

## IRS Clears the Way for Retrofitted Carbon Capture Projects

*In a new Revenue Ruling, the IRS addresses the scope, ownership, and placed-in-service date for carbon capture equipment.*

### Key Points:

- Developers adding carbon capture equipment to an existing industrial facility now have clarity on the starting date for 45Q Credits.
- The placed-in-service date of a “single process train” is the relevant date for purposes of 45Q Credits, and not the placed-in-service dates of individual components.
- A single process train of carbon capture equipment is considered placed in service for 45Q purposes when the full process train is ready to capture and process carbon oxide.

On July 1, 2021, the Internal Revenue Service (IRS) issued further guidance relating to the tax credit for the capture and sequestration of carbon oxide (the 45Q Credit) in the form of Revenue Ruling 2021-13 (the Ruling). This Ruling provides relief and clarity to taxpayers with facilities that have existing components that may meet the definition of carbon capture equipment, as well as taxpayers seeking to expand their carbon capture infrastructure at such facilities. Specifically, this Ruling finds that Acid Gas Removal (AGR) units are carbon capture equipment, clarifies which taxpayer may claim the credit if components of the carbon capture equipment are owned by different taxpayers, and provides guidance on the placed-in-service date for carbon capture equipment with individual components that have been placed in service at different times.

### The 45Q Credit

The 45Q Credit is a per-metric-ton tax credit available to owners of carbon capture equipment who capture carbon oxide from an industrial facility or directly from the atmosphere and then sequester it, or first use it as a tertiary injectant in enhanced oil recovery and then sequester it as part of that process. The captured carbon oxide may also be used in certain other commercial processes that result in the permanent removal of the carbon oxide. Owners of carbon capture equipment may claim tax credits over a 12-year period starting when the carbon capture equipment is first put into service.

### Existing Equipment Can Be Carbon Capture Equipment

Under recently released Treasury Regulations applicable to 45Q Credits, carbon capture equipment is defined based on its function. (For more information, see Latham’s *Client Alert* [“Treasury Finalizes Carbon Capture Tax Credit Regulations.”](#))

Specifically, carbon capture equipment is equipment used to either:

- Separate, purify, dry, and/or capture carbon oxide that would otherwise be released into the atmosphere from an industrial facility
- Remove carbon oxide from the atmosphere via direct air capture
- Compress or otherwise increase the pressure of carbon oxide

For these purposes, carbon capture equipment includes all components of property necessary to compress, treat, process, liquefy, pump, or perform some other physical action to capture carbon oxide. Under these Treasury Regulations, a single unit of carbon capture equipment includes all components that make up an independently functioning process train capable of capturing, processing, and preparing carbon oxide for transport.

Many existing industrial facilities include equipment that functionally separates carbon oxides. As a result, developers of carbon capture projects at such facilities faced significant uncertainty as to whether the placed-in-service date for their carbon capture equipment would be based on the placed-in-service date of the original facility or of the newly installed carbon capture equipment.

The Ruling addresses this common fact pattern by analyzing an AGR unit at a methanol plant. The taxpayer wishes to install new equipment to capture carbon dioxide (CO<sub>2</sub>) that is being released into the atmosphere. The methanol plant first produces a mixture of carbon monoxide, CO<sub>2</sub>, methane, hydrogen, and hydrogen sulfide from the gasification of petroleum coke. Some sulfur and particulate matter is removed, and then the AGR unit removes CO<sub>2</sub> and other unwanted components from this mixture. The remaining components of the mixture are used to produce methanol while the AGR stream, which is almost entirely CO<sub>2</sub>, is released into the atmosphere unless otherwise captured.

The Ruling holds that an AGR unit is carbon capture equipment. The AGR unit functions in part to separate CO<sub>2</sub> from the gas stream. Since this equipment fulfills one of the functions of carbon capture equipment listed in the definition and cannot be excluded based on its existing purpose in the facility, it qualifies as carbon capture equipment.

## Who Can Claim the Credit

Generally, the 45Q Credit is claimed by the taxpayer that both:

- Owns the carbon capture equipment
- Physically or contractually ensures the capture and disposal, injection, or utilization of the carbon oxide

The owner of the carbon capture equipment does not need to own the industrial facility where the equipment is located to qualify for 45Q Credits. If carbon capture equipment is owned by multiple parties, only one taxpayer is permitted to claim the 45Q Credit for each single process train of carbon capture equipment. That person will be the taxpayer who either:

- Physically ensures the capture and disposal, injection, or utilization of such qualified carbon oxide
- Contracts with others to capture and dispose, inject, or utilize such qualified carbon oxide

The Ruling confirms that, based on these rules, the taxpayer eligible to claim the credit need not own every component of carbon capture equipment in the single process train. The taxpayer claiming the credit however, must own at least one component of the carbon capture equipment in the single process train and be the taxpayer ensuring the disposal, injection, or utilization of the carbon oxide. This seemingly simple recitation of the Treasury Regulations is an important confirmation that may lead to tax equity structures in which an investor wishes to own an interest in some or all of the newly installed equipment, but more than likely could not (and may not want to) own an interest in the industrial facility.

## The Placed-in-Service Date for 45Q Credit and Depreciation Purposes

The placed-in-service date for carbon capture equipment is important for 45Q Credit purposes because:

- The 45Q Credit is available for a 12-year period beginning on the date the carbon capture equipment was originally placed in service.
- The amount of the 45Q Credit and the applicable rules vary depending on whether the carbon capture equipment was (or was deemed to be) placed in service after February 8, 2018.

Since a single unit of carbon capture equipment includes all components of the independently functioning process train, it may include both existing equipment such as an AGR unit and new equipment. Under existing law, taxpayers with existing carbon capture equipment components faced a shortened credit period and/or reduced 45Q Credits depending on the placed-in-service date of the carbon capture equipment, unless the taxpayer could show that the value of the existing equipment was less than 20% of the total value of the carbon capture equipment (the 80/20 Rule). Taxpayers that met the 80/20 Rule could “restart” the placed-in-service date for the carbon capture equipment. However, application of the 80/20 Rule to equipment such as an AGR unit can be particularly difficult, as taxpayers were unsure whether to include the value of the entire AGR unit, or only the equipment within the AGR unit that actually separates CO<sub>2</sub>.

This Ruling holds that the placed-in-service date for purposes of the 45Q Credit is when the entire process train of carbon capture equipment is placed in service. According to the Ruling, the placed-in-service date is when the single process train is in a condition or state of readiness and availability for the specifically designed function of capturing, processing, and preparing carbon oxide for disposal, injection, or utilization. Thus this placed-in-service date cannot have occurred if new components are required to capture and process the carbon oxide at a facility so it can be disposed of, injected, or utilized rather than be released into the atmosphere.

The Ruling also clarifies that for depreciation purposes, the AGR unit and any new equipment would be treated as separate assets with their own respective placed-in-service dates.

## Key Takeaways

This Ruling should provide certainty to taxpayers with AGR unit equipment and further clarify for other taxpayers seeking guidance on how to determine the scope of the unit of carbon capture equipment when existing equipment at the facility meets the functional definition of carbon capture equipment. This will be welcome news to taxpayers developing, and financing carbon capture projects at existing industrial facilities.

---

If you have questions about this *Client Alert*, please contact one of the authors listed below or the Latham lawyer with whom you normally consult:

**Jim Cole**

james.cole@lw.com  
+1.713.546.7435  
Houston

**C. Timothy Fenn**

tim.fenn@lw.com  
+1.713.546.7432  
Houston

**Eli M. Katz**

eli.katz@lw.com  
+1.212.906.1620  
New York

**Chelsea M. Muñoz-Patchen**

chelsea.munoz-patchen@lw.com  
+1.713.546.7591  
Houston

**You Might Also Be Interested In**

[Treasury Finalizes Carbon Capture Tax Credit Regulations](#)

[Carbon Capture Industry Receives Long-Awaited 45Q Tax Credit Guidance](#)

[IRS Extends Renewables Continuity Safe Harbor](#)

[IRS Gives Offshore Wind and Federal Land Projects More Time to Qualify for Tax Credits](#)

---

*Client Alert* is published by Latham & Watkins as a news reporting service to clients and other friends. The information contained in this publication should not be construed as legal advice. Should further analysis or explanation of the subject matter be required, please contact the lawyer with whom you normally consult. The invitation to contact is not a solicitation for legal work under the laws of any jurisdiction in which Latham lawyers are not authorized to practice. A complete list of Latham's *Client Alerts* can be found at [www.lw.com](http://www.lw.com). If you wish to update your contact details or customize the information you receive from Latham, [visit our subscriber page](#).