

September 11, 2023

Via Electronic Mail

The Honorable Michael S. Regan Administrator U.S. Environmental Protection Agency William Jefferson Clinton Building 1200 Pennsylvania Avenue, NW Washington, DC 20460

> RE: Petition for Reconsideration Regarding Biogas Regulatory Reforms Finalized in Renewable Fuel Standard (RFS) Program: Standards for 2023–2025 and Other Changes, 88 Fed. Reg. 44,468 (July 12, 2023); Docket EPA-HQ-OAR-2021-0427

Request for Stay of Biogas Regulatory Reforms (40 C.F.R. Part 80, Subpart E)

Dear Administrator Regan:

Pursuant to Section 307(d)(7)(B) of the Clean Air Act, 42 U.S.C. § 7607(d)(7)(B), and the Administrative Procedure Act ("APA"), Coalition for Renewable Natural Gas ("RNG Coalition") respectfully submits this Petition for Reconsideration of certain aspects of the biogas regulatory reforms under the Renewable Fuel Standard ("RFS") program, which were finalized by the U.S. Environmental Protection Agency ("EPA") in the above-referenced rule.

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. Members of RNG Coalition include, but are not limited to: owners and operators of landfills, agricultural digesters, and other waste digesters; owners and operators of RNG projects; RNG marketers; CNG/LNG producers, fleets, and retail dispensers; and even quality assurance providers. All of these entities are or may become subject to the requirements outlined in the biogas regulatory reforms and, as such, are directly impacted by the final rule, which imposes new requirements throughout the RNG supply chain. *See, e.g.*, 88 Fed. Reg. 44,468 44,468 (July 12, 2023) (listing examples of potentially affected entities); *see also Wynnewood Ref. Co., LLC v. EPA*, __F.4th__, 2023 U.S. App. LEXIS 18209, at *15 (D.C. Cir. July 18, 2023) ("'[T]here is ordinarily little question' that a regulated entity has standing to challenge a rule under which it is regulated. ... And, where a petitioner's standing is 'self-evident[,] no evidence outside the administrative record is necessary for the court to be sure of it."') (citations omitted).

Under current regulations, RNG is a biogas-derived fuel that is used in the transportation sector as compressed natural gas ("CNG") and liquified natural gas ("LNG") for purposes of generating Renewable Identification Numbers ("RINs") under the RFS program. RNG projects clean and condition biogas produced from various sources of organic wastes (e.g., landfills, agricultural wastes, wastewater treatment plants, and separated food waste) to pipeline or transportation fuel quality, making it interchangeable with geologic natural gas. Because it is interchangeable with geologic natural gas, RNG is typically transported through the natural gas pipeline system.¹ Since 2014, the RNG industry has operated under the current regulations in 40 C.F.R. Part 80, Subpart M,² developing new businesses, that have supported the expansion of RNG production and use.

For several years, the RNG industry has supported expanding the current regulations to allow RNG to be used for renewable electricity and as a feedstock for the production of other fuels, such as hydrogen.³ In the proposed rule, EPA acknowledged that RNG can be used to generate other renewable fuels under the RFS program. EPA further stated, however, that the current regulations were not well-suited for allowing multiple uses of RNG, claiming that the proposed biogas regulatory reforms were required "to ensure that biogas is not double-counted in a situation where biogas may have multiple uses." 87 Fed. Reg. 80,582, 80,693 (Dec. 30, 2022). EPA explained that allowing RNG to be used to produce other renewable fuels in addition to CNG/LNG would further complicate an already complex program that requires greater oversight. Id. at 80,693-80,694. Neither the industry, nor even EPA, could identify any specific cases of double counting or fraud under the current system, and the proposed rule did not identify any specific concerns with the existing regulations, except for the current reliance on a network of contracts to verify RIN generation for CNG/LNG. While RNG Coalition urged EPA to retain the flexibility in the current system, which already included numerous safeguards against potential fraud and double counting, including third-party and other regulatory oversight, it also requested that EPA provide more time to comment and to have further discussions with the RNG industry to better understand EPA's concerns. Because of the extensive changes being proposed and the lack of explanation for many of the provisions, the RNG industry believed further discussions were appropriate to be able to explain the current safeguards against double-counting or to suggest alternative, less burdensome means to address EPA's concerns. While EPA has engaged in additional discussions with the industry since it issued the proposal, it, nonetheless, rejected many of the industry's concerns, finalizing the biogas regulatory reforms largely as proposed.

Apparently in response to the industry's objections that EPA did not provide sufficient notice in the proposal for many of the provisions in the biogas regulatory reforms, the final rule provided additional explanation for many of the provisions it was finalizing. These explanations,

¹ Under the biogas regulatory reforms, EPA imposes different requirements on RNG depending on whether or not it is actually injected into a natural gas commercial pipeline system. For RNG produced in a "closed distribution system" (i.e., no commercial pipeline injection), the final rule considers that to be "treated biogas." For purposes of this petition, we may use the term RNG as it is generally used in the marketplace, unless discussing provisions specific to "treated biogas."

² The biogas regulatory reforms become effective the date that this petition is being submitted.

³ Members of RNG Coalition have had registrations for renewable electricity RIN generation and petitions for hydrogen pathways pending at EPA for years, *see, e.g.*, <u>https://www.epa.gov/renewable-fuel-standard-program/pending-petitions-renewable-fuel-pathways</u>).

however, appear based on flawed assumptions, remain unsupported by any data or analysis, and ignore key concerns raised by the industry. While EPA did make some changes in response to comments, the regulatory language does not appear consistent with its explanation in some cases, and EPA made some additional revisions without explanation. For these reasons, the public could not meaningfully comment. EPA's responses raised new grounds for objections and, because they were made after the close of the comment period, it was impracticable for RNG Coalition to raise these objections. Since these objections directly address the flawed assumptions and determinations underlying the asserted basis for the final rule, they are of central relevance to the regulations finalized, and reconsideration is warranted.

To be clear, the RNG industry is committed to protecting the integrity of the RFS program, and RNG Coalition remains open to working with EPA to ensure a workable program that continues to support *growth* of RNG in the transportation fuel market as envisioned and, indeed, directed by Congress. Nonetheless, in light of the requirements of Section 307 of the Clean Air Act and the upcoming July 1, 2024 implementation date, it is submitting this petition for reconsideration and respectfully urges EPA to promptly reconsider, at a minimum, the following aspects of the biogas regulatory reforms.

- EPA must reconsider the new regulations on biogas producers, including, but not limited to, the registration requirement and the single use limitation. EPA waited until the final rule to provide information as to its statement and purpose for these requirements, including its claimed authority to impose (for the first time) substantial regulation on feedstock suppliers and reasons for certain provisions in the final rule. Further, EPA acknowledged, in the response to comments, that the single use limitation in the final rule will limit use under the RFS program.
- EPA must reconsider the testing and measurement provisions for biogas, RNG, and CNG/LNG, including provisions that were included, for the first time, in the final rule. EPA again waited until the final rule to provide information as to its statement and purpose for these requirements, including its claim that it must use voluntary consensus standards only. The final rule, however, fails to provide any analysis as to the technical feasibility of the final requirements or why other methods suggested by the public were not "sufficient," and its new allowance for alternative methods is overly stringent and unclear if it could ever be used. The final regulatory language is also inconsistent with EPA's explanation of the provisions in the final rule.
- EPA must also reconsider or provide further clarifying language regarding several other provisions in the biogas regulatory reforms, including generation of RINs for process heat, development and use of RIN generation protocols for shared interconnections, and the addition of "leakage" as a reason for retirement of RINs.
- While RNG Coalition appreciates and supports efforts at streamlining the registration process, it is yet to be determined that the registration process will be timelier, and the final rule includes provisions that require EPA approval that will likely need to be used by much of the industry and for which little guidance has been provided. EPA should reconsider the prohibition on off-site storage for RIN generation pending registration.

A further explanation of the grounds for reconsideration follows. To the extent EPA contends that the public had adequate opportunity to comment on any or all of the issues raised herein, which we believe it did not, we ask that EPA treat this as a petition for rulemaking under the APA, 5 U.S.C. § 553(e).

Because of the upcoming implementation dates, we urge EPA to promptly respond to this petition. Under Section 304(a) of the Clean Air Act, 42 U.S.C. § 7604(a), any person may commence an action to compel agency action unreasonably delayed. New facilities registered after July 1, 2024 must comply with the biogas regulatory reforms starting July 1, 2024. Registration applications must be submitted at least 60 days before RINs can be generated. Facilities registered prior to July 1, 2024 must comply with the biogas regulatory reforms starting January 1, 2025, but must submit updated registrations by October 1, 2024. In light of this timing, the need to generate RINs for the economics of any project, and the expenditures needed to comply with the new requirements, any delay in responding to this petition for reconsideration and initiate a new rulemaking before the end of this year and/or further extend the implementation dates for these provisions. EPA has not projected new biogas-derived fuels aside from CNG/LNG using RNG through 2025, indicating that there is no prejudice to further deferring implementation of the biogas reforms.

Indeed, we believe an administrative stay of the biogas regulatory reforms is warranted and request that EPA grant the stay under 42 U.S.C. § 7607(d)(7)(B) and initiate a rulemaking, as necessary, to stay the implementation deadlines for Subpart E pending reconsideration. The requirements noted above are onerous, and EPA acknowledged the need for more time to come into compliance when it extended the implementation dates in the final rule from the proposal. However, since the final rule, we understand that members have been unable to determine when they may be able to obtain the required measurement equipment and are having to deal with the pipeline operators to ensure compliance. Any flexibility EPA attempted to provide in the final rule is undermined by the lack of guidance, which, according to its September 7, 2023 webinar, it continues to develop and may not be ready until December of 2023, at the earliest. EPA further indicated that the system for implementing the biogas regulatory reforms continues to be developed and, again, there is no set time frame, except the goal is to have the platforms ready by April 2024 to allow new registrations to begin. Unfortunately, projects are being developed and under construction today. For existing facilities, there is a long lead time to get the proper equipment and, while members have engaged with their equipment suppliers and the pipeline operators, they remain in the dark as to what types of alternative methods EPA may allow or where/how to place any new devices that EPA would find sufficient under the new requirements.

As virtually all CNG/LNG RINs are verified by a Quality Assurance Plan ("QAP") and EPA has not yet approved RNG for any other pathways aside from CNG/LNG, to date, there is no harm to the RFS program or the public to continue to operate under the current system until a workable program can be put in place and EPA can assure implementation in a timely manner. While EPA has since raised new concerns with the QAP being sufficient, which we dispute, it is important to note that RNG is typically injected into the pipeline system, which is regulated and pipeline operators must ensure the gas being injected in of sufficient quality and properly measured for both its own operations and meeting the needs of its downstream customers.

Despite EPA's apparent belief that the industry prove a negative, the lack of reported fraud in the RNG industry over the last almost ten years provides more than enough comfort that it is not likely to occur in the time it may take EPA to revise the regulations.

There is, on the other hand, substantial risk of harm to the RNG industry and to the cellulosic program under the RFS if the biogas regulatory reforms are implemented prematurely. RNG currently represents almost the entire cellulosic biofuel category and is also to be projected to represent much Indeed, EPA also indicated at the September 7, 2023 webinar, that, if existing parties do not update their registrations by October 1, 2024, then they can no longer participate in the RFS program. With the lack of guidance from EPA, it is very likely that projects may not have time to come into compliance or simply throw up their hands and turn to voluntary markets. Otherwise, they risk substantial loss in investments. Even if they were able to submit updated registration applications, the RNG industry has no assurances (nor has EPA provided any) that the equipment being required can even be obtained in a timely manner, which could result in delays in RIN generation and even short or long-term shutdowns. EPA's final Set rule properly recognized that the RNG industry continues to grow and can contribute significantly to the RFS program. These efforts would be lost, based on unsupported concerns of *potential* fraud and *potential* double-counting. As the RNG industry has explained to EPA, the safeguards already in place mitigates against these (extremely low) risks.

RNG Coalition appreciates the work of EPA, and, as noted, remains committed to ensuring the integrity of the RFS program. But the biogas regulatory reforms also must be practical and workable. We look forward to continuing to work with EPA in this regard. We again urge EPA to work with the industry to resolve these important issues to allow the RFS to continue to grow and support RNG in the transportation fuel market and respond to this petition as soon as possible.

Please do not hesitate to contact me if you have any questions.

Respectfully submitted,

Geoffrey Dietz Director of Federal Government Affairs geoffrey@rngcoalition.com

TABLE O	DF CONTENTS
----------------	--------------------

BACKGRO	UND	1
I.	The I	History of RNG in the RFS Program1
II.	Biog	as Regulatory Reforms2
	A.	The proposed rule2
	В.	The final rule5
III.	Clear	n Air Act Requirements7
GROUNDS	FOR R	ECONSIDERATION
I.	EPA Partie	Must Reconsider Requiring Biogas Producers to Become Regulated es to Participate in the RFS Program9
	A.	EPA's new claimed authority to regulate biogas producers is misplaced
	B.	EPA's claimed need to require biogas producers to become regulated parties under the RFS regulations is based on speculative and flawed assumptions that can be easily refuted
		1. Concerns regarding the potential risks of adding non- qualifying gas for purposes of generating RINs are unfounded and do not support imposing substantial new burdens on the RNG supply chain
		2. EPA does not explain why tracking of RNG volumes through RIN generation is not sufficient to address its concerns over double counting
		3. Registration is not required to hold appropriate parties liable under the RFS program to address EPA's claimed concerns20
	C.	At a minimum, EPA must reconsider specific provisions related to biogas producers and biogas production facilities to reduce the burdens on biogas producers
		1. EPA should clarify the definition of biogas production facility to avoid duplicative and unnecessary requirements20
		2. EPA should reconsider the single use limitation for biogas facilities

II.	EPA's Testing and Measurement Requirements Must Be Reconsidered and Revised				
	А.	EPA must reconsider its definition of "continuous measurement".			
	B.	EPA must reconsider the requirement for in-line GCs to measure biogas, RNG and CNG/LNG as provided in § 80.155(a)26			
		1.	Requiring in-line GCs would be unduly burdensome to measure CNG/LNG	27	
		2.	The new grounds expressed for requiring in-line GCs are not reasoned explanations for these burdensome requirements	27	
	C.	EPA 1 under	must also reconsider the types of flow meters that are allowed the regulations	34	
	D.	EPA s meter provid regist	should revise the regulation to allow flexibility in the types of s that can be used, which may include general criteria to de more consistent and streamlined processing of rations	35	
	E.	EPA must reconsider the final rule to the extent it revises the reporting of heating values for RNG, which negatively impacts the conversion of BTUs to ethanol-equivalent gallons (i.e., RINs)			
	F.	EPA 1 pipeli	must reconsider and remove provisions related to confirming ne specifications	37	
		1.	EPA must reconsider and remove the requirement for annual testing	39	
		2.	EPA must reconsider the attest engagement requirements related to pipeline specifications	39	
III.	Addit Recor	Additional Provisions of the Final Biogas Regulatory Reform Should Be Reconsidered			
	A.	EPA should reconsider the requirements when more than one RNG producer injects at the same interconnection40			
	B.	EPA s for pr	should reconsider provisions related to biogas or RNG used ocess heat or energy	42	
	C.	EPA 1 retirin	must reconsider its inclusion of "leakage" as a reason for ag RNG RINs	44	

	D.	EPA should reconsider its prohibition on off-site storage for RIN generation pending registration	45
	E.	EPA also should review its regulations generally to address potential confusion	46
CONCLUSI	ON		47
EXHIBITS			

BACKGROUND

I. The History of RNG in the RFS Program

The RFS program was intended to increase the production of renewable fuels. *See* Energy Independence and Security Act of 2007 ("EISA"), Pub. L. No. 110-140, 121 Stat. 1492 (2007).

In EISA, Congress established escalating targets for cellulosic biofuel, reaching 16 billion gallons in 2022. After 2015, all of the growth in the statutory volume of total renewable fuel was advanced biofuel, and of the advanced biofuel growth, the vast majority was cellulosic biofuel. This indicates that Congress intended the RFS program to provide a significant incentive for cellulosic biofuels and that the focus for years after 2015 was to be on cellulosic. ... Cellulosic biofuels, particularly those produced from waste or residue materials, have the potential to significantly reduce GHG emissions from the transportation sector. In many cases cellulosic biofuel can be produced without impacting current land use and with little to no impact on other environmental factors, such as air and water quality.

88 Fed. Reg. 44,468, 44,512 (July 12, 2023). RNG, which is derived from waste materials, is eligible for the cellulosic biofuel category, providing substantial GHG reduction and environmental benefits. Since 2014, RNG has been the driving force behind the cellulosic biofuel category in the RFS program. Today, RNG represents almost 100% of the D3 RINs generated. This growth has largely been due to the support from EPA in administering the RFS.

Since 2010, EPA has also recognized that biogas injected into the pipeline (i.e., RNG) should be able to be used for the generation of RINs under the RFS program. *See* 75 Fed. Reg. 14,670, 14,876 (Mar. 26, 2010). In 2014, EPA revised the biogas-derived fuel pathways to allow for generation of D3 RINs as cellulosic biofuels.⁴ 79 Fed. Reg. 42,128, 42,128 (July 18, 2014).⁵ At that time, EPA also revised the regulations to better track biogas in the commercial pipeline system. *Id.* at 42,143-42,145. EPA found that "[t]hese requirements will help ensure that the company registering to generate RINs will only generate RINs for fuel that is fully compliant with all regulatory requirements." *Id.* at 42,145. And, despite the growth of RNG under the RFS program, we are not aware of any significant incidences of fraud or double counting with respect to RNG. Nor does EPA cite any such cases.⁶

 ⁴ It is important to note that EPA did not reopen the existing biogas pathways for RIN generation under the RFS program. 88 Fed. Reg. at 44,527. We agree and do not seek such reopening in this reconsideration petition.
⁵ This rule was published the same day as EPA's final rule establishing the RFS Renewable Identification Number (RIN) Quality Assurance Program, 79 Fed. Reg. 42,078 (July 18, 2014).

⁶ At most, EPA refers to some invalid RINs having been generated under the RFS program, citing its RFS enforcement page. 87 Fed. Reg. 80,582, 80,643 n.225 (Dec. 30, 2022); 88 Fed. Reg. at 44,525 n.264. But none of those cases involved RNG. The earlier enforcement cases also led to the development of EPA's Quality Assurance Program, which the vast majority of the RNG industry has been utilizing. Instead, EPA asserts that "[t]he lack of fraud being reported at present under the previous biogas provisions is not necessarily indicative of the lack of fraud occurring. It simply means that it has not been reported." EPA, *Renewable Fuel Standard (RFS) Program*:

In fact, more than any other biofuel under the RFS program, there is substantial oversight with respect to the RNG supply chain, much of which is done by unrelated third parties. EPA has not seriously called into question the integrity of current market participants nor of the ability of this oversight to safeguard against bad actors from entering into the market. Most RNG is transported through a pipeline system, and the volumes of gas are monitored and measured by third-party meters going into the pipeline and leaving the pipeline. Pipeline specifications (or fuel quality) is also checked to protect the operation of the pipeline system, and *any gas* that does not meet the pipeline specifications (or any allowed variances) would not be injected into the pipeline. In addition, virtually all D3 RINs from RNG are verified through a quality assurance plan ("QAP"), which reviews feedstock going into digesters and gas collected at landfills, as well as ensures proper pipeline injection. In 2022, based on EMTS RIN Transaction Volumes reported, Q-RINs represented almost 99% of all D3 2022 RINs transacted and almost 99% of all D3 RINs transacted (2019-2022 vintage years). QAPs have mitigated potential fraud and allow for correction in the event of volume discrepancies, which can be routine for *any biofuel*, as EPA recognized in providing administrative means of adjusting for errors. 40 C.F.R. § 80.1431(c).

When EPA indicated it was seeking to expand the current pathways to allow use of "biointermediates" for production of biofuels under the RFS program and because RNG presents substantial opportunities to reduce GHG emissions in the transportation fuel market in addition to CNG/LNG, RNG Coalition urged EPA to allow RNG to be used as a "biointermediate" for production of other renewable fuels. See, e.g., EPA-HQ-OAR-2021-0324-0485 at 37-43 (Attachment A to EPA-HQ-OAR-2021-0427-0756). Since the RNG industry largely participates in the QAP program, the industry argued that EPA could simply extend the current regulations for RNG injected into commercial pipelines to authorize such RIN generation. EPA provided no indication of concerns of potential ongoing fraud with the current system. In its response to comments on the final rule establishing provisions for biointermediates, EPA simply noted it intends "to address the use of biogas as a biointermediate when we address issues related to the use of biogas to make renewable electricity (so-called 'eRINs') in a future action." 87 Fed. Reg. 39,600, 39,641 (July 1, 2022). In particular, EPA made no indication that it had any concerns with QAP verified RINs. Indeed, while the proposed rule raised general concerns with the reliance on contracts under the current regulations, the proposed rule stated that should EPA "decline to finalize the proposed provisions for biogas regulatory reform [it] would consider it necessary to require mandatory QAP participation for eRIN participants as a mechanism to help oversee the program and avoid the double-counting of the biogas or RNG." 87 Fed. Reg. at 80,677. The RNG industry expressed support for mandating QAPs in lieu of the biogas regulatory reforms. EPA-HQ-OAR-2021-0427-0756 at 44.

II. Biogas Regulatory Reforms

A. The proposed rule

The December 2022 proposal for the 2023-2025 volumes included EPA's proposed regulations for e-RINs. As EPA previously indicated it would, the proposed rule also included provisions referred to as "biogas regulatory reforms," which EPA was proposing "to better

Standards for 2023-2025 and Other Changes – Response to Comments, at 212 (2023) ("RTC"). While the industry cannot establish a negative, mere speculation of potential fraud is insufficient to support burdensome regulations.

facilitate the potential expanded use of biogas and RNG for renewable electricity and other biointermediates, and to reduce the burden associated with implementing the current biogas to renewable CNG/LNG program." 87 Fed. Reg. at 80,693. EPA claimed that the proposed changes would "provide a more comprehensive, yet streamlined, tracking and oversight program for biogas and RNG." *Id.* EPA stated: "we considered how we might also strengthen the regulations to prevent double counting for RNG." *Id.* at 80,643. EPA also raised concerns that allowing for use of RNG for renewable electricity and as a biointermediate adds complexity to the book and claim process and may increase the incentives to commit fraud. *Id.* "For example, a party may generate RINs for a quantity of biogas used to produce RNG for use in CNG/LNG vehicles and then, through a complex contractual network, attempt to allow a different party to generate a RIN for renewable electricity generated from the same volume of RNG." *Id.*

To address these concerns, EPA proposed to replace the flexibility regarding RIN generation and separation for RNG in the current regulations, which allow reliance on EPA's claimed complex system of contracts, with provisions that would track "volumes" of RNG through the EMTS. Under the proposal, the RNG producer or RNG importer would now generate a RIN and assign any and all RINs generated for a given volume of RNG at the point of pipeline injection. The RINs must follow transfer of title of that "volume" of RNG until that "volume" of gas is withdrawn from the pipeline, when the RIN may be separated by specified parties. Although EPA refers to tracking the "volume" of RNG, we understand this to mean the position or "amount" of RNG sold, not the tracing of actual molecules of RNG through the pipeline system or tracking of custody through the pipeline. In other words, the amount of RNG placed into the system, as designated by the number of RINs assigned upon injection. The custody of the gas as it may physically flow through the pipeline system is not tracked. EPA has confirmed this: "The biogas regulatory reform does not fundamentally change the way that the biogas to renewable CNG/LNG pathway operates under the RFS program." RTC at 225.

EPA's proposal, however, went well beyond tracking volumes of RNG through the EMTS, proposing to impose, among other things, requirements on hundreds of new parties by EPA's own estimates⁷ and costly and unnecessary testing and measurement requirements, all the while placing limitations on the industry that may further disincentivize participation in the RFS program. Relying simply on general concerns of double counting and potential fraud, the proposal failed to tie numerous of the proposed requirements to EPA's claimed policy underlying the rule, largely relied on conclusory statements without providing any factual support, and/or failed to explain the legal authority or basis for several of the proposed requirements. While EPA claimed some of the provisions stemmed from 2016 guidance,⁸ that guidance provided EPA's interpretation of how to show the biogas was of "pipeline quality," but,

⁷ EPA-HQ-OAR-2021-0427-1111. Because the industry had significant questions on how the proposed provisions would work, it could not fully assess EPA's estimates for the ICR. However, these numbers may be too low. Based on RNG Coalition data (as of September 10, 2023), there are 300 operational RNG facilities in the US and Canada with an additional 178 under construction and another 303 in the planning stages. (www.rngcoalition.com) Depending on how EPA interprets the definition of "biogas production facility," the number of "biogas producers" that may be subject to the rule may be even higher.

⁸ Guidance on Biogas Quality and RIN Generation when Biogas is Injected into a Commercial Pipeline for use in Producing Renewable CNG or LNG under the Renewable Fuel Standard Program, September 2016, EPA–420–B–16–075 ("EPA 2016 Guidance").

importantly, was not issued in compliance with the requirements for a rule, including the requirement to provide the legal and factual support for the guidance and to provide for public notice and comment. "Guidance" cannot impose new requirements not in regulations, but parties have worked with EPA through the registration process and have been operating under those approved registrations for years.⁹ In any event, the proposed regulatory language significantly differed from the more general guidance document that EPA failed to explain in the proposal.

Because of the extensive nature of the proposed changes, the lack of information provided by EPA to support many of the proposed changes, and the issuance of the proposal before the holidays that would make it difficult to reach the stakeholders necessary to review and analyze the proposed changes, RNG Coalition asked EPA to extend the public comment period, so that the industry could meaningfully respond to the proposed rule. EPA-HQ-OAR-2021-0427-0420. EPA rejected RNG Coalition's requests, asserting only that it was subject to a consent decree that related to the 2023 volume and it was "not feasible" to only extend the comments for a portion of the rule. *See* EPA Jan. 20, 2023 Letter to RNG Coalition, *available at* https://www.epa.gov/system/files/documents/2023-01/rfs-req-comment-ext-nprm-2023-2025-crng-epa-response-2023-01-20.pdf (Ex. 1). However, as explained, the provisions of the regulation were severable by EPA's own determination and, indeed, EPA has since deferred finalizing a significant portion of the proposal on renewable electricity that the RNG industry continues to urge EPA to complete.

Nonetheless, based on the limited information provided by EPA, the RNG industry submitted substantial comments to EPA on the biogas regulatory reforms. *See* Comments of RNG Coalition, et al., Feb. 2022 (EPA-HQ-OAR-2021-0427-0756). In particular, several commenters echoed RNG Coalition's concerns with the potential implications of the biogas reforms for continued growth of the D3 category.¹⁰ While the RNG industry believed the current system could continue to be utilized, it also noted the burdensome nature of several of EPA's provisions, raising concerns that those requirements could create *disincentives* to participate in the RFS program.

EPA staff did meet with stakeholders during and after the public comment period. While EPA did provide more information in subsequent discussions with RNG Coalition and some of its members, these discussions largely occurred outside the public comment period, and EPA appears to have ignored the information provided by the industry in response in the final rule. EPA-HQ-OAR-2021-0427-1125 at 3 (EPA Log of discussions with stakeholders on the Set rule proposal, listing meeting with CRNG but noting no materials provided).¹¹

⁹ The EPA 2016 Guidance, in fact, acknowledges that a rulemaking is required (at 2). This does not obviate EPA's need to provide the factual, legal, and policy basis for the proposal.

¹⁰ See, e.g., EPA-HQ-OAR-2021-0427-0483 at 4; EPA-HQ-OAR-2021-0427-0538 at 4-5; EPA-HQ-OAR-2021-0427-0827 at 8; EPA-HQ-OAR-2021-0427-0598 at 3; EPA-HQ-OAR-2021-0427-0623 at 3-4; EPA-HQ-OAR-2021-0427-0628 at 1; EPA-HQ-OAR-2021-0427-0709 at 11-14; EPA-HQ-OAR-2021-0427-0681 at 5; EPA-HQ-OAR-2021-0427-0792 at 22-24; EPA-HQ-OAR-2021-0427-0777 at 8-9; EPA-HQ-OAR-2021-0427-0728 at 4; EPA-HQ-OAR-2021-0427-0801 at 3-5; EPA-HQ-OAR-2021-0427-0695 at 9-10; EPA-HQ-OAR-2021-0427-0759 at 6.

¹¹ We indicated we would provide information to EPA at the meeting which was sent to EPA on April 28, 2023. That information is attached as Exhibit 2.

B. The final rule

In the final rule, EPA largely finalized the biogas regulatory reforms as proposed with some changes in response to public comments. The final rule asserted the same general statements that the reforms would "allow for the use of biogas as a biointermediate and RNG as a feedstock to produce biogas-derived renewable fuels other than renewable CNG/LNG" and would "also substantially help improve oversight of the program and mitigate against the potential for parties to double-count biogas and RNG given the program's expansion." 88 Fed. Reg. at 44,522.

However, in the final rule and mostly in its response to comments, EPA also raised new concerns with the current requirements for RNG RIN generation not previously identified in the proposal. For example, EPA indicated it "is already concerned over the presence of fraud." RTC at 212. But, the only example provided in the proposal related to EPA's claimed complex nature of the contracts used in the industry, which it was replacing with the requirement to track RNG volumes through RIN generation and separation. Given that the RNG industry is subject to substantial oversight, the RNG industry asked EPA for specific examples of how fraud might occur. Only in response to comments did EPA identify any such examples, none of which, we believe, presents a substantial enough risk to justify several of the requirements being imposed.

In addition, EPA also provided new explanations that appear to counter those provided in the proposal. For example, as noted above, EPA indicated in the proposal that it could make the QAP mandatory if it did not finalize the biogas regulatory reforms. Based on this statement, the RNG industry supported that alternative over the onerous provisions in the proposal. But, in support of the final rule, EPA apparently now claims that the QAP is not sufficient, saying that the "high QAP participation indicates that the fraud risk may be high" and that "there may be a lack of trust among obligated parties on the validity of cellulosic RINs." RTC at 212. This unsupported, speculative statement, however, is incorrect.

The RFS program is a "buyer beware" program, and the QAP program was established as a voluntary means of providing more comfort on the validity of RINs. In addition, compliance in the QAP is required for obligated parties to be able to use an affirmative defense in the event RINs are found to be invalid. The cellulosic biofuel volumes are the smallest volume requirements and had ranged from 0.2% to 3% of the total program through 2022. Given that obligated parties largely operated in the gasoline and diesel fuel markets and the QAP rule was finalized the same day as EPA's determination to allow RNG to generate D3 RINs (i.e., it was essentially starting from zero), it only made sense for the market to tout QAP verified RINs as a means to mitigate against risk. This was particularly true for D3 RINs, which had to compete with cellulosic waiver credits issued by EPA for which validity could not be questioned.

EPA never indicated that adoption of a QAP program would infer a likelihood of invalidity without the QAP. Instead, for RNG, the QAP was a marketing tool. This in no way evidences concerns that fraud is actually occurring or even likely to occur. As EPA itself explained:

The quality assurance program finalized today is voluntary. As a result, there are no obligatory costs. There will be costs associated with an individual party's participation in the quality assurance program. However, the fact that the quality assurance program is voluntary means that a decision to participate will be made independently by each regulated party. Furthermore, any costs incurred will only be borne if the industry believes that those costs are less than current costs in the marketplace resulting from efforts to verify, acquire, and trade RINs.

79 Fed. Reg. at 42,109. As the American Petroleum Institute stated: "The documentation required for QAP is comprehensive and the independent auditors review generation to dispensing documentation to ensure that only qualified RNG-to-CNG generates RINs." EPA-HQ-OAR-2021-0427-0627 at 13. Indeed, while EPA asserted (with no support) in the RTC that obligated parties may have concerns with respect to RNG RINs, obligated parties opposed the extensive nature of the biogas regulatory reforms in comments submitted on the proposal.¹²

In support of the final rule, EPA claimed the proposed regulatory language and its asserted need for the reforms generally was sufficient explanation for the public to comment on the proposed regulations, but appeared to recognize that such general and conclusory statements of policy were not sufficient explanation to support the final rule. *See, e.g.,* RTC at 273 ("Given that we proposed these provisions and explained why they are necessary in the NPRM, we have already given the public the opportunity to comment on these provisions and explained why they are necessary in the NPRM, we have already given the public the opportunity to comment on these provisions and explained why they are necessary in the NPRM, we have already given the public the opportunity to comment on these provisions. Below we describe the provisions individually."). While providing a more detailed explanation in the final rule and its supporting response to comments, EPA still provided little if any factual support or analysis for its largely conclusory statements.

Failing to explain in the proposal its view of the need for several of the biogas regulatory reform's provisions or provide any supporting analysis, EPA then blames the public for not adequately responding to EPA's concerns and providing alternatives to address them. But, in light of the purposes of the RFS program, the industry explained the potential limitations and additional burdens that several of its proposed provisions would impose on the industry. It could not divine why EPA proposed provisions that simply did not appear necessary or related to EPA's claimed need – i.e., provide oversight and protect against double counting. This ignores EPA's obligations and fails to follow proper administrative procedures, as further outlined below.

¹² EPA-HQ-OAR-2021-0427-0553 at 6 (Chevron); EPA-HQ-OAR-2021-0427-0623 at 3-5 (Shell); EPA-HQ-OAR-2021-0427-0627 at 12-14 (American Petroleum Institute); *see also* EPA-HQ-OAR-2021-0427-0812 at 27 (American Fuel & Petrochemical Manufacturers) ("The proposed changes will penalize the current participants in the biogas and RNG value chain who have developed compliance strategies and business arrangements that have resulted in the generation of the vast majority of D3 cellulosic biofuel RINs over the history of the RFS.").

We again compare the process for the biogas regulatory reforms to the fuels streamlining proposal, where EPA engaged in extensive stakeholder discussions of draft regulatory language prior to even issuing the proposal.¹³ Here, EPA first provided complex and detailed regulatory language that represented a significant departure from current regulations in the proposal right before the holidays and declined to provide the industry with more time to review. Indeed, while EPA provided more time to implement the biogas regulatory reforms in the final rule, at the September 7, 2023 webinar, it indicated it still could not answer numerous questions from the industry as EPA continues to work on developing guidance and EMTS/CDX capabilities to implement the reforms. With a significant number of questions remaining, the industry still may not have enough time to ensure compliance (i.e., change contracts, get proper equipment, get biogas producers to register), notwithstanding the new implementation dates in the final rule. Also at the September 7, 2023 webinar, EPA appeared to state that, if existing facilities cannot meet the new requirements in the time frames under the regulations and do not update their registrations by October 1, 2024, then they would be out of the RFS program. EPA must ensure that the regulations are practical and workable before requiring facilities to expend a lot of resources on marginally (if at all) beneficial new requirements or bow out of the RFS program.

III. Clean Air Act Requirements

It cannot be disputed that a notice of proposed rulemaking must come with a statement of basis and purpose. The Clean Air Act requires EPA to include with that statement (1) the factual data on which the proposed rule is based, (2) the methodology used in obtaining the data and in analyzing the data, and (3) the major legal interpretations and policy considerations underlying the proposed rule. 42 U.S.C. § 7607(d)(3). "The agency's rationale for the rule must be made clear and subjected to public comment." Tex. Ass'n of Mfrs. v. United States Consumer Prod. Safety Comm'n, 989 F.3d 368, 382 (5th Cir. 2021). "Such notice must provide both adequate time for comments and rationale for the rule to allow interested parties the opportunity to comment meaningfully." Marine Transp. Servs. Sea-Barge Grp., Inc. v. Busey, 786 F. Supp. 21, 36 (1992) (citing Florida Power & Light Co. v. United States, 846 F.2d 765, 771 (D.C. Cir. 1988)). The notice "requirement is a critical one because it supports the assumption [the court makes] with regard to EPA's substantive decisions that those decisions are in fact the product of informed, expert reasoning tested by exposure to diverse public comment." BASF Wyandotte Corp. v. Costle, 598 F.2d 637, 641 (1st Cir. 1979); see also United States Telecomms. Ass'n v. FCC, 825 F.3d 674, 700 (D.C. Cir. 2016) ("Under the APA, an NPRM must 'provide sufficient factual detail and rationale for the rule to permit interested parties to comment meaningfully." (quoting Honeywell International, Inc. v. EPA, 372 F.3d 441, 445 (D.C. Cir. 2004) (internal quotation marks omitted)); Envtl. Integrity Project v. EPA, 425 F.3d 992, 996 (D.C. Cir. 2005) ("[N]otice requirements are designed (1) to ensure that agency regulations are tested via exposure to diverse public comment, (2) to ensure fairness to affected parties, and (3) to give affected parties an opportunity to develop evidence in the record to support their objections to the rule and thereby enhance the quality of judicial review.") (quoting Int'l Union, United Mine Workers of Am. v. Mine Safety & Health Admin., 407 F.3d 1250, 1259 (D.C. Cir. 2005)).

¹³ EPA, *Fuels Regulatory Streamlining*, <u>https://www.epa.gov/diesel-fuel-standards/fuels-regulatory-streamlining</u> (last updated Apr. 7, 2023).

The D.C. Circuit has stated that it will defer to an agency "so long as we are assured that its promulgation process as a whole and in each of its major aspects provides a degree of public awareness, understanding, and participation commensurate with the complexity and intrusiveness of the resulting regulations." Weyerhaeuser Co. v. Costle, 590 F.2d 1011, 1028 (D.C. Cir. 1978) (citation omitted). "More to the point, however, [the D.C. Circuit] has made it clear that an agency may not turn the provision of notice into a bureaucratic game of hide and seek." MCI Telecomms. Corp. v. FCC, 57 F.3d 1136, 1142 (D.C. Cir. 1995) (citations omitted). Courts have found that "[a] conclusory statement, of course, does not in itself provide the 'satisfactory explanation' required in rulemaking." Int'l Fabricare Inst. v. EPA, 972 F.2d 384, 392 (D.C. Cir. 1992); see also NRDC v. EPA, 824 F.2d 1258, 1286 (1st Cir. 1987) (finding EPA's "bald assertion" did not adequately explain why requirements were promulgated); Asarco, Inc. v. EPA, 616 F.2d 1153, 1162 (9th Cir. 1980) (vacating EPA action that was based on "abstract or conclusory statements" and finding EPA's "superficial inquiry ... deficient"); NRDC v. EPA, 438 F. Supp. 3d 220, 234 (S.D.N.Y. 2020) ("The Memorandum's 'conclusory statements do not suffice to explain' the EPA's decision.") (quoting Encino Motorcars, LLC v. Navarro, 136 S. Ct. 2117, 2127 (2016)); Conservation Law Found. v. Evans, 209 F. Supp. 2d 1, 8 (D.D.C. 2001) ("Furthermore, an agency may not rely on mere conclusory statements to explain its decision.") (listing cases, e.g., Chemical Mfrs. Ass 'n v. EPA, 28 F.3d 1259, 1266 (D.C. Cir. 1994), Bangor Hydro-Electric Co. v. FERC, 78 F.3d 659, 664 (D.C. Cir. 1996)); Cat Run Coal Co. v. Babbitt, 932 F. Supp. 772, 779 (S.D. W. Va. 1996) ("Conclusory statements will not suffice under this standard.") (citations omitted). It follows that EPA must provide sufficient explanation for its proposed regulatory requirements in order for the public to be able to meaningfully comment, particularly when there is no analysis or factual evidence presented supporting EPA's claims.

Under Section 307(d)(7)(B) of the Clean Air Act, the Administrator is required to grant a petition for reconsideration if the grounds for objection arose after the period for public comment or it was impracticable to raise a particular objection during the period for public comment, and the objection is of central relevance to the outcome of the rule. 42 U.S.C. § 7607(d)(7)(B). Reconsideration petitions may be the appropriate forum to raise procedural violations. *Id.* § 7607(d)(9). EPA also has routinely initiated reconsideration of an action even if the standards of Section 307(d)(7)(B) are not met. *See, e.g.,* 88 Fed. Reg. 28,918, 28,925 (May 4, 2023) (undertaking reconsideration where EPA "recognized that aspects of this action warrant careful review, and potential modification, to ensure our actions are fully consistent with the requirements of the Clean Air Act and the Regional Haze Rule"); 86 Fed. Reg. 35,795, 35,795 (July 7, 2021) ("EPA has the authority to review and reconsider, on its own initiative, previous decisions and actions."); 74 Fed. Reg. 66,470, 66,471 (Dec. 15, 2009) (granting reconsideration to clarify ambiguous definitions in regulation); 71 Fed. Reg. 14,665, 14,668 (Mar. 23, 2006) (granting petition for reconsideration due to confusion over EPA's methodology). Finally, EPA must allow for petitions to amend or withdraw agency action under the APA, 5 U.S.C. § 553(e).

GROUNDS FOR RECONSIDERATION

I. EPA Must Reconsider Requiring Biogas Producers to Become Regulated Parties to Participate in the RFS Program.

When Congress passed the Energy Policy Act of 2005, it sought to promote fuels produced from renewable sources in the gasoline market, mostly corn ethanol. Under EISA, Congress sought to diversify the feedstocks used and promote "advanced" biofuels used for transportation, including "biogas." 42 U.S.C. § 7545(o)(1)(B).

Biogas has various sources, which, because they are wastes, generally (if not all) meet the advanced biofuel 50% lifecycle GHG emissions reduction requirement. And, EPA has found that significant sources of biogas—landfills, agricultural digesters, and wastewater treatment digesters—qualify as cellulosic materials. Only "separated food waste," as a potentially major source of biogas, is typically considered "non-cellulosic," but still qualifies as a feedstock for "advanced" biofuels. Separated food waste, which includes used cooking oil under the statute, is a feedstock that can be used for other biofuels, including ethanol, renewable diesel, and jet fuel. Prior to the biogas regulatory reforms, however, EPA imposed additional recordkeeping requirements on users of separated food waste, which were revised in the same rulemaking. EPA, however, did not propose to require separated food waste suppliers to register under the RFS program, only biogas producers.

Aside from the biogas coming from organic wastes, there were no real limitations imposed by Congress in the statute on the source of the biogas, which is unlike, for example, biomass from planted crops and crop residues, planted trees and tree residues, and slash and precommercial thinnings. Yet, for the first time under the RFS program, EPA is directly regulating feedstock suppliers and imposing substantial new requirements.¹⁴ Despite several provisions requiring EPA to establish regulations to implement the RFS program, Congress nowhere referenced the feedstock supplier. In the final rule, however, EPA appears to be broadening its authority beyond that provided by Congress and unnecessarily imposing disparate treatment on the RNG industry.¹⁵ Because the statute does not specifically grant EPA authority to directly regulate feedstock providers, it was not practical for the public to comment on EPA's claimed new authority. Nor was it practical for the public to identify the unspoken concerns of the

¹⁴ We acknowledge that EPA requires registration of "biointermediate" producers. While we disagree with the limitations EPA has imposed on production of renewable fuels that may involve multiple steps at different facilities, EPA expressly declined, at that time, to treat biogas or RNG as a "biointermediate." As such, there was no cause for the RNG industry to challenge these regulations. In any event, a "biointermediate" producer represents a substantially different player in the biofuels market. Unlike a biogas producer, the entire business model of the biointermediate producer is to process renewable biomass into a different material in order to be further processed by another party into renewable fuels under the RFS program. This is distinct from biogas producers that are typically in the business of collecting and managing wastes, which is generated with or without the RFS program. The RFS program does not drive landfills or, as EPA itself found, animal feeding operations. RTC at 386. Indeed, there are 43,000+ aggregated organic waste sites in North America already, which the RNG industry is working to capture and control methane already being produced.

¹⁵ It is ironic that, as support for other provisions in the rule, EPA asserts that it must remove flexibilities provided to the RNG industry, in recognition of the unique market and distribution system, to treat it the same as other biofuels. *See, e.g.*, 87 Fed. Reg. at 80,700 (proposing to prohibit off-site storage of RNG pending registration for purposes of providing equal treatment compared to other biofuels).

agency. EPA's authority and basis for the requirements imposed on biogas producers are of central relevance to the rule.

A. EPA's new claimed authority to regulate biogas producers is misplaced.

In the proposal, EPA did not specifically identify the legal authority on which it was relying to establish the biogas regulatory reforms. The proposal merely indicated that the "Statutory authority for this action comes from sections 114, 203–05, 208, 211, and 301 of the Clean Air Act, 42 U.S.C. 7414, 7522–24, 7542, 7545, and 7601." 87 Fed. Reg. at 80,711. Nothing in Clean Air Act Section 211, however, gives EPA authority to directly regulate feedstock (renewable biomass) suppliers. Nor are we aware that Congress indicated any intent to grant EPA such authority. This is like saying EPA can regulate crude oil for gasoline or corn farmers to "ensure" sufficient volumes of ethanol. Rather, Congress sought to promote diversification of fuels in the marketplace and was directing its attention to those market participants (i.e., obligated parties) that were impeding that progress, imposing on EPA a duty to ensure the *minimum volumes* sought were introduced into the transportation fuel market.¹⁶ EPA compounds this error by making unsupported conclusory statements that are easily refuted by actual market conditions, rendering its assertion of this claimed authority arbitrary.

In response to comments, EPA provided several reasons why it does not agree that the final rule entails a substantial expansion of its authority or of the RFS regulatory program, will result in significant new administrative burdens, or will limit participation in RFS or hamper growth in cellulosic biofuel volumes. RTC at 7-8. Each of these contentions are incorrect.

First, EPA appears to assert new, broad authority under Clean Air Act Section 211(o)(2)(A)(i), which provides that EPA shall "promulgate" and "revise" "regulations ... to ensure that transportation fuel sold or introduce into commerce ... contains at least the applicable volume" of renewable fuel, to directly regulate, among others, landfills, agricultural operations, and wastewater treatment facilities. RTC at 7. While EPA argues that the public "ignores" this statutory provision, it is EPA that ignores "the 'old and familiar rule' that 'the specific governs the general." *Genus Med. Techs. LLC v. FDA*, 994 F.3d 631, 638 (D.C. Cir. 2021) (citation omitted). Section 211(o)(2)(A)(iii) references imposing compliance obligations only on "refineries, blenders, distributors, and importers, as appropriate, to ensure that the requirements of this paragraph are met." 42 U.S.C. § 7545(o)(2)(A)(iii). It is clear that Congress sought to impose compliance obligations on "obligated parties" to meet the volume requirements, but there is no indication that Congress also sought to grant EPA wide authority to regulate other entities, particularly those that the program was intended to support. The U.S. Supreme Court recently reminded EPA that it is subject to authority delegated by Congress. *West Virginia v. EPA*, 142 S.

¹⁶ EPA appears to turn Congress' intent on its head. Elsewhere, EPA contends that it need not actually ensure the volume requirements be met, setting standards based on new, untested "adjustments" to account for inherent uncertainties that EPA admits, in projecting gasoline and diesel fuel use further out into the future. 88 Fed. Reg. at 44,520. EPA finalized three years of percentage standards over the objections of the public. EPA also indicates that, if it does grant retroactive small refinery exemptions in the future, which it has also acknowledged reduces the actual volume requirements, it *will not* adjust the volume obligations. *Id.* at 44,521. It makes little sense that Congress's directive to ensure the volume requirements allows EPA to pick and choose when it will actually "ensure" the volumes when it comes to those parties that Congress specifically identified as being subject to the volume requirements, yet also grants EPA broad authority to impose substantial regulatory requirements on parties across the biofuel supply chain that are nowhere mentioned in the statute.

Ct. 2587, 2609 (2022). Imposing such onerous requirements on biogas producers arguably requires clearer direction by Congress of which EPA can point to none.

EPA then contends that it is simply putting in place requirements for feedstock providers akin to the requirements for renewable fuel producers—who have been regulated entities under the program since its inception. RTC at 7. In so doing, EPA references long-standing requirements on renewable fuel producers and asserts that, under the current regulations, RNG producers, RNG importers, marketers, and third parties that manage environmental commodities currently make up the bulk of the parties registered to generate RINs under the previous biogas provisions; "requiring such parties to register in order to participate in the RFS is not a new phenomenon." *Id.* at 7. Whether it is a new phenomenon or not is beside the point.¹⁷ The question is whether EPA has authority to do so.

In trying to make this analogy, EPA ignores that the RIN is the means of compliance under the RFS program, but it is also the form of "credit" under Section 211(o)(5), which must also be part of the regulations under Section 211(o)(1)(A). 42 U.S.C. § 7545(o)(5)(A). In the cases cited by EPA to defend its claimed broad authority, the *RIN generator* (and/or RIN separator) is the party that is regulated. While we believe this also does not give EPA carte blanche regulatory authority over anything related to RINs, under the current regulations, the RIN generator (and/or RIN separator) for RNG is not specified in the regulations and, as such, it can encompass a broader range of entities, including one that may fall under EPA's definition of "biogas producer." This does not indicate that Congress intended to give EPA broad authority to regulate feedstock providers *that do not (or cannot) generate RINs*. Moreover, this is like saying that, in regulating power plants, EPA can impose regulations on carbon capture and sequestration projects or hydrogen production as those are the anticipated means for meeting the New Source Performance Standards proposed by EPA. 88 Fed. Reg. 33,240 (May 23, 2023). That would be a clear expansion of EPA's authority under the Clean Air Act, just as EPA has done here.

Second, EPA contends that "feedstock providers' participation in the RFS program is completely voluntary, and the commenter's suggestion that we are imposing mandatory obligations on feedstock suppliers is false." RTC at 8. Indeed, in response to many of the concerns raised by the RNG industry, EPA simply repeated that biofuel producers are not required to participate in the RFS program. EPA further states that "[u]nder the existing biogas provisions, biogas producers may voluntarily subject themselves to the RFS program directly, by registering to generate RINs, or indirectly, by supplying biogas to RIN generators under the existing producer can generate RINs in a biogas closed distribution system or supply biogas to an RNG producer." *Id.* This discussion completely ignores the purposes of the RFS program, distorts how the current market was built and operates, and ignores the added compliance costs that EPA itself

¹⁷ It should be noted that public comments did oppose many of the requirements that EPA has imposed under the guise of ensuring "integrity" of the RIN market, including raising concerns as to the impact of increased regulatory costs and adverse impacts on expanding biofuels under the RFS program. However, companies typically engage in a cost-benefit analysis to determine whether or not to challenge EPA regulations. To use EPA's own logic, the lack of a challenge to prior regulations does not indicate that EPA's actions complied with the Clean Air Act or are per se permissible. As the D.C. Circuit has found, subsequent actions by EPA can alter the stakes of judicial review to challenge EPA's claimed authority. *See Sierra Club v. EPA*, 551 F.3d 1019, 1025 (D.C. Cir. 2008).

determined would be the case under the new provisions and the added liability risks for the new registration, recordkeeping, reporting, attest engagement, and PTD requirements (to name a few).

The entire purpose of the RFS program was to create a market demand for biofuels. This was because of the difficulties in competing with the long-standing and ever present petroleum industry. Prior to the RFS program, the RNG industry was small and largely used for electricity purposes to meet state Renewable Portfolio Standards. EPA, *An Overview of Renewable Natural Gas from Biogas*, at 5 (2020), *available at* https://www.epa.gov/sites/default/files/2020-07/documents/lmop_rng_document.pdf. However, the RNG industry has grown from about 32 million ethanol-equivalent gallons in 2014 to over 660 million ethanol-equivalent gallons in 2022¹⁸ under the RFS program with most RNG now going into the transportation fuel market. Millions of dollars have been invested in reliance on the RFS program and on *EPA's current regulations*. Millions more have been incurred in developing compliance systems to ensure compliance with those regulations. EPA is not starting a new program that companies are walking into with eyes wide open. Rather, it is changing how an existing program (and market) currently operates.

EPA also ignores the significant different calculus that parties must now undertake. Under the current regulations, biogas producers either recouped their expenses through RIN generation *or* received revenues from those entities that agreed to undertake the actions necessary to comply with EPA's regulations and, thereby, incur the costs of compliance. Under the biogas regulatory reforms, the biogas producer will now incur compliance costs regardless of whether they generate RINs. Those parties providing the revenues may now also no longer be able to generate RINs or, if RNG producers, are also subject to compliance costs, which we believe will substantially increase, affecting the revenues that they can share with the biogas producer.

The potential impacts on biogas producers are evident from EPA's own Information Collection Review (EPA-HQ-OAR-2021-0427-1111). For the 2014 rule, which established the current system for RIN generation for RNG, EPA estimated 5,408 biogas feedstock producers who must provide information about their feedstock to biofuel producers "and to EPA upon request." EPA-HO-OAR-2012-0401-0043 at 8, 11. EPA estimated these parties would incur a total of \$154,128 under the rule, while fuel producers (i.e., the RIN generators and directly regulated parties) were estimated to incur total costs of \$519.840. Id. at 11-12. Under the biogas regulatory reforms, EPA estimates a much small number of respondents regarding biogas feedstock producers (196), but more than \$2.3 million in total annual costs—more than ten times the estimated costs under EPA's current regulations. This is now in addition to the costs incurred by RNG producers (195) of almost \$2 million in total annual costs. While EPA may consider these costs to be minimal, they are not minimal to small producers or municipalities. It may be that EPA believes RIN prices for D3 are high enough to support added regulatory burdens, but recoupment of investments are based on estimated RIN prices, and the biogas regulatory reforms fundamentally change the economics of existing relationships and future investments. Because EPA just proposed these extensive regulations in December 2022 and RNG projects typically take years to develop, these are new costs not otherwise planned for, even by the 178 RNG

¹⁸ EPA, *RINS Generated Transactions: Total Net Generation Report*, <u>https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rins-generated-transactions</u> (data as of Aug. 10, 2023).

facilities currently under construction (168 in the U.S.) or the 303 RNG projects in the planning stages (https://www.rngcoalition.com (last visited Sept. 10, 2023)). Moreover, while currently these parties may face liability if they contribute to the creation of an invalid RIN, now they face a substantially greater liability risk for a whole number of additional potential violations, including mere paperwork violations. In any event, it is not EPA's job to determine whether the parties can afford the regulatory changes; its job is to explain why those expenses are needed, why other, less costly means of achieving EPA's objections are not sufficient, and why the benefits outweigh those costs. EPA did none of these things.¹⁹

Shockingly, EPA states in the final rule: "For the biogas regulatory reform provisions, we are modifying the previous biogas provisions to make compliance less burdensome for regulated parties." 88 Fed. Reg. at 44,552. For which regulated parties? This is not less burdensome for those biogas producers that were not previously registered. This is not less burdensome for RNG producers, as the contractual sales of RNG through the distribution system do not go away, rather the RNG producers now have additional reporting and recordkeeping requirements. This is all in addition to attest engagements and engaging in the QAP process. EPA failed to consider these important factors, claiming only that the industry did not provide evidence that feedstock producers may no longer want to participate in the RFS program. But it is a matter of simple economics. Increased compliance costs have the unintended effect of making other waste management methods, such as flaring, more economically attractive, creating disincentives to the development of RNG projects that could have improved the collection and commercial utilization of biogas. The same is true even if the biogas producer can hire third parties to submit the required reports. If the third party can no longer participate in the RFS market as it is doing so today, it will seek to recover all of its costs, which otherwise would have been offset by the RINs that they currently generate. Engaging in an economic analysis of how these regulations may impact the industry nationwide was simply not required nor even feasible in the time provided to respond to comments. Imposing such a requirement on the public would turn EPA's obligations for rulemaking on its head.

Even if some revenues could still be realized by biogas producers to support participation in the RFS program, as the RNG industry has explained to EPA on numerous occasions, the certainty and stability of voluntary markets has been increasingly more attractive to investors in light of the volatility in the RFS program. EPA's view of high D3 RIN prices is not the answer to every question. EPA now has increased the regulatory burdens on the industry that could continue to make these voluntary markets more attractive. This is counter to the purposes of the RFS program, and EPA's obligations to ensure the *volumes* of biofuels are introduced into the *transportation fuel market*.

¹⁹ In the final rule, EPA did review registrations to identify how many existing registrants to generate RINs were already RNG producers. While EPA did not release the underlying data due to confidentiality concerns, this does not address the concerns regarding *biogas producers*. Moreover, despite this review, it provided no analysis of other statements it asserted, stating only it was relying on its "experience."

B. EPA's claimed need to require biogas producers to become regulated parties under the RFS regulations is based on speculative and flawed assumptions that can be easily refuted.

As in the proposal, EPA claims that it is concerned that biogas producers could claim to send the same volume of biogas to multiple facilities with each not knowing that it is using the same volume of biogas as the other facilities. RTC at 251. To the extent this is a valid concern, this may explain tracking of RNG volumes through RIN generation, which EPA can "see" in its RFS platform EMTS, 87 Fed. Reg. at 80,693, but it does not explain why imposing substantial new requirements and limitations on biogas producers is necessary. As the industry explained in objecting to these requirements, the only information EPA needs to confirm the appropriate volume of RIN generation is the amount of biogas going to the RNG facility and the amount of RNG injected into the pipeline. An engineer reviewing this data could determine if, based on the source of the biogas and the volume of intake, the output of RNG (including treated gas in a closed distribution system) is suspect. Indeed, QAP providers have been doing this to date. Adding upstream measurement requirements does not improve the quality of data and will only add significant costs without any incremental benefit in terms of accuracy or tracking fuel volumes. In its response to comments, EPA provided new rationale in support of the final rule that the public was not able to comment on. Had they been able to do so, they could have explained why EPA's concerns are unfounded. Since the basis for EPA imposing such requirements is flawed, these objections are of central relevance to the rule.

EPA now explains that "these registration requirements are needed to ensure that biogas producers can produce biogas that qualifies under the CAA and EPA regulatory requirements." RTC at 253. As an initial matter, landfill gas and digester gas are easily identifiable. And, as discussed above, we believe EPA is impermissibly seeking to broaden its authority under the Clean Air Act. Importantly, EPA *has not* required feedstock suppliers to register for any other biofuel. In response to comments, EPA contends:

Finally, the commenter compares registration requirements for biogas producers to providing registration requirements to feedstock providers like farmers. There are critical differences between producing biogas that is turned into RNG and producing corn for ethanol that warrant different treatment in this instance. Primarily, there is a high potential for fraud due to the fungibility of natural gas and RNG that does not exist for other feedstock and pathways and that makes requiring biogas producers to register both necessary and justified.

RTC at 256. EPA appears to conflate *biogas* with *RNG*. *Biogas* is not fungible with natural gas, and there is no connection between the fungibility of *RNG* with natural gas and requiring registration of *biogas* producers. And, contrary to EPA's contentions, renewable diesel is treated as interchangeable with petroleum diesel fuel (referencing a *diesel* fuel ASTM standard) and also can be transported in pipelines, yet EPA does not require those feedstock suppliers to register, even though there *have been actual cases of fraud* in the biomass-based diesel category.

Moreover, we believe this response ignores key concerns with feedstocks used for other biofuels. For example, there is risk that fuel derived from crops come from newly cleared agricultural lands. Concerns were raised with potential fraud when EPA approved the alternative compliance approach for soybean oil based biodiesel from Argentina, noting that the program could allow non-compliant soybeans to be imported from other countries. Yet, EPA has not imposed registration requirements on these feedstock suppliers. Indeed, when EPA revised its requirements for establishing use of used cooking oil (i.e., separated food waste), it still did not require the same type of registration requirements (or reporting or attest engagement requirements) for feedstock aggregators, with a minimal registration requirement to associate with producers and allow for the required mandatory participation in *a QAP*.

In an apparent attempt to explain the unique concerns raised by biogas producers, EPA further explained *in support of the final rule* that "[h]aving biogas producers register alleviates our double counting concerns for the following reasons:

- Ensures that the RNG producer is not adding non-qualifying gas for upgrading.
- Tracks the volume of biogas effectively in EMTS.
- Allows EPA to hold parties that are closely involved in the value chain liable."

RTC at 252. Had EPA provided this rationale with the proposal, the public would have explained why these claims are flawed.

1. Concerns regarding the potential risks of adding non-qualifying gas for purposes of generating RINs are unfounded and do not support imposing substantial new burdens on the RNG supply chain.

Despite EPA's new explanation, it remains unclear how the registration of the biogas producer would show that the RNG producer is not adding non-qualifying gas for upgrading. RNG is produced from biogas collected from the decomposition or anaerobic digestion of organic wastes at a landfill or through a digester, such as an agricultural digester or wastewater treatment digester. Biogas is different in kind from RNG. Biogas input and RNG output are measured separately. EPA does not explain how also requiring the biogas producer to register and report the same volume already measured by the RNG producer provides any added assurance that the RNG facility is not injecting higher volumes than warranted. EPA then tries to assert that the biogas producer is responsible for the proper allocation of biogas to various feedstocks, D-codes, and verifications statuses. RTC at 250. But this only applies to mixed digesters, and EPA imposes additional requirements to establish that RINs are properly being allocated in those cases. EPA further notes that biogas producers "are in the best position to ensure that the feedstocks being used qualify; having them register is the most efficient and effective way for EPA to verify this critical step of RIN generation." Id. at 256. But, this is true for all feedstocks for all biofuels (e.g., the farmer is "in the best position" to know where the corn or soybean was grown), including renewable diesel that is co-processed with petroleum diesel and those feedstocks for which Congress imposed specific restrictions to be considered "renewable biomass." This is insufficient to explain why it is necessary here.

Indeed, EPA rejected the industry's request that EPA allow third parties, who would have access to the same information as the biogas producer, to register in place of the biogas producer, such as the RNG producer or a marketer that generates RINs, as under the current regulations. Yet, in the final rule, EPA appears to admit that the biogas producer and the RNG producer may be the same party under its regulations. RTC at 8. The regulations, however, would require compliance with both sets of regulations in these cases. *See* 40 C.F.R. § 80.105(a)(3), 80.110(a)(3), 80.115(a)(3). This has raised several questions, which RNG Coalition has separately asked EPA to provide clarification. In other words, the biogas producer requirements appear to only create duplication and confusion, providing no additional assurances above what is already provided by the RNG producer itself (or the RIN generator in a biogas closed distribution system).

In addition, EPA's response to comments make clear that its concern regarding "nonqualifying gas" is with generating RINs for geologic natural gas *versus RNG*. EPA states that biogas producers can be "a source of fraud in the system, as it is possible to mix fossil natural gas into the biogas." RTC at 250. While this may be within the realm of possibility, EPA regulation should not be based on speculation. A review of EPA's own handbooks on digestors and landfill gas operations provide no indication that such could be the case. AgStar, Project Development Handbook (2020), *available at* <u>https://www.epa.gov/sites/default/files/2014-</u> <u>12/documents/agstar-handbook.pdf</u>; EPA, Landfill Gas Energy Project Development Handbook (2021), *available at* <u>https://www.epa.gov/lmop/landfill-gas-energy-project-development-handbook</u>.

Although this concern is not referenced in the proposed rule, EPA appears to be imposing several requirements based on this unfounded fear.²⁰ Section 80.155(b)(2)(viii) requires any party required to sample and test biogas or RNG must, among other things, undergo Carbon-14 analysis using ASTM D6866. While we believe the testing and measurement requirements generally must be reconsidered, as further discussed below, EPA's speculative concern does not justify requiring such analysis on every sample of biogas and RNG. Carbon-14 is typically only used for co-processed liquid fuels (such as renewable diesel production at petroleum refineries) to determine the percentage of renewable fuel produced. We are not aware of any such co-processing at RNG facilities.²¹ Members have engaged in discussions with labs, and, while we

²⁰ While EPA provides new explanation in the response to comments, it remains spread out and difficult to follow. This is further reason why it was incumbent on EPA to provide its rationale upfront in the proposal so that the public (or a court on review) is not required to parse through the record trying to find a coherent whole of an argument. ²¹ The 2016 Guidance (at 1) states, with no support, that EPA understands "that it is common practice for biogas producers to blend biogas after treatment with some amount of non-renewable natural gas or propane to increase the heat content (BTU) before injecting the blend into a commercial natural gas distribution pipeline." Had the guidance been subject to notice and comment rulemaking, the industry may have objected to this characterization and certainly, seven years later, does so now. If propane (high BTU fuel) is used to "boost" the methane content of RNG, a propane tank would need to be connected and would be visible, and the different heat content would be noted by the metering. QAP providers have checked for these issues during their verification process. There is no need to use in-line GCs to determine if this was occurring without being detected. Fossil natural gas generally would not be helpful to "boost" RNG, but, again, equipment would be needed for such blending to occur, and its addition would also be detected by metering. Moreover, today, equipment is manufactured and projects are designed to ensure pipeline specifications will be reliably and consistently met, so "boosting" would not be required. Some biogas to electricity projects may have blending lines, which, again, would be visible and detectable, and any fossil natural gas used would be reflected in utility bills. This does not, however, justify imposing requirements on all RNG producers.

are not aware of anyone regular using Carbon-14 testing for RNG, only one lab in the United States has been identified that does such testing. It is an unnecessary burden with likely long wait times to conduct on a regular basis.

The general statement of need for the biogas regulatory reforms in the proposed rule essentially placed an obligation on the public to try to identify any and all potential ways that fraud might occur to explain why the current system or alternative actions could assuage EPA's unexpressed and unsupported concerns. But, based on the practicality of biogas production and the operation of RNG plants, it just did not seem feasible that parties could simply add geologic natural gas to either biogas or even RNG without detection under the current system of regulations. Some of these reasons follow.

Biogas and RNG facilities are not typically co-located or near geologic natural gas wells. While some projects may utilize fossil natural gas as a power source, it would likely be piped into the facility through a separate input piping system that is monitored by the utility selling the natural gas. This generally would be distinguished from any landfill collection system or intake piping from the digester. Even if connected at some point, the amount of natural gas received from the utility, as well as how much is going to onsite uses (e.g. boiler for digester or other uses), would be known. As noted above, it can be determined if the volume of RNG reportedly being injected into the pipeline is consistent with the biogas it is receiving based on an engineering review. But, not all projects would even require natural gas for energy. Covered lagoons typically do not require an outside energy source to undergo the digestion process. Some types of digesters and landfills could use natural gas as energy for certain processes (e.g., for heat or run flares), but they can also use their own biogas, diesel fuel, or electricity as the power source. And, for those that utilize natural gas, utility bills could also be used to determine if any "excess" fossil natural gas is being used by the facility. Indeed, EPA's response to comments (not the proposal) provided explanations for several recordkeeping requirements, arguing that these are intended to detect whether fossil natural gas is injected into the pipeline, including information on the source of process heat. RTC at 274.22

EPA does not even venture a guess as to how fossil natural *gas* could be added to a biogas stream. Fossil natural gas is not sold by just anyone and, while we do not dispute there may be bad actors out there, natural gas presents different handling considerations than liquid fuels. While one could pour a gallon of petroleum diesel using a milk jug into a vat of renewable diesel without much fanfare, "[t]he delivery and distribution of gas are critical aspects of the energy industry. Ensuring the safe and efficient transport of this essential resource requires an extensive network of pipelines and equipment." Dombor, *Understanding the Basics of Gas Distribution Systems*, July 2, 2023, <u>https://www.dombor.com/gas-distribution-systems-a-beginners-guide/</u>. It also appears that EPA forgets that methane is extremely flammable and may

²² EPA also argues that the requirement to provide compliance certifications under Title V serves this purpose. RTC at 274. Curiously, EPA does not refer to existing regulations that include similar requirements (which are reopened by the final rule here) at 40 C.F.R. § 80.1454(k). Instead, EPA contends that "[u]sing these types of documents to help with compliance is not new for the RFS, and we previously have required it for all renewable fuel producers to submit Compliance Certifications pursuant to 40 CFR 80.1450(b)(1)(v)(A)." RTC at 274. EPA likely did not refer to § 80.1454(k) because EPA similarly provided no explanation for its inclusion in the regulations. 75 Fed. Reg. 14,670. In any event, the provision actually referenced by EPA (§ 80.1450(b)(1)(v)(A)) only requires copies of air permits, not Title V compliance certifications, to help establish a facility's baseline production capacity.

form explosive mixtures with air. It therefore presents safety concerns that are not present with other feedstocks such as used cooking oil. Fossil natural gas is significantly higher in methane content than biogas. It is also unclear if EPA considered whether simply adding fossil natural gas to biogas would have any operational impact on the digester, landfill collection system, or RNG facility. Indeed, we do believe that injecting fossil natural gas into the upgrading equipment will have detrimental impacts on its operations. For example, membranes used to remove CO₂ from biogas streams may be harmed if the larger hydrocarbons from fossil natural gas are run through the system. Thus, EPA's claimed unique nature of biogas compared to other feedstocks, we believe, presents a substantially smaller risk of fraud than of feedstocks for other biofuels.

Finally, QAP providers can (and do) check if input piping from natural gas sources is being redirected. Site visits are required under EPA's regulations already. While the RNG industry argued that EPA could rely on the QAP oversight, EPA also now contends that the QAP may not be sufficient because QAP providers would not necessarily have access to all records to verify RINs. RTC at 251, 288-289. EPA does not identify what those records this might entail, nor do we believe it can identify any specific records, as the QAP provider does, in fact, review biogas records, and the biogas production facility and RNG equipment are often co-located. To the extent, this is a concern of EPA, it could simply require that the biogas production facility also be part of the QAP site inspection and document review process to verify RINs, as it is doing for separated food waste feedstock users. In other words, there are less costly and burdensome ways to provide added assurances. EPA simply cannot provide any evidence that these new requirements on biogas producers are worth the minimal, if any, added benefit to the "integrity" of the program.

In summary, EPA appears to simply believe that the value of the RIN will provide sufficient incentives to commit fraud and that there is ample opportunity to perpetrate such fraud. The experience of the last almost decade, however, shows that this is not the case, in large part because the current regulations and oversight are sufficiently robust and also because of operational realities that do not lend the process to outright fraud by individual companies. These same perceived incentives to commit fraud would be present even where EPA only allows CNG/LNG from RNG. EPA provides no explanation how allowing additional uses of RNG will suddenly change the economic calculus for companies in the biogas and RNG supply chain, particularly where it is now limiting RIN generation and separation and tracking the RNG volumes through RINs. While EPA's response is that the lack of reported fraud does not mean none occurs, for all the reasons noted above, we believe it would have been detected if such were the case, and EPA provides no evidence otherwise.

2. EPA does not explain why tracking of RNG volumes through RIN generation is not sufficient to address its concerns over double counting.

EPA claims that requiring registration of *biogas* producers is needed to track the volume of biogas effectively in EMTS. RTC at 252. But, RINs are generated based on RNG injected into the pipeline, and EMTS is designed to track RINs.

We found no regulatory requirement that biogas producers submit reports to EMTS. Instead, the preamble states that EPA intends "to have biogas producers complete the monthly reporting requirement by entering batch reports directly into EMTS and then transferring each batch also in EMTS to a party that uses such biogas to produce a biogas-derived renewable fuel, RNG, or a biointermediate." 88 Fed. Reg. at 44,533. It is not clear then that the EMTS has even been revised to allow such tracking, raising additional concerns that EPA can even implement the reforms. Regardless, this still does not obviate the need for the biogas producer to register. The amount of biogas received by the RNG plant can be and is measured *by the RNG facility*. There would not appear to be a need for the biogas producer to report that same volume separately.

EPA may contend it is needed to ensure the biogas facility is not reporting the same volume of biogas twice, as was its claimed concern with only relying on contracts as it claims occurs under the current system. But intake measurements ensure that biogas is received by the RNG facility.²³ The RNG producer can still report in the registration the source of its biogas and even whether that source has other RNG projects or other uses, which can be verified by the third-party engineer. But, no one else can claim that specific volume of biogas for purposes of generating RINs, because they would only be able to show measurements for biogas actually received.²⁴ EPA's final rule does not restrict all other uses of biogas at a production facility, essentially acknowledging that the biogas measured for each use can be identified separately. Again, the QAP (including on-site visits) can provide a check if there are other uses at the biogas site. While EPA claims that this "increase[d] oversight" is not a "substitute for effective program design," RTC at 320, the program design appears to be the new RIN generation structure. But then EPA is requiring the same data to be collected, reported, and verified numerous ways and numerous times on the speculative, off-chance, all of the current measures to prevent fraud are circumvented. EPA has yet to explain how all of these requirements in the biogas regulatory reforms, including requiring the biogas producer to register, are, in fact, more effective in meeting EPA's goals or, more importantly, in meeting Congress' goals.

Further, it is entirely unclear why the biogas capacity of a landfill that has different operations with different meters and different operators has any relevance to EPA's oversight over RIN generation for volumes of RNG *injected into the pipeline*. As the public explained and for the reasons explained above, so long as the volume of RNG is less than the volume of biogas being received by the RNG facility and consistent with expected volumes, this should be enough to establish that the plant is not engaged in fraudulent behavior. The apparent search for 100%

²³ Requiring monitoring of the biogas flowing into the RNG plant addresses the following unsupported claim: "While separate meters [at biogas facilities] can help with potential double counting, allowing multiple uses still increases the complexity of the program, and makes it difficult to identify double counting. For example, if meter data is switched, this could lead to higher volumes and create a double counting issue." RTC at 320. The meter data could only be "switched" by the biogas producer, as the RNG producer would be required to show the underlying flow meter data. Requiring the biogas producer to also report, then, would seem to have no added benefit. ²⁴ In support of its single use limitation and responding to comments regarding the existing oversight over biogas sites, such as landfills, EPA states: "monitoring of volumes at the biogas production facility does not necessarily translate to information that is necessary to prevent double counting when the biogas leaves the facility." RTC at 318. We believe this illustrates our point. Under EPA's revised system of RNG RIN generation and monitoring at the RNG facility, the concerns with double counting of RNG volumes are alleviated. What EPA does not explain is what "double counting" remains of concern upstream when RNG can only be produced based on the volumes of biogas actually received. Indeed, a company selling used cooking oil could similarly claim it is sending the same volume of used cooking oil to different renewable diesel plants, but EPA allows the biofuel producer to provide the evidence that it is the one that actually used that volume. It does not require registration by the feedstock producer for used cooking oil, nor need it do so for biogas producers.

precision is not warranted, nor required for any other biofuel. *See, e.g.,* 87 Fed. Reg. at 80,707 (acknowledging that, under current RFS regulations, renewable diesel generates RINs for its non-renewable portion). EPA does not even require it for meeting the volume requirements. *See, supra* n.16.

3. Registration is not required to hold appropriate parties liable under the RFS program to address EPA's claimed concerns.

EPA also contends that registration of biogas producers allows EPA to hold parties that are closely involved in the value chain liable. RTC at 252. But, if the source of the violation is the biogas producer, current regulations already allow EPA to do so. 40 C.F.R. § 80.1461(a), (b).

As EPA has long acknowledged, the RFS program is a buyer beware program, and the RNG producer bears the risk that RINs are found invalid for using feedstock that is nonqualifying. This is no different than all other biofuels. Yet, only for biogas is EPA imposing direct regulatory requirements with respect to the feedstock suppliers.

Also, as noted above, these new regulatory requirements create significant new liability risks that are immaterial to whether or not the feedstock provider is committing fraud. While the public raised these concerns, *see, e.g.*, EPA-HQ-OAR-2021-0427-0759 at 6, EPA fails to acknowledge this additional risk. Now, biogas producers are subject to penalties for a whole host of potential violations that folks with limited experience with the RFS program may find extremely daunting. For example, EPA is requiring biogas producers to submit monthly reports, which could subject them to penalties if they miss just one month. In other words, the biogas regulatory reforms are overly prescriptive and many of these parties have not had to deal with these issues, which increase the potential for mistakes. Even if they hire third parties to submit those reports (to the extent such third parties are available to engage in such activity under the biogas reforms), the registered party is ultimately responsible and subject to enforcement actions.

C. At a minimum, EPA must reconsider specific provisions related to biogas producers and biogas production facilities to reduce the burdens on biogas producers.

1. EPA should clarify the definition of biogas production facility to avoid duplicative and unnecessary requirements.

EPA finalized its proposed definition of biogas producer and biogas production facility.²⁵ Where the public requested revisions to these definitions to be more in-line with market and on-the-ground conditions, EPA declined to do so, indicating it was relying on common definitions

²⁵ We have requested that EPA provide further guidance on the scope of a biogas production facility, particularly when co-located with an RNG project. EPA's response to comments does seek to clarify the phrase "where biogas is produced" in the definition of biogas production facility as "the location where microbes process renewable biomass into methane. This includes landfills, municipal wastewater treatment facility digesters, agricultural digesters, separated MSW digesters, and other waste digesters." RTC at 238. But, we believe further clarification is needed because the definition still relies on the existing definition of "facility," which starts at "the point of delivery of feedstock material" and extends to "the point of final storage of the end product." This language does not clearly delineate between the biogas production facility and the RNG facility and would not appear consistent with EPA's claimed clarification.

used elsewhere. EPA did, however, clarify the meaning of "supervises" and "controls" in its response to comments. RTC at 240-241. These clarifications indicate that the biogas producer and the RNG producer could be the same entity, so long as they manage the day-to-day operations of both facilities or control physical access to both facilities. *Id.* These clarifications illustrate, however, that there does not need to be separate registration of biogas producers. Instead, the same entity will be submitting the same information, unless EPA is requiring duplicative submissions.

EPA contends that, because of the broad definition of biogas producer, concerns that the landfill operator or the farmer would have to register are unfounded. RTC at 8. While we appreciate EPA's attempts to clarify and do not disagree (or oppose) a broad definition, the regulatory language is not so clear as to the requirements in such a case. This is particularly true with respect to those provisions that relate to "transfer of title" to the biogas. A party that "supervises" the biogas facility may not technically own "title" to the biogas it is collecting. As one example, how would the product transfer document requirements work in such a case. Does the unregistered landfill owner have to provide product transfer documents for the transfer of biogas to the registered biogas producer that also owns/operates the upgrading equipment? We also note that the definition of "facility" refers only to those activities and equipment "that are located on one property." Revised 40 C.F.R. § 80.2. As EPA is aware, biogas may be collected from different farms at different digesters but fed into the same RNG facility. Requiring each digester to register as a "biogas producer" would be unwieldy, but it is unclear how these definitions would apply in such a case. Further, it is unclear, depending on the definition of each facility, whether measurements are required upon leaving the biogas facility and entering the RNG facility. EPA also states that it "did not propose nor are we finalizing that measurement is required at the output of each digester." RTC at 282. We believe such measurements are only necessary when entering the upgrading equipment, which, as discussed above, would not require the biogas producer to register.

2. EPA should reconsider the single use limitation for biogas facilities.

EPA also should reconsider the single use limitation on biogas facilities. EPA itself acknowledges that this requirement may "lead to some volumes not to be used under RFS." RTC at 317. But, EPA does not contend that the biogas from these facilities would not meet the statutory definitions, and there is no indication EPA can pick and choose what eligible fuels can participate in the program. Where EPA's obligation is to ensure the volumes are introduced into the transportation fuel market, this limitation is counter to Congress' directive.²⁶

In response to comments objecting to the proposed single use limitation for biogas, EPA again provided more explanation than it did in the proposal. RTC at 316-317. EPA states that "The single use limitation helps achieve these aims [of improved oversight and avoiding double-counting] in the following ways:

²⁶ Other of EPA's arguments are addressed above.

- When an auditor is looking at the facility, they do not need to verify that the biogas volumes that are used for other purposes are consistent with the volume of biogas reported since biogas can only be used for a single purpose.
- Given that biogas can only go to one use, a biogas producer cannot overstate the volumes that they send to two different uses."

Id. at 316. While this explanation only calls into question the need to impose substantial registration, reporting and recordkeeping requirements on biogas producer versus having the auditor verify these volumes (as it does today), we do not believe the "simplicity provided by this limitation," as asserted by EPA, is an appropriate "tradeoff" to losing potential volumes of RNG that might otherwise have gone into the transportation fuel market. *Id.* at 317.

We believe this concern will become of even greater importance when EPA finalizes provisions for the generation of eRINs. RNG Coalition submitted additional information on those sites that have both RNG and electricity (Ex. 2), noting at least 22 operational projects and 8 under construction that send RNG and electricity off-site. (This does not include those that may use electricity on-site.) The operational projects represent over 8% of online projects and almost 6% of RNG production; the projects under construction represent 7% of projects under construction and over 12% of projected output of projects under construction. All projects are in the United States. This is a significant percentage of current and planned projects.

The industry explained how each use would have separate collection equipment and different meters to monitor biogas flow. Nonetheless, EPA says, "[w]hile some facilities might have the appropriate metering, this might not be true for all facilities, and removing this limitation without additional requirements would still not ensure volumes of renewable fuel are produced consistent with CAA requirements." RTC at 317. This is confusing because, although we dispute certain aspects of the testing and measurement provisions, EPA is presumably requiring the "appropriate metering" to be used. EPA then states that "Metering allows for data about the volumes but does not decrease the complexity of the networks." *Id.* at 319. We remain confused as to what EPA means by "the complexity of the networks" with respect to biogas production. There is a digester that sends the biogas to an RNG facility. There is a landfill that has part of its acreage collected for one use and sold to the party using that biogas from that collection system and another portion of its acreage where biogas is collected for another use and sold to the party using that biogas production facility could limit the scope of the "facility" at issue that would render the single use limitation largely inoperative.

EPA also now claims that this limitation does "not reduc[e] the diversity of options available to biogas producers," who can still market the biogas for uses outside the framework of the RFS. RTC at 317. This is immaterial to determining whether EPA is meeting the goals of Congress in growing renewable fuel use in *the transportation market*. That is the primary consideration EPA must take into account when implementing the RFS program. By its plain terms, the single use limitation is limiting the ability of a particular biogas source to contribute to the RFS program. While EPA refers to the limitations it imposed on biointermediate producers, that limitation was also opposed by the public, including the RNG Coalition, for the same reasons it objected to the single use limitation here.²⁷ EPA-HQ-OAR-2021-0324-0485 at 37-43 (Attachment A to EPA-HQ-OAR-2021-0427-0756). It should also be noted that, in June 2023, EPA's Landfill Methane Outreach Program ("LMOP") held a webinar that indicated there was an increasing trend of landfill gas electricity projects shutting down. *See LMOP, Webinar: Landfill Gas Electricity Power Purchase Agreement Ending Soon? Learn What You Can Do*, June 13, 2023, available at <u>https://www.epa.gov/lmop/webinar-landfill-gas-electricity-power-purchase-agreement-ending-soon-learn-what-you-can-do</u>. EPA noted that there are more than 280 currently operating electricity projects that may have expiring Power Purchase Agreements. While eRINs could have provided these projects a lifeline, the potential shutdown of these projects indicate that the diversity of markets may not be as robust as EPA appears to believe.

II. EPA's Testing and Measurement Requirements Must Be Reconsidered and Revised.

The RNG industry does not necessarily oppose requirements in the regulations to the extent they establish parameters that should be met to ensure volume measurements regarding biogas intake, RNG injection, and natural gas withdrawal are sufficiently consistent. They should, however, allow flexibility, particularly when other regulatory programs may similarly require reporting of these volumes, yet provide EPA with assurances that the volume measurements are relatively accurate. The testing and measurement requirements in the final rule impose significant and undue costs on the industry, particularly where more than sufficient, less burdensome means are available to meet the requirements of the RFS program. EPA claimed that the public didn't explain the impacts on other regulatory programs, but it should go without saying that the industry would rather comply with two different programs using the same meters than trying to install two different meters in the event the regulatory requirements are not consistent. If EPA imposes such specific requirements with limited flexibility, it could impact the ability of the facility to comply with state or other federal laws (or even with the specifications of the particular pipeline, impacting its ability to distribute RNG). Moreover, the pipeline operator may have specific requirements for their pipelines and already have equipment installed, which may not meet EPA's requirements. The final rule, however, would appear to require the RNG producer to install a second GC and/or flow meter, which may be impractical, and otherwise unnecessary.

Again, EPA provided little explanation in the proposed rule for these provisions. In particular, the proposed rule did not provide any technical support for the specifications. "An agency commits serious procedural error when it fails to reveal portions of the technical basis for a proposed rule in time to allow for meaningful commentary." *Solite Corp. v. EPA*, 952 F.2d 473, 484 (D.C. Cir. 1991) (quoting *Connecticut Light and Power Co. v. NRC*, 673 F.2d 525, 530-31 (D.C. Cir. 1982)); *see also Air Transp. Ass 'n of Am. v. FAA*, 169 F.3d 1, 7 (D.C. Cir. 1999) ("[T]he most critical factual material that is used to support the agency's position on review must have been made public in the proceeding and exposed to refutation.") (quoting *Ass 'n of Data Processing Serv. Orgs., Inc. v. Bd. of Governors of the Fed. Reserve Sys.*, 745 F.2d 677, 684 (D.C. Cir. 1984)).

²⁷ As noted above, EPA did not include biogas or RNG in the biointermediate provisions and, as such, there was no reason to challenge that determination. Moreover, those provisions were unrelated to the introduction of eRINs into the program.

Instead, EPA simply noted (with no support) that the value of RINs create "clear incentives to manipulate testing and measurement." 87 Fed. Reg. at 80,675. The problem with this assessment is that the pipeline does provide third-party oversight over the volume of RNG injected and the volume of natural gas withdrawn. EPA then makes the leap to assert that "establishing clear and consistent testing and measurement requirements, we can ensure the validity of RINs and a level playing field for RIN generators." *Id.* For biogas and RNG, EPA then simply references guidance from 2016 to support its proposed requirements, asserting (again with no support) that it does "not believe these proposed requirements are in line with existing guidance." *Id.*

Guidance, however, is not binding, and EPA cannot impose substantive requirements through guidance. It must undergo notice and comment rulemaking. Because it did not undergo notice and comment rulemaking when it issued the 2016 guidance, EPA did not explain the basis for the recommendations in the guidance. More important, the proposed rule went well beyond that guidance, which, among other things, did not identify any specific type of in-line GC, stating only that parties "should use in-line gas chromatography (GC) meters that provide continuous reading," and allowed for alternative forms of measurements reviewed and approved by EPA through the registration process. EPA 2016 Guidance at 3.²⁸ EPA is the sole owner of information regarding registrations, which largely consist of confidential business information, and, as such, EPA could, and should, have reviewed those registrations to assess the measurements *EPA itself has approved* and the potential implications of its proposal. In any event, the RNG industry widely opposed these proposed requirements.

Only after the comments were submitted did EPA then provide an explanation for the provisions proposed and subsequently finalized. These new grounds, however, cannot support these overly burdensome requirements.

As a general matter, the requirements being imposed on biogas and RNG producers (as well as CNG/LNG distributors) appear based on equipment and specifications that were not developed for biogas or RNG. These industries are not new, and the methodologies used have long been in place, particularly for RNG where pipelines and utilities must measure the gas being injected and used. Industry standards for flow measurement include API Manual of Petroleum Measurement Standards (MPMS), GPA Standards and Recommended Practices, Institute of Petroleum (UK) documents, American Gas Association, ASME, and International Standards Organization documents.

It is also important to note that, because of the continuous gas flow, being able to run the biogas and RNG facility smoothly is extremely important. A glitch can result in significant downtime, which may require the facility to resort to flaring of the biogas. The reliability and operability of the equipment being required to measure gas flow streams, then, is a key consideration that appears to have been ignored by EPA. Instead, EPA has required equipment and incorporated specifications that were developed for different products and different purposes. For example, other meters have been developed specifically to address the constituents

²⁸ Any implication that the RNG industry was not in compliance with this guidance must be rejected. EPA approved the registrations and the D3 RINs have been verified by QAP.

for biogas whether from a landfill or digester and the safety concerns for each. These meters would easily detect non-biogas streams. Other equipment, such as in-line GCs, that are not designed for biogas may be negatively impacted, thus requiring more maintenance and resulting in greater expense and more downtime, as these units require specific skills that are not readily available nationwide. The operability of the required equipment was wholly unexplored by EPA. There simply is no basis for imposing the requirements for testing and measurement that are in the final rule. These provisions must be reconsidered.

A. EPA must reconsider its definition of "continuous measurement."

In the proposal, EPA included a new definition of "continuous measurement," which read:

Continuous measurement means the automated measurement of specified parameters of biogas, natural gas, or electricity as follows:

- (1) For in-line GC meters, automated measurement must occur at least once every 15 minutes.
- (2) For flow meters, automated measurement must occur at least once every 6 seconds.
- (3) For all other meters, automated measurement must occur at least once every 2 seconds.

87 Fed. Reg. at 80,713. EPA provided no basis for these specific requirements,²⁹ and comments raised concerns as to whether they were too onerous. As EPA indicated, concerns were raised regarding "the volume of data that must be stored and transferred to auditors." RTC at 282. EPA responded to these comments by revising the definition in the final rule, which EPA claims "[i]n order to balance the need to obtain accurate measurements and the data storage and transfer concerns, we are allowing for flow meters that measure no less frequent than every 6 seconds to be able to total the flow on a minute basis and record that data. We believe this addresses commenters' concerns around storing and transferring meter data." *Id.* at 282-283. As an initial matter, EPA does not explain how adding a new "record[ing]" requirement addresses the industry's concerns. Instead, we are concerned that EPA has not fully considered the potential implications of these overly prescriptive requirements and, therefore, believe reconsideration is warranted.

In the final rule, EPA revised the definition of "continuous measurement" to now provide that, for in-line GCs, automated measurement must occur "and be recorded" no less frequent than once every 15 minutes. 88 Fed. Reg. at 44,557. For flow meters, the final rule provides that automated measurement must occur no less frequent than once every 6 seconds, "and weighted

²⁹ Although, again, not subject to notice and comment rulemaking, the EPA 2016 Guidance (at 3) merely stated: "In order to properly measure the BTU of the biogas after treatment for RIN generation purposes, parties should use inline gas chromatography (GC) meters *that provide continuous readings*." (Emphasis added). It further stated "RIN generators may develop a sampling protocol that would properly measure the BTU of the biogas after treatment as *an alternative to continuous metering*. The sampling protocol must be submitted as part of the registration submission and is subject to EPA's review." (Emphasis added).

totals of such measurement must be recorded at no more than 1 minute intervals." *Id.* For all other meters, automated measurement "and recording" must occur at a frequency specified at registration. *Id.* These are new requirements and, while we do not dispute EPA's ability to revise regulations based on public comments, the revised language could be read as imposing *greater* burdens than the proposed definition.

We continue to remain concerned with duplicative measurement requirements. Today, pipeline operators can provide data regarding injected volumes, which are third parties. However, pipeline operators may not have the types of measurements required by the regulations. In addition, the pipeline operator also controls the data and, even if the meter automatically measures every 15 minutes for GCs or every 6 seconds for flow meters, they may not retain or provide the data to users of the pipeline. As such, the new language would now appear to require that data be recorded and retained, and, in both cases noted, the RNG producer likely would be required to add equipment. This assumes that the RNG producer can even get access or the authority to install the correct equipment at the appropriate locations to show injected volumes. We understand trying to get consistency in reporting, but EPA did not provide any evidence that the current methods are not providing sufficiently similar information.

While EPA is requiring GCs (addressed below), GCs also can have variability, depending on the sample and its preparation, the instrumentation, accessories, and operating conditions, as well as operator skill and experience. "For routine samples, accuracies of 1-5% are common. For analytes present at very low concentration levels, for samples with complex matrices, or for samples that require significant processing before analysis, accuracy may be substantially poorer. In the analysis for trihalomethanes ..., for example, determinate errors as large as $\pm 25\%$ are possible." David Harvey, Analytical Chemistry 2.1, at 12.4.17 (2023), available at https://chem.libretexts.org/Bookshelves/Analytical Chemistry/Analytical Chemistry 2.1 (Harv ey)/12: Chromatographic and Electrophoretic Methods/12.04: Gas Chromatography. An analysis conducted by a manufacturer of flow meters that have been designed or used for biogas, show a much better uncertainty rate of 1% or less. In other words, they can have greater accuracy than in-line GCs, as they are specifically designed for the anticipated constituents in the landfill gas, digester gas, or RNG. On the September 7, 2023 webinar, EPA asked for information to help develop guidance to compare the accuracy against the methods required. But EPA has still not provided any analysis or methodology against which the public should use to compare. In other words, the record does not support EPA's claim that something more than what is already used by the pipelines is needed. And, EPA appears to have ignored important aspects of the problem.

B. EPA must reconsider the requirement for in-line GCs to measure biogas, RNG and CNG/LNG as provided in § 80.155(a).

In addition to the reasons noted above, there are several reasons EPA must reconsider Section 80.155 with respect to requiring use of in-line GCs to measure the volume of biogas, RNG or renewable CNG/LNG. First, EPA did not propose to require in-line GCs to measure CNG/LNG. While the public generally opposed the requirement for in-line GCs, this expansion of the requirements in the final rule are not warranted. Second, EPA provided new grounds for claiming it must require in-line GCs. These grounds, however, do not support the level of stringency EPA requires. 1. Requiring in-line GCs would be unduly burdensome to measure CNG/LNG.

Although the testing and measurement requirements in the proposal were strongly opposed by industry as unduly burdensome, EPA did not specify requiring in-line GCs to measure CNG/LNG in the proposal and, as such, the public could not directly comment on it. The proposed rule only referred to requiring in-line GCs for measuring biogas and RNG, reading: "Any party required to continuously measure the volume of biogas or RNG under this subpart must use all the following: (1) In-line GC meters compliant with ASTM D7164 (incorporated by reference, see § 80.3), including sections 9.2, 9.3, 9.4, 9.5, 9.7, 9.8, and 9.11 of ASTM D7164...." 87 Fed. Reg. at 80,733. The regulations would have required various parties to measure the volume of biogas or RNG. However, to separate RINs, RNG RIN separators would only be required to measure the volume of natural gas withdrawn from the pipeline. Proposed § 80.125 (87 Fed. Reg. at 80,723).³⁰ This made sense because the process of compressing and liquifying the RNG to CNG or LNG is merely a form change and, under the biogas regulatory reforms, the CNG/LNG producer merely separates the RINs associated with the volume of natural gas withdrawn from the pipeline.

In the final rule, however, EPA added that renewable CNG/LNG must also be measured using in-line GCs (§ 80.155(a)). 88 Fed. Reg. at 44,574. EPA also appears to have added a requirement that CNG/LNG in a closed distribution system be measured by the party upgrading biogas to treated biogas (in both Btu HHV and LHV) and by the biogas closed distribution RIN separator (in Btu LHV) (§ 80.110(f)(2)(iv), (f)(3)). 88 Fed. Reg. at 44,566. It is also unclear whether this change impacts RNG RIN Separators, who must measure the gas withdrawn from the pipeline, but must also report the volumes of CNG/LNG produced (§ 80.125(d), 80.140(e)). 88 Fed. Reg. at 44,568, 44,572. EPA does not explain the need for this change nor provide any support for requiring in-line GCs to measure CNG/LNG in any circumstance. GCs may be prohibitively expensive or impractical due to their size and space needed especially if they must be installed at each CNG/LNG station. *See, e.g.,* Ex. 2. And lead times on purchasing and delivery of GCs are fairly long which could result in significant delays in project registrations. Since publication of the final rule, we have heard, based on discussions with member companies, that the specific time of GCs required have a wait list of several *years*.

Finally, EPA does not provide any evidence that these specific GCs provide any additional accuracy or assurance over flow meters and methane analyzers that may already be in use. To the extent the addition of CNG/LNG imposes new requirements for RNG, measuring the natural gas withdrawn from the pipeline (which we also do not believe requires in-line GCs in addition to flow meters) should be more than sufficient information to separate RINs.

2. The new grounds expressed for requiring in-line GCs are not reasoned explanations for these burdensome requirements.

Where the proposed rule merely relied on reference to the 2016 guidance that provided little, if any, explanation for its recommendations, it was not until the final rule that EPA

³⁰ While proposed § 80.140 indicated that the RNG RIN Separator must provide evidence that it measured the RNG used to produce CNG/LNG in compliance with proposed § 80.165, 87 Fed. Reg. at 80,726, this does not mention the CNG/LNG itself.

explained the basis for requiring both in-line GC and flow meters and only certain types. While EPA is required to respond to comments, waiting until after the public raises concerns to provide the required statement of basis and purpose for its proposed regulations defeats the purpose of notice and comment rulemaking.

In response to comments (i.e., after the close of the comment period), EPA claimed:

federal regulations based on the National Technology Transfer and Advancement Act (NTTAA) state that agencies should give preference to standardized measurement techniques. Given that there are standards for measurement techniques that can be used in the measurement of methane concentration and flow of biogas and RNG, we do not believe it is appropriate to allow for the use of manufacturers' operating procedures or to allow parties to provide documentation to EPA when standards for such measurement exist. The appropriateness of using other techniques mentioned by the commenters depends on whether a standard meets the requirements. Commenters did not provide standards for the alternative measurement devices that they recommended EPA allow, although EPA did find one standard that is sufficient which is for thermal mass flow measurement devices and is therefore allowing those devices under the program.

88 Fed. Reg. at 44,535. While EPA typically references the NTTAA in its regulatory compliance section of final rules, it typically merely lists those specifications it has incorporated. In the proposal, at best, EPA referenced the NTTAA with respect to its proposal for measuring renewable electricity, where it stated that it is merely "required to specify industry standards when appropriate." 87 Fed. Reg. at 80,676. EPA further stated it believed the standard it was proposing to use "is appropriate considering our need to ensure consistent, quality measurement of renewable electricity for RIN generation." Id. EPA also recognized that many current electricity projects may not have revenue grade meters and that it may take time for these renewable electricity generators to install compliant meters and expressly requested comment on whether alternative methods should be used. Id. EPA provided no such explanation for its proposed requirements for continuous measurements in Section 80.165 (finalized at Section 80.155), which EPA claimed was based on guidance that did not define continuous measurement or specify any particular type of GCs recommended to be used. Id. at 80,675. It also expressly allowed for alternative forms of measurement, so long as it was approved by EPA. While providing guidance, it was only guidance, and so provided some general contours-none of the specifics found in the proposed (or final) rule.

In any event, the NTTAA *does not* require EPA to only allow those forms of measurements with an established industry standard. Rather, the NTTAA provides only that agencies use technical standards that are developed or adopted by voluntary consensus standards bodies over government created standards, but that such standards are not required if there are none or if compliance would be "inconsistent with applicable law or otherwise impractical." Pub. L. No. 104-113, § 12(d)(3), 15 U.S.C. § 272 Note. Although EPA references "federal regulations" implementing the NTTAA requirements, we found that the Office of Management

and Budget ("OMB") has guidance through Revised OMB Circular A-119 (January 27, 2016), *available at* <u>https://www.whitehouse.gov/wp-content/uploads/2020/07/revised_circular_a-119_as_of_1_22.pdf</u> ("OMB Circular A-119").³¹ EPA's final rule is not consistent with this guidance.

As OMB's guidance explains:

The Circular does not preclude the use of other standards in rulemaking, procurement, or other program activities in cases where voluntary consensus standards do not exist or use of existing voluntary consensus standards would be inconsistent with law or otherwise impractical, including where use of a voluntary consensus standard would not be as effective at meeting the agency's regulatory, procurement or program needs. The Circular also recommends that the agency consider allowing the use of other standards as alternative means for complying with agency regulatory, procurement, or program requirements that incorporate voluntary consensus standards, where such other standards are also found to be suitable under the agency's analysis.

OMB Circular A-119 at 19. The term "standard," or "technical standard," includes all of the following:

- (i) common and repeated use of rules, conditions, guidelines or characteristics for products or related processes and production methods, and related management systems practices;
- (ii) the definition of terms; classification of components; delineation of procedures; specification of dimensions, materials, performance, designs, or operations; measurement of quality and quantity in describing materials, processes, products, systems, services, or practices; test methods and sampling procedures; formats for information and communication exchange; or descriptions of fit and measurements of size or strength; and
- (iii) terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process, or production method.

Id. at 15. Contrary to EPA's contentions, this could include operating instructions.

³¹ 15 C.F.R. part 287 contains guidance on federal conformity assessments. EPA does reference 15 C.F.R. § 287.4(f) in its response to comments. RTC at 277-278, 280-281. That provision references OMB Circular A-119. Further, if EPA finds that these provisions are applicable, that regulation also requires that the "conformity assessment" be subject to public notice and comment. 15 C.F.R. § 287.4(c). We are not aware of any such assessment in the docket.

This certainly does not mean that EPA can only require use of in-line GCs because it could not identify other industry standards for measuring methane content and natural gas volumes (despite the industry providing several alternatives to those specifications listed in the proposal). Indeed, such a restrictive reading of the NTTAA "preference" would undermine innovation and use of metering technology that is better targeted for biogas and RNG, more reliable, easier to use, *and* more accurate. Developing standards through a voluntary consensus body can often take years and, if EPA is required to include them in regulations, it would take even longer to get the regulation amended to include them. That is precisely what is happening with the RNG industry, as new technology is being developed that reduces downtime and maintenance costs, while providing more targeted and reliable information. It certainly doesn't explain why EPA is requiring in-line GCs in the first instance.

Rather, OMB's guidance outlines various factors to weigh in deciding whether to use a particular standard (at 17-18). Several of these factors weigh *against* use of only these specific standards that EPA included in the final rule, including the following.

- The nature of the agency's statutory mandate and the consistency of the standard with that mandate: Based on conversations with RNG producers, in-line GCs meeting the specification identified by EPA could be cost-prohibitive and have very limited availability. This could create disincentives to participate in the RFS program or, at a minimum, lead to significant delays pending obtaining the proper equipment that may stop RNG production under the RFS program or cause RNG projects to turn to voluntary markets instead.
- <u>The costs and benefits of implementing other available standards that may also</u> <u>meet the agency's needs</u>: Other means of measurement are substantially less costly and provide the information needed to protect against double-counting and against fossil based natural gas being used in lieu of RNG. As one example previously provided to EPA for comparison (Ex. 2), we understand installation of a Honeywell gas chromatograph can cost on the order of \$165,000 compared to a gas analyzer, which can range from \$20,000-\$75,000. The equipment alone can cost at least three times as much (e.g., \$60,000 for gas chromatographs compared to \$5,000-\$20,000 for gas analyzers).

Rather than assess the costs/benefits of the "preferred" method over others, EPA states, "for entities looking to invest millions of dollars to produce RNG (or looking to represent those entities), we believe the marginal cost to purchase the standards is low enough to satisfy the requirements for being reasonably available." RTC at 286. While EPA may believe these are "marginal cost[s]," that is not the question it must ask. The question it must ask is if they are feasible or more appropriate and if the higher costs are worth the unexplained and highly questionable additional benefit of using that standard over others that are less costly. Moreover, this bald assertion is counter to the statements from *industry* that the costs may be prohibitive, and biogas producers and CNG/LNG distributors are not "looking to invest millions of dollars" in RNG projects. This also ignores concerns that, in actuality, these machines are not available and are not practical to use at many projects. They typically require dedicated space,

which may be hard to find at existing plants or hard to add for plants already under construction. RNG Coalition also expressed concerns that it will take months (now we hear years) to obtain GCs that meet the standards in the final rule. This is not "reasonably available."

In addition, EPA provides no explanation of why existing flow meters, which it has approved under the current regulations, are insufficient to meet its needs to provide "consistent" measurements. While EPA seeks to place the burden on the public to prove the accuracy of these other methods, it provides no criteria by which to do so. This is despite the fact that it has almost ten years of data regarding D3 RIN generation for RNG. In any event, public comments did indicate that other forms of measurement are equally as accurate as GCs, particularly with respect to measuring biogas. *See* EPA-HQ-OAR-2021-0427-0480 at 2.

Moreover, operability and reliability benefits support the use of other instruments that can also measure percent CH₄ rather than use of gas chromatographs to measure percent CH₄. This is primarily because non-maintenance intensive devices are easier to operate. For example, if routine preventative maintenance can be performed on instruments while gas remains flowing for a brief duration, this improves the overall goal of reducing carbon emissions by fostering higher uptime. This operability benefit, in turn, provides greater reliability because preventive maintenance is easily accomplished, which also further reduces CO₂ emissions. Additionally, the skills required for preventative maintenance on certain gas analyzers that accurately measure CH₄ are more widespread among operators than the more specialized skills required, for example, to maintain the same high reliability in gas chromatographs.

• The ongoing use of the standard by other agencies for the same or a similar requirement, the use of which in a particular instance would increase consistency across the Federal government: EPA cites to no federal agency that uses this same standard. Indeed, EPA's own regulations do not require in-line GCs for the measurement of methane, much less only in-line GCs that meet ASTM D7164. For example, the RNG Coalition pointed EPA to 40 C.F.R. § 98.344(c), the greenhouse gas reporting regulations, that outlines different methods of measuring methane from landfill gas. ASTM D7164 is not listed, and we found no other reference to it in the Code of Federal Regulations. When it first promulgated Section 98.344(c), unlike here, EPA conducted an uncertainty analysis and considered the costs of continuous monitoring systems to determine whether the monitoring requirements were appropriate. 74 Fed. Reg. 56,260, 56,337 (Oct. 30, 2009) (finding "monitoring requirements in the final rule provide for accurate emission estimates at a reasonable cost burden to reporters").

Instead, here, EPA placed the burden on the industry, which, again, turns the notice and comment requirements on its head. EPA states that the in-line GC specification applies to high methane content gaseous fuels, which biogas is one. RTC at 277. EPA further stated, however: "Given that the standard still appears to

apply to biogas and the commenters presented no information why this would not be the case, we are finalizing as proposed the requirement for inline-GC meters using ASTM-D7164-21." *Id.* at 278. But the industry explained the burdensomeness of this requirement, particularly with respect to biogas. For example, we understand that the impurities in biogas can reduce the life of GCs, likely requiring additional costs to maintain or replace more than may occur with geologic natural gas.

- <u>The ongoing use of the standard by State and local governments for the same or a similar requirement, the use of which in a particular instance would increase consistency across jurisdictions</u>: It was suggested that EPA allow for measurements consistent with any state regulations. EPA rejected this recommendation without much explanation, simply stating that "[d]ifferent regulatory programs have different objectives and what is sufficient for one program may not be appropriate for a different program." RTC at 284. But, EPA does not explain why these other means of simply measuring the volume of biomethane would not be appropriate to determine volumes for RIN generation.
- <u>The prevalence of the use of the standard in the national and international</u> <u>marketplaces</u>: Other forms of measuring biogas and RNG are typically used and widely accepted. We have found limited references to D7164, and, contrary to EPA's assertions, alternative standards were provided when it was identified as an available standard (not as a preferred or only standard). *See, e.g.*, GTI, Guidance Document for the Introduction of Landfill-Derived Renewable Gas into Natural Gas Pipelines at 12 (2012) (listing Standard GC analysis techniques for measuring heating value including ASTM D1945 (Standard Test Method for Analysis of Natural Gas by Gas Chromatography), ASTM D1946 (Standard Practice for Analysis of Reformed Gas by Gas Chromatography) ASTM D7164, (Standard Practice for On-line/At-line Heating Value Determination of Gaseous Fuels by Gas Chromatography), or GPA 2261 (Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography).

EPA states that "[f]rom the comments received, it appears that parties knew of the types of devices specified in the standards, since multiple parties commented on the applicability of online GC meters and orifice meters for biogas and RNG applications. Because it is clear that industry participants are familiar with the devices and we believe those devices and the associated standards are the best way of measuring and monitoring biogas flows and volumes, we are finalizing use of the standards as proposed." RTC at 286. But, mere familiarity with something does not evidence widespread *use*. We understand that this type of inline GC may be used for utilities, but it has not typically been used for biogas or RNG. It is far from clear that the mere existence of a standard binds EPA's hands with respect to regulatory requirements. Moreover, we found no comments searching for "D7164." We also searched for "ASTM," "chromatographs," and "GCs" and the only comments we found discussing the proposed standards under the biogas regulatory reforms echoed the RNG industry's view that the proposed requirements were not warranted, called into question the availability of the

standards EPA is prescribing, and explained how other equipment is more reliable for biogas and RNG operations. *See* EPA-HQ-OAR-2021-0427-0480 at 2; EPA-HQ-OAR-2021-0427-0735 at 9; EPA-HQ-OAR-2021-0427-0752 at 1-2; EPA-HQ-OAR-2021-0427-0778 at 13-14; EPA-HQ-OAR-2021-0427-0778 at 13-14; EPA-HQ-OAR-2021-0427-0827 at 10.

• <u>The ability of small- and medium-sized enterprises to comply with the standard</u>: Comments raised concerns that the requirement for in-line GCs could be costprohibitive. OMB guidance indicates that a standard may be "impractical" if it imposes substantially "more burdens, or be less useful, than the use of another standard." OMB Circular A-119 at 20.

Indeed, the purpose of the NTTAA is to have the government benefit from the expertise of industry, and not use government-unique standards. OMB Circular A-119 at 1. But, here, EPA has ignored the expertise and experience of the industry.

While we agree with EPA that metering can be used to protect against the occurrence of fraud and consistent measurement is ideal, EPA provides no evidence that only by requiring inline GCs and only those that meet a particular specification can these goals be met. It is important to note that the final rule requires both in-line GCs *and flow meters*. And OMB guidance encourages flexibility in regulations, not sole reliance on one or a limited number of standards:

> It may be appropriate for the agency to allow the use of multiple standards in order, for example, to permit greater flexibility for producers and service providers in meeting program, procurement, or regulatory requirements, enhance competition in the marketplace, provide greater choice to consumers, and enable new innovative solutions to be developed. Allowing the use of more than one standard may also allow producers and service providers to meet both U.S. requirements and requirements in different markets simultaneously, thereby reducing burdens for manufacturers and service providers while effectively addressing agency objectives.

OMB Circular at 25-26.

EPA acknowledges that in-line GCs may not be necessary by "finalizing an allowance for alternative measurement protocols." RTC at 278. EPA asserts, however, that this "should address some of the commenters' concerns." *Id.* While EPA can revise regulations in response to public comments, the public did not have an opportunity to comment on the new provision. If it had, it would have objected to it. The new provision finalized by EPA reads that "EPA may accept an alternative measurement protocol if all the following conditions are met: (i) The party demonstrates that they are unable to continuously measure using meters that comply with the requirements in paragraphs (a)(1) and (2) of this section, as applicable. (ii) The party demonstrates that the alternative measurement protocol is at least as accurate and precise as the methods specified in paragraphs (a)(1) and (2) of this section, as applicable." 88 Fed. Reg. at

44,574. The proposal provided no information on the accuracy or precision of the methods specified, and the final rule provides no further guidance to the public as to what EPA might require to accept alternative measurement protocol. On the face of the added provision, it would appear that it would be difficult to meet those criteria.

Moreover, this provision undermines EPA's claim that the biogas regulatory reforms will streamline the program. Without more specific criteria or explanation as to what demonstration is needed, we anticipate this will result in significant delays in registration. This concern is exacerbated by the final rule that prohibits generation of RINs for RNG stored off-site pending registration.

C. EPA must also reconsider the types of flow meters that are allowed under the regulations.

EPA also proposed to require measuring biogas and RNG by flow meters in addition to in-line GCs. As with the requirement for in-line GCs, EPA's proposal included limited types of flow meters that would be allowed based on American Petroleum Institute (API) specifications. 87 Fed. Reg. at 80,733. One type of meter is not universally used by pipelines. In the final rule, EPA rejected comments from the public to allow greater flexibility or to allow compliance with any methodology required in pipeline specifications or other state or federal law, but EPA did add another specification from Europe. 88 Fed. Reg. at 44,574. EPA again argued that it was required to limit the types of flow meters used based on the NTTAA. For the same reasons discussed with respect to in-line GCs above, the limitations in the types of flow meters that can be used in the final rule is arbitrary and must be reconsidered.

When selecting the ideal measuring technology for biogas flow measurement, there are a number of available technologies to consider. Ultimately, there is no best technology for gas flow measurement for any given application. An engineer making the selection has to balance process parameters, performance, regulations, diagnostics, cost and availability when making the proper decision for selecting a flowmeter. In different applications and industries, some of these conditions may weigh more in the decision-making process than others. EPA failed to take any of these operational issues into account, asserting only that it must use meters that have a specific voluntary consensus specification.

Further evidence that EPA did not follow the NTTAA guidance is that we found no other instance where the use of such standards was so limiting. Based on a review of the National Institute of Standards and Technology's Standards Incorporated by Reference (SIBR) Database, we did find one other regulation that incorporated more broadly the API Manual of Petroleum Measurement Standards recommendations for gas measurement, but, even there, alternatives were provided—API Pipeline Recommended Practices and American Gas Association. *See* 30 CFR § 250.1203 (requirements for all outer continental shelf royalty and allocation meters). EPA's failure to specify the criteria it used to identify the very few specifications included in the final rule continues to leave the public in the dark. The lack of record evidence to support EPA's statements in the final rule should be grounds for reconsideration.

While EPA provides no explanation or assessment of the "accuracy" it is claiming to seek, California Air Resources Board's ("CARB") Low Carbon Fuel Standard ("LCFS")

regulations provide flexibility, while also including requirements to maintain measurement accuracy. Tit. 17 CCR § 95488.8(j) and (k). CARB requires following manufacturer recommendations for calibration, with allowances for outages, and accounts for missing data, so long as it can be verified that data are accurate within 5%. *Id.*; *see also* Tit. 17 CCR § 95103(k). EPA's GHG reporting rule similarly provides general calibration and accuracy requirements. *See* 40 C.F.R. § 98.3(i). As discussed above, flow meters are accurate, and limiting the rule to only those flow meters that meet certain specifications simply is not needed to ensure reliable and accurate results across different methods.

EPA also claims to have found an additional specification for flow meters that was not in the initial proposal (EN 17526). 88 Fed. Reg. at 44,574. EPA simply states: "Upon searching for standards, we did find one standard for thermal mass flow measurement devices which appears to be sufficient, and we have added the standard specifying thermal mass flow devices as an allowed measurement method under 40 CFR 80.155(a)." RTC at 278. Again, EPA fails to provide any criteria for determining a standard that is "sufficient." In fact, this standard, upon review by the industry, is a European standard based on different requirements that may not be easily applicable to operations and industry requirements in the United States. Yet, EPA also contends that long-standing measurements in state law, federal law, and pipeline specifications are now somehow insufficient, such that, rather than rely on these tried and true methods, new equipment may need to be installed at all biogas, RNG and CNG/LNG facilities.

D. EPA should revise the regulation to allow flexibility in the types of meters that can be used, which may include general criteria to provide more consistent and streamlined processing of registrations.

While we believe EPA should allow for companies to continue to use existing metering protocols, particularly if dictated by other requirements, EPA blames the public for not providing alternatives that it finds sufficient. RTC at 278, 280. The problem is that EPA provided no analysis of the required measurement methods that the public could compare other methods against. A review of ASTM D7164 does not readily identify any specific criteria to judge other means of measurement against. Rather it simply appears to provide guidance on the types of performance tests to be conducted. Similar to CARB's regulation, we believe EPA need only require one form of volume measurement and should simply provide general parameters that must be met, such as following manufacturer's recommended calibration procedures, provision for missing/gaps in data, having sufficient reliability and accuracy (e.g., within $\pm 5\%$). As noted above, current flow meters used today more than adequately meet this level of accuracy.

We further note that, in fact, the public did provide several alternatives to the testing and measurement requirements in the proposal. *See, e.g.,* EPA-HQ-OAR-2021-0427-0792 at 23-24 (referring to measurement requirements in pipeline specifications or state/federal law requirements); EPA-HQ-OAR-2021-0427-0480 (recommending (1) EPA add to the preapproved Testing and Measurement Requirements non-dispersive infrared (NDIR) analyzers for methane measurement and thermal mass flow instruments for measuring landfill gas and biogas volumetric quantities, and the use be in accordance with manufacturer specifications for the specific application, or (2) focus on a relevant accuracy standard for the metering and measurement of biogas production and accept any equipment or specifications that achieved the standard). As noted above, RNG Coalition referenced the measurement methods in EPA's

greenhouse gas reporting rule as a follow up to a discussion with EPA where EPA staff generally asked if the industry was aware of specific standards for methane meters. (Ex. 2). EPA either ignored or simply rejected these alternatives as not "sufficient." This was arbitrary.

E. EPA must reconsider the final rule to the extent it revises the reporting of heating values for RNG, which negatively impacts the conversion of BTUs to ethanol-equivalent gallons (i.e., RINs).

As noted above, the final rule included, throughout, specific references to reporting heating value of biogas and/or RNG as lower heating value ("LHV") or higher heating value ("HHV"). However, in the proposed rule, the term "lower heating value" was only used in reference to equivalence values (87 Fed. Reg. at 80,741). The term "higher heating value" was only used in the proposed rule with respect to calculating RINs for mixed feedstocks (87 Fed. Reg. at 80,743) and with respect to calculating RINs for renewable electricity (87 Fed. Reg. at 80,722). While the proposal did indicate that values needed to be reported in BTUs, it did not specify LHV or HHV, and the industry read these reporting requirements to continue to operate as under the current regulations, which similarly did not reference LHV or HHV. RNG RIN generation protocols, submitted to and approved by EPA, have long been using a 0.903 factor for typical natural gas to convert from LHV to HHV.³² This is because the product being withdrawn from the pipeline is required to meet "natural gas" pipeline specifications. Based on EPA's equivalence value of 77,000 BTU (LHV), using this conversion factor results in 1 MMBTU of RNG equating to 11.727 RINs. To our knowledge, this has been consistent throughout the operation of the program and across the industry. This is also the LHV/HHV conversion factor that has been used by CARB in the LCFS. See CARB, LCFS Guidance - Low Carbon Fuel Standard (LCFS) Guidance 19-05: Reporting and Recordkeeping for Natural Gas and Bookand-Claim Accounting for Biomethane, at 10 (2019), available at https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/guidance/lcfsguidance 19-05.pdf (citing CA-GREET 3.0).

However, in the final rule, EPA changed the reporting requirements with no explanation, referencing for different requirements either reporting in LHV or HHV or both. More significant, it added a new provision in the final regulatory language requiring: "A party converting between Btu HHV and Btu LHV for biogas, treated biogas, natural gas, or CNG/LNG must use the ratio of HHV and LHV of methane as specified in ASTM D3588 (incorporated by reference, see § 80.12)." 88 Fed. Reg. at 44,575. Because EPA provided no notice of these changes and gave no indication that it sought to change current industry-wide practice, they were not a logical outgrowth from the proposal and the public could not comment on these changes.

EPA's revisions in the final rule fundamentally change how RINs have been calculated, which is a change in policy that was required to be explained by EPA. As noted, currently, the RNG industry uses the LHV/HHV conversion factor for typical natural gas, which is 0.903. It is our understanding that the LHV/HHV conversion factor for methane based on using ASTM D3588, however, is 0.9004. As a result, the calculation of RINs is 11.69 RINs per MMBTU

³² <u>https://www.rngcoalition.com/calculators-conversions</u>. The conversion factor of 0.903 also seems to be used by DOE in its hydrogen tool available at <u>https://h2tools.org/hyarc/calculator-tools/lower-and-higher-heating-values-fuels</u>.

HHV instead of 11.727 RINs that the industry has been using. While this may appear to be a marginal difference, in the aggregate, it will have a substantial impact on RIN generation. Moreover, EPA has imposed specifications that may be more appropriate for fossil natural gas but appears to be using a specification for pure methane. This is particularly troubling if the RINs generated must be matched up with the natural gas volumes withdrawn for purposes of RIN separation, which would support continuing use of existing conversions methods. EPA must provide the basis for this inconsistent treatment and support for the new conversion methodology. Because EPA provided no notice of this change, it failed to support its change in policy, and the objections directly address the reasonableness (or necessity) of these changes, it must undertake reconsideration.

F. EPA must reconsider and remove provisions related to confirming pipeline specifications.

In a stakeholder meeting with RNG Coalition, EPA indicated it was not seeking to approve RNG fuel quality. (Ex. 2) Yet, the final rule retains several provisions, including testing and sampling requirements, that we believe are unnecessary and beyond EPA's authority. Indeed, EPA claims, in the final rule, that it is seeking to address "its need to ensure product quality." 88 Fed. Reg. at 44,535. But EPA does not have authority to ensure fuel quality of RNG. Rather, whether the RNG meets pipeline specifications (i.e., is of pipeline quality) is regulated by the pipeline operators to ensure proper operation of the pipeline system under approval by state authorities for intrastate pipelines or the Federal Energy Regulatory Commission for interstate pipelines.

We acknowledge that, in response to public comments, the final rule is an improvement over the proposal regarding the issue of compliance with pipeline specifications to be considered RNG. In particular, EPA revised the definition of "renewable natural gas" in the final rule to remove concerning language in the proposal that RNG meet "the specifications for the natural gas commercial pipeline system *submitted and accepted by EPA* under § 80.145(f)(6)." 87 Fed. Reg. at 80,717 (emphasis added). Instead, the final definition of RNG merely requires that the product "does not require removal of additional components to be suitable for injection into the natural gas commercial pipeline system."³³ 88 Fed. Reg. at 44,561. EPA, however, continues to include regulatory provisions that appear to require the RNG producer to establish the RNG actually meets pipeline specifications. Even if EPA contends it has broad authority under Section 211(o)(2)(A) to impose such requirements, that provision only requires EPA to ensure the fuel is "introduced" into the transportation fuel market. There is no indication that Congress sought to give EPA authority to regulate fuel quality. Indeed, this would be highly unusual as fuel quality is typically regulated by the states. As such, Congress would not hide "elephants in mouseholes." *Whitman v. American Trucking Assns., Inc.*, 531 U. S. 457, 468 (2001).

³³ We note that the final definition of "Renewable natural gas" changed from the proposal, which required that the RNG "*will be* used to produce renewable fuel," to requiring that the RNG "*is used* to produce renewable fuel." "Is used" implies that the upgraded biogas is not RNG until it is actually used to produce renewable fuel. But this occurs after the natural gas is withdrawn from the pipeline and, as such, may be is inconsistent with generating RINs upon injection into the pipeline. We suggest EPA clarify the meaning behind this change or undergo a technical correction.

Nor can we identify any "need to ensure product quality" for purposes of the RFS program. EPA nonetheless contends that "Pipeline specifications for RNG are necessary to ensure that the RNG producer will (a) inject into the natural gas commercial pipeline system and (b) do so in a manner that the RNG can be used to produce and be used as transportation fuel consistent with CAA and EPA regulatory requirements." RTC at 242-243, 258; *see also id.* at 259 ("Unlike the certificates of analysis, the pipeline specifications are necessary to determine compliance with the definition of RNG if any violations occur during the first few years of operation. For these reasons we are continuing to require pipeline specifications at registration for RNG producers, and this information may be used by EPA and QAP providers to determine compliance."). But, under the biogas regulatory reforms, RNG RINs are to be generated and assigned *upon injection* into the pipeline. 40 C.F.R. § 80.125(b)(1), (c)(1). If the RNG does not meet the specifications (or is otherwise allowed to be injected), the pipeline system would not allow it to be injected. *See, e.g.*, Northern Natural Gas, *Northern Natural Gas Operating Guidelines Biomethane Receipts*, Dec. 28, 2021, *available at*

https://www.northernnaturalgas.com/Document%20Postings/Biomethane_Gas_Guidelines.pdf ("If at any time Northern's chromatograph recordings or the laboratory test results indicate the Receipt Gas quality does not meet Northern's Tariff specifications or the constituents' tolerance levels as indicated in the table below, the Receipt Gas will be shut-in and the operator will be required to repeat the Monitoring Period One and Monitoring Period Two testing protocols.").

Yet, EPA imposes specific testing methods and acknowledges that it is requiring "testing" of components which may not be specified by the pipeline operator," again referencing its 2016 guidance. RTC at 287. But there is no one specification for RNG, and it can be used so long as it is of "pipeline quality." That is, the impurities are removed to make it interchangeable with fossil natural gas. EPA still somehow claims, even though it provides no support for why its parameters and test methods are appropriate to show the RNG can be used as transportation fuel or as a feedstock for transportation fuel,³⁴ it is the purpose of EPA's testing "to show that the RNG complies with the pipeline specification for RIN generation and to ensure cleaning of biogas is occurring, whereas the purpose of testing by the pipeline operator may be different." Id. This statement is nonsensical. The higher methane content of the RNG shows that the biogas has been upgraded. The pipeline operator is ensuring that the gas injected into its system is of sufficient quality, and the RNG injected, regardless of EPA's testing requirements, must meet the pipeline's specifications to be distributed. While that may have the intended effect of ensuring proper operation of the pipeline system (e.g., that it won't be negatively impacted by impurities), it also ensures the quality of the delivered product, where customers expect "natural gas" These different purposes are not inconsistent and certainly not reason to impose additional testing requirements on biogas and RNG producers to meet some unspecified standard.

Imposing additional requirements on RNG producers to confirm pipeline specifications adds absolutely nothing to show that "the RNG can be used to produce and be used as transportation fuel consistent with CAA and EPA regulatory requirements." RTC at 242-243, 258. While we do not object to EPA requiring information on pipeline connections with the

³⁴ If a renewable fuel producer requires a feedstock of different quality, then presumably it would not purchase RNG from the pipeline but directly from the producer. That, however, could be addressed in registration provisions, rather than imposing unnecessary and burdensome testing requirements on the entire RNG supply chain, particularly CNG/LNG producers.

registration, including a description of the pipeline specifications for that pipeline, we believe EPA must reconsider and remove any provision related to establishing that the RNG meets pipeline specifications, including testing requirements (see, e.g., § 80.105(f), § 80.110(f), § 80.155(b)). Indeed, EPA states that RNG that fails to meet pipeline specifications "may still qualify as RNG if the RNG meets" the requirements in 40 C.F.R. Part 80. RTC at 292. This undermines EPA's claim that it must "ensure product quality." We further note that, for no other biofuel, does EPA impose similar requirements in its regulations that the renewable fuel producer establish that any fuel quality specifications are met. In light of the third-party oversight already present, there is simply no reason to impose additional and disparate requirements on RNG under the RFS program.

1. EPA must reconsider and remove the requirement for annual testing.

EPA's final rule continues to require that sampling and testing of biogas, RNG before blending with non-renewable components, and RNG after blending with non-renewable components be done "at least once per calendar year, as applicable." 40 C.F.R. 80.110(f)(iii) (88 Fed. Reg. at 44,566). But, as noted, EPA acknowledges in the response to comments that failure to meet pipeline specifications does not disqualify RNG. RTC at 292. As explained above, if the RNG does not meet pipeline specifications, the pipeline will not allow it to be injected. There is simply no rationale that supports requiring regular testing of biogas or RNG to ensure the RNG meets pipeline specifications under the RFS program. EPA appears to acknowledge this in its response to comments, which states "We have removed the requirement that annual sampling and testing is required."³⁵ RTC at 286. This indicates that the language in Section 80.110(f)(iii) is in error, and EPA must amend the regulations to remove that language.

Even if EPA removes the requirement for annual testing, EPA would still require sampling and testing every three years. RTC at 286. EPA claims to be doing so, "balancing the need to show that the RNG complies with the pipeline specifications." *Id.* But, as noted, there is no reason, *under the RFS*, to show that RNG complies with pipeline specifications. Moreover, given that each pipeline has its own specifications, EPA cannot justify the specific testing requirements outlined in Section 80.155(b)(2). There is no standard pipeline specification and not all pipelines (if any) require testing of all these constituents, such as siloxanes, or require the listed analysis, such as a Carbon-14 analysis. Indeed, siloxanes do not present an issue for many biogas facilities, such as agricultural digesters and, as discussed above, Carbon-14 analysis is not conducted for purposes of establishing compliance with pipeline specifications. EPA's regulation further gives EPA authority to require testing for any additional components "as a condition of registration." 40 C.F.R. § 80.155(b)(2)(vii) (88 Fed. Reg. at 44,574). Such authority is nowhere to be found in the statute.

2. EPA must reconsider the attest engagement requirements related to pipeline specifications.

In its comments, RNG Coalition also objected to requiring the attest engagement to confirm that the pipeline specifications are being met. Again, EPA appears to agree, stating that

³⁵ At the September 7, 2023 Webinar, EPA again noted that gas analysis samples were only required every three years.

review of fuel quality or pipeline specifications as part of attest engagements was not proposed or finalized. RTC at 259. But 40 C.F.R. § 80.165(c)(4)(iii) in the final rule requires, in the attest engagement, reporting of findings of off-spec RNG. 88 Fed. Reg. at 44,574.

EPA acknowledges this later in the response to comments (at 298), contending that attest auditors must review all applicable registration information as part of the annual attest engagement procedures, which would include that the "RNG producer has submitted pipeline specifications as part of registration and that certificates of analysis submitted as part of 3-year registration updates met the applicable regulatory requirements." While we strongly disagree with EPA that such review "by the attest auditor is important because it verifies that the RNG producer can produce RNG that may be injected into the natural gas commercial pipeline system for use as transportation fuel consistent with CAA and EPA regulatory requirements," the final regulation clearly states that the attest engagement must "Report as a finding any batches with reported values that did not meet the natural gas specifications submitted under § 80.135(d)(5)." This would require a review of fuel quality or pipeline specifications, which are simply unnecessary under the RFS program. While EPA references only the need to check registration materials in its response to comments, EPA finalized recordkeeping requirements related to test results and findings of off-specification fuel. See 40 C.F.R. § 80.145(c)(5) (requiring results of any laboratory analysis of chemical composition or physical properties), (6) (requiring documents supporting the composition of biogas and RNG and cleanup of biogas for each batch), (11) (requiring documentation of any waiver provided by the natural gas commercial pipeline system for any parameter of the RNG that does not meet the natural gas specifications submitted under § 80.135(d)(5)). EPA must undergo reconsideration to remove these provisions from the final rule.

III. Additional Provisions of the Final Biogas Regulatory Reform Should Be Reconsidered.

A. EPA should reconsider the requirements when more than one RNG producer injects at the same interconnection.

In the proposal, EPA included provisions related to the requirement that, when RNG is injected from multiple RNG production facilities at a pipeline interconnect, the total number of RINs generated must not be greater than the total number of RINs eligible to be generated for the total volume of RNG injected by all RNG production facilities at that pipeline interconnect. 87 Fed. Reg. at 80,726 (proposed § 80.140(b)(7)), 80,729 (proposed § 80.145(f)(8)), 80,732 (proposed § 80.155(e)(9)), 80,737 (proposed § 80.180(a)(1)(i)).³⁶ While we did not believe this was a common occurrence at the time of the comments, we also understand that these would involve separate meters at the interconnection site. The RNG industry also noted that EPA did not provide any real world examples of this as a potential issue or explain the concern it was trying to address. It also raised concerns whether the information needed to comply with these requirements could be collected from non-related entities.

³⁶ These provisions were finalized at 40 C.F.R. § 80.125(b)(7), 40 C.F.R. § 80.135(d)(8), and 40 C.F.R. § 80.145(c)(9), respectively.

Although EPA did not respond to all of the industry's concerns, EPA did finally provide an explanation in the response to comments.

We proposed shared injection point provisions in 40 CFR 80.140(b)(7), 80.145(f)(8) and 80.155(e)(9) because in our experience shared injection points exist in the covered location and have the potential for incorrectly attributing RINs due to the added complication of having to allocate metered gas at an injection point across multiple RNG production facilities. Based on our experience, we are also concerned that parties are inconsistently attributing RIN generation because the previous biogas provisions did not specifically address this situation. Even if the situation of multiple facilities injecting RNG at the same interconnect is not common, based on our experience it is necessary to regulate them effectively to avoid double counting and ensure proper RIN allocation.

RTC at 328. EPA provided no information or data to describe its "experience" and does not explain why such data could not be provided to the industry. EPA does not dispute that these different facilities would have separate meters and, as such, it remains unclear what "added complication" there would be to identify the volume of RNG being injected from each facility. We also understand that, when this does occur, there is a protocol already in place in the event the pipeline may report different volumes than the different meters combined. Since EPA provided no explanation for these provisions, EPA also provided no guidance as to whether existing protocols, consistent with the pipeline operator's requirements, would be sufficient.

Elsewhere in the response to comments, EPA provides the following example of why allocation of RINs *may* be necessary. RTC at 263.

Five facilities share an interconnect and each produce ten million BTUs of biogas of biogas to be sent to the pipeline. During one month, the pipeline *cannot accept some of the biogas* due to a disruption of service or because the biogas did not meet pipeline specification and ten million BTUs *are flared after each facility has measured their biogas individually*. Each facility needs to know how many RINs they should generate. If each facility generates RINs from ten million BTUs, more RINs would be generated than the amount the RINs corresponding to the amount of RNG placed on the commercial pipeline. This would create invalid RINs. Without coordinated equations that clearly explain how many RINs should be generated, it would be difficult for multiple QAP providers to identify the issue, since QAP providers do not see information for facilities for which they do not provide QAP services.

Id. (emphasis added). As an initial matter, EPA keeps referencing injection of biogas and its experience "overseeing biogas programs where multiple facilities share an interconnect." *Id.*

EPA, however, has clearly defined and distinguished biogas from RNG. So, conflating these terms raises concerns that EPA's experience is *unrelated to RNG*, upon which the requirements are being imposed. Based on our understanding, the *RNG* is measured separately from each RNG facility. If the *RNG* cannot be accepted into the pipeline because it does not meet the pipeline specifications, it is simply not injected. To our understanding, there would be no need to allocate any volumes or RIN generation. We are concerned that a misunderstanding of this fundamental distinction between biogas production and RNG distribution may be driving many of the provisions of the biogas regulatory reforms. This is why we urged EPA to engage in ongoing discussions with the industry to ensure it is addressing EPA's concerns without imposing undue burdens.

Nonetheless, EPA has noted that a QAP provider may not see information for other facilities (which could be addressed through the QAP provisions), but we understand that the QAP provider does, in fact, check for these issues already. In any event, the QAP provider reconciles any differences between the pipeline data and the RNG producer's data and, to our knowledge, has been able to obtain the information needed to do so. EPA, however, ignores the question as to whether and how RNG producers would know if it is a shared interconnection and who those other parties are to develop joint protocols for RIN generation. There are also likely already protocols set up for determining allocation of the gas received, which is controlled by the pipeline operator. This is the protocol that should be determinative, not what appears to be a new, undefined "description of how the RNG producers will allocate RINs." Further, EPA also provides no explanation, if that is the only means of getting into the pipeline, what happens if the parties cannot agree. Because EPA has provided insufficient explanation and we believe there are already protocols in place to prevent double counting of RINs in such an event, again, we believe these provisions should be reexamined. Allowing parties to simply report on the procedures in place would also better serve the purpose of streamlining the registration process.

B. EPA should reconsider provisions related to biogas or RNG used for process heat or energy.

In its comments, RNG Coalition asked EPA to clarify when RINs were required to be generated for RNG. EPA claimed it did so by clarifying the definitions that the biogas are RNG are produced under an approved pathway. RTC at 229. However, it is still unclear how these regulatory provisions apply to biogas or RNG used for process heat or energy, and EPA should not create disincentives for use of biogas or RNG for process heat or energy.³⁷

In response to comments raising concerns with inconsistent provisions in the regulations, EPA merely explained that it was finalizing requirements that RINs must be retired for RNG

³⁷ Similar questions arise with respect to EPA's statements in the preamble that "since a RIN is generated for RNG at the point of injection into a natural gas commercial pipeline system, any party that exports the RNG outside of the covered location incurs an exporter RVO under 40 CFR 80.1430 and is required to satisfy that RVO by retiring the appropriate number and type(s) of RINs." 88 Fed. Reg. at 44,539. If the RNG is designated for export, RINs should not be generated. Also, RNG, itself, is not an approved "renewable fuel." While we do not dispute that these RINs likely should be retired, EPA also did not propose or finalize any changes to 40 C.F.R. § 80.1430, which refers only to "renewable fuel." But, under EPA's definition of RNG, it is "used to produce renewable fuel." 88 Fed. Reg. at 44,561. The "renewable fuel" would be the CNG/LNG or other fuel for which RNG is the feedstock. EPA, again, should clarify when RNG RINs may be generated if the RNG will be exported and that, if subsequently exported, such RINs should be retired, rather than treated as an export RVO.

used for process heat. RTC at 324. In its response, we believe EPA missed the point of the comments. We do not dispute that RINs generated for RNG that is used for non-transportation fuel uses³⁸ should be retired. The question we have, however, is how would that RNG have generated a RIN in the first instance if, as EPA states, it is only requiring RNG RINs for transportation fuel under the RFS program. While there may be instances when RNG injected into the pipeline is stored and subsequently sold for process heat use, we believe, like any other biofuel, those RINs would need to be retired. This would be true, however, for any non-designated use (e.g., electricity for residential use) and, so it is unclear why EPA references process heat and energy specifically.

Moreover, EPA states in the final rule that: "Similar to the reporting procedure for biogas producers, RNG producers *will generate RNG RINs in EMTS* and transact them to parties that use the RNG as a feedstock, *for process heat*, or to produce renewable CNG/LNG." 88 Fed. Reg. at 44,533. But, where the RNG is used for process heat, no RINs should be generated. Section 80.150(b)(3)(iv) includes requirements for product transfer documents for transfers of biogas designated for use as process heat or energy under § 80.1426(f)(12) or (13). 88 Fed. Reg. at 44,574. Upon receipt of that biogas, then, the RNG producer should not generate RINs. And, no such RNG could be transferred under the RFS, as it would require a product transfer document that says: "This volume of RNG is designated and intended for transportation use in the 48 U.S. contiguous states and Hawaii or as a feedstock to produce a renewable fuel and may not be used for any other purpose." 40 C.F.R. § 80.1453(a)(12)(viii) (88 Fed. Reg. at 44,589). It may be that EPA is seeking to impose additional requirements for those renewable fuel producers that use biogas or RNG for process heat or energy under approved pathways. But, it is not clear from the final rule, and it is also not clear if, with all the other requirements, additional requirements for process heat use are needed.

Clarification is needed because EPA imposes liability on parties that may use the biogas or RNG for process heat or energy, even though, EPA would appear to be requiring that RINs to be generated. Section 80.175(b)(2)(vi) provides that, when biogas is found in violation of the regulations, this liability extends to "[a]ny person that used the biogas or RNG produced from the biogas as process heat or energy under § 80.1426(f)(12) or (13)." 88 Fed. Reg. at 44,579. Section 80.175(b)(3)(iv) provides that, when RNG is found in violation of the regulations, this liability extends to "[a]ny person that used the RNG as process heat or energy under § 80.1426(f)(12) or (13)." Id. Moreover, RNG producers shouldn't face liability for generation of invalid RINs because of inconsistent or confusing regulations. If EPA is only trying to address the circumstance where it is subsequently used for process heat or energy after RIN generation, we believe such use would merely require retirement of those RINs, and these other provisions are unnecessary and create confusion. To make these provisions clear, revisions to the regulations may be needed, which is why we believe reconsideration is necessary. At a minimum, guidance must be provided as to how the provisions work regarding RNG used for process heat or energy and what potential liability risk companies may face under the biogas regulatory reforms, which could disincentivize its use in these applications.

³⁸ Although jet fuel and heating oil are also allowed uses under the RFS, we are not aware of RNG being approved for such uses.

C. EPA must reconsider its inclusion of "leakage" as a reason for retiring RNG RINs.

As RNG Coalition noted in its comments, EPA added the term "leakage" as grounds to require RIN retirement under 40 C.F.R. § 80.1434 in the proposal without explanation. 87 Fed. Reg. at 80,747. The change was not even listed in its table listing the "numerous technical amendments to the RFS and fuel quality regulations ... being made to correct minor inaccuracies and clarify the current regulations." *Id.* at 80,708. Despite EPA's failure to meet the notice requirements of the Clean Air Act, EPA finalized this change over the public's objections.

In its response to comments, EPA stated:

We disagree with the implication that retiring RINs for leakage of renewable fuel was not previously required. Treatment of RINs that do not represent renewable fuel is explained in the existing RFS regulations under "Treatment of invalid RINs" (80.1431), "Reported spillage or disposal of renewable fuel" (80.1432) and "RIN retirement" (80.1434). Retiring RINs for volumes of renewable fuel not used as transportation fuel is not a new requirement and has been in place since the start of the RFS program. For example, other renewable fuel producers such as ethanol or biodiesel producers have been retiring RINs for reported spills since 2010 as shown on EPA's public RFS data page. Additionally, downstream entities such as an RNG RIN separator can only separate RINs from the volume of renewable CNG/LNG used as transportation fuel (see 40 CFR 80.140(d)). We only added the term "leakage" under 40 CFR 80.1434 to clarify the terminology as it pertains to RNG for use when retiring RINs in the EMTS system.

RTC at 230-231. We do not dispute that RINs must be retired if the RNG is not used for transportation fuel. Nor do we dispute that the RFS regulations have long required *liquid* biofuels to retire RINs in the case of any spills. What we dispute is the mere insertion of the term "leakage" without explanation.

EPA says it is only seeking to "clarify the terminology," but spills of liquid biofuels is a very different situation. Such spills are readily seen and can be quantified. "Leakage," on the other hand, can mean different things depending on the circumstances. It is unclear when or how leakage would come into play when, again, the volume of RNG is measured at injection and the natural gas is measured upon withdrawal from the pipeline. This would also appear inconsistent with the "book-and-claim" process for RNG distributed through the natural gas commercial pipeline system. Merely inserting the term in the regulations provides regulated entities with no notice whatsoever as to its obligations under the regulations. Indeed, the biogas regulatory reforms are premised on EPA's claim that biogas and RNG present unique circumstances than other biofuels. It was incumbent on EPA to provide explanation as to the meaning and potential impacts of this change. Having failed to do so and only explaining its claimed intent in the final rule, reconsideration is warranted.

D. EPA should reconsider its prohibition on off-site storage for RIN generation pending registration.

In the proposed rule, EPA contended that, since it was no longer requiring that biogas and RNG producers demonstrate that there are contracts between each party in the biogas/RNG production, distribution, and use chains in order to demonstrate transportation use, EPA believed it was "no longer necessary to allow for RINs to be generated for biogas/RNG produced and stored offsite of the biogas/RNG production facility prior to EPA acceptance of the biogas and RNG producer's registrations." 87 Fed. Reg. at 80,700. While EPA referenced that it normally does not allow RIN generation for fuel produced prior to an approved registration, EPA explained that it had provided an exception for RNG and was continuing to allow on-site storage.³⁹ *Id.* Because on-site storage of RNG is largely impractical, public comments strongly opposed the proposed prohibition on off-site storage, raising concerns with the normal, long delays in the registration process and with the time lag for QAP verification of RINs.

EPA did respond to these concerns, making changes to the proposal that would, as EPA explains, streamline the registration process. While EPA claims it is seeking to facilitate the registration process through the biogas regulatory reforms, there are still open questions as EPA approval of "alternative" means of complying is still required. In particular, due to the onerous measurement requirements and the projects that are already under construction or in the planning stages that did not account for EPA's new requirements, we believe many parties will seek alternatives to requiring in-line GCs. Because EPA has yet to provide guidance on what it believes is sufficient for its purposes, we anticipate these approvals could take some time. Moreover, EPA has limited resources, and, unless revised, the biogas regulatory reforms will result in numerous registration applications and updates that EPA must wade through. While this may alleviate over time and we appreciate EPA's efforts to streamline the process, it is unlikely to speed up registration in the near term and time will only tell if it will do so in the long term.

In the final rule (not the proposal), EPA explained that the current flexibility has hindered its ability to verify the validity of RIN generation for stored biogas/RNG. 88 Fed. Reg. at 44,540. Again, EPA refers to its "experience," saying the "production of RNG from the facility would often not match the number of RINs generated." *Id.* Only EPA has access to this information, as no supporting data or technical analysis was provided to the public. However, according to EMTS data, error corrections for all of the D3 category (which includes liquid ethanol), was around 1% from 2014 to 2016 and has been less than 1% since 2017 (as low as .004% in 2018).⁴⁰ Even looking at the percentage of RINs retired as a result of being invalid, for remedial actions or for volume corrections,⁴¹ the percentages are around the same, with the highest being 1.9% of total net D3 RINs generated in 2019. Since then, the percentage of RINs retired for these reasons compared to total net D3 RINs was 0.1% in 2020, 0.9% in 2021, 0.8% in 2022, and is currently at 0.3% for 2023. This does not appear to raise significant concerns on the integrity of the RFS

³⁹ It should be noted that EPA also allowed an exception for canola biodiesel, allowing delayed RIN generation for biodiesel produced prior to approval of a canola biodiesel pathway. 40 C.F.R. § 80.1426(g).

⁴⁰ <u>https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rins-generated-transactions</u> (data as of Aug. 10, 2023).

⁴¹ <u>https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rin-use</u> (data as of Aug. 10, 2023).

program. These low error rates may be because RIN generation is typically timed with implementation of QAP verification.

EPA then attributes these discrepancies "likely because RNG is typically stored for an undisclosed period of time." 88 Fed. Reg. at 44,540. EPA claims this requires review of documentation for every party in the entire distribution system "since the beginning of the program." *Id.* This makes little sense since, today, parties will seek registration when they are ready to start injecting and, as such, the delay is only as long as EPA takes to review the registration. In addition, EPA can impose criteria, as it does for on-site storage which remains allowed, to ensure the RNG producers retain sufficient documentation to confirm RIN generation volumes. To the extent EPA believes it will streamline the registration process, the time that the RNG will need to be stored should be less of an issue. However, we believe EPA should reconsider these provisions, at least in the interim to ensure it, in fact, is streamlining the registration process and has sufficient resources to do so.

Assuming registration is streamlined under the biogas regulatory reforms, the bigger issue may be QAP approval. The QAP requirements and onboarding approval process must mirror that of these new EPA registration requirements and approval. Under the new rules, Q-RINs should only apply to the generation of the D3 RIN and not to transfers or separation. At a minimum, EPA should make this clear in guidance and as it approves revisions to quality assurance plans.

E. EPA also should review its regulations generally to address potential confusion.

In its comments, RNG Coalition raised concerns that several of the proposed regulations were unclear, used inconsistent terminology, or were internally inconsistent. EPA's final rule did address several of these concerns, which we appreciate. However, other questions remain. We understand EPA is planning on conducting outreach to stakeholders to provide additional guidance, and we have previously sent a list of questions/issues for clarification. Guidance, however, is not binding,⁴² and we've already heard reports that other EPA staff read the regulatory requirements differently.

As such, we urge EPA, to the extent necessary, to revise the regulatory language to ensure consistency with its asserted intent. This includes, but is not limited to, EPA's intent not to require tracing of RNG through the pipeline system, even though the regulations refer to withdrawal of "RNG." EPA confirmed this in the response to comments, stating that "[t]he biogas regulatory reform does not fundamentally change the way that the biogas to renewable CNG/LNG pathway operates under the RFS program." RTC at 225. This was again confirmed at the September 7 webinar, as reflected in the slide copied below:

⁴² We remind EPA that guidance is limited to interpretations of its regulations and cannot impose new, substantive requirements. Adding substantive requirements cannot be done through guidance but requires a rulemaking.



We appreciate EPA's clarification on this issue, but just seek to ensure that the regulatory language sufficiently reflects this intent.

CONCLUSION

For all the reasons discussed above, we believe reconsideration of certain provisions of the biogas regulatory reforms is required and warranted. We urge EPA to respond to this petition as soon as possible and stay or extend the implementation deadlines as needed to ensure a workable program that does not undermine the ability of the industry to meet the 2023-2025 volumes and to continue to grow the RFS program.