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Washington, D.C. 20224

Re: Section 45Q: request for clarification of application of definition of “carbon capture equipment” to industrial facility separation units

Dear Mr. Desmond, Ms. Porter and Mr. Selig:

This letter concerns the recently released final regulations under Internal Revenue Code section 45Q (T.D. 9944, January 6, 2021), specifically the definition of “carbon capture equipment” contained therein.

We sincerely appreciate the release of the extensive guidance in the final regulations and the thoughtful analysis that was brought to bear in their preparation. It is clear that preparation of the regulations and the explanation of the response to public comments on the proposed regulations was a large undertaking that necessitated hard work and dedication to produce but the final product will provide the certainty needed to stimulate investment in carbon capture projects.

We are writing to tell you about a difficulty in applying the regulations in their final form to a fact situation that we have seen commonly presented by our clients and others in the industries for which the credit is relevant. Application of the final regulations is not clear on this point and, as a result, is delaying the closing of investments currently under negotiation.

Moreover, because of the time-limited nature of the credit (12 years from the placed-in-service date which can, pursuant to an election under section 45Q(f)(6), be deemed to have been in 2018), every day of delay in closing the investments reduces the available credit, thereby calling into question the financial assumptions on which the deals are predicated and potentially causing such investments to collapse.

We are concerned about the treatment of industrial equipment that separates, but does not necessarily capture for sequestration, carbon oxide from other substances, and whether such units must be considered part of the “carbon capture equipment” of a facility or project. The

determination of whether such separation equipment necessarily falls within the definition of “carbon capture equipment” has significant ramifications.

Because section 45Q attributes the credit to the party that owns “the carbon capture equipment,” a determination that the separation units are in all circumstances “carbon capture equipment” would mean that the taxpayer must own the industrial separation equipment in order to claim the credit. Such a requirement would be highly problematic in the context (which is typical) of an investor that wants to invest in order to obtain the credit and must be certain that it owns the carbon capture equipment but does not care to, or is unable to, acquire any portion of the industrial facility to which it is attached.¹

The owners of the compression and processing equipment that are investing for purposes of obtaining the section 45Q tax credit may often be unable to obtain ownership of a part of the industrial facility, which is likely to have different owners and be encumbered by, and subject to the same negative covenants in, debt that encumbers the rest of the industrial facility. A requirement that the taxpayer that owns the carbon capture equipment attached to an industrial facility must also own equipment that composes part of the industrial facility would therefore be an absolute obstacle to such investment.

Inclusion of such industrial equipment in the definition would also have an impact on the application of the determination of the placed-in-service date for the project, since the regulations will treat a facility that is retrofitted with carbon capture equipment as placed in service after the 2018 cut-off date for access to the improved 45Q tax credit if no more than 20% of the carbon capture equipment is used equipment (the “80/20 rule”). Inclusion of industrial equipment (which is very likely to be older, used equipment) in the calculation when a facility is retrofitted with new compression and processing equipment would make the project much less likely to be able to take advantage of the 80/20 rule.

Investments in projects are currently being negotiated that involve industrial carbon oxide separation units referred to as “Selexol” units. Selexol is the trade name for an acid gas removal solvent that can separate acid gases such as carbon dioxide from feed gas streams such as synthesis gas, an industrial product produced by gasification of coal, coke, or heavy hydrocarbon oils. Similar separation units in some facilities using a slightly different process are referred to as Rectisol units.

¹ The final regulations clearly recognize that ownership of the carbon capture equipment and ownership of the industrial facility may be different, stating in Treas. Reg. section 1.45Q-2(c) that: “Carbon capture equipment that is originally placed in service at a qualified facility on or after February 9, 2018, may be owned by a taxpayer other than the taxpayer that owns the industrial facility at which the carbon capture equipment is placed in service.”

Following treatment in the Selexol unit, the syngas is largely freed of the carbon oxide and is ready for further processing or combustion. At that point, the Selexol unit has completed its industrial function (separation of carbon dioxide from the resulting industrial product), and the next stage in the industrial process could be simple emission of the waste carbon dioxide into the atmosphere. However, for facilities that have invested in additional equipment, the carbon dioxide is sent, via a pipe, out the tailgate of the industrial facility to equipment that compresses, processes and ships the carbon dioxide to be sequestered, used in EOR or otherwise utilized. In these circumstances, the Selexol unit does not capture the carbon oxide; it identifies and separates it but then the facility could just as easily (in fact, more easily) emit the carbon oxide as capture it. The Selexol unit is part of the industrial facility and is necessary for production of the syngas that is free of carbon oxide, regardless of whether such carbon oxide is thereafter emitted or captured.

Treas. Reg. section 1.45Q- 2(c) defines “carbon capture equipment” as follows:

(c) Carbon capture equipment. In general, carbon capture equipment includes *all components of property that are used to capture or process carbon oxide until the carbon oxide is transported for disposal, injection, or utilization. . . .*

(1) Use of carbon capture equipment. Carbon capture equipment is equipment used for the purpose of—

(i) *Separating, purifying, drying, and/or capturing carbon oxide that would otherwise be released into the atmosphere from an industrial facility;*

(ii) *Removing carbon oxide from the atmosphere via direct air capture; or*

(iii) *Compressing or otherwise increasing the pressure of carbon oxide.*

(2) Carbon capture equipment components. Carbon capture equipment generally includes components of property necessary to compress, treat, process, liquefy, pump or perform some other physical action to capture qualified carbon oxide. (emphasis added)

Treas. Reg. section 1.45Q- 2(c) defines “industrial facility” as follows:

An industrial facility is a facility . . . that produces a carbon oxide stream from . . . a manufacturing process. . . that, absent capture and disposal, injection, or utilization, would otherwise be released into the atmosphere as industrial emission of greenhouse gas or lead to such release.

Because, under the facts described above, the Selexol unit is not properly viewed as performing the function of capturing carbon dioxide but, rather, as functioning to isolate the carbon dioxide that is a by-product and that would be released if other equipment (the true carbon

capture equipment) is not installed, we do not believe that it is intended that such a unit be covered by the new general definition, which applies a functional approach and states that carbon capture equipment includes all components of property that are used to capture or process the carbon oxide. Even if this is the intended application of the regulation to separation units, however, uncertainty arises from the subsequent reference in subparagraph (1)(i) of the regulation to equipment having the purpose of “separating” carbon oxide. The Selexol unit separates carbon oxide (and other substances) from the syngas. Therefore, application of the definition to such units under the facts above is unclear.

Accordingly, we would like to request that consideration be given to providing additional guidance on this point, such as a Notice or Revenue Ruling, which would clarify that Selexol, Rectisol, or similar units, either are not included in the definition of “carbon capture equipment” under such facts or, if they are, that the taxpayer is not required to own such units in addition to the equipment that compresses and processes the carbon oxide.

The guidance could be provided as the IRS’ interpretation of the application of the final regulations to this particular fact situation. That interpretation could be premised upon the use of the word “and/or” in the itemization of purposes for which carbon capture equipment is used. In other words, the itemization is an expansive list of the purposes carbon capture equipment generally would, but does not necessarily under all facts, perform and not all such purposes are necessarily required. The general definition that defines carbon capture equipment as “all components of property used to capture . . . carbon oxide” requires that the taxpayer must own all components that capture or process but not all components that, under appropriate facts such as the above, incidentally contribute to carbon capture in the course of an industrial process, e.g., separate carbon oxide.

The interpretation would be supported by the description of the revised definition of “carbon capture equipment” in the final regulations. The preamble to the final regulations explains that the definition, as revised, is intended to adopt a functional approach, rather than a specific list approach, to the definition. The functional approach looks, naturally, to the function of such equipment being that of capturing carbon oxide. The function of Selexol, Rectisol and similar units is not to capture the carbon oxide. Rather, it is, absent other facts, only to clean the carbon oxide out of the syngas. Moreover, such guidance or ruling could be narrowly circumscribed to the current function of Selexol, Rectisol or similar units as they are currently used, leaving open the possibility that subsequent technological developments with such units could result in a different outcome.

Finally, we point to the clear legislative intent of section 45Q to incentivize investment in equipment that reduces the amount of carbon oxide emitted from industrial facilities. The separation units we are describing are in no way connected to an effort to reduce emissions. In most existing facilities that we are aware of, the installation of such units pre-dated the availability of a credit for carbon capture. In fact, without attachment of carbon capture equipment to the industrial facilities, the units, by identifying and separating out the carbon oxide from the syngas, actually enable carbon oxide to be emitted. Therefore, we believe requiring a prohibitively

burdensome investment in and ownership of such units would be counter to the clear legislative intent reflected in section 45Q.

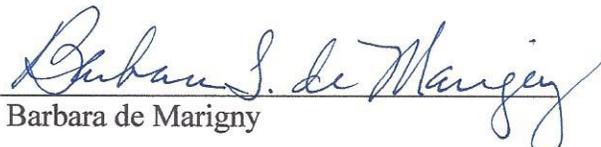
Alternatively, if you determine that such units fall within the definition of “all components of property used to capture” carbon oxide, then we would request that you consider clarifying that an exception will be made for units such as the Selexol, Rectisol and similar units so that, while they may fall within the definition of carbon capture equipment, the taxpayer is not required to own such units in order to claim the credit, as long as the taxpayer owns, at a minimum, the equipment that compresses and processes the captured carbon. Restrictions could be placed to narrow the availability of such an exception, for example, restricting it to circumstances in which the separation units are within the boundaries of the industrial facility, form part of the industrial facility and are owned by the owner of the industrial facility.

If you decide that a Revenue Ruling with respect to the specific facts of Selexol, Rectisol or other similar separation units is the best way to proceed, we would be happy to arrange to provide you with additional, more detailed information regarding the chemical engineering of, and processes carried out by, such units.

We would like to stress again the urgency with which we make this request. We would be pleased to discuss any of the above with you or your delegates whenever convenient for you, with hope that this request can receive your attention as soon as possible.

Respectfully Submitted,

Baker Botts, L.L.P.

By: 
Barbara de Marigny

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