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CC:PA:LPD:PR (REG-112339-19)
Room 5203
Internal Revenue Service
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

Via Federal eRulemaking Portal at: www.regulations.gov (REG-112339-19)

Re: Comments on Proposed Regulations for IRC §45Q

Dear Sir/Madam:

The undersigned entities representing the Carbon Utilization Research Council, Clean Air Task Force, ClearPath, Environmental Defense Fund, Oxy Low Carbon Ventures, Shell Oil Company, and The Nature Conservancy submit the below "Recommendation to the IRS on the Section 45Q Proposed Regulations" for your consideration. In addition, we would like to commend the IRS and Treasury for utilizing the comments submitted in response to Notice 2019-32 to develop the comprehensive guidance in these proposed regulations.

Recommendations to the IRS/Treasury on the Section 45Q Proposed Regulations

SECURE GEOLOGIC STORAGE and RECAPTURE:

The IRS has the statutory authority and mandate to "establish regulations for determining adequate security measures for the geological storage of qualified carbon oxide under subsection (a) such that the qualified carbon oxide does not escape into the atmosphere."[1]

In order to fully execute this mandate, the commenters recommend that the IRS adopt a provision modeled after recommendation number 4 in a recent National Petroleum Council report on CCUS[2], which calls for conditioning limitations on credit recapture "provided that the taxpayer continues to comply, either directly or by contract, with a Treasury recognized method for demonstrating secure geologic storage and has a plan to remediate leaks of CO_2 should they occur."

We believe this should take the form of a free-standing provision in the regulations requiring taxpayers who elect to use CSA/ANSI ISO 27916:19 (ANSI/ISO Standard) to continue complying with the ISO standard according to its terms, directly or through contractual obligations imposed on storage site operators, for as long as necessary to demonstrate that storage is secure. The standard requires that actions be taken for this purpose until projects are properly terminated at the time injection ceases and wells are plugged. The compliance requirement we suggest is necessary for two reasons. First, unlike Subpart RR of the Greenhouse Gas Reporting Regulations, there is no government agency other than IRS that has authority to enforce compliance with the ANSI/ISO standard. Second, project life and the risk

[1] 26 USC 45Q(f)(2)
[2] Meeting the Dual Challenge, A Roadmap to At-Scale Deployment of Carbon Capture, Use, and Storage, Volume I Report Summary, National Petroleum Council, 2019, Page 40

management steps for the ANSI/ISO standard generally extend well beyond the 17 year credit recapture period proposed by IRS, and the 14-year credit recapture period recommended in the section below.

The ANSI/ISO Standard generally requires entities to take multiple actions on an annual basis until the project terminates. Project termination occurs when injection ceases, wells are plugged, and the requirements of Section 10.4 are met. It is only at project termination that the ANSI/ISO standard provides for a demonstration that "the injected CO_2 is safely contained with sufficient documentation of the characteristics of the EOR complex and operational history of the CO_2-EOR project to demonstrate long-term stability and predictability of the associated storage." CSA/ANSI ISO 27916:19 10.4(c).[3] We do not recommend that IRS adopt the NPC's other recommended requirement, that taxpayers or their contractors be required to maintain a remediation plan, since the IRS does not seem well-suited to enforce such a requirement.

The rule requirement we are suggesting must be made enforceable by creating a penalty for premature cessation of compliance that is sufficient to incentivize continued compliance with the CSA/ANSI ISO 27916:19 methodology for a period that can easily be many decades longer than the credit recapture period. We believe a penalty of up to $1.5 million (depending on the seriousness of the violation) in each year of non-compliance would be sufficient and the IRS has authority under 45Q(f)(2) to create the suggested rule and penalty.

The IRS should also reconsider the five-year look-back period in the proposed rule and consider evidence supporting a shorter look-back period. This evidence-based support for a shorter look-back period is justified under existing Executive Orders in effect, including EO 12866 and EO 13563, which, among other things, require that benefits justify costs, the use of best available techniques to quantify anticipated present and future benefits, and the use of objective scientific and technical information. We believe a three-year recapture period, to include the year in which the leaked amount is quantified, is the appropriate period that balances costs, benefits, and project investment.

The limited exception to recapture in sec. 1.45Q-5(i) should also be revised to add a requirement that the disposing party complies with the secure geologic storage requirements through project termination to qualify for the exception and to add "seismic activity not caused by injection operations" as another example.

TRANSPARENCY

The proposed rule establishes an alternative pathway for demonstrating the secure geologic storage of carbon oxide through enhanced oil recovery (EOR) under the section 45Q program. The current method for determining secure geologic storage is to use the EPA procedures and requirements for quantifying the amount of carbon oxide securely stored under Subpart RR of its Greenhouse Gas Reporting Program (GHGRP). The IRS is proposing to add the ANSI/ISO methodology as an additional option for determining secure geologic storage for the purposes of the 45Q tax credit. We believe that this approach makes good policy sense provided that IRS requires annual independent third-party certification and addresses transparency issues as we recommend in these comments. The ANSI/ISO standard is similar to the Subpart RR methodology and establishes a comprehensive set of requirements for assuring and

[3] Monitoring and reporting under the ANSI/ISO Standard may also cease if the injection operation transitions to SubPart RR.

quantifying the long-term containment of the injected carbon dioxide that is injected into geologic formations for EOR purposes.

Although we support the IRS' adoption of this alternative pathway, we are concerned that the ANSI/ISO standard itself does not contain the necessary provisions for ensuring public disclosure of required information upon which the taxpayer bases its demonstration of secure geologic storage. As a general matter, this information includes the initial documentation (CSA/ANSI ISO 27916:19 §4.3), periodic documentation (CSA/ANSI ISO 27916:19 §4.4), and termination documentation (CSA/ANSI ISO 27916:19 §10.4).

As discussed in the preamble of the proposed rulemaking, the absence of public disclosure is further complicated by the fact that existing federal laws limit what the IRS may disclose to the public[4] in relation to any information that it receives from taxpayers to document their claim for section 45Q tax credits. As a result of this limitation, the IRS has not proposed to establish any requirements for the public disclosure of information supporting their claim for section 45Q tax credits. Such an outcome raises major policy concerns. In particular, it results in the failure to make available to the public key relevant data that is necessary to maintain the public's confidence in and integrity of the section 45Q tax credit program that protects confidential business information, such as estimated oil reserves. We believe providing this transparency is critically important to instill confidence in taxpayers that we have achieved the safe and secure geological storage for which we are claiming the tax credit.

One straightforward solution to remedy this shortcoming is for EPA to promulgate a new subpart to the GHGRP regulations. This subpart would establish procedures for documenting and reporting the amount of carbon oxide securely stored using the ANSI/ISO methodology. Under this approach, the reporting of this information to EPA under a new subpart will ensure that the public has access to the relevant information in the same manner that the public currently has access to the information reported to EPA under the Subpart RR reporting regulations. While generally supportive of this approach, we are concerned that it could take a year or more for EPA to develop a new subpart for documenting and reporting the amount of carbon oxide securely stored using the ANSI/ISO methodology. Until EPA develops the new subpart, an interim approach that would assure the public access to the relevant information is needed to maintain public confidence in and integrity of the section 45Q tax credit. We believe that this interim approach, as outlined below, accomplishes the needed transparency while also keeping within the bounds of federal law.

The preamble for the proposed rulemaking confirms that Subpart RR remains the principle pathway for demonstrating secure geological storage of carbon oxide for the purposes for the 45Q tax credit. All of the relevant documentation for making this demonstration is available for public review on EPA's Greenhouse Gas Reporting website (www.epa.gov/ghgreporting) in accordance with EPA's Subpart RR regulations (codified at 40 C.F.R. §§98.440-449).

The IRS would also establish as a voluntary, alternative approach using the ANSI/ISO standard for documenting the quantity of CO_2 securely geologically stored on an annual basis and demonstrating that storage is secure. This means that no taxpayer would be <u>required</u> to use the ANSI/ISO standard, but rather the final rule would allow taxpayers to use the ANSI/ISO standard at their election and, so doing, they would also be voluntarily electing to make their information available for public review.

[4] 85 Fed. Reg. at 34055/2 (citing section 6103).

Specific conditions would be established for documenting the amount of CO_2 that is securely stored in a geological formation under the alternative ANSI/ISO standard. One important condition for using the ANSI/ISO methodology is that a qualified and independent engineer or geologist provides third-party verification of the taxpayer's implementation and compliance with the ANSI/ISO standard. Another key condition for using the ANSI/ISO methodology would be that the taxpayer makes the relevant information for documenting secure geologic storage available to the public by posting the ANSI/ISO required information on a relevant, public website. It is our preference that EPA assumes the role of making the information available to the general public on a website established and maintained by EPA. Until this occurs, however, taxpayers should be required – as a condition for using the ANSI/ISO methodology – to make the information available on a publicly accessible internet website established and maintained by the taxpayer.

With this approach, we are proposing that taxpayers must satisfy both of these conditions in order to use the alternative ANSI/ISO methodology. If taxpayers decline to voluntarily meet both of these conditions, then the only pathway for earning the section 45Q tax credits with geologic storage remains EPA's Subpart RR regulations.

To assure full compliance with federal laws prohibiting disclosure of taxpayer information, the final IRS rules would expressly provide that none of this information would be provided to IRS for disclosure to the general public. Nor would the IRS regulations impose any mandate for the taxpayer to release all of the data used for documenting secure geologic storage under the alternate ANSI/ISO methodology. Rather, any decision for the public release of the data would be a voluntary decision of taxpayers if they elect to use the ANSI/ISO procedures.

Finally, we strongly urge the IRS continue to provide annual reports on the total aggregate number of metric tons of carbon oxides taken into account in computing section 45Q credits that are awarded each year to taxpayers under both the original and new 45Q provisions. The report should also provide the aggregate totals broken down into the following categories: total carbon dioxide sequestered, total carbon oxides other than carbon dioxide sequestered, total carbon oxides geologically sequestered without EOR, total carbon oxides sequestered through EOR, total carbon oxides sequestered through utilization, total carbon oxides sequestered through Subpart RR, and total carbon oxides sequestered through the ANSI/ISO standard. Providing this information will further enhance the transparency and public confidence in the section 45Q tax credit program.

THIRD PARTY VERIFICATION

The proposed regulations require certification to be done annually by an independent engineer or geologist. We propose additional language to provide specificity around what must be certified and at what cadence, and to define whether an engineer or geologist has the experience, credentials, and independence to perform the certification analysis.

With respect to what must be certified, in addition to the currently proposed mass balance calculations and information regarding monitoring and containment assurance (for which we provide citations to the ANSI/ISO standard), we believe IRS needs to explicitly include three key types of documentation that cover the lifecycle of a CO_2 enhanced oil recovery project as presented in the ANSI/ISO standard. These are initial documentation (CSA/ANSI ISO 27916:19 §4.3), periodic documentation (CSA/ANSI ISO 27916:19 §4.4), and termination documentation (CSA/ANSI ISO 27916:19 §10.4), which between them are necessary to document the secure geologic storage of carbon oxides. Initial and termination

documentation are one-time events that occur at the beginning and end of a project's lifespan, respectively. The periodic documentation is prepared at least annually throughout the lifespan of the project. All three types of documentation are required by the ANSI/ISO standard to be "offered to the authority" (annually in the case of periodic documentation) and are thus especially appropriate for third party verification.

Our proposed language also includes a reference to the cadence specified for each type of documentation in the ANSI/ISO standard – the frequency at which appropriate documentation must be provided to the qualified independent engineer or geologist. In particular, the periodic documentation referenced in Section 4.4 of CSA/ANSI ISO 27916:19 should be certified at least annually per that section's requirement.

With respect to defining "qualified independent engineer or geologist," we have developed a definition to help provide clarity to taxpayers and the IRS on appropriate entities for this requirement. First, we specify that a qualified independent engineer or geologist could be a single person, or a team led by such people. Second, we specify that such entities should have expertise in the relevant subjects (operating CO_2 EOR facilities; ensuring secure geologic storage of CO_2; the ANSI/ISO standard itself) in the particular jurisdiction(s) where the projects occur. Third, we call for the entity to be led by a licensed Petroleum Engineer or Professional Geologist in good standing to ensure expertise and professionalism. Fourth, in order to ensure independence, we call for the entity to be independently employed from the taxpayer, to certify that independence and lack of material conflicts, and to not review their own work. Taken together, these four components will help ensure that the IRS can rely on credits claimed using the ANSI/ISO standard.

Additionally, as use of the ANSI/ISO standard increases, it would be appropriate for the American National Standards Institute's National Accreditation Board to establish a process for formal accreditation of qualified, independent third parties. We encourage the IRS to work with ANSI toward this end and to require use of that program in the future to certify such third-party reviewers.

Proposed Regulatory Language to Implement These Comments:

§1.45Q-1 Credit for Carbon Oxide Sequestration should be modified:

(1) in the "Contract Provisions" in subsection (h)(2)(iii)(E) by adding "through project termination under the methodology selected to demonstrate secure geologic storage" after "§§1.45Q3(b)(1) and 1.45Q-3(c)", and

(2) in the "Contract Provisions" in subsection (h)(2)(iii)(F) by adding "through project termination under the methodology selected to demonstrate secure geologic storage" after "§1.45Q3(b)(1) or (2) and §1.45Q-3(c)".

§1.45Q-2 Definitions for Purposes of §§1.45Q-1 through 1.45Q-5 should be modified:

(1) by redesignating existing subsections (i) and (j) as subsections (j) and (k), respectively, and inserting a new subsection (i) to read as follows:

> "(i) Qualified independent engineer or geologist. A person, or team led by such a person, with expertise in enhanced oil or natural gas recovery projects in the state or states where the project(s)

are located, secure geologic storage of CO_2, and the requirements of CSA/ANSI 27916:19, and who is licensed as a Petroleum Engineer or Professional Geologist, in good standing. In order to avoid conflict of interest, this person or team may not be a direct employee of the taxpayer collecting the credit or its subsidiaries, the electing taxpayer or the credit claimant, nor involved in the preparation of documentation required under §1.45Q-3(d). The certification under §1.45Q-3(d) must include an affidavit of independence from the taxpayer collecting the credit or its subsidiaries, or the storage operator or its subsidiaries. The affidavit must include a conflict of interest assessment with respect to the taxpayer collecting the credit or its subsidiaries, or the storage operator or its subsidiaries, including a list of projects worked on for such entities in the previous five years, and a statement of no material conflict of interest."

§1.45Q-3 Secure Geological Storage should be modified:

(1) by revising Subsection (d) to read as follows:

"(d) Certification. For qualified enhanced oil or natural gas recovery projects in which the taxpayer reported volumes of carbon oxide to the EPA pursuant to 40 CFR Part 98 subpart RR, the taxpayer may self-certify the volume of carbon oxide claimed for purposes of section 45Q. For qualified enhanced oil or natural gas recovery projects in which the taxpayer determined volumes pursuant to CSA/ANSI ISO 27916:19, a taxpayer may prepare documentation as outlined in CSA/ANSI ISO 27916:19 internally, and~~but~~ such documentation must be provided at appropriate intervals as specified in CSA/ANSI ISO 27916:19 to a qualified independent engineer or geologist, who then must certify that the documentation provided, including, but not limited to, initial documentation (CSA/ANSI ISO 27916:19 §4.3), periodic documentation (CSA/ANSI ISO 27916:19 §4.4; specified annually), and termination documentation (CSA/ANSI ISO 27916:19 §10.4), and the mass balance calculations (CSA/ANSI ISO 27916:19 §8) as well as information regarding monitoring and containment assurance (CSA/ANSI ISO 27916:19 §6), is accurate and complete. Certifications must be made annually other than for initial documentation and termination documentation. For any leaked amount of qualified carbon oxide (as defined in §1.45Q-5(c)) that is determined pursuant to CSA/ANSI ISO 27916:19, the certification must also include a statement that the quantity was determined in accordance with sound engineering principles. Taxpayers that capture carbon oxide giving rise to the section 45Q credit must file Form 8933 (or successor forms, or pursuant to instructions and other guidance) with a timely filed federal income tax return or Form 1065, including extensions or for the purpose of this rule, amendments to federal income tax returns, Forms 1065, or on AARs, as applicable. Taxpayers that dispose of, inject, or utilize qualified carbon oxide must also file Form 8933 (or successor forms, or pursuant to instructions and other guidance) with a timely filed federal income tax return or Form 1065, including extensions or for the purpose of this rule, amendments to federal income tax returns, Forms 1065, or on AARs, as applicable. If the volume of carbon oxide certified and reported is a negative amount, see §1.45Q-5 for rules regarding recapture.",

(2) by inserting a new subsection (e) to read as follows:

"(e) Reporting. The CSA/ANSI ISO 27916:19 standard requires documentation to be offered to a regulatory body responsible for quantification of the storage of CO2 in association with a CO2 EOR operation. The Environmental Protection Administration (EPA) is such a body at the federal level. Injection operators that choose to operate under that standard will be required to report sufficient

documentation for demonstrating the secure geologic storage, including the methodology and data used in the mass balance calculation, to the EPA for publication to the general public under the Greenhouse Gas Reporting Program (GHGRP). Until EPA establishes requirements and procedures for the reporting of this documentation for publication to the general public under the GHGRP, then the taxpayer shall make available the documentation on a publicly accessible internet website established and maintained by the taxpayer. This documentation shall include the initial documentation (CSA/ANSI ISO 27916:19 §4.3), periodic documentation (CSA/ANSI ISO 27916:19 §4.4), and termination documentation (CSA/ANSI ISO 27916:19 §10.4).",

(3) by redesignating existing subsection (e) as subsection (f) and amending it to read as follows:

"(f) Failure to submit complete documentation or certification or reporting. No section 45Q credit is allowed for any taxable year for which the taxpayer (including credit claimants) has failed to timely submit complete documentation and certification that is required by this regulation or Form 8933 (or successor forms, or pursuant to instructions and other guidance) or has failed to comply with the requirements of subsection (e). The credit will be allowed only for a taxable year for which complete documentation and certification and the reporting requirements of subsection (e) have ~~has~~ been timely submitted. Certifications for each taxable year must be submitted by the due date of the federal income tax return or Form 1065 on which the section 45Q credit is claimed, including extensions. If a section 45Q credit is claimed on an amended Federal income tax return, an amended Form 1065, or an AAR, as applicable, certifications may also be submitted with such amended Federal income tax return, amended Form 1065, or AAR. If a section 45Q credit was claimed on a timely filed Federal income tax return or Form 1065 for a taxable year ending after February 9, 2018, and beginning before the date of issuance of this proposed regulation, for which certifications were not submitted, such certifications may be submitted with an amended Federal income tax return, an amended Form 1065, or an AAR, as applicable, for the taxable year in which the section 45Q credit was claimed. For qualified enhanced oil or natural gas recovery projects in which the taxpayer determined volumes pursuant to CSA/ANSI ISO 27916:19, taxpayers must annually certify compliance until the conditions specified in CSA/ANSI ISO 27916:19 §§10.4 and 10.5 are met.", and

(4) by redesignating existing subsection (f), as subsection (h) and inserting a new subsection (g) as follows.

"(g) Failure to continue compliance with CSA/ANSI ISO 27916:19. For each taxable year after the 12-year claiming period, a penalty of up to $1.5 million (depending on the seriousness of the violation) may be imposed on a taxpayer (including credit claimants) that fails to timely submit complete documentation and certification that is required by this regulation or Form 8933 (or successor forms, or pursuant to instructions and other guidance) or has failed to comply with the requirements of subsection (e). This penalty cannot be imposed by withholding any tax credits. This penalty shall not apply to any year after which injection operations have been terminated and secure geologic storage has been shown under the terms of CSA/ANSI ISO 27916:19 sec. 10.4 or the injection operations begin to be reported to EPA pursuant to 40 CFR part 98 Subpart RR. When injection operations have been terminated and secure geologic storage has been shown pursuant to CSA/ANSI ISO 27916:19 sec. 10.4, the taxpayer shall submit certified termination documentation. Alternatively, when injection operations begin to be reported to EPA pursuant to 40 CFR part 98

Subpart RR, the taxpayer shall submit a certified report stating that it is now reporting under that provision rather than CSA/ANSI ISO 2791619:19."

§1.45Q-5 Recapture of Credit should be modified:

(1) by replacing "five" with "two" in the second sentence of the definition of recapture period in subsection (f),

(2) by replacing "fifth" with "second" in the last sentence of the definition of "Calculation" in subsection (g)(2),

(3) by reducing the recapture period from five to three years including the year of the leakage in the examples in §1.45Q-5(g)(6),

(4) by revising subsection (i) to would read as follows:

(i) Limited exceptions. A recapture event is not triggered in the event of a loss of containment of qualified carbon oxide resulting from actions not related to the selection, operation, or maintenance of the storage facility (so long as the disposing party continues to comply with §1.45Q-3(b)(1) or (2) and §1.45Q-3(c) through project termination under the methodology selected to demonstrate secure geologic storage), such as seismic activity not caused by injection operations, volcanic activity, or terrorist attack.

Thank you for the opportunity to submit these comments outlining a set of recommendations to address our joint concerns with the proposed regulations. Please contact us with any questions.

Respectfully submitted,

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