CARBON CAPTURE COALITION

To: U.S. Environmental Protection Agency (EPA)

EPA Docket Center
Office of Air and Radiation Docket
Mail Code 28221T
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From: Carbon Capture Coalition
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Re: Docket ID No. EPA-HQ-OAR-2019-0424

EXECUTIVE SUMMARY

Members of the Carbon Capture Coalition (the Coalition) have prepared these comments on the Revisions and Confidentiality Determinations for Data Elements Under the Greenhouse Gas Reporting Rule (EPA-HQ-OAR-2019-0424). The Coalition appreciates the EPA's work to update the Greenhouse Gas Reporting Rule (GHGRP), particularly the measurement and reporting of sources and sinks of CO_2 pertaining to the carbon management industry, which is inclusive of carbon capture, removal, transport, utilization and storage.

Commercial-scale deployment of carbon management technologies is fundamental to meeting the Biden Administration's net-zero and midcentury climate goals. In its most recent WGIII Climate Change 2022: Mitigation of Climate Change report, the Intergovernmental Panel on Climate Change (IPCC) reaffirms the central role that these technologies will play in capturing carbon dioxide (CO_2) from emitting sectors, as well as directly removing legacy emissions from the atmosphere.

The federal Section 45Q tax credit, the foundational policy mechanism to enable economywide commercial deployment of carbon management technologies, is unique in relation to other clean energy tax credits. In order to be eligible to claim the credit, claimants must demonstrate secure geologic storage of captured or utilized CO_2 utilization through robust monitoring, reporting, and verification (MRV), or lifecycle analysis (LCA), of the utilized carbon oxide, CO_2, or it's precursor, carbon monoxide (CO).

The Coalition has long supported robust MRV and has maintained that public transparency, reporting and oversight provisions are vital to maintaining public and policymaker support of the 45Q tax program. Integral to the MRV process are the reporting requirements required for secure geologic storage established through the EPA's GHGRP.

With regards to EPA's proposed addition of new source categories or expansion of existing categories (EPA-HQ-OAR-2019-0424), the Coalition's comments are divided into three parts:

- Adding direct air capture to Subpart PP – Suppliers of Carbon Dioxide;
- Creation of Subpart VV – Geologic Sequestration of Carbon Dioxide with Enhanced Oil Recovery Using ISO 27916, and;
- Adding CO_2 utilization to GHGRP.

1. Adding direct air capture to Subpart PP – Suppliers of Carbon Dioxide

Direct air capture (DAC) is expected to play an important role in meeting midcentury climate goals, as well as addressing legacy emissions in the atmosphere. As DAC projects reach commercial maturity, the GHGRP will need to be updated to ensure that DAC equipment owners can properly demonstrate the permanent storage or utilization of captured CO_2 to claim the 45Q tax credit. Therefore, the Coalition supports EPA revising 40 CFR 98.6 to add direct air capture to the list of suppliers of CO_2 and adding DAC to the definition of "carbon dioxide stream". Additionally, the Coalition supports the EPA using the statutorily defined definition of DAC in the Clean Air Act (42 U.S.C 7403(g)) for the purposes of the GHGRP.

2. Creation of Subpart VV – Geologic Sequestration of Carbon Dioxide with Enhanced Oil Recovery Using ISO 27916

The Coalition strongly supported the Internal Revenue Service (IRS) designating CSA/ANSI ISO 27916:19 (ISO 27916) as an alternative quantification methodology, in addition to Subpart RR of the GHGRP, to demonstrate secure geologic storage associated with CO_2-Enhanced Oil Recovery (CO2-EOR) to claim the 45Q tax credit. For purposes of monitoring the safety and long-term security of CO_2 storage, ISO 27916 may be viewed as an equivalent reporting mechanism to the existing EPA Subpart RR rule, except for the transparency and accountability information that EPA makes publicly available from those EOR operators reporting under Subpart RR. The Coalition supports EPA publishing non-confidential data on the EPA website related to the

amounts of stored CO_2 and associated documentation for ISO 27916, as this would harmonize the information available to the public about those projects reporting under Subpart RR and ISO 27916. EPA publishing this information does not pose any additional burden to project operators, as the information is already reported to IRS via the ISO standard for purposes of electing the 45Q tax credit.

In 2019 model guidance to the IRS and U.S. Department of the Treasury, the Coalition outlined principles and guidelines for an ISO-based program to provide for demonstration of secure geologic storage associated with EOR that is equivalent to the existing EPA Subpart RR rule. In those comments, the Coalition recommended specific, supplementary transparency and accountability provisions for an ISO-based program to ensure equivalency and underscored the vital importance of such measures in the demonstration and reporting of secure geologic storage to maintain public confidence in the integrity of the 45Q tax credit.

However, in 45Q regulations issued by the IRS in 2021 following the enactment of the 2018 FUTURE Act, the agency made the determination that they do not have the statutory authority to publicly disclose relevant documentation by taxpayers reporting under ISO 27916. Since the publication of 45Q regulations in early 2021, the Coalition has continued to support requiring public disclosure of relevant documentation by taxpayers relying on this alternative ISO pathway. To this end, the Coalition supports EPA creating Subpart VV – geologic sequestration of carbon dioxide with enhanced oil recovery using ISO 27916, as it maintains the integrity of the ISO program, while harmonizing the reporting information that is publicly disclosed for both Subpart RR and ISO 27916.

The Coalition offers the following specific comments on the proposed addition of Subpart VV to the GHGRP:

- For the purposes of Subpart VV, operators reporting to EPA must provide a copy of information reported under ISO 27916, which includes the independent engineer or geologist's certification of the mass balance calculations as well as information on monitoring and containment assurance. The preamble of the proposed regulations notes "the EPA is not proposing EPA approval of a third party approved and certified EOR OMP and documentation," and the Coalition supports this approach in the final regulations.

- With the addition of Subpart VV, the final regulations should make clear that CO_2-EOR operators electing to use ISO 27916 no longer have the option to report under subpart UU and instead are reporting under the newly established Subpart VV. Subpart UU, used for reporting CO_2 injected, is not equivalent to demonstrating secure geologic storage, which is the purpose of the proposed Subpart VV.

Language appearing in the preamble of the draft regulations may create the impression that CO_2-EOR operators have the option of continuing to report under Subpart UU (emphasis added):

- "The EPA is proposing no threshold for the proposed subpart VV so that all EOR facilities that quantify CO_2 sequestration using the CSA/ANSI ISO 27916:2019 standard and that do not report under subpart RR would have **the option to either report under the proposed subpart VV, or would otherwise continue to report under subpart UU.** For these reasons, we do not anticipate that the new subpart would increase the number of facilities subject to the GHGRP. Further, **it is difficult to predict how many injection facilities would choose to report using the ISO standard in lieu of continuing to report under subpart UU.**"

Additionally, the definition of the source category for Subpart VV (Section 98.480(a)(2)) could be interpreted that CO_2-EOR operators may continue to use Subpart UU for purposes of GHGRP reporting, and the Coalition suggests that subsection (2) be deleted (emphasis added):

- This source category pertains to carbon dioxide (CO_2) that is injected in enhanced recovery operations for oil and other hydrocarbons (CO_2-EOR) in which all of the following apply:

  (1) You are using the International Standards Organization (ISO) standard designated as CSA/ANSI ISO 27916:2019 (incorporated by reference, see § 98.7) as a method of quantifying geologic sequestration of CO_2 in association with EOR operations.

  (2) You are not reporting under subpart UU of this part.

The above language in the draft regulations may create confusion on this point, and the Coalition suggests that EPA clarify that CO_2-EOR operators must now report under Subpart VV in the final regulations.

3. Adding CO_2 utilization to GHGRP

The proposed regulations also ask the question whether EPA should add CO_2 utilization (beyond the purposes for use in EOR operations) as a source category in part 98 of GHGRP, as currently, there is not a source category strictly related to CO_2 utilization. The Coalition appreciates EPA considering this question and agrees that better understanding of sources and sinks of CO_2 will better inform efforts to reduce CO_2

emissions and programs under the Clean Air Act. However, the Coalition urges EPA take its time and give due consideration to the creation of any reporting program for the nascent CO_2 utilization industry to avoid inadvertently create further barriers to the deployment of these climate essential technologies.

First, the volume of CO_2 utilized is already reported by emitting facilities under the current reporting structure of the GHGRP. However, unlike geologic storage, processes that utilize carbon oxides can be either a source of greenhouse gas emissions or a sink, creating increased complexity in designing reporting standards. Requiring a full lifecycle assessment of products sourced from CO_2 utilization also sets a unique and significantly higher reporting standard than for other source categories in the GHGRP. Therefore, the benefit of additional reporting requirements for one industry under the GHGRP should be weighed against the additional burden it places on project developers. EPA should not take any steps that would serve to add additional and unique reporting requirements to the still nascent carbon utilization sector.

The current information contained within the draft regulations is insufficient to draw conclusions as to the purpose and benefit of adding utilization to the GHGRP. Therefore, the Coalition recommends that to properly consider whether CO_2 utilization should be added to the GHGRP, EPA should conduct a public engagement process, whether through a formal Request for Information, or by other means, to gain a better understanding of the very complex considerations of greenhouse gas emissions and sinks related to CO_2 utilization. The Coalition and its members stand ready to assist EPA in any such public processes.

ABOUT US

The Carbon Capture Coalition is a nonpartisan collaboration of more than 100 companies, unions, and conservation and environmental organizations jointly working to build federal policy support for economywide, commercial scale deployment of carbon management technologies and infrastructure. This includes carbon capture, removal, transport, utilization, and storage from industrial facilities, power plants, and ambient air. Economywide adoption of carbon management technologies is critical to achieving net zero emissions to meet midcentury climate goals; strengthening and decarbonizing domestic energy, industrial production and manufacturing; and retaining and expanding a high-wage jobs base. Convened by the Great Plains Institute, Coalition membership includes industry, energy, and technology companies; energy and industrial labor unions; and conservation, environmental, and energy policy organizations.