Biogas Regulatory Reform Rule Criteria for Qualifying for an Alternative Measurement Protocol Guidance



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Assessment and Standards Division Office of Transportation and Air Quality U.S. Environmental Protection Agency

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I. Introduction

As part of the Biogas Regulatory Reform Rule (BRRR),¹ the Environmental Protection Agency (EPA) promulgated regulations that require parties that produce biogas, renewable natural gas (RNG), or renewable compressed natural gas (CNG) and renewable liquified natural gas (LNG) under the Renewable Fuel Standard (RFS) program to measure those products using specified methods (see 40 CFR 80.155(a)(1) and (2)).² EPA also promulgated a provision that allows EPA to accept an alternative measurement protocol in the event the party demonstrates first that it is unable to continuously measure using the specified meters at its facility (see 40 CFR 80.155(a)(3)(i)), and second that the alternative measurement protocol is at least as accurate and precise as the specified methods (see 40 CFR 80.155(a)(3)(i)).

This document provides guidance regarding the first step of the alternative measurement protocol by addressing certain situations in which a party may be able to make the demonstration under 40 CFR 80.155(a)(3)(i) that it is unable to continuously measure using the meters that the regulations specify at 40 CFR 80.155(a)(1) and (2). This document does not list all situations that could potentially qualify under 40 CFR 80.155(a)(3)(i), and EPA is not addressing whether any circumstances not discussed in this document could qualify under 40 CFR 80.155(a)(3)(i). If a party wishes EPA to inquire about other circumstances not addressed in this document, the party should submit a short description of those circumstances to EPA at FuelsProgramSupport@epa.gov.

As discussed above, at the second step of the alternative measurement protocol, the party must demonstrate that the alternative measurement protocol it wishes to use is as accurate or precise as the specified methods under 40 CFR 80.155(a)(1) or (2). EPA intends to evaluate whether alternative measurement protocols meet the criteria of 40 CFR 80.155(a)(3)(ii) when it responds to specific requests for alternative measurement protocols. This guidance describes how EPA intends to proceed with implementing alternative measurement protocol accuracy and precision criteria in Section V of this guidance.

The contents of this document do not have the force or effect of law and are not meant to bind the public or the EPA in any way. This document is intended to provide clarity to the public regarding existing requirements under the law or agency policies.

II. Existing biogas and RNG production facilities

As noted in the BRRR, EPA understands that the installation of new metering equipment may require that existing biogas and RNG production facilities redesign, re-permit, and/or reconstruct the facilities,

¹ 88 Fed. Reg. 44468 (July 12, 2023).

² The regulatory requirements at 40 CFR 80.155(a)(1) require the use of gas chromatograph (GC) meters that meet specified standards. The regulations at 40 CFR 80.155(a)(2) require the use of flow meters compliant with one of the specified standards.

which could take a significant amount of time and/or resources.³ EPA clarifies here that existing facilities that have already completed their planning, permitting, and construction may demonstrate they satisfy the first prong under 40 CFR 80.155(a)(3) by showing that they will be unable to install the specified meters by demonstrating, for example, prohibitively high installation costs and/or physical difficulty of installing the specified meters due to the nature of the preexisting structure or design. Facilities that have already registered under 40 CFR 80.1450(b) or have submitted a complete registration request under 40 CFR 80.1450(b) or 80.135, as applicable, to EPA prior to July 1, 2024, may be able to demonstrate that, for these reasons, they satisfy the criterion of 40 CFR 80.155(a)(3)(i) that they are unable to continuously measure using meters that comply with the requirements of paragraphs (a)(1) and (2).

EPA does not intend to suggest through this guidance that prohibitively high installation costs and physical difficulty of installing the specified meters are the only bases to establish the first prong under 40 CFR 80.155(a)(3) and will consider these and other bases on a case-by-case basis. Parties submitting updated registration information for facilities registered prior to July 1, 2024, or that have submitted a registration request prior to July 1, 2024, that believe their existing biogas or RNG production facilities are unable to continuously measure using meters that comply with the requirements of paragraphs 40 CFR 80.155(a)(1) and (2) should include an explanation of why this is the case in their registration.

III. Biogas and RNG production facilities under construction prior to July 1, 2024

EPA recognizes that facilities that have commenced construction, as described at 40 CFR 80.1403(a)(1), of biogas and RNG production facilities prior to July 1, 2024, may have undergone potentially several years' worth of planning, permitting, and construction. Like existing facilities, facilities that have commenced construction, as defined by the regulations, may be able to demonstrate they satisfy the first prong under 40 CFR 80.155(a)(3) by showing an inability to install specified meters by demonstrating they are unable to reconfigure and/or reconstruct their facilities to install the meters specified at 40 CFR 80.155(a)(1) and (2) due to prohibitively high installation costs and/or physical difficulty of installing the specified meters due to the nature of the preexisting structure or design. As such, these facilities may be able to make similar demonstrations, for similar reasons, to those made by existing facilities discussed in Section II.

Parties submitting a registration request for biogas or RNG production facilities that commenced construction prior to July 1, 2024, must submit the necessary information under 40 CFR 80.1450(b)(1)(vi) to establish that they have commenced construction prior to this date. Parties wishing to demonstrate that they are unable to continuously measure using meters that comply with the requirements of 40 CFR 80.155(a)(1) and (2) because they have commenced construction on their facilities should also include an explanation in their registration submission of why they are unable to do so.

IV. Specified meters for other purposes

A. New biogas production facilities

A measurement device may be built for the express purpose of measurement of biogas, as opposed to the natural gas (inclusive of RNG). Because biogas, as defined in 40 CFR 80.2, can contain moisture or other constituents that may interfere with the measurement of biogas volumes when using certain

³ See 88 Fed. Reg. at 44529-44531.

types of meters, including those specified in 40 CFR 80.155(a)(1) and (2), a party registering a new biogas production facility may demonstrate that a new biogas production facility meets the first prong under 40 CFR 80.155(a)(3)by demonstrating in its registration submission that a feature of the biogas being measured makes the facility unable to use the specified meters.

B. Renewable CNG/LNG dispensing stations

Parties required to measure volumes of renewable CNG/LNG (i.e., biogas-closed distribution system (BCDS) RIN generators and RNG RIN separators) may demonstrate an inability to use the meters specified at 40 CFR 80.155(a)(1) and (2) to continuously measure volumes of renewable CNG/LNG at dispensing stations on the same bases identified in Sections II and III of this guidance. Additionally, BCDS RIN generators and RNG RIN separators may demonstrate an inability under the first prong of 40 CFR 80.155(a)(3) by demonstrating that the existing infrastructure of their CNG/LNG dispensing stations is not physically compatible with the meters specified at 40 CFR 80.155(a)(1) and (2); that the dispensers at CNG/LNG dispensing stations would need to be rebuilt to install the specified methods; and/or that reconfiguring the station to accommodate the meters would require local, state, and federal permitting, and/or substantial time to design and build the new dispensers at the dispensing stations.

Because RNG RIN separators do not submit information for the measurement of renewable CNG/LNG to EPA as part of their registration requirements (see 40 CFR 80.135), RNG RIN separators need not indicate to EPA in their registration submissions that they are relying on this guidance for the measurement of renewable CNG/LNG.

BCDS RIN generators should indicate in their registration submissions that they intend to rely on this guidance when demonstrating that their CNG/RNG dispensing stations meet the first prong under 40 CFR 80.155(a)(3).

V. Alternative measurement protocol accuracy and precision criteria

EPA is not determining that any particular protocols satisfy the second prong under 40 CFR 80.155(a)(3) in this guidance. However, it is clarifying that, in order to mitigate duplicative submissions and limit unnecessary delays in the acceptance of new registrations and registration updates under BRRR, we intend to accept alternative measurement protocols that represent instrument manufacturers, industry standard-setting bodies and technology types (e.g., a specific type of flow metering technology), and that we are publishing decisions regarding accepted alternative measurement protocols that any party can rely on to demonstrate compliance with the second prong under 40 CFR 80.155(a)(3). For example, if EPA determines that a flow meter model made by an instrument manufacturer satisfies the second prong under 40 CFR 80.155(a)(3) with respect to a particular registration submission, a subsequent party need only specify in its alternative measurement protocol submission that its facility uses that specific model of flow meter by the instrument manufacturer that was previously approved. Similarly, if EPA accepts a measurement protocol submission that it is using a measurement method consistent with the previously accepted industry standard.

EPA intends to post on its website the alternative measurement protocols it has accepted under 40 CFR 80.155(a)(3). If a party submits a request for the use of an accepted alternative measurement protocol, the party should indicate in its registration which alternative measurement protocol it will use, and

reference EPA's acceptance letter posted on the website. The party may need to submit additional information specific to the facility under 40 CFR 80.135(c)(3) or (d)(3) to ensure that the party uses the alternative measurement protocol consistent with EPA's acceptance of that protocol.