1.32**	**1.33**	**1.3**	**1.28**
Ethanol Content (%)	70%	70%	70%	70%	70%	70%	70%	70%	70%
OPIS National Avg. RIN Price	$0.71	$0.73	$0.73	$0.74	$0.74	$0.75	$0.73	$0.74	$0.75
*All prices are rounded to the nearest penny									
Ave Comp. E85 Price (DM Terminal)	$1.37	$1.36	$1.35	$1.48	$1.53	$1.60	$1.59	$1.63	$1.62
Ave Ethanol Plant Price	$0.76	$0.76	$0.76	$0.86	$0.90	$0.89	$0.89	$0.84	$0.88
Discount for Preblened/Plant E85	$0.61	$0.60	$0.59	$0.62	$0.63	$0.71	$0.70	$0.79	$0.74
Prorated OPIS National Avg. RIN Price	$0.50	$0.51	$0.51	$0.56	$0.56	$0.56	$0.61	$0.61	$0.62
(% of RIN to match % of Eth)	70%	70%	70%	75%	75%	75%	83%	83%	83%
Plant Price Discount less Prorated RIN value	$0.12	$0.09	$0.08	$0.07	$0.07	$0.14	$0.10	$0.17	$0.12

	5/24/2016	6/6/2016	6/13/2016	6/20/2016	
Absolute Energy	**0.82**	**0.87**	**0.86**	**0.87**	
Ethanol Content (%)	83%	83%	83%	83%	
Cenex	**1.2**	**1.24**	**1.25**	**1.18**	
Ethanol Content (%)	70%	70%	70%	70%	
Flint Hills Resources	**1.18**	**1.28**	**1.26**	**1.24**	
Ethanol Content (%)	70%	70%	70%	70%	
HollyFrontier	**1.52**	**1.57**	**1.55**	**1.52**	
Ethanol Content (%)	70%	70%	70%	70%	
Little Sioux Corn Processors	**0.85**	**0.9**	**0.99**	**0.95**	
Ethanol Content (%)	83%	83%	83%	83%	
Quad County Corn Processors	**1.02**	**1.06**	**1.07**	**0.97**	
Ethanol Content (%)	80%	83%	83%	83%	
RPMG	**1.24**	**1.33**	**1.3**	**1.26**	
Ethanol Content (%)	70%	70%	70%	70%	
Siouxland Energy Cooperative	**0.92**	**0.96**	**0.96**	**0.93**	
Ethanol Content (%)	80%	80%	80%	80%	
The Andersons-Denison	**0.82**	**0.86**	**0.85**	**0.86**	
Ethanol Content (%)	83%	83%	83%	83%	
Valero Corp.	**1.32**	**1.36**	**1.35**	**1.33**	
Ethanol Content (%)	70%	70%	70%	70%	
OPIS Des Moines Terminal Rack Avg.	**1.31**	**1.36**	**1.35**	**1.32**	
Ethanol Content (%)	70%	70%	70%	70%	
OPIS National Avg. RIN Price	$0.78	$0.80	$0.83	$0.83	
*All prices are rounded to the nearest penny					
Ave Comp. E85 Price (DM Terminal)	$1.67	$1.73	$1.71	$1.73	$1.70
Ave Ethanol Plant Price	$0.89	$0.93	$0.95	$0.92	
Discount for Preblened/Plant E85	$0.79	$0.80	$0.77	$0.81	
Prorated OPIS National Avg. RIN Price	$0.65	$0.66	$0.69	$0.69	
(% of RIN to match % of Eth)	83%	83%	83%	83%	
Plant Price Discount less Prorated RIN value	$0.14	$0.13	$0.08	$0.12	

OPIS Rack Prices- 2015										
	1/5/2015	1/8/2015	1/12/2015	1/15/2015	1/19/2015	1/22/2015	1/26/2015	1/29/2015	2/2/2015	2/5/2015
V-grade (84-octane)	1.292	1.271	1.247	1.343	1.366	1.330	1.388	1.418	1.552	1.564
E0 (87-octane)	1.426	1.381	1.338	1.414	1.433	1.392	1.442	1.468	1.597	1.610
E0 Premium (91-octane)	1.613	1.560	1.505	1.539	1.543	1.488	1.516	1.543	1.673	1.695
E10 (87-octane)	1.256	1.219	1.203	1.281	1.298	1.268	1.327	1.361	1.471	1.489
E100	1.908	1.794	1.743	1.599	1.526	1.533	1.565	1.594	1.609	1.614
Comp. E85	$1.72	$1.64	$1.59	$1.52	$1.48	$1.47	$1.51	$1.54	$1.59	$1.60
	70% Eth	--->>								
	1/5/2015	1/8/2015	1/12/2015	1/15/2015	1/19/2015	1/22/2015	1/26/2015	1/29/2015	2/2/2015	2/5/2015

OPIS Rack Prices- 2015										
	2/9/2015	2/12/2015	2/16/2015	2/19/2015	2/23/2015	2/26/2015	3/2/2015	3/5/2015	3/9/2015	3/12/2015
V-grade (84-octane)	1.653	1.649	1.720	1.714	1.762	1.880	1.926	1.894	1.847	1.785
E0 (87-octane)	1.699	1.702	1.775	1.779	1.854	1.991	2.045	2.018	1.984	1.921
E0 Premium (91-octane)	1.769	1.777	1.849	1.868	1.955	2.114	2.182	2.161	2.133	2.069
E10 (87-octane)	1.569	1.568	1.637	1.625	1.671	1.773	1.827	1.804	1.756	1.700
E100	1.608	1.566	1.573	1.593	1.598	1.530	1.565	1.632	1.608	1.636
Comp. E85	$1.62	$1.59	$1.62	$1.63	$1.65	$1.64	$1.67	$1.71	$1.68	$1.68
	2/9/2015	2/12/2015	2/16/2015	2/19/2015	2/23/2015	2/26/2015	3/2/2015	3/5/2015	3/9/2015	3/12/2015

OPIS Rack Prices- 2015										
	3/16/2015	3/19/2015	3/23/2015	3/26/2015	3/30/2015	4/2/2015	4/6/2015	4/9/2015	4/13/2015	4/16/2015
V-grade (84-octane)	1.698	1.796	1.784	1.820	1.740	1.713	1.719	1.674	1.728	1.840
E0 (87-octane)	1.834	1.921	1.912	1.932	1.853	1.831	1.828	1.779	1.828	1.941
E0 Premium (91-octane)	1.981	2.061	2.046	2.058	1.978	1.949	1.941	1.898	1.945	2.059
E10 (87-octane)	1.622	1.712	1.700	1.731	1.663	1.647	1.645	1.604	1.657	1.758
E100	1.643	1.598	1.606	1.654	1.643	1.703	1.736	1.758	1.657	1.642
Comp. E85	$1.66	$1.66	$1.66	$1.70	$1.67	$1.71	$1.73		$1.67	$1.69
						<<----	70% Eth		75% Eth	---->>
	3/16/2015	3/19/2015	3/23/2015	3/26/2015	3/30/2015	4/2/2015	4/6/2015	4/9/2015	4/13/2015	4/16/2015

OPIS Rack Prices- 2015									
	4/20/2015	4/23/2015	4/27/2015	4/30/2015	5/4/2015	5/7/2015	5/11/2015	5/14/2015	5/18/2015
V-grade (84-octane)	1.825	1.851	1.880	1.906	1.952	1.939	1.913	1.988	2.011
E0 (87-octane)	1.926	1.949	1.980	2.009	2.056	2.043	2.019	2.091	2.116
E0 Premium (91-octane)	2.051	2.072	2.107	2.137	2.185	2.173	2.150	2.222	2.253
E10 (87-octane)	1.744	1.767	1.796	1.823	1.867	1.863	1.838	1.903	1.930
E100	1.635	1.697	1.690	1.702	1.687	1.720	1.765	1.740	1.747
Comp. E85	$1.68	$1.74	$1.74		$1.74	$1.76	$1.79	$1.79	$1.80
		<<----	75% Eth		80% Eth	---->>			
	4/20/2015	4/23/2015	4/27/2015	4/30/2015	5/4/2015	5/7/2015	5/11/2015	5/14/2015	5/18/2015

OPIS Rack Prices- 2015									
	5/21/2015	5/25/2015	5/28/2015	6/1/2015	6/4/2015	6/8/2015	6/11/2015	6/15/2015	6/18/2015
V-grade (84-octane)	2.010	2.009	1.935	2.071	2.010	2.017	2.126	2.101	2.037
E0 (87-octane)	2.116	2.118	2.103	2.290	2.238	2.241	2.356	2.328	2.277
E0 Premium (91-octane)	2.250	2.259	2.275	2.487	2.482	2.484	2.629	2.617	2.561
E10 (87-octane)	1.926	1.925	1.859	1.985	1.943	1.946	2.041	2.016	1.952
E100	1.802	1.740	1.747	1.737	1.657	1.660	1.637	1.580	1.577
Comp. E85	$1.84	$1.79	$1.78	$1.80		$1.72	$1.72	$1.67	$1.66
			<<----	80% Eth		83% Eth	---->>		
	5/21/2015	5/25/2015	5/28/2015	6/1/2015	6/4/2015	6/8/2015	6/11/2015	6/15/2015	6/18/2015

OPIS Rack Prices- 2015									
	6/22/2015	6/25/2015	6/29/2015	7/2/2015	7/6/2015	7/9/2015	7/13/2015	7/16/2015	7/20/2015
V-grade (84-octane)	1.983	1.992	1.985	2.031	2.025	2.053	2.023	2.060	2.183
E0 (87-octane)	2.228	2.244	2.235	2.276	2.275	2.305	2.289	2.337	2.484
E0 Premium (91-octane)	2.512	2.510	2.487	2.534	2.547	2.593	2.593	2.647	2.814
E10 (87-octane)	1.915	1.922	1.916	1.953	1.961	1.980	1.960	1.965	2.102
E100	1.605	1.655	1.682	1.755	1.757	1.740	1.796	1.715	1.665
Comp. E85	$1.67	$1.71	$1.73	$1.80	$1.80	$1.79	$1.83	$1.77	$1.75
	6/22/2015	6/25/2015	6/29/2015	7/2/2015	7/6/2015	7/9/2015	7/13/2015	7/16/2015	7/20/2015

OPIS Rack Prices- 2015									
	7/23/2015	7/27/2015	7/30/2015	8/3/2015	8/6/2015	8/10/2015	8/13/2015	8/17/2015	8/20/2015
V-grade (84-octane)	1.926	1.85	1.772	1.739	1.713	1.746	2.136	2.052	1.775
E0 (87-octane)	2.267	2.223	2.219	2.201	2.179	2.211	2.589	2.512	2.199
E0 Premium (91-octane)	2.621	2.582	2.643	2.611	2.623	2.653	3.026	2.943	2.602
E10 (87-octane)	1.868	1.795	1.729	1.708	1.671	1.69	2.06	1.988	1.707
E100	1.655	1.657	1.639	1.685	1.715	1.695	1.712	1.607	1.65
		1.533	1.499	1.493	1.466	1.442	1.515	1.504	1.459
Comp. E85	$1.76	$1.75	$1.74	$1.77	$1.79	$1.78	$1.86	$1.76	$1.74
	7/23/2015	7/27/2015	7/30/2015	8/3/2015	8/6/2015	8/10/2015	8/13/2015	8/17/2015	8/20/2015

OPIS Rack Prices- 2015									
	8/24/2015	8/27/2015	8/31/2015	9/3/2015	9/7/2015	9/10/2015	9/14/2015	9/17/2015	9/21/2015
V-grade (84-octane)	1.695	1.474	1.619	1.598	1.541	1.513	1.501	1.551	1.592
E0 (87-octane)	2.105	1.851	1.975	1.901	1.838	1.799	1.782	1.819	1.862
E0 Premium (91-octane)	2.494	2.207	2.32	2.307	2.216	2.149	2.128	2.158	2.196
E10 (87-octane)	1.631	1.425	1.554	1.564	1.513	1.469	1.463	1.503	1.535
E100	1.724	1.627	1.617	1.572	1.572	1.622	1.605	1.63	1.617
	1.434	1.339	1.367	1.369	1.368	1.357	1.363	1.387	1.388
Comp. E85	$1.79	$1.67	$1.68	$1.63	$1.62	$1.65	$1.64	$1.66	$1.66
	8/24/2015	8/27/2015	8/31/2015	9/3/2015	9/7/2015	9/10/2015	9/14/2015	9/17/2015	9/21/2015

OPIS Rack Prices- 2015								
	9/24/2015	9/28/2015	10/1/2015	10/5/2015	10/8/2015	10/12/2015	10/15/2015	10/22/2015
V-grade (84-octane)	1.589	1.635	1.675	1.871	1.819	1.704	1.52	1.575
E0 (87-octane)	1.866	1.908	1.979	2.181	2.158	2.019	1.861	1.764
E0 Premium (91-octane)	2.212	2.254	2.343	2.532	2.534	2.392	2.225	2.025
E10 (87-octane)	1.544	1.588	1.62	1.778	1.777	1.67	1.478	1.533
E100	1.647	1.632	1.607	1.642	1.782	1.769	1.632	1.592
	1.413	1.415	1.421	1.458	1.501	1.463	1.391	1.392
Comp. E85	$1.68	$1.68	$1.68	$1.75	$1.86	$1.82	$1.68	$1.63
	<<----	83% Eth	80% Eth	--->>				
	9/24/2015	9/28/2015	10/1/2015	10/5/2015	10/8/2015	10/12/2015	10/15/2015	10/22/2015

OPIS Rack Prices- 2015								
	10/26/2015	10/29/2015	11/2/2015	11/5/2015	11/9/2015	11/12/2015	11/16/2015	11/19/2015
V-grade (84-octane)	1.522	1.554	1.569	1.543	1.507	1.332	1.272	1.256
E0 (87-octane)	1.697	1.73	1.702	1.668	1.627	1.45	1.392	1.373
E0 Premium (91-octane)	1.894	1.876	1.865	1.839	1.79	1.637	1.56	1.533
E10 (87-octane)	1.488	1.518	1.533	1.514	1.481	1.325	1.269	1.242
E100	1.617	1.748	1.7	1.599	1.58	1.539	1.529	1.487
	1.393	1.418	1.433	1.436	1.429	1.381	1.36	1.329
Comp. E85	$1.63	$1.74	$1.70	$1.62	$1.59	$1.51	$1.49	$1.45
	<<---	80% Eth	75% Eth	75% Eth	70% Eth	--->>		
	10/26/2015	10/29/2015	11/2/2015	11/5/2015	11/9/2015	11/12/2015	11/16/2015	11/19/2015

OPIS Rack Prices- 2015								
	11/23/2015	11/25/2015	11/30/2015	12/3/2015	12/7/2015	12/10/2015	12/14/2015	12/17/2015
V-grade (84-octane)	1.256	1.316	1.326	1.265	1.244	1.265	1.288	1.229
E0 (87-octane)	1.374	1.435	1.448	1.392	1.381	1.391	1.41	1.354
E0 Premium (91-octane)	1.553	1.599	1.609	1.557	1.542	1.55	1.566	1.505
E10 (87-octane)	1.236	1.292	1.303	1.246	1.228	1.236	1.254	1.187
E100	1.492	1.529	1.559	1.544	1.492	1.477	1.47	1.472
	1.352	1.355	1.357	1.301	1.234	1.207	1.139	1.088
Comp. E85	$1.46	$1.50	$1.53	$1.50	$1.46	$1.45	$1.45	$1.44
	11/23/2015	11/25/2015	11/30/2015	12/3/2015	12/7/2015	12/10/2015	12/14/2015	12/17/2015

OPIS Rack Prices- 2015				
	12/21/2015	12/24/2015	12/28/2015	12/31/2015
V-grade (84-octane)	1.229	1.23	1.228	1.247
E0 (87-octane)	1.354	1.35	1.345	1.363
E0 Premium (91-octane)	1.489	1.479	1.474	1.482
E10 (87-octane)	1.192	1.184	1.185	1.193
E100	1.462	1.444	1.444	1.427
	1.102	1.219	1.218	1.209
Comp. E85	$1.43	$1.42	$1.41	$1.41
			<<---	70% Eth
	12/21/2015	12/24/2015	12/28/2015	12/31/2015

OPIS Rack Prices- 2016										
	1/4/2016	1/7/2016	1/11/2016	1/14/2016	1/18/2016	1/21/2016	1/25/2016	1/28/2016	2/1/2016	2/4/2016
V-grade (84-octane)	1.28	1.101	1.093	1.028	0.989	0.987	0.998	0.953	0.924	0.817
E0 (87-octane)	1.392	1.218	1.201	1.121	1.066	1.057	1.06	1.006	0.975	0.879
E0 Premium (91-octane)	1.510	1.344	1.315	1.226	1.154	1.134	1.126	1.079	1.04	0.939
E10 (87-octane)	1.227	1.071	1.063	1.003	0.964	0.959	0.981	0.931	0.908	0.797
E100	1.434	1.342	1.299	1.339	1.344	1.292	1.317	1.412	1.44	1.477
Comp. E85	$1.39	$1.27	$1.24	$1.25	$1.24	$1.20	$1.22	$1.27	$1.29	$1.28
Ethanol content	70% Eth	--->>								

OPIS Rack Prices- 2(										
	2/8/2016	2/11/2016	2/15/2016	2/22/2016	2/25/2016	2/29/2016	3/3/2016	3/7/2016	3/10/2016	3/14/2016
V-grade (84-octane)	0.774	0.785	1.005	1.027	1.189	1.244	1.247	1.297	1.389	1.386
E0 (87-octane)	0.834	0.844	1.062	1.096	1.275	1.356	1.371	1.421	1.522	1.523
E0 Premium (91-octane)	0.898	0.906	1.132	1.187	1.375	1.466	1.498	1.546	1.673	1.675
E10 (87-octane)	0.76	0.755	0.965	0.996	1.154	1.211	1.219	1.247	1.344	1.345
E100	1.477	1.384	1.387	1.339	1.372	1.365	1.319	1.313	1.354	1.367
Comp. E85	$1.27	$1.20	$1.27	$1.25	$1.32	$1.33	$1.30	$1.31	$1.36	$1.37
Ethanol content										

OPIS Rack Prices- 2(										
	3/17/2016	3/21/2016	3/24/2016	3/28/2016	3/31/2016	4/4/2016	4/7/2016	4/11/2016	4/14/2016	4/18/2016
V-grade (84-octane)	1.33	1.339	1.36	1.345	1.301	1.238	1.282	1.4	1.446	1.377
E0 (87-octane)	1.459	1.468	1.494	1.485	1.452	1.466	1.5	1.598	1.63	1.559
E0 Premium (91-octane)	1.605	1.607	1.64	1.636	1.639	1.697	1.749	1.838	1.859	1.781
E10 (87-octane)	1.29	1.285	1.306	1.297	1.259	1.197	1.229	1.341	1.397	1.335
E100	1.359	1.369	1.344	1.355	1.379	1.415	1.483	1.512	1.509	1.575
Comp. E85	$1.35	$1.36	$1.35	$1.35	$1.36	$1.37	$1.43	$1.48	$1.49	$1.53
Ethanol content				<<---	70% Eth	75% Eth	--->>			

OPIS Rack Prices- 2(										
	4/21/2016	4/25/2016	4/28/2016	5/2/2016	5/5/2016	5/9/2016	5/12/2016	5/16/2016	5/19/2016	5/23/2016
V-grade (84-octane)	1.431	1.449	1.49	1.488	1.406	1.402	1.53	1.577	1.62	1.642
E0 (87-octane)	1.606	1.61	1.644	1.643	1.583	1.591	1.721	1.773	1.842	1.871
E0 Premium (91-octane)	1.823	1.821	1.853	1.861	1.817	1.83	1.973	2.021	2.092	2.129
E10 (87-octane)	1.387	1.402	1.438	1.441	1.36	1.36	1.469	1.511	1.555	1.576
E100	1.675	1.645	1.628	1.608	1.635	1.672	1.608	1.625	1.692	1.678
Comp. E85	$1.61	$1.60	$1.59	$1.59	$1.60	$1.63	$1.59	$1.62	$1.68	$1.67
Ethanol content		<<---	75% Eth	83% Eth	--->>					

OPIS Rack Prices- 2(										
	5/26/2016	5/30/2016	6/2/2016	6/6/2016	6/9/2016	6/13/2016	6/16/2016	6/20/2016	6/23/3016	6/27/2016
V-grade (84-octane)	1.632	1.628	1.643	1.634	1.657	1.575	1.5	1.53	1.593	1.527
E0 (87-octane)	1.869	1.869	1.894	1.895	1.928	1.835	1.759	1.769	1.802	1.722
E0 Premium (91-octane)	2.135	2.142	2.172	2.176	2.217	2.121	2.026	2.018	2.036	1.947
E10 (87-octane)	1.57	1.565	1.572	1.571	1.592	1.519	1.455	1.465	1.52	1.462
E100	1.698	1.745	1.752	1.745	1.742	1.742	1.752	1.765	1.755	1.735
Comp. E85	$1.69	$1.73	$1.73	$1.73	$1.73	$1.71	$1.71	$1.73	$1.73	$1.70
Ethanol content									<<---	83% Eth

Attachment B

Department of Justice

THOMAS J. MILLER
ATTORNEY GENERAL

ADDRESS REPLY TO:
HOOVER BUILDING
DES MOINES, IOWA 50319
TELEPHONE: 515-281-5164
FACSIMILE: 515-281-4902

January 28, 2014

Gina McCarthy, Administrator
U.S. Environmental Protection Agency
Air and Radiation Docket
Docket ID No. EPA-HQ-OAR-2013-0479
Docket ID No. EPA-HQ-OAR-2013-0747
Mailcode: 6102T
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Administrator McCarthy:

The purpose of this letter is to comment on EPA's proposed 2014 Standards for the Renewable Fuel Standard Program, and the related petitions urging EPA to waive the applicable statutory renewable fuel standards contained in the Clean Air Act, section 211(o)(2)(B). While we appreciate EPA's past efforts to implement this important program, the current proposal ignores the express terms of the statute and would contravene Congressional intent to foster increased production of renewable fuels. The production of renewable fuels is a critical part of Iowa's economy - providing a key market for agricultural crops and creating thousands of jobs.

EPA's proposed 2014 Renewable Fuel Standards rely, in part, on the general waiver authority contained in section 211(o)(7)(A), which authorizes the Administrator to waive the statutory standards and reduce the "national quantity of renewable fuel" required under section 211(o)(2). This general waiver is authorized only when implementation of the statutory standards would severely harm the economy or when there is an "inadequate domestic supply." Clean Air Act, section 211(o)(7)(A)(i) and (ii).

EPA is not proposing to find that implementation of the standards would severely harm the economy, but instead concludes that there is an "inadequate domestic supply." EPA reaches this conclusion by suggesting that the phrase "inadequate domestic supply" is ambiguous and should be interpreted to allow consideration, not only of factors affecting the ability to produce renewable fuels but also "factors affecting the ability to distribute, blend, dispense, and consume those renewable fuels." 78 Fed. Reg. 230, 71755 (Nov. 29, 2013).

Review of EPA's construction of the statutes it administers is governed by the two-part test in *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-843 (1984). First, if the intent of Congress is clear, the court as well as the agency must give effect to the unambiguously expressed intent of Congress. *Id.* Second, if Congress has not directly addressed the precise question at issue, then the agency's answer must be a permissible construction of the statute. *Id.*

The statute here is not ambiguous. The general waiver provision expressly provides that the EPA may reduce "the national quantity of renewable fuel" under paragraph 2 of section 211(o) if it determines that there is an "inadequate domestic supply." Clean Air Act, section 211(o)(7)(A)(ii). The latter phrase authorizes a general waiver only when there is an inadequate domestic supply of "renewable fuel," not blended fuel.

The national renewable fuel standards in paragraph 2 of section 211(o) specify the "applicable volume of renewable fuel," which must be contained within "transportation fuel." Similarly, the general waiver phrase "inadequate domestic supply" refers, not to blended fuel, but to the supply of "renewable fuel." "Renewable fuel" is defined to mean "fuel that is produced from renewable biomass and that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel." Clean Air Act, section 211(o)(1)(J).

Accordingly, general waiver of the national renewable fuel standards under section 211(o)(7)(A)(ii) is not authorized unless there is an inadequate domestic supply of renewable fuel, not blended fuel.

Other factors such as distribution capacity of blended fuel provide no basis for a general waiver under section 211(o)(7)(A)(ii). This analysis is buttressed by other provisions in section 211 which, unlike the general waiver provision in section 211(o)(7)(A)(ii), expressly authorize consideration of "distribution capacity." *E.g.*, Clean Air Act, section 211(m)(3)(C)(i) (authorizing waiver of requirements for oxygenated gasoline when there is an "inadequate domestic supply of, or distribution capacity for, oxygenated gasoline"); section 211(c)(4)(C)(ii)(I) (authorizing temporary waiver of controls relating to fuels and fuel additive which would "prevent the distribution of an adequate supply of the fuel or fuel additive to consumers"); and sections 211(k)(6)(B)(i)(I) and (iii)(I) (authorizing deferral of reformulated gasoline requirements in a State that opts in to the program where "there is insufficient capacity to supply reformulated gasoline").

In addition, Congress' express inclusion of the term "distribution capacity" in other sections of the same Act provides further proof that Congress did not intend for the EPA to consider "distribution capacity" under the general waiver provision of section 211(o)(7)(A)(ii). *See Sebelius v. Cloer*, 133 S. Ct. 1886, 1894 (2013) ("where Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposefully in the disparate inclusion or exclusion.").

The legislative history of section 211 also makes clear that Congress did not authorize a general waiver of the national renewable fuel standards based on "distribution capacity." The House of Representatives' version of the Energy Policy Act of 2005 would have expressly authorized a general wavier if there was an "inadequate domestic supply *or distribution capacity to meet the requirement*." Energy Policy Act of 2005, H.R. 6, 109th Cong. § 1501(a)(2) (emphasis added). The Senate removed that emphasized language and the final statute was adopted accordingly. Pub. L. 109-58, 119 Stat. 594, § 1501(a)(2).

Even if the statute was ambiguous, the EPA's proposed waiver under section 211(o)(7)(A)(ii) would not be a permissible construction of the statute. The Congressional purpose in enacting the renewable fuel standards was "to move the United States towards greater energy independence and security" and "to increase the production of clean renewable fuels." Energy Independence and Security Act of 2007, Pub. L. 110-140, 121 Stat. 1492. Congress sought to achieve those purposes by establishing enforceable national renewable standards, increasing in increments between 2006 and 2022, thereby allowing the fuel industry to make necessary adjustments. If the EPA waived national renewable fuel standards, not because of an inadequate supply of renewable fuel, but rather because of limited distribution capacity of blended fuels, it would be removing the incentives adopted by Congress to foster increased production of renewable fuels and greater energy independence.

We respectfully request that you decline to waive the national renewable fuel standards under section 211(o)(7)(A)(ii), except when there is an inadequate domestic supply of renewable fuels, not blended fuel. Thank you for your consideration.

Sincerely,

T. J. Miller

THOMAS J. MILLER
Attorney General of Iowa
Hoover State Office Building
1305 E. Walnut, 2nd Floor
Des Moines, IA 50319
Phone: (515) 281-5164
Fax: (515) 281-4209
E-mail: Thomas.Miller@iowa.gov

Attachment C

Blender Pump Stations

2016 Ethanol Sales
January thru April

Fast Stop - Cresco

	Percentage
E0	0.0%
E10	34.6%
E15	12.1%
E30	32.5%
E85	20.9%
E100 Content	**31.5%**

New Century FS -- Vinton

	Percentage
E0	0.0%
E10	57.4%
E15	30.7%
E30	1.3%
E50	1.1%
E85	9.5%
E100 Content	**18.8%**

Farmers Coop -- Creston, Mt. Ayr

	Percentage
E0	5.1%
E10	73.5%
E15	7.9%
E30	3.0%
E85	10.6%
E100 Content	**17.8%**

Star Energy - Ft. Dodge, Spencer, Storm Lake

	Percentage
E0	0.0%
E10	32.0%
E15	53.8%
E30	2.3%
E85	11.9%
E100 Content	**21.4%**