



August 3, 2020

VIA ELECTRONIC SUBMISSION

www.regulations.gov

Docket: IRS REG-112339-19

Honorable David Kautter
Assistant Secretary (Tax Policy)
Department of the Treasury
1500 Pennsylvania Ave., N.W.
Washington, D.C. 20220

David Selig, Esq.
Office of Associate Chief Counsel
(Passthroughs and Special Industries)
Internal Revenue Service

Re: **Section 45Q Carbon Sequestration Credit – Comments of Nutrien**

Dear Assistant Secretary Kautter:

Nutrien, a leading ammonia and fertilizer manufacturer, in the United States, is pleased to submit these comments to assist the successful implementation of the Section 45Q tax credit incentive, which was enhanced by Section 41119 of the Bipartisan Budget Act of 2018, Pub. L. 115-123 (Feb. 9, 2018), with the goal of increasing incentives for capture and storage or utilization of industrial carbon oxide emissions. The Department of Treasury (“Treasury”) and Internal Revenue Service (“IRS”) have invited comment on proposed implementing regulations published at *Credit for Carbon Oxide Sequestration; Notice of proposed rulemaking*, 85 Fed. Reg. 34,050 (June 2, 2020).

About Nutrien

Nutrien is the world's largest provider of crop inputs and services, playing a critical role in helping growers increase food production in a sustainable manner. We produce and distribute 25 million tonnes of potash, nitrogen and phosphate products world-wide. With this capability and our leading agriculture retail network, we are well positioned to supply the needs of our customers. We operate with a long-term view and are committed to working with our stakeholders as we address our economic, environmental and social priorities.

I. Background

Section 45Q was originally enacted by section 115 of the Energy Improvement and Extension Act of 2008, Pub. L. 110-343, 122 Stat. 3829 (Oct. 3, 2008), and amended by section



1131 of the American Recovery and Reinvestment Tax Act of 2009, Division B of Pub. L. 111-5, 123 Stat. 115 (Feb. 17, 2009) (“original 45Q”). Section 45Q originally provided a tax credit for carbon dioxide captured at a qualified facility and disposed in secure geological storage or enhanced oil recovery within the United States. See Notice 2009-83, 2009-44 I.R.B. 588, modified by Notice 2011-25, 2011-14 I.R.B. 604. Under Section 45Q(e), tax credits for existing facilities are available up to the end of the year in which EPA certifies that 75 million metric tons of qualified CO₂ have been taken into account for purposes of the section 45Q credit (the “sunset” provision).

The Bipartisan Budget Act expanded the section 45Q incentive (“new 45Q”) for taxable years beginning after December 31, 2017. New section 45Q provides a tax credit for each metric ton of qualified carbon oxide captured by the taxpayer and disposed of in secure geological storage, used as a tertiary injectant in a qualified enhanced oil or natural gas recovery (EOR) project, or utilized for commercial purposes as described in section 45Q(f)(5), including by displacing non-recycled CO₂. The 75-million-ton sunset provision no longer applies to carbon capture equipment placed in service on or after February 9, 2018; instead, section 45Q credits are allowed during a 12-year period.

Section 45Q(f)(3) provides that the section 45Q credit is attributable (i) in the case of carbon capture equipment originally placed in service before February 9, 2018, to the person that captures and physically or contractually ensures the storage or utilization of the qualified carbon oxide, and (ii) in the case of carbon capture equipment originally placed in service on or after February 9, 2018, to the person that owns the carbon capture equipment and physically or contractually ensures the capture and storage and use of the qualified carbon oxide. New section 45Q(f)(3)(B) provides that the taxpayer to whom the credit is attributable may elect that the person that stores or uses the qualified carbon oxide may claim the credit.

Section 45Q(h) provides that the Secretary of the Treasury may prescribe regulations and other guidance as may be necessary or appropriate to carry out section 45Q. Section 45Q(f)(2) provides that the Secretary, in consultation with the Administrator of the Environmental Protection Agency (“EPA”), the Secretary of the Department of Energy (“DOE”), and the Secretary of the Department of the Interior (“DOI”), shall establish regulations for determining secure geological storage of qualified carbon oxide such that the carbon oxide does not escape into the atmosphere. Section 45Q(f)(4) provides that the Secretary shall, by regulation, provide for recapture of the tax credit with respect to any qualified carbon oxide that ceases to be captured, disposed of, or used. On May 20, 2019, the IRS solicited general comments on 45Q implementation by Notice 2019-32, 2019-21 I.R.B. 1187. Following stakeholder comments, IRS published Rev. Proc. 2020-12, 2020-11 I.R.B. 495, effective March 9, 2020, establishing a safe harbor for allocation of the 45Q tax credit in certain partnership structures and Notice 2020-12, 2020-11 I.R.B. 495, effective March 9, 2020, providing guidance on beginning construction under section 45Q(d)(1). The IRS has proposed comprehensive implementing regulations to be codified at 26 C.F.R. §1.45Q-0 *et seq.* for public comment by August 3, 2020. *Credit for Carbon Oxide Sequestration; Notice of proposed rulemaking*, 85 Fed. Reg. 34,050 (June 2, 2020).



II. Comments on 45Q Proposed Rules

A. Lifecycle Analysis: Third-party Verification

The proposed regulations would, if adopted, require that a lifecycle analysis (“LCA”) report for utilization projects be “performed by or verified by an independent third-party.” 85 Fed. Reg. at 34,073; §1.45Q-4(c)(2). Although third-party verification works as an incentive for taxpayers to ensure that their lifecycle analysis is robust, particularly if a safe harbor is offered, we question whether the statute permits third-party verification of lifecycle analyses on a mandatory basis. 45Q(f)(5)(B)(ii) states that the term “lifecycle greenhouse gas emissions” has the same meaning as under the Clean Air Act Renewable Fuels Standard (“RFS”) program. Neither the 45Q statute nor the RFS program mandate third-party verification. We believe the absence of any reference to verification in 45Q(f)(5)(B) should be interpreted as foreclosing *mandatory* third-party verification as proposed.

Rather than imposing an additional regulatory burden, IRS should consider encouraging third-party verification on a voluntary basis by offering a safe-harbor incentive to taxpayers that have their LCA approved by an accredited third-party verification entity.

IRS could determine that once an LCA report is approved by an accredited, independent third-party verifier, there would be less need for duplicative review by IRS and its sister agencies (discussed below). If IRS were to offer a safe harbor for third-party verification on a voluntary basis, it is likely that the vast majority of taxpayers would retain accredited third-party verifiers, which would enhance the integrity of the LCA process and reduce administrative burdens on the government. To ensure adherence, **IRS could establish a fraud exemption from the safe harbor and conduct spot audits as needed to ensure that the third-party verification system is working.**

In terms of what third-party verifiers are acceptable, we suggest that IRS take advantage of existing accreditation programs, such as that used by California¹ or the voluntary program established under the Clean Air Act renewable fuels program.²³

B. Review of Lifecycle Analysis

IRS’s proposal to require submittal of all lifecycle analyses for review and/or consultation

¹ For example, the California Air Resources Board certifies verifiers for greenhouse gas reporting laws <https://ww2.arb.ca.gov/our-work/programs/mandatory-greenhouse-gas-emissions-reporting/verification/mandatory-ghg-reporting>.

² Section 45Q(f)(5)(B)(ii) reads as follows: “(f) Special rules. * * * (5) Utilization of qualified carbon oxide. * * * (ii) Lifecycle greenhouse gas emissions. For purposes of clause (i), the term ‘lifecycle greenhouse gas emissions’ has the same meaning given such term under subparagraph (H) of section 211(o)(1) of the Clean Air Act (42 U.S.C. 7545(o)(1)), as in effect on the date of the enactment of the Bipartisan Budget Act of 2018 [enacted Feb. 9, 2018], except that ‘product’ shall be substituted for ‘fuel’ each place it appears in such subparagraph.”

³ On a related topic, although perhaps a technicality, the proposed regulations refer to a “professional license” but we are not aware of licensing programs per se, but rather accreditation programs.



by three different agencies – IRS, DOE and EPA – appears to be overly burdensome and likely to result in significant approval delays undermining the certainty needed to make the large investments the law is seeking to incentivize. Carbon oxides can be put to a wide variety of uses, such as building materials, food products, biofuels and bioproducts, all of which can displace other carbon oxide which would otherwise be emitted to the atmosphere. Given this reality, the lifecycle analyses will address a wide array of product types, activities and fact patterns. In addition, each individual LCA will have to be based on a bespoke evaluation and measurement of the particular activity being analyzed, unless the IRS is willing to review and approve broadly applicable pathways that cover categories of similar projects such as is done in the RFS program. Although we agree that ISO 14044:2006 is an appropriate framework for commercial utilization projects that displace CO₂ emissions, the lifecycle analysis requires methods and procedures for which neither the 45Q regulations nor the RFS regulations provide precise guidelines, thus the lifecycle analysis will require a considerable degree of professional judgment in adapting the statutory reference to the Clean Air Act as applied to carbon capture projects.

We also recognize that reviewing submitted LCAs will require a significant commitment in both time and resources. Each of the agencies involved would have to assemble a team with necessary professional competence and familiarity with lifecycle analysis methods and will need adequate bandwidth and financial resources to review LCA's quickly and accurately. For agency review to be workable in the business world, the agencies would have to complete their review within a reasonable time.

Moreover, in terms of substance of the review, the agency could not legally reject a lifecycle analysis submitted by a taxpayer except if the analysis is shown to be inconsistent with generally accepted carbon accounting principles. The statute ties eligibility for the tax credit to an LCA approvable under the RFS program and does not delegate to the IRS (or any other agency) any authority to devise new requirements or make policy judgments about what projects will be eligible.

For the reasons stated above, we suggest that the IRS create a safe harbor for taxpayers as an incentive that will likely result in many, if not all, significant carbon utilization projects retaining qualified third-party verifiers. Allowing for a safe harbor and the use of accredited 3rd party auditors will remove the potential for subjectivity and help establish a standardized benchmark. This will help ensure the integrity of the greenhouse gas lifecycle analysis, minimize regulatory burdens, speed tax preparation, and avoid unwarranted delays and agency expenditures.

C. Commercial Markets

The enhanced 45Q(f)(5)(A) expanded the allowable uses of captured carbon oxide to include “the use of such qualified carbon oxide for any other purpose for which a commercial market exists [except EOR], as determined by the Secretary.”⁴ **The term “commercial market”**

⁴ 45Q(f)(5) provides in pertinent part: “(f) Special rules * * * (5) Utilization of qualified carbon oxide (A) In general For purposes of this section, utilization of qualified carbon oxide means—(i) the fixation of such qualified carbon oxide through photosynthesis or chemosynthesis, such as through the growing of algae or bacteria, (ii) the chemical conversion of such qualified carbon oxide to a material or chemical compound in which such qualified

Comments of Nutrien - 45Q Tax Credits 4



is not defined in the statute, but given the congressional intent to incentivize a broad range of CO₂ uses, we suggest that the IRS should recognize that CO₂ has many existing and potential uses in commercial markets, such as for building products, fuels, food production and refrigeration.

The proposed regulations define “utilization of qualified carbon oxide” as including “any other purpose for which a commercial market exists . . . as determined by the Secretary of the Treasury.”⁵ §1.45Q-4(a)(3). This language, which generally mirrors the statute, is facially unobjectionable. However, the preamble suggests that IRS might intend to define which commercial uses qualify as CO₂ utilization. [fn: 85 Fed. Reg. at 34057 (“The proposed regulations do not define commercial markets . . . The Treasury Department and the IRS continue to study these issues and request comments”); 85 Fed. Reg. at 34064 (“The Treasury Department and the IRS also request specific comments regarding the definition of commercial markets . . .”). However, we believe it is clear that the legislation only delegates to IRS the responsibility to determine whether there is a commercial market for CO₂ (i.e., a binary yes or no determination whether a market exist for CO₂). Congress itself made the determination to incentivize all commercial markets. **Thus, we do not believe the IRS should seeks to narrow the broader intent of the statute by trying to define “commercial market”.**

To the extent that IRS does seek to include a definition of “commercial market”, we recommend the Agency focus on whether the market exists (e.g., "commercial market means a market in which carbon oxide is sold or transacted on commercial terms"), rather than making a policy judgment about which markets should be incentivized. We also recommend that while the IRS should not attempt to create an exhaustive list of eligible markets, the Agency should recognize the work done by DOE and other agencies in identifying valid existing commercial CO₂ uses (see illustrative diagram below) and should develop a positive list of markets that have been shown to exist.

carbon oxide is securely stored, or (iii) 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.” (Emphasis added.)

⁵ The proposed regulation adds the phrase “or his [her] delegate” which does not appear in the statute.



Figure 1 - Congressional Research Service report “Carbon Capture and Sequestration (CCS) in the United States” Fig. 5 (p. 11) (Aug. 9, 2018); citing Source: U.S. DOE, National Energy Technology Laboratory, CO₂ Utilization Focus Area, at <https://www.netl.doe.gov/research/coal/carbon-storage/research-and-development/co2-utilization>.

D. Displacement Utilization Projects

“Because displacement is specifically referenced in the statute and because the lifecycle analysis is based on the Clean Air Act renewable fuels program, IRS should acknowledge utilization projects that use recycled CO₂ to displace fossil/mined CO₂ based on project-specific LCA documentation. Congress’ policy choice is scientifically justified because if sectors such as dry ice, meat packing, and carbonated beverages did not utilize recycled CO₂ from capture facilities, then the CO₂ from the capture facility as well as CO₂ from the utilization facility would be emitted into the atmosphere – thus the displacement use reduces CO₂ emissions by the full amount of the captured CO₂ on a lifecycle basis.

We recommend that IRS clarify that permanent sequestration is not a prerequisite for carbon oxide uses described in section 45Q(f)(5)(A) and that eventual emission into the atmosphere does not, in itself, subject the taxpayer to recapture provisions so long as the LCA accounts for a full project lifecycle analysis.

* * *

Nutrien greatly appreciates this opportunity to comment on these important issues. The investment necessary for carbon capture equipment is considerable and requires some degree of predictability with respect to eligibility for the 45Q tax credit. We encourage IRS to adopt clear rules that are faithful to Congress’ intention to incentivize a broad range of carbon capture and utilization projects in the United States. We would be pleased to meet with your team in Washington, D.C. if helpful.



Respectfully submitted,

DocuSigned by:
Jeremy Stump
EC99C8515F8C434...

Jeremy Stump
Vice President, Global Government & Industry Affairs