August 17, 2018

Acting Administrator Andrew Wheeler
Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

RE: Docket ID EPA-HQ-OAR-2018-0167

Dear Acting Administrator Wheeler:

On behalf of more than 40,000 dues-paying corn farmers nationwide and more than 300,000 corn growers who contribute to corn checkoff programs in their states, the National Corn Growers Association (NCGA) appreciates the opportunity to comment on the proposed rule for the 2019 volume standards under the Renewable Fuel Standard (RFS) program.

In the 11 years since Congress expanded the RFS, corn farmers have responded to the growing market for ethanol by increasing production efficiency to help meet the RFS goals of moving the United States toward greater energy independence and security and boosting production of clean, renewable fuels that benefit consumers.

NCGA appreciates that the Environmental Protection Agency (EPA) proposed an implied volume of 15 billion gallons for conventional renewable fuel, consistent with the volume requirement intended by Congress, as well as proposed growth in the cellulosic, advanced and total renewable fuel volumes.

The RFS requires an increasing volume of biofuels be blended into the nation's transportation fuel supply annually, and EPA's proposed rule, on the surface, follows the law's intent. However, because of EPA's failure to account for the extensive retroactive exemptions granted to 48 refineries for 2016 and 2017 obligations and failure to estimate 2019 exemptions, we have no confidence in the volumes EPA proposes. By not accounting for the impact of 2.25 billion ethanol-equivalent gallons in retroactive exemptions, or for future exemptions, EPA renders the proposed volumes meaningless.

We ask EPA to maintain the proposed conventional biofuel requirement in the final rule, as well as the growth in cellulosic, advanced and total renewable fuel volumes. To uphold the full clean air, cost-savings, energy independence and rural economic benefits consumers and farmers receive from the RFS, however, EPA must also use the 2019 volume rule to make, and keep, the RFS whole. NCGA's detailed comments on the proposed rule follow.

Sincerely,

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The RFS and Agriculture

Through the 2017 crop year, 5.5 billion bushels of U.S. corn were used to produce 15.8 billion gallons of ethanol. Corn ethanol production returned the equivalent of 1.24 billion bushels of corn as distillers dried grains for feed, adding value for corn farmers and benefits for livestock producers in the form of high-quality, affordable nutrition.

Farmers are facing their fifth consecutive year of depressed income and commodity prices. This year, net farm income, which has dropped 50 percent since 2013, is expected to be at its lowest level since 2006. Due to lower prices, the U.S. Department of Agriculture (USDA) projects corn crop receipts will decline for the fifth consecutive year. As a result, farmers are facing increased financial challenges and drains on equity. That financial stress, in turn, affects rural businesses and communities across the country.

Corn prices averaged $4.70 per bushel between 2006 and 2013, a time of positive net income for many grain farmers. Since then, corn prices declined to $3.70 per bushel in 2014 and are expected to fall to a range of $3.35 to $3.45 for the 2017/2018 marketing year, prices well below average, and below the average cost of production of $4.24 estimated by USDA.

Maintaining an implied volume for conventional renewable fuel at 15 billion gallons, consistent with the statutory target for 2019 and the proposed rule, provides a firm base of support for ethanol production and corn prices. A strong RFS is a market-based solution for sustaining the agriculture economy.

Since the RFS was enacted in 2005, corn farmers have responded with increasing productivity. Corn production has improved on all measures of resource efficiency, further fortifying ethanol as a sustainable renewable fuel. For example, corn farmers have increased production while reducing application of primary nutrients such as nitrogen, phosphorous, and potassium. In 1980, farmers produced 6.64 billion bushels of corn and used 3.2 pounds of primary nutrients per bushel. By 2014, farmers more than doubled production while cutting nutrient input in half, producing 14.2 billion bushels of corn while using 1.38 pounds of nutrients per bushel.

While meeting new demand for ethanol, corn has kept up with demand across sectors. This includes our largest market, livestock feed, as well as food and industrial uses and international demand from exports. Corn production has primarily increased because crop yields have increased from an average of 150.7 bushels per acre in 2007 to 176.6 bushels in 2017. Productivity growth is a long-term trend; production in 1980 averaged 91 bushels per acre.

Ethanol production has not had a significant impact on total agricultural land use, even as ethanol hit its highest production level in 2017. Projections for land use changes made in the early stages of the RFS have not materialized when direct production experience is evaluated. According to USDA data, planted corn acres in 2012 were nearly 8 million more than in 2018, and planted corn acres in 2007, the year the RFS expanded, were nearly 4 million greater than this year.

The RFS has had a strong, positive impact on corn production and agriculture, adding value to the commodity we produce. The proposed conventional biofuel requirement would continue the RFS' benefits for agriculture. A growing total biofuel requirement also increases benefits to the U.S. farm economy at a time when farmers need new markets to increase demand. However, as long as EPA continues to issue retroactive small refinery exemptions without reallocation, farmers cannot rely on the proposed volumes in this rule and the entire rural economy will continue to suffer.

Small Refinery Exemptions

The RFS statute requires EPA to determine and publish annual renewable fuel obligations that ensure transportation fuel sold or introduced into commerce in the United States, on an annual average basis, contains at least the applicable volume of renewable fuel determined in accordance with the volume tables.[1] For EPA to follow through on its charge to set renewable fuel volumes that ensure the obligations of the RFS are met, EPA must consider the impact of agency actions that would affect renewable fuel volume in U.S. transportation fuel.

The most recent agency actions impacting the annual volume obligations have been EPA's approval of large volumes of small refinery exemption extensions, removing these refineries' obligation to blend renewable fuel, and the failure to reallocate these exempted obligations to other parties.

In the proposed rule, EPA disclosed the agency granted refineries disproportionate economic hardship exemptions for 2016 and 2017 RFS obligations totaling 2.25 billion RINs, or ethanol-equivalent gallons. These exemptions, granted long after the renewable volume obligations for 2017 and 2016 were finalized, effectively reduced the volume obligations for those years by 790 million ethanol-equivalent gallons and 1.46 billion ethanol-equivalent gallons, respectively. In effect, the 2017 implied conventional ethanol volume of 15 billion gallons was reduced to 13.887 billion gallons, a level well below the volume needed for a 10 percent ethanol blend.[2]

Because of these exemptions, the ethanol inclusion rate in finished gasoline has declined since late 2016, and the actual gasoline and diesel use reported by obligated parties to EPA for the 2016 and 2017 RFS compliance years is significantly less than EPA's projections for use in the final volume standards for those years, corresponding to reduced volume obligations from the exemptions. This wide discrepancy between reported gallons and projected gallons represents lost biofuels blending, and that difference tracks the volume of exemptions EPA disclosed in the proposed rule.

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[1] Clean Air Act § 211 (o)(3)(B)(i)

[2] Coppess, J. and S. Irwin. "EPA 2019 RFS Proposed Rulemaking: What You See Is Not What You Get." *farmdoc daily* (8):128, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 12, 2018

The demand destruction caused by these exemptions impacts corn farmers by reducing use of our crop for biofuels, lowering our crop sales and incomes. When every 1 billion gallons of ethanol production ties back to 2.1 million harvested acres of corn – roughly the amount of Michigan's harvested corn acres – the demand destroyed by these refinery exemptions that are not reallocated directly affects farmers. Based on analysis of EPA's public data reported for RFS compliance done by the Renewable Fuels Association, the difference between the actual obligated fuel volumes reported to EPA for the 2016 and 2017 compliance years and the final volumes projected in those respective volume rules is 1.6 billion gallons. This lost ethanol blending has cost farmers $1.96 billion, based on 570 million bushels of lost corn grind, assuming a value of $3.50 per bushel.

2019 Volumes

The RFS statute and regulations give EPA the tools to ensure that retroactive refinery exemptions do not reduce 2019 volume obligations set through this rulemaking. EPA, however, failed to propose using these tools, leaving the door open for the agency to waive the volume requirements after finalizing this rule. Indiscriminately waiving substantial volumes after issuing final standards adds another layer of market uncertainty for farmers expecting to have confidence in the volumes EPA sets.

To be consistent with the statute's direction that the final 2019 renewable fuel obligations ensure the requirements of the RFS are met, EPA should project an exempted small refinery volume in this rule, even though EPA has not yet received petitions for exemptions. The standards formula in the proposed rule projects zero gallons of gasoline and zero gallons of diesel will be exempted for small refineries. NCGA believes recent experience contradicts these projections.

EPA has historically granted limited small refinery hardship exemptions, and EPA intended that the need for small refinery exemptions would decrease over time as obligated parties adjusted to the requirements of the law. EPA states in the 2019 proposed rule that the RFS, "will not have a significant impact on a substantial number of small entities."[3] EPA reached a similar conclusion in the 2018 volume-setting process, stating, "Currently available information shows that the impact on small entities from implementation of this rule would not be significant," and that, "the costs to small entities of the RFS standards are far less than 1 percent of the value of their sales."[4]

Despite these findings, EPA granted 2.25 billion ethanol-equivalent gallons of exemptions since the 2016 compliance year, with four additional 2017 petitions still under evaluation.[5] Given the magnitude of exemptions granted during the past year to two years, it is not credible for EPA to project 2019 exemptions for small refineries will total zero gallons.

[3] 83 Federal Register 32058 (July 10, 2018)
[4] 82 Federal Register 34243 (July 21, 2017)
[5] 83 Federal Register 32029 (July 10, 2018

The equation for calculating the annual renewable fuel percentage standards is prescriptive on this matter. It specifically includes entries for the "amount of gasoline" and "amount of diesel projected to be produced by exempt small refineries and small refiners" for the year, in gallons in any year they are exempt.[6] By including the variables of projected gallons of gasoline and projected gallons of diesel for exempt small refiners, the regulation provides EPA with a means to ensure that retroactive refinery exemptions are estimated in the 2019 volume standards and to meet the agency's statutory requirements under the RFS.

The inter-agency documents posted to this docket show EPA evaluated its responsibilities under the law and its regulations and considered following the law in the proposed rule. Documents shared between EPA and the Office and Management and Budget on June 19, 20 and 21, 2018, show EPA drafted a proposal estimating the volume of 2019 small refinery exemptions by using the actual 2017 volumes of gasoline and diesel exempted from blending, the most recent year for which EPA has granted small refinery exemptions at this time.

As stated in this draft proposal, "Our grant of small refinery exemptions affects the amount of transportation fuel subject to the renewable fuel obligation that year. Projecting the total exempted volumes based on the most recent exemption data is an appropriate way to address this effect and facilitate the satisfaction of the RFS program requirements in CAA 211(o)(2)."[7] NCGA agrees with EPA's assessment that including a projection for the exempted small refinery volume for 2019 would be consistent with the statute and the regulations. Doing so allows EPA to account for retroactive small refinery exemptions and keep the volume requirements set in this rule whole.

Without explanation, EPA changed course just prior to issuing the proposed rule. On June 22, 2018, EPA reverted to its prior draft rule, which failed to project 2019 exempted volumes and protect volumes from retroactive waivers.[8] As currently proposed, EPA may grant refineries retroactive exemptions for 2019, and these volumes would disappear from the volume requirements. EPA's process ensures the 2019 volume obligations will not be met, violating EPA's statutory responsibility to meet volume obligations.

NCGA urges EPA to maintain the integrity of the RFS volumes established in this rulemaking process. As EPA states in the proposed rule, "any exemptions for 2019 that are granted after the final rule is released will not be reflected in the percentage standards that apply to all gasoline and diesel produced or imported in 2019."[9] For corn farmers, that means the volumes set in this rulemaking are meaningless. EPA must reallocate waived gallons to keep the final RFS volumes whole, and this rulemaking provides EPA with the means to ensure retroactive waivers

[6] 40 CFR 80.1405(c) (GE^i and DE^i)

[7] USEPA Documentation of OMB Review Under Executive Order 12866 posted to this docket, Email from Tia Sutton to Chad S. Whiteman, Re: Revised version of 2019 RVO NRPM, June 20, 2018

[8] USEPA Documentation of OMB Review Under Executive Order 12866 posted to this docket, Email from Tia Sutton to Chad S. Whiteman, Re: Revised version of 2019 RVO NRPM, June 22, 2018

[9] 83 Federal Register 32057 (July 10, 2018)

do not lower volumes. Purposefully excluding small refinery exemptions from the standards equation will always result in a reduction in required renewable fuel usage. With this lapse, the agency is willfully allowing for continued market uncertainty for corn farmers, as well as the greater rural economy.

EPA states the agency is not soliciting comments on how these exemptions are accounted for in the percentage standards formula. While EPA may not want feedback on how the agency is failing to maintain the integrity of the RFS and administer the volume standards in accordance with the law, corn farmers will provide that feedback nonetheless and make our voices heard. The process for accounting for these volumes is central to the integrity of the RFS, and it is offensive to farmers that EPA does not believe our comments on this issue are worth soliciting and considering.

2016 and 2017 Exemptions

While EPA discloses the number of RINs not required to be retired because of the small refinery exemptions issued for the 2016 and 2017 compliance years, EPA does not propose a means to offset these significant reductions in volume requirements. NCGA urges EPA to incorporate these exempted volumes into the 2019 obligations to mitigate damage done to biofuel and corn demand from declining biofuel blending rates.

Because EPA's exemptions retroactively reduced the renewable fuel obligation for select refineries, which shrank the total requirement to blend, EPA failed to ensure volumes of renewable fuels are blended in accordance with the volumes set through the annual standards rulemakings. In short, EPA, to remain within the statutory requirements of the law, must now make the RFS whole after its decision to retroactively waive volumes.

NCGA believes EPA should use the opportunity presented by the 2019 volume rule to ensure RFS volumes set for 2016, 2017 and 2018 are achieved despite exemptions that have been granted or may be granted. The annual rulemaking process for the RFS enables EPA to send a strong signal of market certainty that helps all parties. Certainty achieved by using this rulemaking to equitably reallocate exempted volumes from past compliance years provides certainty not only for the 2019 standards, but also for standards EPA set for past years.

With no notification from EPA of when these exemptions were granted, which refineries received waivers and without justification provided for these exemptions, NCGA has very limited EPA-disclosed information on which to judge the merits of these exemptions. Congress granted EPA authority to issue exemptions to small refineries that demonstrate a disproportionate economic hardship. However, Congress did not grant EPA unlimited authority to waive RFS volumes. EPA may be within its authority to issue exemptions, but EPA is not exempt from its statutory duty to ensure final volume requirements are met. Because of the retroactive exemptions EPA issued, the required renewable fuel volumes for 2016 and 2017 have not been met.

Ignoring the impact of these retroactive exemptions suppresses the annual volume standards by an appreciable amount. EPA should show a sense of urgency in making up these volumes in order to provide ample notice and certainty to obligated parties. The large carryover RIN bank of nearly 15 percent of the total 2019 RFS volumes, nearing the 20 percent maximum carryover, is further justification for the agency to address this issue now.

Failure to address these retroactive exemptions equates to EPA exercising RFS waiver authority not specifically granted by Congress. Congress provided specific procedures for reducing the overall RFS volume requirements, such as the general waiver authority based on inadequate domestic supply or severe economic harm. Small refinery exemption authority is not general waiver authority and cannot be used to accomplish the same result by another means.

General Waiver Authority

EPA states that, "At this time, we do not believe that the circumstances exist that would justify a waiver of volumes under the general waiver authority."[10] NCGA agrees with EPA's assessment and believes adjustments to the volume requirements using the general waiver authority are not justified.

Domestic Supply

NCGA, as one of the petitioners in *Americans for Clean Energy v. EPA*, challenged EPA's use of the general waiver authority based on inadequate domestic supply in the rule setting volume requirements for 2014-2016. In its July 28, 2017 opinion, the U.S. Court of Appeals for the District of Columbia Circuit vacated EPA's decision to reduce the total renewable fuel requirements for 2016 through use of its "inadequate domestic supply" waiver authority and remanded the rule to EPA for further consideration.

The Court held that, "EPA erred in how it interpreted the 'inadequate domestic supply' waiver provision. We hold that the 'inadequate domestic supply provision' authorizes EPA to consider *supply-side* factors affecting the volume of renewable fuel that is available to *refiners, blenders and importers* to meet the statutory volume requirements. It does not allow EPA to consider the volume of renewable fuel that is available to ultimate *consumers* or the *demand-side* constraints that affect the consumption of renewable fuel by consumers."[11]

Given the plentiful supply of feedstocks and supply of renewable fuel to refiners, blenders and importers, as well as stable projections for 2019 supply, NCGA concludes that EPA's general waiver authority based on "inadequate domestic supply," as interpreted by the DC Circuit Court, would not apply when setting 2019 volume requirements.

[10] 83 Federal Register 32029 (July 10, 2018)
[11] *Americans for Clean Energy v. EPA.* No. 16-1005 (D.C. Cir., 2017)

Corn-based ethanol remains the primary biofuel produced to meet the volume requirements under the RFS. As proposed, EPA's 2019 standards would achieve the implied statutory volume for conventional biofuel of 15 billion gallons. In 2017, conventional ethanol production surpassed this level, totaling 15.8 billion gallons, according to the U.S. Energy Information Administration. NCGA strongly supports this proposed implied volume and asks that EPA maintain it in the final rule.

The August 10, 2018 World Agriculture Supply and Demand Estimates report from the USDA shows ample corn production to continue to meet this level of domestic ethanol production in the coming year. USDA projects a 2018/2019 corn crop of 14.6 billion bushels, which is flat compared to 2017/2018 production. USDA is also forecasting a 1.7 billion bushel carry-out for the 2018 marketing year, down slightly from the 2 billion bushel carry-out for the 2017/2018 marketing year. Corn farmers have produced, and will continue to produce, more than a sufficient supply of corn to achieve, and expand, current levels of ethanol production.

Severe Economic Harm

The threshold indicating severe economic harm is justifiably high. NCGA believes EPA's interpretation of severe economic harm waiver authority made through denials of waiver petitions in 2008 and 2012 is entirely appropriate and consistent with the statute. EPA should continue to rely on this thorough and well-documented interpretation.

When EPA declined petitions to waive volume requirements in 2012 based on economic harm, the agency specifically noted that the question of severe harm is a high statutory threshold. When evaluating use of the waiver authority, it is not enough for EPA to determine that implementation of the RFS would *contribute* to economic harm. EPA's interpretation of the statute has been that implementation of the RFS must be the *cause* of the economic harm.[12] The statute requires causation; correlation or contribution are insufficient.

EPA undertook significant analysis in evaluating the 2008 and 2012 waiver petitions to determine whether the RFS would cause severe harm to the economy of a state, region or the nation. For example, EPA evaluated several options for economic models before using one to compare the circumstances with and without a waiver in order to evaluate its impacts. The agency presented the results of the economic modeling for various scenarios, demonstrating the data EPA considered. EPA asked two questions to make a final determination on severe economic harm. First, EPA asked whether there was a high degree of confidence that severe harm would occur from implementation of the RFS. Second, EPA considered the nature and degree of any harm to determine severity.

In the agency's 2012 petition denial, EPA acknowledged the many impacts of reduced crop production due to drought. However, EPA concluded the evidence did not support a

[12] 77 Federal Register 70773

determination that implementation of the RFS would cause severe economic harm and that RFS implementation was likely to have no impact on corn, food and fuel prices.[13]

Furthermore, and critically important, EPA has held that severe harm must affect more than one sector of the economy. In 2008, EPA stated that, "it would be unreasonable to base a waiver determination solely on consideration of impacts of the RFS program to one sector of an economy, without also considering the impacts of the RFS program on other sectors of the economy, or on other kinds of impact."[14] EPA must also evaluate the entire spectrum of impacts of the RFS, from negative to positive, when assessing total economic harm to a state, region or the nation.

Requests from four state governors in late 2017 for EPA to waive volume requirements cited impacts on the refining sector. While the refining sector has expressed concern about RFS impacts and price stability in the RIN market, EPA concluded in 2017 that RIN prices do not cause economic harm to refiners. In the 2018 volume standards rule, the agency stated, "EPA has invested significant resources evaluating the impact of high RIN prices on refiners. After reviewing the available data, EPA has concluded that refiners are generally able to recover the cost of RINs in the prices they receive for their refined products, and therefore high RIN prices do not cause significant harm to refiners."[15]

Conventional biofuel D6 RIN values are now near 20 cents, compared with values of nearly 90 cents when EPA published its 2017 conclusion on the impact of RIN values. The significant decline in RIN values, combined with rapidly rising refiner profits in 2017 and 2018, provide no evidence that the RFS is causing economic harm to refiners. NCGA agrees with EPA's assessment that RIN prices do not affect refiners.

In a November 30, 2017 memorandum to the 2018 volume standards docket, *Assessment of Waivers for Severe Economic Harm or BBD Prices for 2018,* EPA further assessed waivers based on severe economic harm. Not only did EPA state that stakeholders did not provide any evidence of severe economic harm that is occurring or projected to occur, EPA's own investigation of broad economic indicators concluded that no waiver based on severe economic harm was warranted.[16] EPA reviewed fuel prices, fuel supply, crop prices, and refinery closures before concluding that compliance with the RFS was not causing severe economic harm to a state, region or the country. Such harm was not likely to occur in 2018 absent a change in circumstances, a scenario EPA found equally improbable.[17]

[13] 77 Federal Register 70752
[14] 77 Federal Register 70774
[15] Environmental Protection Agency, Standards for 2018 and Biomass-Based Diesel Standards for 2019: Responses to Comments, Page 198
[16] Korotney, David, Memorandum to EPA Air Docket EPA-HQ-OAR-2017-0091, *Assessment of Waivers for Severe Economic Harm or BBD Prices for 2018*, November 30, 2018
[17] Korotney, David, Page 14

NCGA does not believe circumstances reviewed by EPA last year have changed significantly in 2018 to indicate evidence of economic harm caused by the RFS. Rather, a finding of economic harm would be more improbable today given changes in fuel supply and prices, refinery profits and crop prices. In 2018, ethanol has had a significant cost advantage over gasoline, with current ethanol prices nearly 70 cents less per gallon. As previously discussed, with USDA's most recent U.S. corn production estimate of 14.6 billion bushels for 2018, coupled with the high carry-out of the 2017 crop, the overall corn supply is expected to remain large with prices declining. EPA's use of general waiver authority in the 2019 volume requirements would have significant negative impacts on an already-hobbled rural economy.

Severe Environmental Harm

NCGA believes the RFS also provides significant environmental benefits, particularly when renewable fuels are compared with the petroleum-based products that biofuels replace.

The RFS requires renewable fuels to meet lifecycle greenhouse gas (GHG) emission reduction thresholds. Models used to predict RFS impacts in 2010 projected that use of conventional ethanol would reduce GHG emissions by 21 percent compared to gasoline by 2022. However, more recent analysis, based on actual corn and ethanol production, shows higher actual GHG reductions than EPA previously projected. For example, a 2017 USDA-sanctioned analysis found GHG emissions for conventional ethanol are currently 43 percent less than for gasoline.[18]

NCGA was disappointed that EPA's recent Triennial Report to Congress regarding biofuels and the environment failed to account for GHG reductions from biofuels use, a significant environmental benefit of the RFS. However, NCGA notes EPA acknowledged corn production can provide soil carbon benefits.

NCGA is also concerned EPA's report did not make any comparative assessment relative to the impacts of other types of transportation fuels, including fossil fuels. Environmental impacts from fossil fuel production, refining and use are greater than those from biofuels. When evaluating the environmental impact of biofuels, the environmental impact of the fuels replaced must also be considered.

EPA's Triennial Report comes up short on incorporating the improvements in sustainability and productivity that have taken place both in agriculture and in biofuels production since the RFS was enacted. Much of the data EPA reviewed for the report did not go beyond 2012. For example, for the last six years, planted corn acres have been lower than planted corn acres in 2012, and planted corn acres have exceeded the amount in 2007, the year the RFS was expanded, in only three crop years out of the following 10.[19] As corn productivity has increased,

[18] ICF prepared for USDA, A Life-Cycle Analysis of the Greenhouse Gas Emissions of Corn-Based Ethanol, January 12, 2017

[19] USDA, NASS, Crop Production 2017 Summary, January 12, 2018

farmers are producing larger crops, using less land and fewer inputs per bushel. In 2007, crop yields averaged 150.7 bushels per acre; the 2017 average is 176.6 bushels.

The RFS also requires EPA to assess whether new cropland has been brought into production since 2007 to support biofuel production. EPA's 2007 baseline for agriculture land is 402 million acres. In 2017, EPA concluded that U.S. agriculture land reached 376 million acres and did not exceed the 2007 baseline.[20] Based on EPA's assessment, the RFS is not causing aggregate land use change.

EPA's Triennial Report recommends continued adoption of conservation practices to improve water quality, soil quality and other factors, and EPA should ensure the agency is using the most recent information on conservation practices adoption, rather than 2010 data, to inform EPA's assessment of environmental impacts. Corn farmers are proud of our leadership in expanding conservation and best management practices. For example, NCGA's Soil Health Partnership engages a growing network of corn growers representing more than 140 farms in 14 states. These farmers are following established research protocols to measure the environmental and economic benefits of soil health strategies. Through data collection and analysis, the partnership is producing data-driven recommendations that farmers can use to improve sustainability and productivity, resulting in more carbon sequestration, erosion protection, drought tolerance and nutrient storage, among other benefits.

EPA's Triennial Report does not provide a comprehensive assessment of biofuels' environmental impact benefits. Unfortunately, this incomplete analysis is being erroneously touted by some to conclude the RFS is causing significant environmental harm. By issuing a report that only tells part of the story and draws conclusions based on limited data from past years, EPA's report does not fully capture the environmental benefits of biofuels. As such, as EPA evaluates use of general waiver authority, NCGA believes a comparative assessment to other transportation fuels must be part of that process.

Because the Circuit Court decision clarified "inadequate domestic supply" waiver authority and because the RFS is causing neither severe economic nor severe environmental harm, NCGA finds no justification for EPA to use its general waiver authority to reduce required volumes of renewable fuel in a final rule.

EPA Response to *Americans for Clean Energy v. EPA* Remand

In the proposed rule, EPA states its intent to use a separate rulemaking to address the 2017 decision from the United States Court of Appeals for the District of Columbia Circuit in *Americans for Clean Energy v. EPA*. The DC Circuit Court found that EPA improperly used the RFS general waiver authority in setting the 2014-2016 volume requirements, specifically vacating the 2016 volume requirements and remanding that rule to EPA.

[20] 82 Federal Register 58491 (December 12, 2017)

EPA has had a full year to comply with the Court's remand and address the 500 million gallons improperly waived. NCGA is extremely disappointed with EPA's failure to address the remand ordered by the Court in its 2019 volume rule. Addressing the remand in the 2019 volume rule would provide certainty and notice to obligated parties. A projected carryover RIN bank of 15 percent of the volumes proposed in 2019, or 3 billion RINs, provides a sufficient buffer to address the 500 million RINs affected by the remand. NCGA urges EPA to promptly adhere to the Court's remand and restore these gallons.

Effects of Carryover RIN Bank Size

As EPA outlines, the small refinery exemptions and other EPA actions have directly increased the number of carryover RINs that will likely be available for compliance with the 2019 standards.[21] In the past year, the number of carryover RINs has increased by nearly 1 billion, from an estimated 2.2 billion when the 2018 rule was finalized to 3.06 billion now. Total carryover RINs are now nearly 15 percent of the total renewable fuel volume requirement that EPA is proposing, nearing the 20 percent maximum limit on carryover RINs. Even though advanced biofuel carryover RINs have declined, the volume is nearly 14 percent of the advanced volume proposed by EPA.

NCGA believes the increase in carryover RINs blunts the effectiveness of the RIN market as a mechanism to drive biofuels blending and, ultimately, to support the intent of the RFS to increase the volume of renewable fuel blended into transportation fuel. The current high level of carryover RINs means 3 billion gallons of the 2019 volume requirement could be met with these RINs rather than through actual biofuels blending. Should EPA continue granting small refinery exemptions, the carryover RIN bank could easily grow beyond the maximum of 20 percent of the annual volume obligation. Additional exempted volumes could result in carryover RINs that expire without being used.

The carryover RIN bank, now at its largest historical level, underlines the importance of EPA's timeliness in addressing the DC Circuit Court's remand of the 2016 volume rule and reallocation of small refinery exemptions now, while still providing a buffer for compliance flexibility and to meet uncertainties in the market.

RIN Market Operations

EPA discusses possible proposals to change RIN market operations, including changes in the type and frequency of RIN-related information released, as well as a future proposed rule addressing the length of time RINs can be held and/or allowed RIN market participants.

[21] 83 Federal Register 32030 (July 10, 2018)

Because NCGA is not a direct participant in the RIN market, we are not offering specific recommendations for changes to its operations. However, NCGA believes EPA should use agency authority to improve visibility into the RIN marketplace and that more transparency would help reduce perceived RIN price volatility and improve predictability for RIN market participants.

EPA's granting of numerous small refinery exemptions injected considerable uncertainty into the RIN market. Because EPA discloses no information about these waivers, other than the aggregate numbers in this proposed rule long after granting the waivers, EPA created uncertainty about RIN supply and renewable volume obligations, contributing to RIN market volatility. EPA could easily disclose waiver recipients and amounts in real-time while still protecting proprietary information, providing the RIN marketplace with more complete information about obligations and RIN supply. EPA's current practice, however, deprives all market participants, other than the waiver recipient, of important market information, allowing EPA and select refiners to impact the RIN market.

NCGA urges EPA and obligated parties to address price stability in legal and transparent ways, such as by enabling the expansion of domestic blending and use of renewable fuels. As more renewable fuel is blended into the fuel supply, more liquidity is added to the RIN market, easing RFS compliance for obligated parties.

Cellulosic Biofuel Volume

In contrast to last year's proposed rule, EPA proposes to increase the cellulosic biofuel volume for 2019, following the RFS intent to require increasing amounts of renewable fuel blended into transportation fuel. For 2019, EPA proposes a volume of 381 million gallons, an increase of nearly 100 million gallons from 2018. EPA uses the cellulosic waiver authority to reduce the statutory volume of 8.5 billion gallons based on projected production.

Although most cellulosic biofuel comes in the form of compressed natural gas (CNG) and liquified natural gas (LNG) derived from biogas, liquid cellulosic biofuel is largely derived from corn-based feedstocks, corn kernel fiber or corn stover. As biofuels producers make capital investments to add corn kernel fiber processing to their systems, NCGA encourages EPA to ensure an efficient and effective registration process supports a return on these investments.

NCGA notes that EPA continues to use the methodology first used in the 2018 rule to project liquid cellulosic production. While NCGA agrees with EPA that there is "inherent difficulty" in projecting cellulosic biofuel production, particularly as existing ethanol producers adopt new technologies and new producers gradually increase production, we believe EPA should assess how the methodology is projecting volumes based on 2018 production data that will be available before EPA sets final 2019 volumes.

EPA's methodology gives equal weight to production from 2016 and 2017, tying projections for future production to production from two to three years earlier. EPA's backward-looking methodology does not account for growth as cellulosic producers mature and continue improving on their technologies. NCGA believes EPA should look forward, rather than backward, when setting cellulosic volumes to more accurately capture current cellulosic market activity.

Total Renewable Fuel

The RFS law requires an increasing amount of renewable fuel to be introduced into the nation's transportation fuel supply each year. EPA follows the statutory intent by proposing to increase the total renewable fuel volume from 19.29 billion gallons to 19.88 billion gallons. EPA's proposal is an improvement from 2018, which was a proposal to decrease total renewable fuel.

While EPA may be operating within the law to use the cellulosic waiver authority to its fullest extent, reducing both the advanced biofuel and total renewable fuel volumes by the same amount as the cellulosic volume reduction, NCGA urges EPA to reconsider this decision in the final rule. The cellulosic waiver authority does not require EPA to make an equal reduction to both advanced biofuel and total renewable fuel.

Increasing the amount of renewable fuel blended into the nation's transportation fuel supply increases U.S. energy security and independence by diversifying transportation fuel sources. Diversifying our fuel sources also strengthens additional sectors of our economy, creates new jobs and investment and lowers prices for consumers.

While cellulosic production is not yet sufficient to meet statutory requirements and EPA must use the cellulosic waiver authority, EPA may also allow other renewable fuels to backfill a portion of the cellulosic volume waived, resulting in higher total renewable fuel use. Regardless of whether EPA allows advanced biofuel or conventional biofuel to backfill for these volumes, the RFS goals of energy independence, greenhouse gas emission reductions and rural economic development would all be better achieved through additional renewable fuel use rather than additional fossil fuel use. Conventional ethanol also currently costs 70 cents less per gallon than gasoline.

Additional supplies of advanced biofuels and conventional biofuels are available to meet a higher standard that would result from backfilling a portion of the cellulosic volume waived. Further, the rapid growth in the carryover RIN bank to its current record size provides additional flexibility in meeting higher standards in 2019.

As EPA notes, increasing amounts of distillers corn oil are expected to be produced in the 2018/2019 marketing year, supporting additional biofuel production. Over the last several years, most dry mill ethanol plants have made investments to allow for the extraction of a

portion of corn oil from the distiller's dried grains (DDGs) that are a co-product of ethanol production. We recognize EPA has concerns about displacing what some consider food into the biodiesel market. However, we believe these concerns are misplaced.

In the case of corn oil from DDGs, this product was never destined for the food market, and, in all but the rarest cases, is not considered "food grade" oil. Instead, extracting a portion of the corn oil during ethanol production increases the energy balance of corn and adds more value to our commodity. Removing some of the fat content of DDGs by extracting corn oil only changes the nutritional profile of this co-product, and, depending upon the livestock species fed, also increases the digestibility and feed value of the DDGs. In this way, the ethanol value chain continues to provide greater returns to producers and more products from a kernel of corn.

Renewable Fuels in the Marketplace

In the proposed rule, EPA correctly states that the DC Circuit Court's 2017 decision in *Americans for Clean Energy v. EPA* means the agency's assessment of demand-side issues is not relevant for determining supply of renewable fuel. Although the proposed rule does not include demand considerations, the memorandum to the docket, *Market Impacts of Biofuels in 2019*, discusses projections for renewable fuel consumption and constraints on consumption. EPA states that assessing these demand-side considerations and ways the marketplace could meet the volume standards may be relevant to how EPA considers use of other waiver authority, such as the waiver for severe economic harm.

Although not included in the proposed rule, NCGA cautions EPA against weighing these ethanol consumption and usage constraints, which may undermine the purpose of the RFS and use of the volume requirements to help force demand up, an objective emphasized by the DC Circuit Court.[22] The RFS provided renewable fuels with access to a previously closed marketplace, but the market-forcing policy of the RFS relies on EPA to set, and uphold, high standards in order to help increase demand. NCGA further encourages EPA to affirmatively acknowledge that the agency shall only consider factors affecting supply to refiners, blenders and importers, such as the availability of feedstocks, the production capacity of renewable fuel producers and imports from foreign producers, when setting volume requirements.

EPA identifies "constraints on the ability of the market to significantly exceed an average nationwide ethanol content of more than 10 percent," including consumption-related factors such as gasoline use and the volume of ethanol needed to blend at a 10 percent level, retail locations offering higher blends, relative pricing of higher blends and use of gasoline without ethanol.[23] NCGA believes the agency's continued fabrication of a false E10 blend wall does not

[22] *Americans for Clean Energy v. EPA*. No. 16-1005 (D.C. Cir., 2017)
[23] Korotney, David, Memorandum to EPA Docket EPA-HQ-OAR-2018-0167, *Market Impacts of Biofuels in 2019*, June 26, 2018

account for the ample time the petroleum and fuel retail industries have had to prepare to accommodate the higher ethanol blends they knew the expanded RFS would require.

EPA also fails to identify a significant regulatory barrier to ethanol use, the lack of Reid Vapor Pressure (RVP) parity for ethanol bends greater than 10 percent such as E15. NCGA strongly urges EPA to set a transparent timeline for using the agency's authority to remove the outdated RVP barrier and to ensure this barrier is removed before June 1, 2019. While not part of the RFS, removing this RVP regulatory barrier would ease implementation of the RFS and provide a consistent product to consumers. Further, EPA action on RVP parity would follow through on President Trump's repeated commitment to remove this barrier and provide a no-cost solution to expand a domestic market for farmers impacted by trade policy, extensive small refinery exemptions and low commodity prices.

The RVP of gasoline can range from 7 to 15 psi; the RVP of pure ethanol is 2 psi. Depending on the location and month of the year, gasoline RVP may not exceed 9.0 or 7.8 psi. The most common fuel used in the United States today is E10, which has a RVP of about 10 psi.

Under the Clean Air Act, E10 is allowed a "one-pound waiver" of EPA's evaporative emission limit.[24] In other words, Congress authorized EPA to allow E10 use during the June 1 through September 15 summer fueling season even though it may exceed the 9.0 psi limit. The purpose of RVP regulation is to permit ethanol blends that do not substantially contribute to ground-level ozone to enter the market blended with standard gasoline, and the current regulatory interpretation on RVP was made when 10 percent was the highest approved ethanol blend.

In 2011 EPA approved the use of E15, a fuel with fewer evaporative emissions than E10. While the RVP of E15 is less than E10, it is still above the 9.0 psi threshold. Even though ethanol blends above E10 would lower evaporative emissions from today's level, EPA does not currently allow E15 to be sold during summer months in non-reformulated gasoline areas.

Without relief from the outdated RVP interpretation, retailers are forced to stop selling E15 during the summer fueling season. This unnecessary limitation on E15 sales keeps many retailers from offering the choice of E15. It also denies consumers the opportunity to buy a lower-cost, lower-emissions fuel, which costs 5 to 10 cents less than E10, during the peak driving season. To remedy this unnecessary RVP constraint, EPA must put ethanol blends greater than 10 percent, such as E15, on a level playing field with E10. NCGA believes EPA has the authority to update this outdated regulation and to act now.

In 2011, EPA approved the use of E15 in all cars built after 2001. Today, nearly 90 percent of the vehicles on the road can use E15. E15 compatibility is the standard for new vehicles, and new E15-capable vehicles are added to the fleet each year while older vehicles, which are less likely to be E15 compatible, are retired. In addition, there are currently 20 million flexible fuel

[24] CAA § 211(h)(4)

vehicles (FFVs) on the road, capable of using ethanol blends up to E85. There are more FFVs on the road today than cars and light trucks running on diesel and E0.

Because all vehicles on the road can run on regular gasoline, which is primarily E10, when retailers add E15 and other higher ethanol blends to their inventory, they retain all previous customers while doing more to service the nearly 90 percent of vehicles capable of using E15. More than 1,400 retailers across 30 states currently offer E15, more than triple the number of locations offering E15 in 2016.

The financial barrier to such additions for retailers is often exaggerated, partly due to the complex nature of requirements regarding fuel. According to audits by the U.S. Department of Energy's National Renewable Energy Lab (NREL), nearly all underground storage tanks and systems can safely store up to 100 percent ethanol. This limits the transition to above ground equipment, which, for E15, is quite reasonable. According to both the Petroleum Equipment Institute and the USDA, most stations can upgrade their hanging hardware and dispensers adding E15 capability for as little as $1,000. Converting current fuel positions costs even less.

For our part, NCGA continues to work with our partners to expand the ability of fuel retailers to offer higher ethanol blends despite contractual hurdles erected by oil companies. An increase in compatible vehicles and upgraded fuel dispenser infrastructure continues to drive market penetration of higher blends of ethanol at U.S. fueling stations, illustrating that the fabricated 10 percent "blend wall" is not a legitimate barrier.