CBA
ENVIRONMENTAL SERVICES INC.

Via Electronic Submission
July 28, 2020
Internal Revenue Service
Attn: CC:PA:LPD:PR (REG-1112339019)
Room 5203
P.O. Box 7604
Ben Franklin Station
Washington D.C. 20044

RE Notice of Proposed Rulemaking (REG-112339)/Comments on Proposed Regulations Regarding Credit for Carbon Oxide Sequestration Under Section 45Q

Dear Sir/Madam:

Pursuant to Notice of Proposed Rulemaking (REG-112339), the Treasury Department and the Internal Revenue Service (the "Service") published proposed regulations (the "Proposed Regulations") regarding the credit for carbon oxide sequestration under Section 45Q of the Internal Revenue Code of 1986 (the "Code"), as amended by Section 41119 of the Bipartisan Budget Act of 2018, P.L. 115-123 (the "BBA"), Pub. L. No. 115-123 (February 9, 2018).

CBA plans to deploy proprietary technology to capture qualified carbon oxides from a variety of fuels and materials, including coal, biomass and municipal solid waste. The technology can capture qualified carbon oxides at various stages in the production process, including prior to fuel combustion.

CBA believes the Proposed Regulations represent a major step forward in the implementation of Section 45Q and we are grateful for the efforts made by the Service to incorporate our and others' comments. In this letter, we limit our comments on the Proposed Regulations to Section 1.45Q-4, Utilization of Qualified Carbon Oxide.

For purposes of utilizing qualified carbon oxide, Code Section 45Q(f)(5)(B) and Proposed Regulations Section 1-45Q-4(b) define how qualified carbon oxide will be measured for purposes of claiming the Section 45Q tax credit. These provisions generally provide such utilized amount is equal to the metric tons of qualified carbon oxide which a taxpayer demonstrates, based on an analysis of lifecycle greenhouse gas emissions ("LCA") were either: (i) captured and permanently isolated from the

atmosphere, or (ii) displaced from being emitted into the atmosphere. In general, we believe that, as proposed, Section 1.45Q-4 does not provide sufficient guidance to taxpayers on how to prepare, submit and gain timely approval of the required LCA. We are concerned that, without a clearly defined, time-limited process for LCA report approval, taxpayers will continue to be hamstrung in their efforts to attract investors and commercial counterparties to participate in new carbon capture projects. Our specific comments are as follows:

Utilization of Qualified Carbon Oxide--Measurement (1.45Q-4(c)(2))

Section 1.45Q-4(c)(2) provides in part: "The taxpayer measures the amount of carbon oxide captured and utilized through a combination of direct measurement and LCA."

CBA has the ability to use continuous emissions monitors to measure directly the qualified carbon oxide captured and utilized in its process. CBA also has developed a mass balance model that calculates qualified carbon oxide captured and utilized. In combustion testing performed at the Energy & Environmental Research Center, University of North Dakota, CBA's mass balance model matched actual emissions reductions within 1%.

The regulations also require taxpayers to follow guidelines under the International Organization for Standardization (ISO) 14044:2006. The language in the regulation guidance implies that direct measurement and LCA are mutually exclusive. If so, this is inconsistent with ISO 14044, which states that LCA "data may include a mixture of measured, calculated **or** estimated data" (emphasis supplied).

CBA requests that Section 1.45Q-4(c)(2) be revised to clarify that the taxpayer may measure the amount of carbon oxide captured and utilized through use of direct measurement, use of a mass balance model or use of the two methods in combination.

In this connection, it would be helpful if the Proposed Regulations were revised to clarify whether an LCA based entirely on measured data would receive the same level of approval scrutiny as an LCA that is based on calculated and estimated data. In our view, measured data is the "gold standard" (*i.e.,* providing both transparency and an incentive for incremental improvements that displace additional carbon

oxides) for purposes of life cycle analysis and warrants expedited consideration for approval.

In addition, LCAs generally focus on quantifying total emissions, and Section 45Q(f)(5)(B)(i)(II) requires an LCA to measure the emissions that are being "displaced from being emitted into the atmosphere." Accordingly, we propose the best measurement of the qualified carbon oxide being displaced from a specific activity would be measuring the difference between (i) a base case (without carbon utilization) and (ii) the Section 45Q case that includes carbon utilization.

Utilization of Qualified Carbon Oxide--Approval of the LCA (1.45Q-4(c)(3))

Section 1.45Q-4(c)(3) provides: "The taxpayer must submit the written LCA report required by paragraph (c)(1) of this section to the IRS and the Department of Energy (DOE). The LCA will be subject to a technical review by the DOE, and the IRS, in consultation with the DOE and the Environmental Protection Agency, will determine whether to approve the LCA."

CBA respectfully submits that, unless the final regulations prescribe the requirements for the LCA approval process in greater detail, with clear guidelines for applicants and firm deadlines for the three participating agencies to take action, this process could frustrate the successful implementation of Section 45Q.

For example, based on our experience applying for and receiving governmental approvals generally, we would predict that, if LCA review is conducted by the agencies sequentially, it inevitably will lead to delays, simply through the time required to move an application from one agency to the next. Although we prefer agency review be concurrent, we note that concurrent review carries heightened risk that the agencies will reach differing conclusions on whether a particular LCA should be approved.

If Section 45Q is to succeed in incentivizing investment in carbon capture, taxpayers will need clarity as to what is required for LCA approval and certainty that their LCA submissions will be reviewed and acted upon promptly. To minimize the foreseeable procedural and substantive causes for delay inherent in three-agency LCA review, the final regulations must set forth the process in detail with clear standards for an acceptable LCA and impose deadlines for agency action. We propose a total period of 60 days, from the date of application to the date of decision,

subject to extension only for cause (*e.g.,* an applicant's failure to provide supplemental information necessary for agency evaluation promptly upon request).

Utilization of Qualified Carbon Oxide--Submission of the LCA (1.45Q-(c)(4))

This section of the Proposed Regulations is reserved. Our comments regarding taxpayer need for specific guidance on the process apply here also.

Utilization of Qualified Carbon Oxide--Commercial Market (1.45Q-(d))

This section of the Proposed Regulations is reserved. We note that Section 45Q provides that the determination of whether a "commercial market exists" for a product utilizing qualified carbon oxide is to be determined by the Secretary of the Treasury. Section 45Q(e)(5)(A)(iii). Congress clearly intended Section 45Q, as amended by the BBA, to incentivize new uses of carbon oxides in a wide variety of commercial products.

We respectfully submit that to avoid uncertainty and delay the final regulations should identify, by name or category, products for which a commercial market exists.

For example, CBA's technology will convert qualified carbon oxide into ammonium carbonate, which in turn will be combined with other chemicals to make guaranteed analysis fertilizers that are in widespread use worldwide.
In cases like this, taxpayers should not have to await a specific determination by the Secretary that a commercial market exists for the product. We suggest that the goals of Section 45Q would be promoted by a blanket determination by the Secretary identifying all feasible products and commercial markets, with specific determinations to be made on a case-by-case basis.

* * * *

To our knowledge, in the two and one-half years since enactment of the BBA, not a single Section 45Q credit has been sought outside of the enhanced oil recovery sector. Meanwhile, the deadline for beginning construction of projects seeking to qualify for Section 45Q credits remains December 31, 2023. If Section 45Q is to fulfill its purpose of promoting capital investment in innovative new technologies to limit and reduce US emissions of greenhouse gases, it is imperative that additional efforts be made through refinement of the Proposed Regulations to clarify, simplify and expedite the credit application and approval process. In particular, we are

concerned that, without a clearly defined, time-limited process for LCA approval, taxpayers will continue to be hamstrung in their efforts to attract investors and commercial counterparties to participate in new carbon capture projects.

Thank you for your consideration of our comments. We would be happy to provide additional information upon request.

Very truly yours,

CBA ENVIRONMENTAL SERVICES, INC.

By: *Bruce L Bruso*
Bruce L. Bruso
President/CEO