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America's Ethanol Supporters

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July ##, 2020

RE: Proposed Amendments to the Income Tax Regulations under Section 45Q
REG-112339-19
Internal Revenue Service
Room 5203
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

Thank you for the opportunity to provide comments regarding the Internal Revenue Service's (IRS) proposed regulations for carbon oxide sequestration credits under section 45Q of the Internal Revenue Code. Growth Energy believes that any Final Rule should recognize carbon captured and transmitted for use in food and beverage commercial markets as an eligible activity under 26 U.S.C. 45Q(f)(5)(A)(iii).

Growth Energy is the world's largest association of ethanol producers, representing nearly half of the nation's ethanol production and thousands of supporters across the country. These companies and their employees serve America's need for homegrown renewable fuels and its coproducts, such as pure carbon dioxide for commercial food and beverage applications, municipal water sanitation, permanent geologic sequestration, and enhanced oil recovery. The ethanol industry has more than 50 projects that on average capture 99,000 to 153,000 tons of carbon dioxide annually. These facilities both capture qualified carbon oxides or are in the process of financing projects to capture and sequester carbon oxids..

1. The existing statute provides IRS authority to determine that carbon oxide utilization includes any purpose for which a commercial market exists, but IRS has not provided guidance as to which commercial markets qualify.

On February 9, 2018, the *Bipartisan Budget Act of 2018* became law and amended 26 U.S.C. 45Q to incentivize the utilization of carbon oxide in commercial markets.[1] The statute states that "utilization of qualified carbon oxide means…the use of such qualified carbon oxide for *any other purpose for which a commercial market exists*….as determined by the Secretary" (*emphasis* added).[2]

[1] Bipartisan Budget Act of 2018, P. L. 115-123, Sec. 41119
[2] 26 U.S.C. 45Q(f)(5)(A)(iii)

On May 20, 2019, IRS published Notice 2019-32, 2019-21 I.R.B. 1187 requesting comment on the types of utilization that should qualify for the section 45Q credit. On July 4, 2019, Growth Energy submitted comments outlining the merit and importance of including the commercial market for carbon dioxide in the food and beverage industries as an eligible use of qualified carbon oxide.[3]

On June 2, 2020, IRS published at 85 F.R. 34050 a notice of proposed rulemaking (REG-112339-19). In the notice of proposed rulemaking, IRS stated: "utilization of qualified carbon oxide means…The use of such qualified carbon oxide for any other purpose for which a commercial market exists (with the exception of use as a tertiary injectant in a qualified enhanced oil or natural gas recovery project), as determined by the Secretary of the Treasury or his delegate."[4] In the proposed regulation, IRS does not define "commercial markets" and says "[t]he Treasury Department and the IRS continue to study these issues and request comments."[5] Therefore, Growth Energy submits these comments to demonstrate that an active and significant market exists for carbon dioxide captured by our ethanol facilities.

2. The food and beverage industry is a significant commercial market for carbon dioxide utilization.

Combined, the food and beverage industry utilizes approximately 10 million tons of carbon dioxide per year globally, and ethanol facilities constitute a major source of captured carbon dioxide. The food and beverage industries alone account for six percent of global demand for carbon dioxide use.[6] Compared with other uses for carbon dioxide, food and beverage manufacturers have the third largest commercial market, following the fertilizer industry (the largest) and enhanced oil recovery (second largest).[7]

While some ambiguity may exist in the determination of "any other purpose for which a commercial market exists," it is clear that despite the challenges inherent in demarcating qualifying carbon dioxide utilization, the third largest commercial market for carbon dioxide – food and beverage manufacturers – should fall within the scope of eligible uses.

The explicit decision to write the statute to give the IRS greater latitude in determining eligible uses strongly suggests Congress intended the 45Q credit to extend to important commercial markets, including food and beverage manufacturing. The intent of the statute was not necessarily to preserve carbon dioxide markets for food and beverage or to push ethanol producers from supplying that market; however, failing to provide this incentive to these commercial markets could result in a move away from food grade capture, reducing supply to food and beverage markets and increasing the mining of naturally sequestered carbon dioxide, undercutting the intent of the statute.

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[3] Growth Energy, "RE: Comments on Credits for Carbon Oxide," July 4, 2019, https://growthenergy.org/wp-content/uploads/2019/07/Growth-Energy-45Q-Carbon-Comments-FINAL.pdf
[4] REG-112339-19 §1.45Q-4(a)(3)
[5] *Ibid*, 30
[6] International Energy Agency, "Putting CO2 to Use: Creating Value from Emissions," September 2019, p. 3, https://www.iea.org/reports/putting-co2-to-use
[7] *Ibid*, 6

Many of our ethanol plants occupy a unique position in the carbon dioxide utilization supply chain because they are located in close proximity to food and beverage manufacturers. Meat packing facilities, for example, purchase 61% of their total U.S. demand for carbon dioxide to preserve their products from ethanol plants.

3. Ethanol plants are positioned to capture a significant amount of carbon dioxide and transmit it for utilization in the food and beverage industry.

Ethanol has great potential to expand carbon capture and utilization efforts. Approximately 50 U.S. ethanol plants already capture, clean, and condense carbon dioxide, and that number could rise to 60. According to Christianson PLLP's Biofuels Benchmarking program, those plants capturing carbon dioxide do so at an average rate of 1,980 tons of carbon dioxide per million gallons of ethanol produced, with the top 25% capturing 3,075 tons of carbon dioxide per million gallons of ethanol produced. This means an average-sized ethanol plant would capture 99,000 to 153,000 tons of carbon dioxide each year. With a nationwide fleet of more than 200 ethanol plants, there is room to expand these benefits if the IRS issues final regulations that provides guidance on 26 U.S.C. 45Q(f)(5)(A)(iii) which involves a wide portfolio of strategies to capture, store, utilize, or displace carbon dioxide.

Encouraging the growth and resilience of this carbon dioxide utilization supply chain is vital to safeguard food and beverage manufacturers, which are essential businesses. As the nation experienced a few months ago during the height of the Coronavirus pandemic, ethanol plants were forced to cut production to match the dramatic loss in gasoline demand, which also curbed their ability to produce carbon dioxide for food and beverage companies. The sudden supply shock of carbon dioxide caused a ripple effect in other markets and intensified conditions for a spike in food prices as companies struggled to source enough carbon dioxide to meet consumer needs.[8] Without the steady recovery in gasoline demand to drive ethanol production, food processors would have faced dire consequences.

Including the food and beverage industry as an eligible commercial market for carbon dioxide would help build resilience in this essential supply chain to external shocks, such as a pandemic, by creating an appropriate tax environment that incentivizes the buildout and operation of carbon capture capabilities. This would ensure that ethanol plants have both the capacity and financial incentive to provide food and beverage manufacturers with a stable supply of carbon dioxide.

4. Carbon dioxide captured by ethanol plants and utilized in the food and beverage industry would displace a substantial amount of carbon dioxide that would otherwise be emitted.

There is no doubt a commercial market for pure carbon dioxide produced by ethanol plants exists. Without this market, ethanol plants would simply emit carbon dioxide into the atmosphere, forcing food and beverage companies to obtain carbon dioxide from extractors that drill it from natural gas wells. Instead, our facilities capture and utilize a qualified carbon oxide

[8] Stakeholder Letter to Vice President Mike Pence, April 7, 2020, https://www.cganet.com/wp-content/uploads/CO2-Coalition-Letter-FINAL_200407.pdf

directly to food and beverage customers, significantly dropping the net amount of carbon dioxide that would be emitted into the air or drilled out of the ground.

The IRS should recognize that using carbon dioxide from our facilities ensures that additional mined carbon dioxide is not necessary to meet these applications as ethanol's carbon comes from annual, renewed sources. Currently, the tax code is structured to incent geologic storage of carbon dioxide over food and beverage market use, creating a scenario which encourages ethanol plants that are located near adequate geologic storage conditions to pump the gas into the ground instead of selling it to those who need it for food and beverage use. Without the recognition from the IRS that food and beverage utilization of carbon dioxide qualifies under section 45Q, ethanol plants that capture carbon will follow incentives, requiring additional carbon dioxide to be mined to meet those needs.

5. Utilization definition should include food and beverage use.

For the reasons stated above, we strongly believe that the secretary should include carbon dioxide captured for food and beverage purposes as a suitable practice for carbon utilization under section 45Q and fully recognize the opportunity to achieve optimal carbon capture from America's ethanol plants.

The clear intent of the statute is to provide an incentive to those enterprises seeking to reduce emission of carbon dioxide into the atmosphere. This credit, if applied to food and beverage use, will undoubtedly encourage ethanol plants to increase their capture rate of carbon dioxide. We are also aware that a number of plants that do not currently capture will begin to do so. Furthermore, without applying this credit to food and beverage uses, there is significant risk that the incentive will drive those who capture carbon dioxide to other subsidized uses that can access the section 45Q credit. The best way to avoid this situation is to apply this credit to carbon dioxide captured for food and beverage uses.

Thank you again for the opportunity to submit comments. Should you require any further information, please contact John Fuher, Growth Energy's Vice President of Government Affairs at jfuher@growthenergy.org or 202-545-4020.

Sincerely,

Emily Skor, CEO
Growth Energy