

July 8, 2016

Submitted Electronically Via Regulations.gov

Office of Transportation and Air Quality
Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Docket No. EPA-HQ-OAR-2016-0004; Renewable Fuel Standard Program: Standards for 2017 and Biomass-Based Diesel Volume for 2018; Proposed Rule

Dear Administrator McCarthy:

The National Chicken Council (NCC) represents companies that produce and process more than 95 percent of the chicken in the United States.¹ As corn users, NCC's members are substantially impacted by the Renewable Fuel Standard's (RFS) impacts on the corn market and feed supply.

NCC is supportive of the intent of EPA's proposed rulemaking to adjust the biofuels targets for 2017 below statutory levels and to reflect "the maximum supply that can reasonably be expected to be produced and consumed by a market that is responsive to the RFS standards." NCC believes this is an appropriate use of EPA's waiver authority and an important step toward ensuring that the RFS reflects reasoned economic and environmental policy.

Indeed, the recommended statutory levels prescribed by the Energy Independence and Security Act of 2007 (EISA) were based on the faulty projection that the total finished motor gasoline use in 2017 would be 159 billion gallons², a full 10 percent more than the most recent projection by Energy Information Administration (EIA) of 142.9 billion gallons in the agency's 2016 June Short Term Energy Outlook (STEO). Therefore, under the original projections, the statutorily recommended 15 billion gallon volume for conventional biofuel use in 2017 would have been 9.4 percent of the total finished motor gasoline utilization under the original EISA projection.

NCC agrees with EPA, as stated in the proposed rule, that the "volume targets established by Congress for 2017 are beyond reach for all but the minimum 1.0 billion gallons for biomass-based diesel (BBD)." However, NCC requests that EPA use its waiver authority to make further reductions in the overall biofuel use volumes in order for the implied conventional biofuels volume obligation to be lowered to reflect the role of the conventional biofuel implied mandate that was envisioned by Congress under the projected scenario presented at the time EISA was crafted.

¹ In these comments, the terms "chicken" and "broiler" are used interchangeably.

² Energy Information Administration 2007 Annual Energy Outlook, DOE/EIA -0383, (February 2006).

EPA has proposed the following volume obligations:

Biofuel Category	2017	2018	Volume Increase over 2016
Cellulosic	312 mgy	n/a	82 mgy
Biomass Biodiesel	2.0 bgy	2.1 bgy	100 mgy
Advanced Biofuel Total	4.0 bgy	n/a	390 mgy
Total Renewable Fuels	18.8 bgy	n/a	69 mgy
Implied Conventional Volume	14.8 bgy	n/a	300 mgy

As proposed by EPA for 2017, the implied volume obligation for conventional biofuel would be 14.8 billion gallons. Based on the June STEO, this would equate to 10.4 percent of the total finished motor gasoline utilization - a full 100 basis points above the envisioned level originally prescribed by the Congress as per the EISA statutory levels.

In the proposed rule, EPA states:

For the purpose of assessing the supply of total renewable fuel to require in 2017, we are proposing to use an ethanol supply of 14.4 billion gallons for 2017. While the market will ultimately determine the extent to which compliance with the annual standards is achieved through the use of greater volumes of ethanol versus other, non-ethanol renewable fuels, we nevertheless believe that this ethanol volume represents a realistically achievable level that takes into account the ability of the market to respond to the standards we set. We request comment on whether 14.4 billion gallons of ethanol is an appropriate volume to use in the determination of the applicable total renewable fuel volume requirement for 2017.

Assuming a supply of 14.4 billion gallons of ethanol for 2017 implies that the remaining 400 million gallons under the implied conventional biofuel volume of the RFS will be made up of biomass based diesel and renewable diesel that is used in excess of the prescribed volumes for those categories of fuel. EPA is assuming a supply of 400 million gallons of conventional renewable diesel to complete the conventional mandate (much of which would be imported), and production of 2.3 billion gallons of biomass based diesel and renewable diesel that qualifies under the advanced fuel category. The record level of biomass based diesel and renewable diesel production combined to date was 1.9 billion gallons in 2015. The combined production envisioned for 2017 would be 2.7 billion gallons. The nameplate capacity for biomass based diesel production is less than 2.1 billion gallons. Based on historic production, NCC believes these are overly aggressive assumptions. Thus, the 14.4 billion gallon level for ethanol is too high.

Moreover, for consumption of 14.4 billion gallons of ethanol, monthly domestic utilization would have to be approximately 1.2 billion gallons per month. To date, monthly domestic consumption of ethanol for the first quarter of 2016 has averaged 1.162 billion gallons; in 2015 average monthly consumption was 1.161 billion gallons per month, and in 2014 it was 1.122 billion gallons per month.³ Again, based on actual utilization history assuming

³ Renewable Fuel Association, Monthly Ethanol Production Statistics (accessed 29 June 2016).

monthly domestic consumption 1.2 billion gallons is overly aggressive, indicating that EPA's estimate of 14.4 billion gallons of ethanol is too large.

Moreover, under the proposed rule, EPA assumes that e0 (straight gasoline) demand is 200 million gallons. This is grossly underestimated compared to EIA's analysis that ethanol free gasoline demand in 2015 was 5.3 billion gallons.⁴ While e0 delivered to final customers is decreasing, it is decreasing at a rate that if continued would put total e0 use at about 4.1 billion gallons in 2017. Therefore, EPA's proposal is still overstating the amount of ethanol that can be blended into the finished motor gasoline supply by 410 million gallons. Thus, the 14.4 is too large of a volume from this perspective as well.

Finally, an ethanol volume of 14.4 billion gallons would breach the blend wall. Based on EIA's projection that total finished motor gasoline use in 2017 would be 142.9 billion gallons, the supply of 14.4 billion gallons would equate to 10.1 percent, even when not accounting for e0 demand. When factoring in e0 demand, the 14.4 billion gallon volume would be 10.3 percent.

Effect of Breaching the Blendwall on Corn Market

The 2017 implied conventional ethanol mandate proposed by EPA for 2017 breaches the 10 percent blendwall. While seemingly a fuel market issue, breaching the blendwall has a direct impact on corn users. This impact is derived from the effect of the renewable identification numbers (RINs) used as a compliance mechanism for the RFS mandates.

In addition to being a compliance mechanism under the RFS, RINs are part of the value of each gallon of biofuel to which they are attached. According to the EIA, RINs provide

*an economic incentive to use renewable fuels. If RIN prices increase, blenders are encouraged to blend greater volumes of biofuels, based on their abilities to sell both the blended fuel and the separated RIN.*⁵

Of course, blending greater volumes of ethanol means an increase in demand for corn as a feedstock. This impacts all corn users, but especially those who do not benefit from the RINs value such as poultry producers. RIN values can impact the ability to pay for corn. Under the RFS, the effective cost incurred by obligated parties is the cost of ethanol-net-of-RINs. This is derived from the ethanol mills' ability, as described above by EIA, to blend the fuel and separate the RIN. Thus, as RIN prices rise, the net marginal cost of blending ethanol at a fixed price is actually reduced for obligated parties. RINs in effect act as a subsidy for obligated parties. Poultry producers and their customers receive no such relief and must absorb or pass on the full higher costs of corn.

⁴ EIA, Almost all U.S. gasoline is blended with 10% ethanol, Today in Energy (4 May 2016).

⁵ Today in Energy: RINs and RVOs are used to implement the Renewable Fuel Standard, (June 3, 2013), EIA.

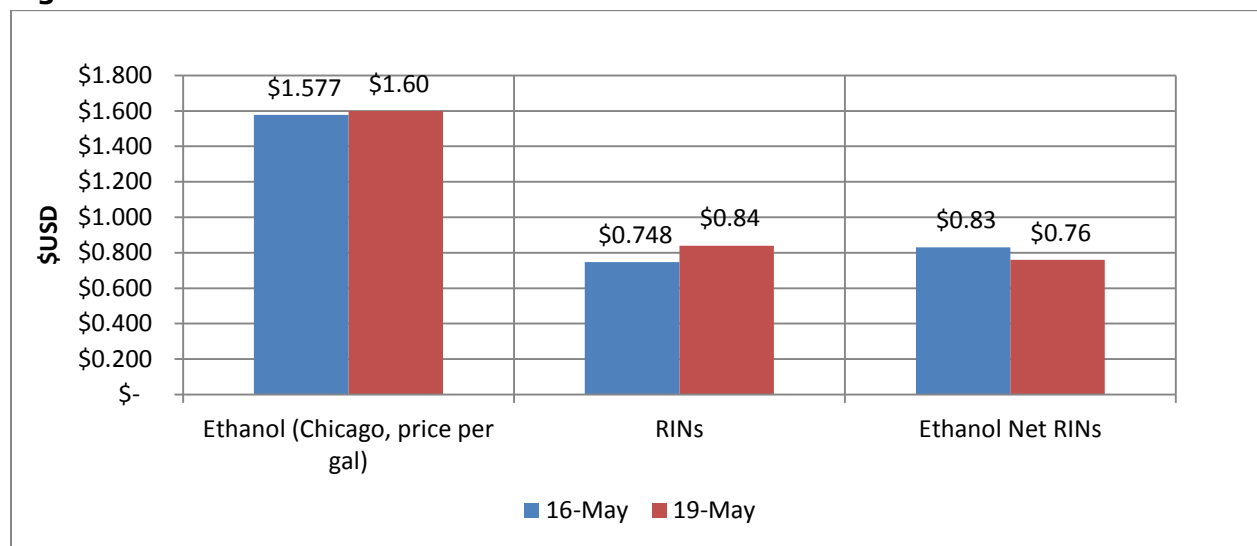
Indeed, establishing a volume under the RFS that exceeds the blendwall, as is the case under the proposed 2017 volumes, effectively creates an artificially high demand for ethanol providing an incentive to shift corn use to ethanol over other uses irrespective of market value. The imputed value of RINs resulting from a volume obligation that breaches the blend wall is clearly understood by EPA as evidenced by the following statement:

In 2013 the price of ethanol generally remained below the price of gasoline on a volumetric basis, yet the price of D6 RINs increased substantially. We believe a significant factor in this change in RIN price was a saturation of the E10 pool⁶

In the case of corn ethanol, higher RIN values can provide ethanol producers an economic advantage in purchasing corn over other corn users such as poultry and livestock feeders.

Figure 1 below shows an example of the impact of the RINs value imputed into ethanol. This sample is a snapshot for the week of 16 May, 2016. At the beginning of that week, RIN prices on Monday, 16 May, reached a high of \$0.7475 and ethanol was \$1.577 per gallon. By Thursday, 19 May, ethanol rose to \$1.60 per gallon and RIN prices rose to a high of \$0.84 based on market speculation over the volume obligation rule. The higher RINs prices resulted in an ethanol-net-of-RINs price drop from \$0.83 to \$0.76 over that same period. This was prior to EPA’s announcement of the 2017 proposed volume obligations. Since the EPA’s proposed rule for the 2017 biofuel volumes, RINs prices have stayed at the upper level of near \$0.84 through the time period these comments were prepared.

Figure 1. Ethanol Net of RINs⁷



⁶ Burkholder D., A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effects, Office of Transportation and Air Quality, US EPA, (May 14, 2015).

⁷ Source: NCC, OPIS.

The RINs effect skews the corn market and places poultry and livestock producers at a distinct disadvantage in purchasing corn, especially when it comes to each marginal bushel of corn. Thus, under the 2017 proposed volumes, the chicken industry remains only one drought or flood away from another economic crisis as faced in 2012 and 2008.

In short, EPA's proposal to set the 2017 implied conventional ethanol mandate above the blendwall reignites the food versus fuel inequity inherent in the structure of the RFS. The impact of the food versus fuel pressure on feedstock has been severe. Since the RFS was enacted, chicken companies have faced \$53 billion in higher actual feed costs due to the RFS. During the RFS era, at least a dozen chicken companies have ceased operations – filing for bankruptcy or having been acquired by another company.

Impacts of Required Volume Obligations under the RFS

The required volume obligations for ethanol under the RFS have the force of a federal mandate which requires obligated parties (*e.g.*, refiners, importers, and blenders) to utilize a minimum amount of corn based ethanol regardless of price or supply. While increased prices are a market signal to other corn buyers to reduce consumption, the RFS effectively masks this signal to the ethanol manufacturing sector through the implicit subsidy of the RINs value as explained previously in these comments. This has made the demand for corn by ethanol manufacturers more inelastic when compared to feed demand for corn.

The elasticity of demand is the degree to which demand for a good varies with its price. Elasticity is measured as the percent change in consumption of a good when the price changes by one percent. Under normal conditions, sales of a good increase with a drop in price and, in turn, decrease with a rise in price. When a rise in price has little or no impact on demand, the demand is referred to as inelastic. As described by the Congressional Budget Office (CBO) in its publication *The Renewable Fuel Standard: Issues for 2014 and Beyond*, inelastic demand implies "that market prices will shift dramatically if decisions about consumption and production change, possibly even if those changes are small."

Because the RFS sets an enforceable mandate for the amount of corn that must be utilized as ethanol feedstock, regardless of the price of corn or the supply of corn, the RFS-driven demand for corn as ethanol feedstock is highly inelastic and has had a significant impact on corn prices since 2007, especially when the corn market was tight.

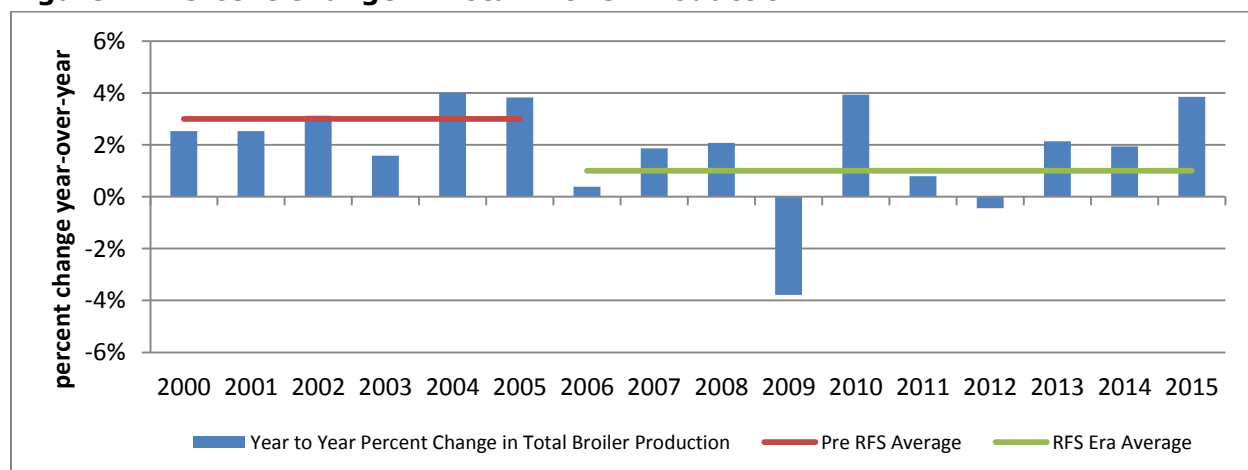
Indeed, that is the situation that the broiler industry has faced in frequent periods over the course of the RFS era —increased prices of corn and a reduction in supply of feed. The impact has been particularly punitive on the broiler industry. Note that the by-product of ethanol production, distillers grains, that are sold back into the feed market, are not well suited for broiler feed compared to other livestock species. Moreover, with the increasing demand for biodiesel that is driven by the RFS, corn oil (referred to as distiller oil) is increasingly extracted from these distillers grains. Currently, 85 percent of all ethanol production is from dry mills with oil extraction according to the Renewable Fuels Association. Distillers grains with oil extracted are even less valuable to poultry producers than distillers grain without oil extraction.

NCC requests that EPA consider the differences in the industry structure between ethanol mills and broiler producers when setting the conventional biofuel mandate. It is much more difficult for broiler production to adjust to artificial swings in the corn market. The very high and very volatile corn prices, particularly in 2008/09 and 2012, set the stage for longer term restrained production. Not only did chicken producers have to significantly adjust production downward to survive higher input costs, but the negative economic ripple effect of an inflexible RFS also caused the primary broiler breeders to significantly adjust their production downward and curtail their production plans for the future.

Primary breeders generate the great grandparent, grandparent, and pedigree flocks. These breeders suffered significant financial strain during periods of high corn prices as orders for day-old pullet chicks were reduced or even cancelled by chicken producers facing unprofitable feed costs under the RFS. It takes time to rebuild grandparent flocks that produce the day-old pullet chicks that mature in seven months into the mother hens that then produce broiler chicks that are put on feed. This recovery process for the production system can take a year or more. By contrast, the fermentation process for producing ethanol takes between 95 and 105 hours. Thus, in five days to a week ethanol manufacturers can adjust production, though the RFS protects them from having to do so.

To gauge the impact of the corn market shocks in 2008/09 and 2012 and the volatility that it has imposed on the corn market for broiler production, consider that total broiler production has increased every year over the previous year since 1975 (including through the most severe corn disruption prior to the RFS era in 1995/96), except for 2009 and 2012. Figure 2 below shows the changes from 2000 through 2015. Prior to the RFS implementation in 2006, the average growth rate in total broiler production was 3 percent. After the implementation of RFS 1 (per the Energy Policy Act of 2005) in 2006 and RFS 2 in 2008 (per EISA in 2007), the average growth rate has been 1 percent.

Figure 2. Percent Change in Total Broiler Production⁸



⁸ Source: NCC, USDA.

At the time EISA was adopted by Congress, NCC believed that the RFS included a workable waiver provision that provided for an “off ramp” in times of economic crisis. On at least two major occasions, that faith has proven to be misplaced. In 2012, the worst drought in more than 50 years coupled with record high and very volatile corn prices was deemed insufficient to trigger a temporary waiver of the RFS. Similarly, in 2008, historically high corn prices did not trigger the waiver under EPA’s authority which led to the 3.8 percent cut back in broiler production in 2009. At the same time ethanol producers were faced with domestic blend wall limits, the RFS gave ethanol producers such leverage that they are able to produce and export surplus ethanol, which further constrained the corn market in the United States.

Indeed, it is not just the ethanol that is used domestically in the U.S. fuel market that impacts the corn supply, rather it is the total ethanol production supported by the RFS. During 2014 and 2015 total ethanol production equaled 105 percent of the conventional biofuel implied mandate. First quarter production totals for 2016 are keeping with this trend and total ethanol production will likely exceed 15 billion gallons in 2016, compared with a projected domestic use of 13.945 billion gallons.⁹ Thus, for 2017, corn ethanol production, with an implied conventional biofuel mandate of 14.8 billion gallons, can be expected to be 15.54 billion gallons. Therefore, total ethanol production in both 2016 and 2017 will exceed the 15 billion gallon cap on corn ethanol that is provided in the EISA statute.

15 Billion Gallon Cap and Exports

Congress, through EISA, set the 15 billion gallon cap on corn ethanol under the RFS to prevent ethanol production from diverting too great a volume of corn from feed, food, and seed use to energy. At the time Congress set this cap, ethanol exports were not envisioned. However, according to the Renewable Fuels Association, exports have exceeded an annual total of 840 million gallons in the past two years, and based on first quarter totals for 2016, exports are on trend to reach almost 1 billion gallons.¹⁰

As the Congressional Research Service has noted, implicit in the RFS there is

considerable uncertainty regarding potential spillover effects in other markets and on other important policy goals. Emerging resource constraints related to the rapid expansion of U.S. corn ethanol production have provoked questions about its long-run sustainability and the possibility of unintended consequences in other markets

The rapid rise in ethanol exports in 2014 and 2015 is indeed a spillover effect that applies further pressure on the corn and feed market beyond Congressional intent under the RFS and is an urgent emerging resource constraint. For the four years of 2013 through 2016 ethanol exports will likely consume nearly 1.2 billion bushels of corn in addition to the corn

⁹ Renewable Fuel Association, Monthly Ethanol Production Statistics (accessed 29 June 2016).

¹⁰ Ibid.

consumed by domestic ethanol. While increased exports of ethanol put upward pressure on corn prices, they do nothing to improve domestic energy independence as is the stated goal of the EISA legislation.

For this reason, EPA's implementation of the RFS to date has resulted in a program that has departed from the underpinning statutory purposes. It is now all the more critical that EPA adopt appropriate standards in the 2017 proposed rulemaking and consider the impact of ethanol exports on U.S. food and feed security by setting a volume obligation that will not leverage ethanol production beyond the 15 billion gallon cap envisioned by Congress in the EISA statute.


Availability of RINs

NCC notes that EPA recognizes the need for an adequate supply of carryover RINs for 2017. As EPA states in the proposed rule, the compliance date for 2016 is 31 March, 2017, while the statutory deadline for establishing the 2017 volumes is 30 November, 2016, and therefore there is uncertainty regarding the total number of carryover RINs that might be available for compliance in 2017. Moreover, EPA acknowledges that carryover RINs are "intended to produce flexibility in the face of a variety of circumstances that could limit the availability of RINs, including weather related damage to renewable fuel feedstocks" such as the corn supply. However, through May of 2016, total RIN generation remains below the total renewable fuel volume obligation for 2016¹¹ and the overly aggressive volume obligations proposed for 2017 (see above discussion on biodiesel) will likely result in further using the inventory of excess carryover RINs, leading to longer term spillover effects.

Conclusion

NCC strongly supports efforts to create a more reasonable and sustainable approach to the nation's fuel policy. The compelled diversion of corn from feed to fuel uses exacts a heavy toll on the domestic chicken industry and American consumers. NCC believes EPA is properly proposing to use its authority under the Clean Air Act to reduce ethanol blending requirements below the statutory levels. However, NCC believes the volumes proposed for 2017 are overly aggressive and based on faulty assumptions about the fuel market and thus should be further reduced to limit the disruptions to the corn market and nation's feed supply.

Sincerely,



Mike Brown
President, National Chicken Council

¹¹ EPA, 2016 Renewable Fuel Standard Data, <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/2016-renewable-fuel-standard-data>, accessed 29 June 2016.