

8/3/2020

CC:PA:LPD:PR (REG-112339-19)
P.O. Box 7604
Ben Franklin Station
Washington, D.C., 20044

RE: Request for Comments on Credit for Carbon Oxide Sequestration (IRS and REG-112339-19)

In response to the Internal Revenue Service (IRS) Notice 2019-32 Request For Comments on Credit for Carbon Oxide Sequestration, Air Liquide submitted multiple comments, many of which have since been addressed by the Treasury and the IRS.

On behalf of Air Liquide's US operations, I am writing to resubmit the following comment pursuant to the IRS's request for information on the Credit for Carbon Oxide Sequestration under Section 45Q of the Internal Revenue Code.

Please consider the below comment regarding the implementation and administration of recent enhancements to Section 45Q as amended in the Bipartisan Budget Act of 2018 (BBA). Air Liquide is considering a range of investments related to innovative technologies and applications of the sort that the FUTURE Act was meant to encourage. Guidance addressing the following concerns will afford Air Liquide the certainty necessary to move forward with these projects, resulting in the reduction of existing industrial carbon dioxide emissions into the atmosphere.

Comment:

Treasury should make clear that the conversion of captured carbon dioxide to carbon monoxide is considered utilization of qualified carbon oxide under Section 45Q(f)(5).

- The chemical compound of carbon monoxide is a securely stored compound of Qualified Carbon Oxide (carbon dioxide).
- Utilization of carbon oxide, such as carbon monoxide, can be made into a durable good or chemical feedstock in the production of durable goods that is utilized and defines the life cycle analysis.

Proposed Guidance:

To further expand on the comment above and address any potential questions, the following outlines the specific criteria under consideration, details how these considerations have potential impacts, and issues suggested guidance:

1) Conversion of carbon dioxide to carbon monoxide is utilization of Qualified Carbon Oxide

- a. § 45Q(c)(1)(B)(i-iii) defines Qualified Carbon Oxide as any carbon dioxide or carbon oxide not emitted into the atmosphere and utilized or disposed of through various methodologies. This current definition of a Qualified Carbon Oxide can be further expanded to reduce nomenclature overlap to allow carbon dioxide converted to alternative forms of carbon oxides thereby reducing carbon dioxide emissions.
- b. Carbon monoxide is a chemically stable compound. EPA does not include carbon monoxide in its definition of Greenhouse Gases, which are specified as carbon dioxide, methane, nitrous oxide, and fluorinated gases. Additionally, as outlined under § 45Q(f)(5)(A)(ii-iii), which defines utilization of a qualified carbon oxide, the direct release of carbon monoxide is otherwise regulated to further demonstrate a secured use of the compound. Simply converting and directly releasing carbon monoxide to the atmosphere would not be possible as a core industrial process at levels that would achieve threshold requirements of carbon dioxide emission reduction to be a Qualified Facility.
- c. Treasury should clarify that the conversion of carbon dioxide to carbon monoxide should be considered the conversion of a Qualified Carbon Oxide to a chemical compound, in which the Qualified Carbon Oxide (carbon dioxide) is securely stored and utilized.

2) Utilization of Qualified Carbon Oxides as a durable good or chemical feedstock in the production of durable goods defines lifecycle analysis

- a. § 45Q(f)(5)(A)(ii-iii) considers (ii) the chemical conversion of qualified carbon oxide to a material or chemical compound in which such qualified carbon oxide is securely stored or (iii) for the use of any qualified carbon oxide for any other purpose for which a commercial market exists.
- b. Durable goods, which themselves may further reduce greenhouse gas emissions (e.g. insulation materials), should not need further lifecycle analysis. Industrial applications use carbon oxides as feedstocks in the creation of materials ultimately used in durable goods.
- c. Under § 45Q(f)(5)(A)(ii-iii), Treasury should consider carbon oxides stored/converted into durable goods as “utilized” and “verified” Qualified Carbon Oxide. Life cycle analysis required under § 45Q(f)(5)(B) need only to refer to an

industrial application of such feedstock via known publicly available chemical reaction processes to demonstrate utilization.

Sincerely,

A handwritten signature in black ink that reads "Joe Fawell". The signature is written in a cursive style with a double slash at the end.

Joe Fawell
Vice President, Government Affairs
Air Liquide USA LLC