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Blog Post

New Proposed Regulations for Carbon Sequestration Tax Credits Answer Key Questions

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Proposed regulations for the carbon sequestration tax credit under section 45Q of the Internal Revenue Code (“Section 45Q”) issued by the U.S. Department of the Treasury on May 28, 2020, provide answers to a number of important questions that were left open after initial Internal Revenue Service (“IRS”) guidance was issued in February 2020. Among other issues, the proposed regulations (the “Proposed Regulations”) address transfers of tax credits to third-party contractors, the requirements for secure storage of sequestered carbon oxide, and events giving rise to tax credit recapture. Although not yet final, taxpayers may rely on the Proposed Regulations immediately for taxable years beginning on or after February 9, 2018, as long as the rules are applied consistently and in their entirety.

Background

The carbon sequestration credit provides a dollar-for-dollar reduction in federal income tax liability for each metric ton of “qualified carbon oxide” captured at a qualifying plant and then permanently buried, used as a tertiary injectant in an enhanced oil or natural gas recovery project, or used in another commercial process that would result in the permanent disposal of the carbon oxide.

For projects placed in service after February 8, 2018, the credits are available annually over a 12-year period beginning in the year in which the carbon capture equipment is placed in service. (Credits are also available for projects that were placed in service earlier, but at a reduced rate and subject to a phase out after 75,000,000 metric tons are sequestered nationwide.) The construction of a facility that includes the carbon capture equipment must begin by the end of 2023 to qualify for tax credits.

The credit ranges from \$10–50 per metric ton, depending on when the carbon capture equipment is placed in service and what is done with the carbon oxide after it is captured. The credit is worth more if the carbon oxide is permanently buried as opposed to put to a commercial use.

Section 45Q, as enacted by Congress, directed Treasury (and in some cases the Department of Energy) to provide rules to address certain key aspects of credit eligibility. Until now, the lack of guidance has significantly constrained financing activity for carbon capture projects.

The IRS published an initial round of guidance for the tax credit in February 2020, providing rules for when carbon capture projects are deemed to begin construction for purposes of qualifying for tax credits, and establishing a framework (similar to that used in wind tax credit financings) for transactions with third-party tax-equity providers to ensure that the allocation of the tax credit is respected. Our analysis of this first wave of tax guidance is available [here](#).

Although the February guidance addressed some important initial questions, details around a number of key issues were still needed. The Proposed Regulations provide much of this remaining detail.

Tax Credit Eligibility and Elections

The default eligibility rule in Section 45Q in the case of equipment placed in service after February 8, 2018, is that the tax credits are awarded to the person that owns the carbon capture equipment and physically or contractually ensures that the carbon is captured and then either permanently stored, used as an injectant or put to another commercial use.

The Proposed Regulations clarify that when the equipment owner contracts for carbon sequestration services, it must do so under a “binding written contract” that is enforceable under state law and “does not limit damages to a specified amount.”¹ Somewhat surprisingly, the Proposed Regulations do not include an exception to this rule. This is in contrast to long-standing bonus depreciation regulations (and prior legislative history), which say that, under a similar “binding written contract” construct, a provision limiting damages to at least five percent of the total contract price is permitted. A five-percent exception was also included in the IRS start of construction rules for carbon capture projects that were issued in February, so it is unclear if the

omission in the Proposed Regulations was intentional or if it will be addressed before the Proposed Regulations become final.

The Proposed Regulations also provide rules for how carbon capture tax credits can be spread among different parties, and allow significant flexibility for transaction structuring. Instead of claiming the credit in full over the 12-year credit period, the person who owns the carbon capture equipment can elect to transfer some or all of the credits to one (or even multiple) contractors who agree to dispose of or use the carbon oxide. If more than one contractor will receive a share of the credits, then the amount each contractor can claim is limited to the proportion of the total carbon oxide that they sequester.

To give an example, if a project would generate \$1,000 in credits and contractor A agrees to dispose of 30% of the carbon oxide and contractor B agrees to dispose of 70%, then contractor A can claim \$300 worth of credits and contractor B can claim \$700.

The election is made annually, so there is flexibility to allocate credits in different proportions year-by-year or even transfer them to some contractors in particular years and other contractors in different years. Both the transferor of the credits and any contractors receiving them are required to file election forms in their tax returns for each year in which the credit is available.

Secured Geological Storage

If captured carbon oxide is not used for commercial use, it must be stored in “secure geological storage,”² which includes storage at deep saline formations, oil and gas reservoirs, and unminable coal seams. Section 45Q directed the Treasury Department to establish security measures in consultation with the Environmental Protection Agency (“EPA”), the Department of Energy and the Department of the Interior to ensure that the stored carbon oxide does not escape into the atmosphere.

The Proposed Regulations address these security measures by requiring any injection of carbon oxide to comply with specific environmental regulations, the applicability of which depend on how the carbon oxide is stored. The Proposed Regulations require taxpayers to support compliance with these rules with certain documentation and certifications that must be filed with the taxpayer’s annual tax return. In the case of geological storage, these certifications must be made by a qualified independent engineer or geologist.

Recapture Rules

Section 45Q(f)(4) of the Internal Revenue Code specifically directs the Treasury Department to provide regulations for recapturing the benefit of carbon capture tax credits if the previously captured carbon oxide “ceases to be captured, disposed of, or used as a tertiary injectant.” In the absence of further detail, the lack of clarity about how and when tax credits were at risk of recapture was a significant barrier to carbon capture project financing. Fortunately, the Proposed Regulations provide detailed guidance on measuring the amount of leaked carbon oxide, methods for calculating recapture and the tax period relevant for such calculations.

A “recapture event” occurs when carbon oxide for which a tax credit was previously claimed ceases to be captured, disposed of or used as an injectant (“leaks”) during a five-year “recapture period.” Recapture events are determined separately for each project.

Recapture is measured on a net basis, so a recapture event only occurs to the extent the amount of carbon oxide that leaks into the atmosphere in a particular year exceeds the amount that was stored or used as an injectant. When a taxpayer, operator or regulatory agency determines that carbon oxide has leaked into the atmosphere, the taxpayer is required to quantify the leak using a methodology provided in EPA regulations, and obtain a supporting certification from an independent engineer or geologist.

The period for monitoring and calculating recapture begins on the date of the first injection of carbon oxide for disposal in secure storage or use as a tertiary injectant and ends on the earlier of five years after the last taxable year a taxpayer claims a tax credit for the project or the date that secure geologic storage monitoring requirements are met.

The recapture amount is calculated by multiplying the amount of leaked qualified carbon oxide against the tax credit rate in the applicable year using a last in, first out (“LIFO”) methodology that looks back up to five years.³

For example, assume a taxpayer claimed 1,000 tons of qualified carbon capture in each of years 1, 2 and 3, and the relevant credit rates for the years are \$25, \$30 and \$35, respectively. If in year 4 the taxpayer has a recapture event of 1,500 tons, then the recapture amount would assume that the year 3 qualified carbon oxide escaped first and the recapture amount would be \$50,000 (year 3 1,000 tons * \$35 = \$35,000, plus

year 2 500 tons * \$30 = \$15,000). The tax credits are taken into income in year 4, when the recapture event occurs.

The Proposed Regulations also provide guidance on reporting requirements with respect to recapture events, and provide a limited exception that a recapture event is not triggered if the loss of containment is due to issues outside of the taxpayer's control like volcanic activity, terrorist attacks and other actions not related to the selection, operation or maintenance of the storage facility.

Other Issues

In addition to the topics described above, the Proposed Regulations address the qualification of new additions to carbon capture equipment placed in service before February 9, 2018, provide rules for retrofitting old carbon capture equipment so that it is treated as newly placed in service, provide additional rules and reporting requirements for how the utilization of carbon oxide (other than as a tertiary injectant) is to be measured, and make other clarifications to the framework provided in section 45Q.

Looking Ahead

Although the Proposed Regulations are technically not effective until they are published in final form, taxpayers may rely on them immediately for taxable years beginning on or before February 9, 2018, as long as they follow the Proposed Regulations in their entirety and in a consistent manner.

The Proposed Regulations answer many of the open questions about carbon capture tax credits and are a major step forward for efforts to finance carbon capture projects. However, there are still a few questions left unanswered, including whether the "binding written contract" rule will be clarified for consistency with the bonus depreciation regulations and start of construction rules, and how to apply recapture events to carbon capture tax credits that are carried forward to future taxable years due to insufficient income tax liability. Further, the Proposed Regulations impose a fairly complex set of compliance and administrative rules, and additional issues may arise as taxpayers begin the process of applying these rules to up-and-running projects.

The Treasury Department and IRS are still looking for additional comments from taxpayers, and while the Proposed Regulations give clarity to taxpayers on most major issues, it is likely that there will be additional guidance and modifications to these rules before they become final.

1. In addition to satisfying the binding written contract rules, the contract must comply with a laundry list of other requirements specified in the Proposed Regulations, and each of the parties is required to report the contract to the IRS.↵

2. The Proposed Regulations provide that carbon oxide is considered to be disposed of in secure geological storage if it is: (a)(i) stored, but not used as a tertiary injectant in an enhanced oil or natural gas recovery project, in compliance with subpart RR of the EPA's Greenhouse Gas Reporting Program (GHGRP) requirements; or (ii) used as a tertiary injectant in an enhanced oil or natural gas recovery project and stored in compliance with applicable requirements under subpart RR of the GHGRP requirements, or the International Organization for Standardization (ISO) standards endorsed by the American National Standards Institute (ANSI) under CSA/ANSI ISO 27916:19, Carbon dioxide capture, transportation and geological storage – Carbon dioxide storage using enhanced oil recovery (CO₂-EOR); and (b) injected into a well that complies with applicable Underground Injection Control (UIC) regulations that apply to onshore or offshore under submerged lands within the territorial jurisdiction of U.S. states. We note that the drafting of the IRS guidance with respect to this provision is ambiguously drafted as to whether (b) is in addition to, or an alternative to, (a)(i) or (ii), but we interpret it as being in addition to either (i) or (ii).↵

3. When credits are claimed by multiple taxpayers, the recapture amount will be allocated to each taxpayer on a pro rata basis.↵

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