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Via Electronic Filing (www.regulations.gov)

The Honorable Andrew Wheeler
Acting Administrator
U.S. Environmental Protection Agency
EPA Docket Center, Air and Radiation Docket
Mail Code 28221T
1200 Pennsylvania Avenue, NW
Washington, DC 20460
ATTN: Docket ID No. EPA-HQ-OAR-2018-0167

Re: Renewable Fuel Standard Program: Standards for 2019 and Biomass-Based Diesel Volume for 2020; Proposed rule, 83 Fed. Reg. 32,024 (July 10, 2018)

Dear Acting Administrator Wheeler:

The organizations signed to this letter represent the full value chain of biogas-derived cellulosic biofuel under the Renewable Fuel Standard (RFS) program. We appreciate the opportunity to submit these comments on the Renewable Fuel Standard Program: Standards for 2019 and Biomass-Based Diesel Volume for 2020 (referred to as “2019 Proposed RVO”). These joint comments focus primarily on issues impacting gaseous cellulosic and advanced biofuels.

The Renewable Natural Gas (RNG) industry is leading the way in the delivery of cellulosic biofuel in the United States. RNG includes compressed natural gas (CNG) and liquefied natural gas (LNG) derived from renewable feedstocks, including agriculture wastes, municipal wastewater, and municipal solid waste in landfills, and makes up over 95 percent of our nation’s cellulosic biofuel production and generation of D3 Renewable Identification Numbers (RINs) under the RFS program. We support increasing the 2019 minimum applicable volume for cellulosic biofuel from 2018 to reflect the continued growth in the RNG industry and the investments being made, and a growing overall advanced biofuel volume to further support RNG production.

INTRODUCTION

Renewable Natural Gas (RNG) is biogas-derived fuel that has been captured from organic waste streams and upgraded to achieve quality standards necessary to blend with or substitute for geologic natural gas.

The Coalition for Renewable Natural Gas (RNG Coalition) is a non-profit association of companies and organizations dedicated to the advancement of RNG as a clean, green, alternative and domestic energy and fuel resource. Our membership includes companies throughout the value chain of waste feedstock conversion to transportation fuel under the RFS, including producers of RNG throughout North America.

Energy Vision (EV) is a not-for-profit think tank whose mission is to research, analyze and promote the technologies and strategies – viable today – required to transition toward a sustainable energy and transportation future. Since 2010, EV has been the leading independent environmental organization looking at the production and use of renewable natural gas (RNG) as a transportation fuel.

The National Waste and Recycling Association (NWRA) is a not-for-profit trade association representing private solid waste and recycling collection, processing, and management companies that operate in all fifty states.

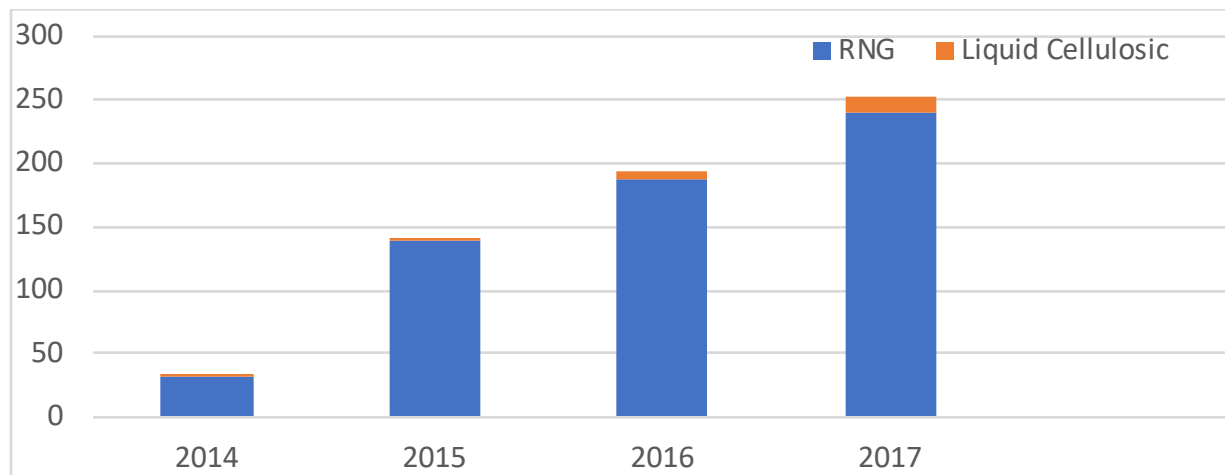
The Solid Waste Association of North America (SWANA) is a not-for-profit professional association in the solid waste management field with more than 10,000 members from both the private and public sectors across North America.

NGVAmerica is a non-profit trade association dedicated to the development of a growing, profitable, and sustainable market for vehicles and carriers powered by natural gas or biomethane. Its member companies produce, distribute, and market natural gas and biomethane, manufacture and service natural gas vehicles, engines, and equipment, and operate fleets powered by clean-burning gaseous fuels across North America.

The RFS program has successfully promoted production of RNG. RNG production facilities are developed at or near organic waste streams, including at landfills, wastewater treatment plants, and agricultural and livestock operations. Increasingly, municipalities are diverting municipal solid waste (MSW) to anaerobic digesters to capture biogas and produce RNG. The RNG industry has made substantial investments in response to the RFS. As shown below, RNG production into the transportation fuel market has expanded significantly since RNG became part of the cellulosic biofuel category under the RFS program.

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RNG Production Under the RFS (D3)
EMTS Data (Million Ethanol Equivalent Gallons) (data as of July 10, 2018)



RNG provides significant economic, energy security, and environmental benefits meeting all the goals of the RFS program set by Congress. Using EPA’s own estimates, RNG is among the most cost-effective means of complying with the RFS program. *See* 83 Fed. Reg. at 32,050-32,051. RNG production, in fact, allows local governments to generate revenue while reducing emissions from landfills and/or meeting their compliance obligations to control those emissions. A responsible long-term RFS policy will attract greater private sector investment and capital to the U.S. energy sector, including RNG.

In the 2019 Proposed RVO, EPA proposes to reduce the statutory minimum applicable volume for cellulosic biofuels for 2019 to 381 million gallons. While a reduction of the statutory volume, this proposal represents an increase of almost 100 million gallons from the 288 million gallons EPA finalized for the 2018 compliance year. Of the 381 million gallons of projected available cellulosic biofuel production for 2019, EPA projects 358 million gallons of available RNG production using a similar methodology as it did for projecting RNG production for the 2018 RFS. This methodology is based on a “growth rate” calculated by comparing 12 months of RNG RIN-generation data to the prior 12 months (hereinafter referred to as “growth rate methodology”).¹ EPA also proposes to set the 2019 standard for the total advanced biofuel category based on a minimum applicable volume of 4.88 billion gallons, which represents an almost 600-million-gallon increase from the 4.29 billion gallons it used to determine the 2018 standard. This is a marked improvement over the 2018 RFS where EPA *reduced* the cellulosic biofuel volume compared to 2017 and essentially held the overall advanced biofuel volume stagnant. Congress sought increased volume requirements to *promote* production of renewable fuels, particularly advanced biofuels like RNG that can qualify as cellulosic biofuel.

¹ EPA uses a different approach for projecting available production of liquid cellulosic biofuels, which it estimates to be around 24 million gallons for 2019. We do not take a position on that methodology or portion of the total projected volume for cellulosic biofuel.

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We support EPA's proposal to the extent it provides for increased cellulosic and advanced biofuel volume requirements compared to 2018. We urge EPA to continue to ensure the RFS recognizes the investments that have been made and continue to be made in improving efficiencies, expanding existing RNG projects, and developing new projects. We also urge EPA to promote biofuels by facilitating expedited registration processes and pathway approvals, and to protect against undermining the volume requirements. In short, the RFS should be administered in a way that secures RNG's important role in domestic fuel policy and facilitates growth of RNG production volumes consistent with the program's advanced and cellulosic biofuel requirements and Congress's goals.

COMMENTS ON PROPOSAL

I. The RNG Industry Supports Increasing Volume Requirements for Cellulosic Biofuel.

We appreciate the proposed increase in the minimum applicable volume for cellulosic biofuels compared to the volume EPA set for 2018. The proposal projects 358 million gallons of available RNG production for 2019 based on a 30.5 percent growth in production from April 2016-March 2017 compared to April 2017-March 2018. EPA's proposal applies this 30.5 percent growth rate to EPA's previous estimate of 274 million gallons of RNG production for calendar year 2018. We agree that the RNG industry continues to grow at a significant pace. There is ample room for continued growth of RNG production under the RFS program; provided, however, that EPA shows strong support for growing and enforcing those volumes.

Although we continue to have concerns with EPA's growth rate methodology, as further described below, the projected growth in available RNG production in the proposal is consistent with the demonstrated growth in the industry and anticipated new projects on the near horizon. Based on industry data, we believe it represents a fair projection of available volume, and, while EPA implies it may make changes to this projection in the final 2019 RFS based on updated data, EPA's approach in projecting available RNG volume must recognize investments made and being made by the RNG industry. In other words, consistent with the statutory requirements, EPA's final RFS must not tip the scales. Rather, EPA should use current and historical data in a neutral methodology to determine the projected volume of available RNG.

A. EPA must project available volume for RNG through a predictable and consistent methodology.

In expanding the RFS program, Congress specified the minimum applicable volume of cellulosic biofuels to be required by EPA. In the event projected production falls short of those volumes, the statute requires EPA to adjust the statutory cellulosic biofuel volume to the "projected volume available" for the next calendar year. 42 U.S.C. § 7545(o)(7)(D)(i). In projecting available volumes, EPA need only take a neutral aim at accuracy, not precisely predict actual production in the next year. EPA previously used a facility-by-facility approach for projecting available volumes, but, for RNG, moved to a growth rate methodology for the 2018 RFS based on RNG being a more mature industry than liquid cellulosic biofuels and the larger number of RNG projects compared to liquid cellulosic biofuels. While the RNG industry

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raised concerns with this approach, which favors historical production over expected future production, it also urged EPA to utilize a consistent and predictable methodology to give the industry certainty and stability to seek financing and make investment decisions. EPA, however, continues to make changes to its approach, creating uncertainty and giving the RNG industry a continuously moving target.

For the 2019 RFS, EPA's proposal purports to use the same methodology as it did for the 2018 RFS. We acknowledge EPA's attempt at consistency, but we urge EPA to provide a consistent formula and provide consistent data to the industry by which investment decisions can be made. For example, even though EPA says it is using the same approach as it did in projecting RNG production for the 2018 RFS, *see* 83 Fed. Reg. at 32,026 and 32,031, it did make a change in the starting point used to project the available RNG volume for 2019. For the 2018 RFS, EPA used the most recent full year of data it had as the starting point; that is, it applied the growth rate to the final production volumes starting with the 2016 RIN-generation data to get to a projection for 2018 (*i.e.*, 185.14 million x 1.216 x 1.216 = 274 million gallons). Here, however, EPA proposes to use its estimate for 2018 RNG production as the starting point (*i.e.*, 274 million x 1.305 = 358 million gallons). If EPA used the same methodology as it did for the 2018 RFS, EPA would have applied the growth rate to 2017 RIN-generation data, which would have resulted in a higher projection for 2019.²

Indeed, EPA's own explanation of how it projected RNG production for 2019 is inconsistent. *Compare* 83 Fed. Reg. at 32,032 ("We then apply this year-over-year growth rate to the total number of cellulosic RINS available for compliance from CNG/LNG in 2017 (the most recent year for which complete data are available), to estimate the production of CNG/LNG derived from biogas in 2019.") *with* 83 Fed. Reg. at 32,037 ("EPA then applied this 30.5 percent year-over-year growth rate to the total number of 2018 cellulosic RINs projected to be generated for CNG/LNG in the 2018 final rule."). In fact, EPA acknowledges that cellulosic biofuel volumes are exceeding what they estimated for 2018. *See* EPA Briefing to OMB, May 15, 2018, Slide 5, EPA-HQ-OAR-2018-0167-0103. In addition, EPA has recognized that the growth rate is likely to proceed at the same pace based on the industry growth. Yet, EPA does not explain its change in starting point from its approach for the 2018 RFS to support using this lower projection. This indicates EPA purposefully changed the approach for the 2019 Proposed RVO to reach a lower projected volume.

EPA also implies that it will make adjustments based on more recent data and will continue to consider changes to more accurately reflect actual production.³ 83 Fed. Reg. at 32,032. While we appreciate EPA's efforts to provide a more accurate means of projecting

² Using the 2018 estimated production results in a lower projected volume for 2019, because that was based on a lower growth rate of 21.6 percent, 82 Fed. Reg. 58,486, 58,502-58,504 (Dec. 12, 2017), than the 30.5 percent identified by EPA in the proposal.

³ While EPA may attempt to assert changes to the methodology are a "logical outgrowth" of the proposal, the industry, as further explained below, cannot follow EPA's data and even slight changes could significantly shift the projected volumes. Indeed, for its assessment of liquid cellulosic biofuels, EPA notes for what months it expects to rely on available production data to make adjustments to the percentile values used. 83 Fed. Reg. at 32,036. EPA provides no similar explanation for potential adjustments for RNG production.

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cellulosic biofuels, the industry needs certainty and predictability in EPA's approach. The growth rate methodology used by EPA is dependent on the time period and the data chosen, and we are concerned that EPA will again make a change in the methodology in the guise of "updated data" to provide an even lower projection of RNG than it has proposed. This is not consistent with the statute or with Congressional intent. EPA is to project "available volume," not precisely assess potential production. Thus, we again urge EPA to provide and use a consistent formula for the RNG industry to be able to better predict the expected volumes.⁴

In addition, we note that, while EPA recognizes that use is not constrained for RNG today, EPA's proposal references current use of CNG/LNG as transportation fuel as a potential reason for not using this methodology down the road. 83 Fed. Reg. at 32,037. We agree with EPA that *use* is not currently a constraint to RNG production.⁵ However, we take issue with the implication that it may be incorporated into EPA's methodology in future years. EPA is purporting to use its authority under the cellulosic biofuel waiver provision in setting the 2019 volume. As noted, that provision is triggered based on projected *production*, and EPA is to set the volume at projected volumes *available*. *Projected use*, therefore, is not an appropriate consideration under the waiver provision.⁶

Moreover, the estimated 580 million ethanol-equivalent gallons of CNG/LNG transportation fuel use implies an arbitrary cap on RNG. EPA does not explain why the data cited on estimated CNG/LNG use in the transportation sector is the appropriate reference point.⁷ Nor does EPA adequately explain how it reached this estimate. For example, in footnotes 64 and 110 of the 2019 Proposed RVO, EPA references a conversion factor of 946.5 BTU per cubic foot that may have been applied to estimate that 580 million ethanol-equivalent gallons of CNG/LNG will be used for transportation fuel in 2019. 83 Fed. Reg. at 32,037. *Compare with* 83 Fed. Reg. at 32,049 (referencing 630 million gallons as potential limit on use).⁸ However, we do believe this conversion factor may be low. Average BTUs for RNG fall in the range of 950-990 BTU per cubic foot. Without understanding EPA's rationale, it is

⁴ We incorporate by reference the comments submitted by the RNG Coalition, *et al.*, on the 2018 RFS proposal (EPA-HQ-OAR-2017-0091-3650).

⁵ Nor should it be a constraint for years. The U.S. Energy Information Administration (EIA) estimates continued increases in consumption of natural gas in the transportation sector "because of growing use in heavy-duty vehicles and freight rail." EIA, *Annual Energy Outlook 2018 with projections to 2050*, at 118 (Feb. 6, 2018).

⁶ Similarly, the D.C. Circuit has found that use (*i.e.*, demand) is not an appropriate consideration under EPA's general waiver authority based on "inadequate domestic supply." *See Ams. for Clean Energy v. EPA*, 864 F.3d 691 (D.C. Cir. 2017).

⁷ EPA references the March 2018 and the April 2018 Short Term Energy Outlook (STEO), claiming to use the Natural Gas Vehicle Use from the STEO Custom Table Builder. We believe these estimates may significantly underestimate total natural gas sales in transportation because EIA's surveys on natural gas (*e.g.*, Form 176) are currently limited in scope and coverage, and so may not include all LNG/CNG sales.

⁸ Whether EPA is referring to ethanol-equivalent or gasoline-equivalent gallons can have an impact on these estimates. For example, the EIA Annual Energy Outlook estimate for on-road natural gas consumption is 697 million gasoline-equivalent gallons, which is approximately 1 billion ethanol-equivalent gallons.

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difficult to comment on the validity of these estimates, although we do have some concerns with the scope of the data EPA purports to be using.⁹

More important, demand for RNG is already accounted for in supply contracts, which are part of the registration process for RNG projects under the RFS. *See, e.g.*, 83 Fed. Reg. at 32,034 n.47 (recognizing facility capacity can be equal to annualized rate of production or sum of volume of contracts in place for sale of CNG/LNG for use as transportation fuel). EPA requests comment on estimates of the volume of CNG/LNG likely to be used as transportation fuel in 2019, “as well as the ability of the CNG/LNG market to provide the documentation necessary to verify the use of this fuel as transportation fuel.” 83 Fed. Reg. at 32,037. While we agree that this information is generally useful to understanding market dynamics for RNG, we contend that EPA has all of the data necessary to this determination within the context of the registration process.

- B. EPA’s projections for RNG production must consider current and planned expansions and new RNG projects.

For the 2018 RFS, EPA moved from a facility-by-facility approach for projecting production of RNG to using an industry-wide approach through estimating a growth rate. The RNG Industry expressed our concern with the growth rate methodology based on historical data in our comments on the 2018 proposed RFS last year. In the final 2018 RFS, EPA made improvements to its proposal by using 12 months of data to calculate the growth rate compared to only five months of data used in its proposal. We appreciate this improvement, but we still believe EPA’s methodology, which is focused on historical data, misses current development and investment activity. We understand EPA currently disagrees with using the facility-by-facility approach and has again proposed using a growth rate approach. As such, we urge restraint from further methodology changes at this time in favor of stability while EPA and stakeholders observe actual production compared to the methodology’s projected volume.

While we are declining from urging EPA to again utilize a facility-by-facility approach at this time, we also believe there is sufficient information to support a projection for RNG for 2019 of at least 358 million gallons based on current industry activity. Nonetheless, we reserve the right to seek adjustments in EPA’s methodology to build on those volumes if EPA’s growth rate methodology underestimates available RNG volumes and, thereby, potentially strands or dissuades investments in RNG.

A 30.5 percent growth rate is consistent with the RNG industry’s growth in recent years. With the incentives from the RFS program and inclusion in the cellulosic biofuel category, the RNG industry has had double digit growth in the D3 category each year since 2014, as shown below.

⁹ *See, e.g., supra*, n.7 and n.8.

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Year	D3 RINS Generated for CNG/LNG	Annual Growth
2014	33 million	n/a
2015	140 million	+324%
2016	189 million	+35%
2017	241 million	+27.5%
2018	315* million	+30.5%**

*Based on EPA estimated growth rate of 30.5%, applied to 2017 volume (241 million * 1.305). This volume is well within the estimated volume for 2018 by the RNG Coalition in its 2018 RFS comments (345 million gallons), *see supra* n.4. The RNG Coalition has also received updated industry information through surveys conducted in March of 2018, which projects higher volumes of RNG for 2018.¹⁰ We incorporate by reference the data submitted by the RNG Coalition, *et al.*, on the 2018 RFS proposal (EPA-HQ-OAR-2017-0091-3650).

**EPA estimated growth rate in 2019 Proposed RVO.

Based on the data above, the average growth rate for RNG over the last three years has exceeded 30 percent. Significant growth rates are likely to continue into the near future. EPA has correctly indicated that many of the technologies being used today are not new. RNG producers utilize the best proven technologies derived from decades of experience in natural gas and biogas treatment. But, the industry's participation in, and compliance with, the cellulosic provisions of the RFS are still in its relative infancy. There are ample sources of landfills, wastewater plants, and agricultural operations, to name a few, to expand RNG production that is still untapped. Moreover, the industry continues to improve to become more efficient in methane capture and RNG production.

There is also an increase in the number of RNG projects currently under development than was considered for 2018. The RNG Coalition has developed a map and listing of RNG projects in the United States and Canada, and it has made that database available to the public.¹¹ Based on the collection of this information, previously obtained information on expected production, and updated information obtained through an industry survey conducted in March of 2018, we identified a significant number of projects that are in development compared to the projects in development for 2018, as shown in the table below. These projects take time to develop and, thus, EPA must continue to ensure the methodology used takes these projects into account so that the substantial investments made are not stranded.

¹⁰ Following EPA's prior facility-by-facility approach, the 345-million-gallon projection included adjusted volumes for projects identified as under construction and that have undergone "substantial development." Using a similar adjustment for these types of projects (75% for projects under construction and 50% for projects that have been identified as having undergone substantial development), we estimate over 400 million gallons of available RNG production capacity for 2019. Given the more mature nature of the RNG industry compared to liquid cellulosic biofuels and for comparison purposes, these adjustments are used rather than EPA's proposed adjustments for liquid cellulosic biofuels in the 2019 Proposed RVO. The RNG industry has a proven track record of building commercial-scale facilities that produce America's cellulosic biofuel.

¹¹ Available at <http://www.rngcoalition.com/>.

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# of D3 Projects based on Status	RNG Coalition 2017 Affidavits	Updated RNG Projects ¹²
Online/Operational	52	63
Under Construction	19	25
Substantial Development	5	24

These projects, however, require stability in the RFS program. Financing is among the most significant challenges cellulosic biofuel producers face in their efforts to bring new biofuel to the U.S. market. Cellulosic biofuel producers must be able to demonstrate to their financiers that there will be a sufficient market for the fuel they produce. We request that EPA continue to make clear and regular statements about its intent not to strand available cellulosic biofuel produced in compliance with the RFS, especially where total biofuel available is well under the statutory limits.

Although we anticipate EPA will seek to use updated data from EMTS (EPA Moderated Transaction System), EPA should be wary of reducing the volume downward from the proposal. There is a delay in RNG production being reflected in EMTS data,¹³ and there is evidence that the volume EPA proposed can be met. As an initial matter, RNG production has tended to be higher in the last half of the year due to financing and development cycles. More important, EMTS data in any given month may not accurately reflect production or available RNG due to the delay in RNG RIN data being reported in the EMTS. The RNG industry, which has made substantial investments in response to the RFS program, should not be blindsided at the end of November because a data shift misled EPA into underestimating RNG production. As noted above, EPA need only take a neutral aim at accuracy in projecting available volumes, not precisely predict production.

- C. EPA should consider the availability of carryover RINs in assessing available production.

As discussed above, EPA has a statutory obligation to set the minimum applicable volume for cellulosic biofuel at the “projected volume available.” In projecting volume *available*, EPA should consider the volume available due to additional supply introduced to the market through the use of cellulosic waiver credits (CWC), and, thereby, carryover RINs. If EPA does not consider these CWCs and carryover RINs in its methodology, the methodology will be biased, as the availability of the CWCs and carryover RINs reduces the incentives for actual production. This is contrary to the statute and EPA’s obligations to promote *actual production*.

¹² There are additional RNG projects in North America, but we have limited the criteria here to those projects that are or will be generating D3 RINs under the RFS program.

¹³ Some may attempt to argue that year-to-date EMTS data for RNG production does not annualize to even the 274-million-gallon projected RNG volume for 2018. But, because of these delays in EMTS reporting of RNG RINs and because production has tended to increase in the second half of the year, annualizing the volume based on EMTS data from the first six months of the year only likely would not accurately reflect production for 2018.

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In the 2019 Proposed RVO, EPA asserts that it will not consider available carryover RINs as part of supply in setting the standards, noting the programmatic need for a RIN bank. 83 Fed. Reg. at 32,030. But, EMTS data shows over 21 million 2017 D3 RINs remain available, which can be used to allow 2018 RINs to be used for compliance in 2019.¹⁴ Indeed, EPA has previously included carryover RINs as part of its assessment of supply in declining to further reduce the cellulosic biofuel volume.¹⁵

EPA's discussion regarding the importance of a RIN bank ignores two key issues. First, the statute does not provide for a RIN bank, limiting the life of credits to 12 months. Second, and more important, CWCs already provide a programmatic buffer for cellulosic biofuels. CWCs should not be a main source of compliance, but should serve as a safety valve, and EPA should promote actual production of cellulosic biofuels. Thus, EPA should consider the use of CWCs and availability of carryover RINs when EPA sets the standard for cellulosic biofuel. Failure to take this "available volume" into account will reduce the actual volumes needed to meet the RFS program, undermining Congress's objectives.

II. The RNG Industry Supports an Increase in the Advanced Biofuel Volume for 2019.

Although RNG produced in the United States is predominantly cellulosic biofuel, RNG also can be used to meet the overall advanced biofuel volume. A strong advanced biofuel program will provide incentives to invest in and develop RNG projects. EPA proposes an overall advanced biofuel volume of 4.88 billion gallons for 2019, reflecting the full reduction in the statutory volume for cellulosic biofuel.¹⁶ The 4.88 billion gallons of advanced biofuels proposed by EPA for 2019 represents a 590-million-gallon increase in advanced biofuels from the minimum applicable volumes of advanced biofuels EPA set for 2018. We support this increase and believe this proposal represents the floor of what EPA must set under the statute, as higher volumes of advanced biofuels are likely available.

We agree that EPA should not use its general waiver authority to further reduce the advanced biofuel volume. Increasing production of advanced biofuels provides environmental and economic benefits, and, as such, it cannot be shown that the proposed volumes will cause *severe* economic or environmental harms. On a lifecycle basis, RNG has among the lowest carbon intensity of all transportation fuels, reducing methane and other harmful emissions from landfills, wastewater treatment and other organic wastes. RNG easily meets the RFS

¹⁴ See EPA, *2017 Renewable Fuel Standard Data (Data are current as of Aug. 10, 2018)*, Total Available RINs to Date, <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/2017-renewable-fuel-standard-data> (updated Aug. 16, 2018). This is odd given that EPA's annual compliance report shows a deficit for D3. See EPA, *Annual Compliance Data for Obligated Parties and Renewable Fuel Exporters under the Renewable Fuel Standard (RFS) Program (Data current as of Aug. 10, 2018)*, <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/annual-compliance-data-obligated-parties-and> (last updated Aug. 16, 2018). This deficit is *after* the actual RVO required was reduced from the volumes EPA set, which we believe was due to the large number of retroactively granted small refinery exemptions.

¹⁵ See EPA, *Denial of AFPM Petition for Waiver of 2016 Cellulosic Biofuel Standard*, Jan. 17, 2017, available at <https://www.epa.gov/sites/production/files/2017-01/documents/afpm-rfs-petition-decision-ltr-2017-01-17.pdf>.

¹⁶ Despite the intent of Congress to *promote* advanced biofuels and move the market, EPA has proposed not to allow other, non-cellulosic advanced biofuels to partially backfill for the shortfall in cellulosic biofuel.

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advanced and cellulosic biofuel definitional thresholds of 50% and 60% savings in GHG emissions, respectively. Using Argonne National Labs' GREET (Greenhouse Gasses, Regulated Emissions, and Energy Use in Transportation) Model, RNG consistently scores over 70% lifecycle GHG emission savings compared to a petroleum diesel baseline, with some RNG demonstrating a carbon-negative lifecycle. RNG also reduces toxic pollutants such as nitrous oxides and sulfur oxides. Failure to enforce strong RFS volumes results in loss of these added benefits.

The RNG industry provides substantial benefits to the communities in which they operate, creating 173 direct and indirect jobs on average per RNG project in communities across the United States. RNG projects also attract between \$10-70 million of investment capital (per project). In fact, when EPA has not fully enforced the required volumes, significant economic harms have been felt throughout the biofuels industry and local communities as a result of reductions in actual volumes required under the RFS program.

There is also no indication of inadequate domestic supply to meet the volumes proposed by EPA. As noted above, we believe there is available capacity to reach higher volumes. While the vast majority of RNG is produced domestically, some RNG is imported, and such imports are properly considered part of the available supply for use in the United States. Based on the significant registration requirements under the RFS, only an RNG facility selling fuel into the United States would undergo the process. The projected production from those facilities must be taken into account.¹⁷ Because EPA has properly not proposed to use its general waiver authority, any subsequent attempt to use that authority requires compliance with the procedural requirements of the statute; that is, notice and opportunity for the public to comment on such a waiver. We incorporate by reference the comments submitted by the RNG Coalition on October 19, 2017 (EPA-HQ-OAR-2017-0091-4705).

III. The RNG Industry Supports Consideration of Regulatory Changes to Improve RIN Market Operations.

EPA notes various actions that it is considering with the intent of minimizing or eliminating potential manipulation of the RIN market. 83 Fed. Reg. at 32,027. One of the most often cited issues with the RIN market is a lack of transparency in RIN availability. Although EPA is seeking comment on RIN market operations, the 2019 Proposed RVO does not include any specific regulatory changes related to these issues. The RNG Industry agrees that any regulatory changes to address RIN market operations require notice and comment rulemaking

¹⁷ Although we understand some obligated parties have attempted to argue that "inadequate domestic supply" does not include foreign production, EPA has long considered foreign facilities in assessing projected production of cellulosic biofuel facilities with no challenges brought by obligated parties. It makes little sense that this projected production would not be considered available supply for purposes of the general waiver authority. Imports are part of the "supply" of transportation fuel in the United States. Further, EPA has long found it has discretion to deny requests for a general waiver, and it should reject any calls to reduce the proposed volumes based on inadequate "domestic" production, even if it can be claimed that domestic production may not be sufficient to meet the required volumes and imported biofuels may be needed.

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and that EPA's request for comments here do not take the place of the required notice for taking any such actions.

A. EPA must better align registration of RNG projects with actual production.

In testimony before the Senate Environment and Public Works Committee, you testified before Congress that new pathways facilitate RFS compliance and promote the rural economy. We agree. EPA's implementation of the RFS program should embrace technology advancement, provide timely review of proven pathway applications, and facilitate the adoption of new pathways that further the RFS program's goals.

In particular, because of the registration requirements and utilization of a quality assurance plan to generate RINs for RNG, there are often long delays between when an RNG facility becomes operational (and thus when volumes become available) and when Q-RINs can be generated. This results in a delay in RIN generation¹⁸ and, thereby, a delay in RIN reporting in the EMTS. The data presented in the EMTS does not, therefore, often show all the production that occurred that month from expansions and new facilities. Instead, RNG may be held in storage until all the requirements to generate a RIN can be completed. EPA should consider actions to facilitate registration and RIN generation for RNG production, which, in turn, will result in more timely incorporation of available RNG into the market and, thereby, more transparent information on RIN availability.

B. EPA can provide more transparent data on RNG production through the EMTS data it makes available to the public.

Using EMTS data, EPA provides monthly summaries of RIN generation and RIN availability as well as RIN separations and RIN retirements. We fully support and appreciate EPA's efforts to provide RIN data to the public. While we appreciate EPA's efforts, we also request changes to make it easier to track monthly production, particularly for RNG.

Since EPA has moved toward a growth rate methodology, which compares RIN generation in a 12-month period to that in the prior 12 months, understanding and tracking monthly production of RNG becomes of greater importance than for other categories. However, EPA only reports RINs generated by fuel type on a year-to-date basis. The total year-to-date RNG data is not especially helpful in trying to estimate projected volumes using EPA's growth rate methodology. In addition, EPA appears to make adjustments to previously provided EMTS data, making it difficult to track actual monthly volumes, even though EPA provides data files for previously reported data. These adjustments are particularly acute for the RNG industry because of the time lag between when RNG is produced and when RINs may

¹⁸ RNG projects are currently experiencing a delay of approximately nine (9) months between actual RNG volume generation and RIN marketability due to EPA's lengthy registration and quality assurance processes. Consequently, an RNG project must prepare for three-quarters of a year of operations without revenue generated by RIN sales. We urge that EPA look for ways to streamline and overlap these two processes. Even something as simple as moving to monthly (and not quarterly) timelines in these processes could save up to 90-days of delay between actual fuel production and Q-RIN generation and reporting.

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actually be reported to the EMTS. Thus, we recommend EPA provide the CNG and LNG gross RIN generation totals on a monthly breakdown. This would increase transparency in the RIN market and better ensure the industry has the same data as EPA, facilitating investment and planning decisions.

- C. The RNG Industry remains concerned with the lack of transparency in EPA's process for granting small refinery exemptions under the RFS program.

We believe EPA's recent handling of the small refinery exemptions has negatively impacted RIN market operations, including for cellulosic biofuels. For example, testimony before the Subcommittee on the Environment in the House Energy and Commerce Committee verified that the retroactive nature of these exemptions has negatively affected the RIN market.¹⁹ While some have argued that blending continues at similar levels despite these exemptions, those discussions relate to ethanol only. They do not consider the negative impacts these exemptions may be having on advanced biofuels.

In April of this year, the RNG Coalition wrote to then Administrator Pruitt expressing its concern that the small refinery exemptions are reducing the volumes required under the RFS program.²⁰ We continue to believe that the small refinery exemptions should not be used as a tool to undermine the standard-setting process.

Concerns surrounding the impacts of the small refinery exemptions are largely due to EPA's lack of transparency in how it processes those exemptions and the extent of those exemptions. We were encouraged by your testimony before the Senate Environment and Public Works Committee that EPA is looking at ways to provide more transparency. However, we believe simply reporting when exemptions are granted does not adequately address the negative impacts being caused by these exemptions on the RIN market and on advanced biofuels. The retroactive nature of these exemptions reduces the enforceability of the volumes EPA sets, undermining the investments that have been made to meet those volumes and making it more difficult to secure financing for new projects in the future. Thus, EPA should reconsider the process and criteria for granting small refinery exemptions in a way that recognizes the intent of Congress, the importance of the RFS program, and the benefits of increased biofuel production to the public and energy sector.

While we also appreciate your recent testimony before the Senate Environment and Public Works Committee that EPA is also looking at strategies for reallocation, we are concerned that EPA declined to include such a proposal with the 2019 Proposed RVO. We look forward to working with EPA on how to address this issue in a way that does not ignore EPA's obligations and does not undermine the intent of Congress.

¹⁹ See, e.g., Testimony of Gabriel E. Lade Center for Agricultural and Rural Development Iowa State University before the Subcommittee on Environment, House Energy and Commerce Committee, July 25, 2018, <https://docs.house.gov/meetings/IF/IF18/20180725/108610/HHRG-115-IF18-Wstate-LadeG-20180725.pdf>.

²⁰ This letter is attached to these comments as Exhibit A.

CONCLUSION

We thank EPA for consideration of these comments and for the significant effort EPA staff has put into the 2019 Proposed RVO. In short, EPA must provide for increases in the cellulosic biofuel and advanced biofuel categories, and we believe the volumes proposed by EPA are minimum volumes that should be used when setting the final 2019 RFS.

The RNG industry has sought to work with EPA and within EPA's proposed methodology, but the industry must have stability and certainty. As such, we urge EPA to utilize a consistent methodology for determining the final 2019 cellulosic biofuel volume, reserving the right to seek adjustments in later years if those projections result in significant underestimates that do not accurately reflect investments made in the industry. RNG projects are relatively small, and any adjustment to the methodology, even if EPA considers it slight, can result in a loss of investment and loss of RNG projects. We also urge EPA to reconsider how it accounts for available carryover RINs for cellulosic biofuels where the CWC already serves as the programmatic buffer EPA asserts the RIN bank is intended to provide. Finally, we urge EPA to consider actions that will facilitate RNG registration and RIN generation and reporting, increase RIN transparency, and remove the uncertainties created by closed-door and retroactive actions that undermine the investments being made by the biofuels industry.

The gaseous cellulosic biofuel industries are growing strong and gaining momentum, thanks in part to the cellulosic biofuel provisions of the RFS. Your action on the 2019 final RFS is critical to the continued development of America's cellulosic biofuel. We look forward to continuing to work with EPA to ensure sustained success and a cleaner, more diverse fuel supply for all Americans.

Respectfully submitted,



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