

August 4, 2015

CC:PA:LPD:PR (REG-132634-14) Room 5203 Internal Revenue Service P.O. Box 7604 Ben Franklin Station

Washington, DC 20044

Re: Comments on Proposed Regulations (REG-132634-14) under Section 7704(d)(1)(E) of the Internal Revenue Code of 1986, as amended, With Respect to the Status of Income as "Qualifying Income"

OCI Partners LP ("OCIP") and OCI USA, Inc. respectfully submit this letter in response to the request for comments on the proposed regulations published in the Federal Register (*see* 80 Fed. Reg. 25970 (to be codified at 26 C.F.R. pt. 1)) on May 6, 2015 (the "Proposed Regulations") under section 7704(d)(1)(E) of the Internal Revenue Code of 1986, as amended (the "Code"),¹ relating to qualifying income from the exploration, development, mining or production, processing, refining, transportation and marketing of minerals or natural resources. We recognize the efforts of the Department of the Treasury ("Treasury") and the Internal Revenue Service (the "Service") to implement a comprehensive definition of qualifying income as it relates to minerals and natural resources, and we believe that input from participants in the mineral and natural resources industries will result in improved final Treasury Regulations. In addition to submitting the comments below for your consideration, OCIP and OCI USA, Inc. hereby request a public hearing regarding the Proposed Regulations.

I.

Our comments principally address the scope of activities that the Proposed Regulations treat as processing or refining of natural gas and the classification of methanol as a mineral or natural resource. We believe that the Proposed Regulations misapply section 7704(d)(1)(E) and misinterpret the original Congressional intent and understanding of the statute as demonstrated in the related legislative history. Inexplicably, the Proposed Regulations ignore the separate, unique meaning of the words "processing" and "refining" set forth in the Code and the existing Treasury Regulations, as well as the Service's own prior ruling practice, and effectively write "refining" of natural gas as an independent activity under section 7704(d)(1)(E) out of the statute. The Proposed Regulations conclude by implication that refining of natural gas is not possible, which is contrary to common industry practice and understanding, by not providing any parameters by which to analyze a refining activity directed at natural gas. This result could not have been intended by Congress.

Finally, we believe that the Proposed Regulations incorrectly exclude methanol as being considered a mineral or natural resource and that such treatment is inconsistent with the plain meaning of section 7704(d)(1)(E) and ignores original Congressional intent and understanding of the statute as demonstrated in the related legislative history. Methanol, which is produced directly by a refining activity, is not explicitly mentioned in section 7704(d)(1)(E) or the related legislative history; however, methanol is a product similar to those products specifically listed in the legislative history. Methanol is a derivative of—and chemically similar to—methane, which is explicitly listed as a mineral or natural resource in the legislative history to section 7704. In addition, methanol is an intermediate product derived from refining natural gas into gasoline. It is, therefore, not a product, like plastic, that results from additional processing beyond that undertaken by refineries and field facilities. Finally, methanol is used as a fuel blended with gasoline and as an octane booster in reformulated gasoline, and like gasoline and diesel fuel, both of which are expressly included in the legislative history to section 7704, methanol is used as a liquid fuel for

¹ Unless otherwise noted, references to "section" or "§" are references to the Code or the Treasury regulations promulgated thereunder (the "Treasury Regulations").



automobile engines. Therefore, even under the framework provided by the Proposed Regulations, methanol is a product of gas and oil that is a mineral or natural resource within the meaning of section 7704(d)(1)(E).

II.

OCIP is a publicly traded partnership (a "PTP") that owns and operates an integrated methanol and ammonia production facility near Beaumont, Texas. This facility has an annual methanol production capacity of approximately 912,500 metric tons making OCIP one of the largest merchant methanol producers in the United States. The facility's annual ammonia production capacity is approximately 331,000 metric tons. Approximately 120 people are employed to operate the facility, and we estimate that our operations are indirectly responsible for the employment of an additional 100 people.

The facility's methanol production unit is comprised of Foster-Wheeler-designed twin steam methane reformers for synthesis gas production, two Lurgi-designed parallel low-pressure, water-cooled reactors and four distillation columns. OCIP refines raw natural gas into synthesis gas by heating the natural gas stream, injecting steam into the natural gas stream and passing the natural gas stream over a nickel catalyst, which reforms the natural gas stream into a mixture of carbon monoxide, carbon dioxide and hydrogen. This activity, referred to as steam methane reforming, of producing synthesis gas is widely used in petroleum refineries around the world. In the final stage of the refining activity, the synthesis gas is fed into a reactor under high temperatures and pressures where carbon monoxide and hydrogen molecules are combined in the presence of a copper-based catalyst to produce hydrogen, water and methanol.

OCIP received Priv. Ltr. Rul. 201324002 (Jun. 13, 2013) from the Service concluding, among other things, that OCIP's income derived from processing and marketing methanol produced through the processing of natural gas will constitute qualifying income within the meaning of section 7704(d)(1)(E). Later in 2013, OCIP conducted an initial public offering of common units representing limited partner interests in OCIP in which the public invested \$315 million. OCIP common units are publicly traded on the New York Stock Exchange.

Additionally, an affiliate of OCIP has begun construction of a second methanol plant, adjacent to the existing facility, that is expected to create another 240 permanent jobs and 2,500 construction jobs. Our affiliate's investment in this facility, which is expected to reach \$2 billion, was predicated on the expectation that, in accordance with the private letter ruling we received, the methanol plant would produce qualifying income and could be contributed to OCIP once completed.

III.

A. The Qualifying Income Exception

Section 7704(a), enacted by the Revenue Act of 1987, generally treats a PTP as a corporation for federal income tax purposes. However, section 7704(c)(1) contains an exception that exempts from treatment as a corporation any PTP for any taxable year if the PTP met the gross income requirement set forth in section 7704(c)(2) for that taxable year and each preceding taxable year beginning after December 31, 1987, during which the PTP or any predecessor was in existence. A PTP meets the gross income requirements of section 7704(c)(2) for any taxable year if 90% or more of the gross income of the PTP for that taxable year consists of "qualifying income."

Under section 7704(d)(1)(E), the broadest category of qualifying income is income derived with respect to minerals or natural resources. Such qualifying income includes:

Income and gains derived from the exploration, development, mining or production, processing, refining, transportation (including pipelines transporting gas, oil, or products thereof), or the marketing of any mineral or natural resource (including fertilizer, geothermal energy, and timber), [or] industrial source carbon dioxide, or the transportation or storage of



any fuel described in subsection (b), (c), (d), or (e) of section 6426 or any alcohol fuel defined in section 6426(b)(4)(A) or any biodiesel fuel as defined in section 40A(d)(1).

Thus, to generate qualifying income with respect to a mineral or natural resource, two requirements must be met: (1) the PTP's activities must be directed towards a mineral or natural resource, and (2) such activities must be one of the enumerated activities listed above, such as processing, refining or marketing.

The first five section 7704(d)(1)(E) activities—exploration, development, mining or production, processing, and refining—reflect a comprehensive upstream-to-downstream progression of different activities that are directed at minerals or natural resources as a feedstock and that ultimately result in a marketable product. Each of these separate activities when applied to a mineral or natural resource feedstock generates qualifying income. Stated differently, the statute provides an analytical framework that requires the input of these five activities to be a mineral or natural resource and is not concerned with the output of such activity. By contrast, the final two enumerated section 7704(d)(1)(E) activities—transportation and marketing—may be directed at either a mineral or natural resource or at a product of one of the first five section 7704(d)(1)(E) activities applied to a mineral or natural resource. For example, income derived from refining crude oil, which is a mineral or natural resource feedstock, into gasoline constitutes qualifying income, and income derived from wholesale marketing of gasoline, which is a product of a refining activity applied to a mineral or natural resource input, constitutes qualifying income. The same construct holds true for the refining of natural gas (mineral or natural resource feedstock) into gasoline (product) or liquefied petroleum gas (product).²

B. Natural Gas Is a Mineral or Natural Resource

The 1988 amendment to section 7704(d)(1) added language providing that any product for which a deduction for depletion is allowed under section 611 is a mineral or natural resource. Generally, section 611 provides a deduction for depletion with respect to mines (*e.g.*, coal and other hard rock minerals), oil and gas wells, other natural deposits and timber. Soil, sod, turf, water, mosses and minerals from seawater, air and other similar inexhaustible sources are, however, explicitly excluded. In addition, the statutory language indicates that products of gas and oil are minerals or natural resources because section 7704(d)(1)(E) provides that qualifying income includes income from the "transportation (including pipelines transporting gas, oil, or products thereof) or the marketing of any mineral or natural resource" (emphasis added). Neither section 7704 nor the Treasury Regulations promulgated thereunder provide any further detail as to what is considered a mineral or natural resource for these purposes.

The legislative history of section 7704, however, provides more insight into what Congress considered to be a mineral or natural resource.³ The Conference Report accompanying the Omnibus Budget Reconciliation Act of 1987 (the "Conference Report"), clarifies the meaning of "oil, gas, or products thereof." The Conference Report not only makes explicit what is implicit in section 7704(d)(1)(E) by defining minerals and natural resources to include oil, gas and products thereof, but also goes on to

² Stated differently, a taxpayer may refine crude oil (input) in the production of gasoline (product); by no means would anyone ever assert that a taxpayer may refine gasoline (product). Therefore, the feedstock is the operating object of the statutory construct.

³ It is well recognized that courts may turn to legislative history to assist in interpretation of statutes. *N. Haven Bd. of Educ. v. Bell*, 456 U.S. 512 (1982). As a general rule, committee reports represent the most persuasive indicia of Congressional intent. *Housing Authority of Omaha v. United States Housing Authority*, 468 F.2d 1, 6-7 n. 7 (8th Cir. 1972), *cert. denied*, 410 U.S. 927 (1973); *Mills v. United States*, 713 F.2d 1249, 1252 (7th Cir. 1983), *cert. denied*, 464 U.S. 1069 (1984), *see also Davis v. Luckard*, 788 F.2d 973, 981 (4th Cir. 1986) (according particular weight to conference reports as representing the final statement of the terms agreed to by both houses of Congress).



clarify which products of gas and oil are minerals or natural resources. Specifically, the Conference Report provides that natural gas (*i.e.*, methane and natural gas liquids or NGLs) constitutes a natural resource for purposes of section 7704(d)(1)(E).⁴

In 1988, Congress passed the Technical Corrections Act of 1988 to make technical corrections relating to the Tax Reform Act of 1986 and for other purposes. This act amended a number of sections of the Code. It is important to note that the 1988 amendment to section 7704(d)(1), which added flush language to the statute to define mineral or natural resource by reference to products for which a deduction for depletion is allowable under section 611, did not exclude products of gas and oil from the definition of mineral or natural resource. In fact, the Senate Report accompanying the Technical Corrections Act of 1988 explicitly acknowledged products of gas and oil as being minerals and natural resources by stating "[w]ith respect to marketing of minerals and natural resources.⁵ Furthermore, it was the same 100th Congress (and the same House Committee on Ways and Means and Senate Finance Committee) that enacted section 7704 in 1987, which amended it in 1988 and specifically included products of gas and oil in the definition of mineral or natural resource. Therefore, pursuant to section 7704(d)(1)(E), as originally understood and intended by Congress, natural gas is a mineral or natural resource, and any income derived from any section 7704(d)(1)(E) activity directed at natural gas constitutes qualifying income.

C. Section 7704(d)(1)(E) Treats "Processing" and "Refining" as Independent Activities

1. Statutory Construction of Section 7704(d)(1)(E)

Section 7704(d)(1)(E) of the Code specifically enumerates each of "processing" and "refining" as a separate activity, separated by commas. The only activities listed in section 7704(d)(1)(E) not separated by commas are "mining or production." The combination of "mining or production" correctly reflects that ores and minerals are mined, while oil and gas are produced. In contrast, section 7704(d)(1)(E) treats "processing" and "refining" as separate activities. Each of oil, gas and the products thereof can be both processed and refined. The same is true of an ore. As such, section 7704(d)(1)(E) must be interpreted to give each term a separate meaning. The Supreme Court has made this a fundamental tenet of statutory construction. *See, e.g., Montclair v. Ramsdell*, 107 U.S. 147, 152 (1883); *Astoria Federal Savings & Loan Ass'n v. Solimino*, 501 U.S. 104, 112 (1991); *Bailey v. United States*, 516 U.S. 137, 146 (1995). As discussed below, the Proposed Regulations violate this principle in effectively writing "refining" out of section 7704(d)(1)(E) with respect to natural gas.

Although it is not uncommon in the downstream oil and gas industry to use the words "processing" and "refining" colloquially as substitutes for each other, the sentence structure of section 7704(d)(1)(E) indicates that the two activities together were intended by Congress to be more inclusive than either activity alone. For example, if a mineral or natural resource is processed but not refined or refined but not processed, such activity still constitutes a qualifying activity. Therefore, the fact that a downstream activity relating to oil, gas or the products thereof may not occur within the gates of a petroleum refinery is not dispositive in determining whether the activity constitutes processing or refining. Further, the ordering of the activities in the statute does not limit the meaning of the words "processing" or "refining" to field processing. For example, transportation of minerals and natural resources often occurs earlier in the value chain than processing or refining activities, but the word "transportation" appears after both "processing" and "refining" in section 7704(d)(1)(E).

In addition, the grammatical implications of the verb form of processing and refining must be considered; each verb requires an object. In other words, various outputs result from the processing or refining of crude oil or natural gas, but the key to classifying income derived from such activities as qualifying income is the object—the feedstock—that goes into the activity (*e.g.*,

⁴ H.R. Rep. No. 495, 100th Cong., 1st Sess. 946-47 (1987) ("For this purpose, oil, gas, or products thereof means gasoline, kerosene, number 2 fuel oil, refined lubricating oils, diesel fuel, methane, butane, propane and similar products which are recovered from petroleum refineries or field facilities.")

⁵ S. Rep. No. 445, 100th Cong., 2d Sess. 424 (1988).



mineral, natural resource) and not what goes on during the activity (*e.g.*, physical or chemical change, transformation) or what is produced by the activity (*e.g.*, fuel, chemical feedstock). Thus, it is clear that the definition of "mineral or natural resource" identifies the intended inputs of processing or refining under section 7704(d)(l)(E). The plain language of the statute clearly states that the refining of a mineral or natural resource generates qualifying income. <u>Because natural gas is a natural resource for</u> purposes of section 7704(d)(1)(E), if an activity that is commonly considered to be refining is applied to natural gas, then income derived from that refining activity constitutes qualifying income. The Proposed Regulations fail to properly apply the statute in this manner.

2. Common Industry Usage and Practice

One bedrock principle of statutory construction is that, in the absence of a statutorily provided definition, a legislature intends words to carry their ordinary meaning and a statute to mean only what it states.⁶ For example, section 7704(d)(1)(E) provides no special definition for the word "refining" nor does it provide any indication that the word should be applied differently depending on the type of mineral or natural resource subject to the activity. Although the statute does not define the term "refining," the common industry usage of such term is easily applied in this context. Specifically, in the oil and gas industry the word refining, as applied to hydrocarbons, is commonly understood to mean an activity that uses heat, pressure and/or the presence of a catalyst to effect a physical or chemical change in a particular hydrocarbon.⁷

The word "refining" has a broad meaning, is used commonly in the oil and gas industry and has applications that span a wide range of activities. Neither the statute nor the legislative history gives any indication that Congress intended this word to have (i) any meaning other than its common usage as applied in the oil and gas industry, (ii) a meaning that varies based on the type of mineral or natural resource subject to such activity or (iii) a meaning that overlaps with any other word in the statute. In other words, there simply is no basis for the Proposed Regulations to suggest otherwise or to deviate from the plain meaning of the words in the statute.

As stated, the only limiting concept in section 7704(d)(1)(E) is that substantially all of the input of a qualifying activity must be a mineral or natural resource of a single type. If a substantial part of the input of an activity is something other than a mineral or natural resource of a single type, then the activity is not refining within the meaning of section 7704(d)(1)(E). However, the word "refining" is not and, consistent with the legislative history, was not intended to be a restrictive word in the statute. Therefore, because natural gas is a natural resource, income derived from refining activities directed at natural gas constitutes qualifying income.

D. Refining Natural Gas Generates Qualifying Income Within the Meaning of Section 7704(d)(1)(E)

The preamble to the Proposed Regulations provides that "[w]ith respect to natural gas, an activity is processing or refining only if the activity purifies natural gas It is generally anticipated that activities that create the products listed in the 2012 version ... of [NAICS] code 211112 concerning natural gas liquids extraction will be qualifying activities. Processing will also include converting methane in one integrated conversion into liquid fuels that are otherwise produced from the processing of crude oil" This language distinguishes the activity of processing of natural gas from crude oil and improperly narrows the scope of qualifying activities that can be performed with respect to natural gas. Neither the language of section 7704(d)(l)(E) nor

⁶ See, e.g., Barnhart v. Signmon Coal Co., Inc., 534 U.S. 438, 461-62 (2002) quoting Connecticut Nat. Bank v. Germain, 503 U.S. 249, 253-54 (1992) ("We have stated time and again that courts must presume that a legislature says in a statute what it means and it means in a statute what it says there.").

⁷ See, e.g., CHARLES F. CONAWAY, THE PETROLEUM INDUSTRY: A NONTECHNICAL GUIDE 231-243 (1999) (describing basic refining activities and indicating that the standard tools of a refiner include heat, pressure and catalysts); MORGAN DOWNEY, OIL 101 143-163 (2009) (indicating the four steps in refining as being separation, conversion, treatment and blending and discussing the importance and applications of heat, pressure and catalysts to various refining activities).



the relevant legislative history provides a basis to distinguish between oil and natural gas with respect to the various qualifying activities listed in the statute. In fact, the references in the legislative history are to "oil, gas, or the products thereof," which construction implies a single type of natural resource.

The novel concept in the Proposed Regulations that activities that produce only certain types of products are qualifying activities is not consistent with section 7704(d)(1)(E) and the related legislative history. The current authority with respect to classifying activities as generating or not generating qualifying income requires a mineral or natural resource to be subjected to a qualifying activity (e.g., refining) but does not impose any requirement on the qualifying activity itself or the product of the qualifying activity. For example, crude oil refining produces various partially refined petroleum products that require further processing or refining to be transformed into usable finished products. Intermediate products that require further refining to be usable include certain distillates,⁸ isobutane and olefinic butane,⁹ light straight-run gasoline,¹⁰ naphtha,¹¹ straight-run distillate,¹² light cycle oil¹³ and low and high sulfur vacuum gas oil.¹⁴ In addition, crude oil refining intermediate products that can be blended directly into refined petroleum products include natural resources such as butane and natural gasoline, as well as gasoline products recognized under Treasury Regulations section 48.4081-1(c)(3)(i), such as alkylate, raffinate and reformate. Each of these intermediate products is derived from a natural resource, crude oil, and will be further processed or refined into a natural resource, a product of crude oil, and each of the activities in the value chain generates qualifying income. It does not follow, therefore, that qualifying activities performed on natural gas to produce intermediate products (e.g., methanol), which undergo additional qualifying activities to be usable in a finished form (e.g., natural gasoline), do not generate qualifying income.¹⁵ This activity does not involve any steps that are not qualifying activities under section 7704(d)(1)(E) or related legislative history. While the activity does introduce oxygen through steam reformation, this is an activity commonly used at refineries in the production of gasoline.¹⁶ Moreover, oxygen is a molecule typically found in hydrocarbons such as crude oil.¹⁷ As such, this activity should be considered to generate qualifying income within the meaning of section 7704(d)(1)(E).

Finally, under section 7704(d)(1)(E) and the related legislative history, an activity is not required to occur at a traditional crude oil refinery in order for such activity to be considered refining. In fact, the Service has previously concluded that refining activities are not limited to crude oil.¹⁸ The activity of converting natural gas into natural gasoline, which generates methanol as an intermediate product, can accurately be considered to be the refining of natural gas. Such activity requires heat to be applied to natural gas in the presence of a catalyst to effect a chemical change in the natural gas, which follows closely the plain meaning of

- ¹³ Requires further refining to produce a finished diesel product.
- ¹⁴ Requires further refining to produce gasoline and diesel products.

¹⁶ See JAMES H. GARY ET AL., PETROLEUM REFINING TECHNOLOGY AND ECONOMICS 273-74 (2007).

¹⁷ See H. K. ABDEL-AAL ET AL., PETROLEUM AND GAS FIELD PROCESSING 44 (2003).

¹⁸ See H.R. Rep. No. 495, 100th Cong., 1st Sess. 1069 (1987) ("For purposes of [section 7704(d)(1)(E)], refining any natural resource is intended to include the production of fertilizer."); see, e.g., Rev. Rul. 73-556, 1973-2 C.B. 199 (further purification of quartzite treated as refining).

⁸ Require removal of sulfur to produce a finished ultra-low sulfur diesel product.

⁹ Requires further refining to produce a gasoline component.

¹⁰ Requires further refining to produce a gasoline product.

¹¹ Requires further refining to produce a gasoline component.

¹² Requires further refining to produce a finished diesel product.

¹⁵ As alluded to above, the distinction in the preamble to the Proposed Regulations to the types of products resulting from the processing of methane that can be qualifying or non-qualifying is without basis because it incorrectly focuses on the product of the activity being a fuel or having been produced as an incident to the production of a fuel.



the term "refining," as understood in the oil and gas industry. As such, this activity, as well as any qualifying activities applied to resulting intermediate products, should be considered to generate qualifying income within the meaning of section 7704(d)(1)(E).

To summarize, we believe that it is clear that the original Congressional intent of the statute, as demonstrated by the related legislative history, does not provide any support for the Proposed Regulations' disparate treatment of natural gas and crude oil with respect to the application of processing activities and refining activities.

E. Methanol Is a Mineral or Natural Resource

As discussed above, products of gas and oil are included in the definition of mineral or natural resource. Products of gas and oil means "gasoline, kerosene, number 2 fuel oil, refined lubricating oils, diesel fuel, methane, butane, propane <u>and similar</u> <u>products which are recovered from petroleum refineries or field facilities.</u>"¹⁹ The Conference Report acknowledges, however, that gas and oil can be processed or refined to such an extent that the result is no longer a mineral or natural resource within the meaning of section 7704(d)(1)(E). Congress, therefore, set a limit on which products of gas and oil are minerals or natural resources and excluded from the definition of mineral or natural resource plastics and similar petroleum derivatives that are produced by additional processing beyond that undertaken by refineries and field facilities.²⁰ Intermediate products that are created in the process of converting natural gas into gasoline, diesel fuel and similar refinery products are, by definition, not produced by additional processing or refining "beyond" what is required to produce gasoline, diesel fuel and similar refinery products are, therefore, minerals or natural resources within the meaning of section 7704(d)(1)(E).

1. Methanol Is a Product Similar to Methane

Methanol is a liquid petrochemical that can be produced from natural gas, petroleum and coal as well as from other substances. In the natural gas industry, methanol is considered to be an NGL like propane and butane. To produce methanol, methane (CH₄), which is the lightest hydrocarbon and the primary constituent of natural gas, is first converted into synthesis gas, which is a mixed stream of hydrogen (H₂), carbon monoxide (CO) and carbon dioxide (CO₂), through a steam reformation process, which is commonly used in refineries producing gasoline. In this activity, methane is reacted with steam (H₂O) over a catalyst, typically nickel-based, in a highly endothermic (heat-absorbing) reaction at high temperatures. The synthesis gas is then reacted over a copper-based catalyst at high temperatures under high pressure. In this reaction, the carbon monoxide (CO) and hydrogen (2H₂) combine to form methanol (CH₃OH), and the carbon dioxide (CO₂) and hydrogen (3H₂) combine to form methanol (CH₃OH) is, therefore, simply methane (CH₄) with one hydrogen molecule (H) replaced by a hydroxyl radical (OH).²¹

The Conference Report states that "gasoline, kerosene, number 2 fuel oil, refined lubricating oils, diesel fuel, methane, butane, propane and similar products" are minerals or natural resources. There is substantial diversity within this list of refinery products. For example, methane (CH₄) is the lightest hydrocarbon. Butane (C₄H₁₀) and propane (C₃H₈) are heavier, more complex hydrocarbons. Gasoline—unlike methane, butane and propane—is not a simple chemical compound at all but is instead a mixture of hundreds of different chemical compounds. Gasoline primarily consists of hydrocarbons but also includes amounts of nitrogen, oxygen and sulfur as well as other elements. In addition, refiners mix numerous additives into gasoline to improve fuel longevity and performance, to inhibit rust, to color the fuel, to improve viscosity of the fuel and for other reasons. Refined lubricating oil consists of base oil—vacuum gasoil from which the aromatic hydrocarbons (*e.g.*, benzene and toluene) and waxes

²⁰ Id.

¹⁹ H.R. Rep. No. 495, 100th Cong., 1st Sess. 946-47 (1987).

²¹ See Mustafa Canakci & Oguzhan Ilgen, *Methanol, in* ALTERNATIVE FUELS FOR TRANSPORTATION 81, 85-88 (Arumugam S. Ramadhas ed., 2011); GARY, *supra* note 16, at 273-74; GEORGE A. OLAH ET AL., BEYOND OIL AND GAS: THE METHANOL ECONOMY 211-12, 215-26 (2006). Excess hydrogen is used by OCIP to produce fertilizer (a mineral or natural resource) at the same facility.



have been removed—and additives. These additives, which may be added by specialized lubricant blenders but are added by refineries as well, can comprise up to 50% of the volume of the finished lubricating oil. Such additives may include molybdenum compounds (to reduce friction), organo-sulfur and organo-phosphorus compounds (to reduce wear), various sulfur, phosphorus, organo-zinc and organo-copper compounds (to reduce oxidation), amine succinates and alkaline earth sulfonates (to reduce rust), metal salts of organic acids (to suspend harmful products in the lubricant), polymers and copolymers like polymethacrylates (to improve viscosity) and alkylaromatic polymers (to depress the lubricating oil's pour point).²²

The non-exclusive list of products of gas and oil contained in the legislative history includes refinery products ranging from the simplest hydrocarbon, methane, to refined lubricating oil, a complex mix of hundreds of chemical compounds and substantial amounts of non-hydrocarbon additives. It would be illogical to conclude that these markedly different substances are similar enough to both be products of gas and oil but that methanol, which is simply methane with one hydrogen molecule replaced by a hydroxyl radical, is just too dissimilar to be itself considered a product of gas and oil. By no means would anyone ever assert that methanol is similar to plastics. Therefore, methanol is a product similar to those enumerated in the Conference Report (particularly methane) and is a mineral or natural resource within the meaning of section 7704(d)(1)(E).

2. Methanol Is Not Produced by Additional Processing or Refining Beyond that of Refinery Products

Methanol, as acknowledged in Example 3 of section 1.7704-4(e) of the Proposed Regulations, is an intermediate product produced in the conversion of natural gas into gasoline. As described above, methane is converted into synthesis gas and then into methanol. Unlike products such as plastics, methanol is an immediate intermediate product in that it is made directly from natural gas. In the 1970s, a research team at Mobil developed a process by which methanol could be further processed into high-octane gasoline (the "MTG Process"). In the MTG Process, methanol (CH₃OH) is first converted over an alumina catalyst into a mixture of methanol (CH₃OH), dimethyl ether, or DME (C_2H_6O), and water (H₂O). This mixture is then transferred into a gasoline synthesis reactor and reacted over an aluminosilicate zeolite, or ZSM-5, catalyst. The resulting mixture includes gasoline, liquefied petroleum gas (*e.g.*, propane, butane) and water. Natural gas was first used as a feedstock for the commercial production of gasoline using the MTG Process almost thirty years ago.²³

The steps described above to produce methanol and convert it into gasoline utilize typical refinery processes, catalysts and equipment that are currently used in refineries in the United States and around the world. Gasoline produced through these activities is fully compliant with conventional refinery gasoline. It has virtually no sulfur and low levels of benzene and can be sold as-is or blended into the refinery gasoline pool. Example 3 of section 1.7704-4(e) of the Proposed Regulations confirms that the income generated from the production and sale of gasoline produced using such a process is qualifying income.

Methanol, therefore, is not a product, such as plastic, that the Conference Report excludes from the definition of mineral or natural resource because it is produced by additional processing or refining "beyond" that required to produce refinery products (*e.g.*, gasoline). Instead, methanol is an intermediate product produced in the act of converting natural gas into gasoline. Methanol is, therefore, not a product that was intended by Congress to fall outside of the definition of mineral or natural resource but is instead a product similar to methane and gasoline that is a mineral or natural resource because it is a product of gas and oil.

To summarize, OCIP refines natural gas (a mineral or natural resource) into methanol (another mineral or natural resource) using typical refinery processes, catalysts and equipment. This activity does not involve any steps that are not qualifying activities under section 7704(d)(1)(E) or the related legislative history. Therefore, income derived from these activities should be considered qualifying income within the meaning of section 7704(d).

²² See DOWNEY, supra note 7, at 158-60, 223-27 (2009); Nehal S. Ahmed & Amal M. Nassar, Lubricating Oil Additives, in TRIBOLOGY – LUBRICANTS AND LUBRICATION 249, 250-267.

²³ See OLAH, supra note 21, at 251-52.



F. Methanol Is a Liquid Fuel

While methanol is used as a chemical feedstock, it has numerous other uses, including as a liquid fuel for automobiles, tractors, airplanes and ships, as was described in our request for the private letter ruling we received from the Service in 2013. Methanol has been used as an automotive fuel—alone, in combination with gasoline and as an octane booster in reformulated gasoline—since the 1920s.²⁴ For example, racing cars that compete in the Indianapolis 500 and other races sanctioned by the Indy Racing League began to use methanol as a fuel in the 1960s and were required to run on pure methanol in the 1970s and 1980s.²⁵

California ran an experimental methanol program in the 1980s and 1990s with automobiles running both on pure methanol and on methanol blends.²⁶ These methanol-compatible vehicles were provided by ten U.S. automakers and at one point, there were approximately 15,000 methanol-compatible vehicles in California alone.²⁷ While the program was eventually discontinued, this was due to infrastructure problems rather than any shortcoming of the use of methanol as a fuel. In fact, the operation of the methanol-compatible vehicles was comparable or superior to gasoline operated counterparts.²⁸ At the peak of the program, in 1993, more than 12 million gallons of methanol were used as a transportation fuel.²⁹

Methanol has also been used as a fuel source for public transportation in U.S. cities, such as Miami and New York.³⁰ In the late 1990s, there were hundreds of methanol-fueled transit and school buses operating in the United States.³¹

A 2010 report prepared by the Sloan Automotive Laboratory at the Massachusetts Institute of Technology states that:

- "Methanol has been used as a transportation fuel in [the] US and in China."
- "Large scale production of methanol from natural gas and coal is a well developed technology."
- "Methanol... is a liquid fuel which can be blended with gasoline and ethanol and can be used with today's vehicle technology at minimal incremental costs."
- "Methanol . . . is a high octane fuel with combustion characteristics that allow engines specifically designed for methanol fuel to match the best efficiencies of diesels while meeting current pollutant emission regulations."
- "Methanol . . . is a safe fuel. The toxicity (mortality) is comparable to or better than gasoline."

²⁶ PETER F. WARD & JONATHAN M. TEAGUE, CAL. ENERGY COMM'N, FIFTEEN YEARS OF METHANOL DISTRIBUTION (1996), *available at* http://www.methanol.org/Energy/Resources/Alternative-Fuel/CEC-1996-ISAF-Fuel-Meoh-Paper.aspx.

²⁷ BROMBERG, *supra* note 25, at 7-9.

²⁸ Id. at 7.

²⁹ Id. at 9.

³⁰ See Robert Motta et al., National Renewable Energy Laboratory, Alternative Fuel Transit Buses: Final Results from the National Renewable Energy Laboratory Vehicle Evaluation Program (1996).

³¹ BROMBERG, *supra* note 25, at 9.

²⁴ DANIEL BALLERINI, BIOFUELS: MEETING THE ENERGY AND ENVIRONMENTAL CHALLENGES OF THE TRANSPORTATION SECTION 257 (Trevor Jones & Jill Rupnow trans. 2012).

²⁵ L. BROMBERG & W. K. CHENG, SLOAN AUTO. LAB. MASS. INST. TECH., METHANOL AS AN ALTERNATIVE TRANSPORTATION FUEL IN THE US: OPTIONS FOR THE SUSTAINABLE AND/OR ENERGY-SECURE TRANSPORTATION 9 (2010); Roland Jones, *Ethanol Boosters hoping for Indy 500 Win*, MSNBC (May 28, 2006), http://www.nbcnews.com/id/12740848/ns/businessthe driver seat/t/ethanol-boosters-hoping-indy-win/#.VZMWKSFVhBc.



• "Methanol is a safe and viable transportation fuel."³²

U.S. law recognizes that methanol is a liquid fuel. Section 2 of the Alternative Motor Fuels Act of 1988 states that:

The Congress finds and declares that... methanol, ethanol, and natural gas are proven transportation fuels that burn more cleanly and efficiently than gasoline and diesel fuel [and] the production and use as transportation fuels of ethanol, methanol made from natural gas or biomass, and compressed natural gas have been estimated in some studies to release less carbon dioxide than comparable quantities of petroleum-based fuel.

Section 301(2) of the Energy Policy Act of 1992 and section 741(a)(2) of the Energy Policy Act of 2005 also both explicitly identify methanol as an alternative fuel. The Code also recognizes that methanol is a fuel. For example, section 4041(m)(2) states that "[t]he term 'partially exempt methanol or ethanol fuel' means any liquid at least 85 percent of which consists of methanol, ethanol, or other alcohol produced from natural gas."

While interest in methanol as a direct fuel waned in the United States in the 1990s due to falling oil prices and successful lobbying by special interest groups favoring other alternative fuels,³³ methanol's global popularity as a direct fuel is increasing as researchers recognize the environmental benefits and the ease of transition to a methanol fuel economy. One such study chaired by Ernest J. Moniz, the current U.S. Secretary of Energy, notes the substantial cost and greenhouse gas ("GHG") advantages of methanol relative to other alternative fuels:

Conversion of natural gas to methanol... could provide a cost-effective route to manufacturing an alternative, or supplement, to gasoline, while keeping CO_2 emissions at roughly the same level. Gasoline engines can be modified to run on methanol at modest cost.

... The U.S. government should implement an open fuel standard that requires automobile manufacturers to provide tri-flex fuel (gasoline, ethanol and methanol) operation in light-duty vehicles. Support for methanol fueling infrastructure should also be considered.

... The potential for natural gas to reduce oil dependence could be increased by conversion into room temperature liquid fuels that can be stored at atmospheric pressure. Of these fuels, methanol is the only one that has been produced for a long period at large industrial scale. Methanol has the lowest cost and lowest GHG emissions \dots ³⁴

China currently leads the world in the use of methanol as an automotive fuel with more than one million cars using methanol as a fuel source.³⁵ There was essentially no use of methanol as an automotive fuel in China as recently as the mid-2000s, and in less than a decade methanol has come to represent approximately 8% of China's total fuel supply and is the largest

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³⁴ Id. at 12, 125-128.

³⁵ William Tucker, Methanol - the Fuel in Waiting, REAL CLEAR POLITICS (Oct. 30, 2014),

http://www.realclearpolitics.com/articles/2014/10/30/methanol_the_fuel_in_waiting_124487.html; Tom Ridge & Mary E. Peters, *The Methanol Alternative to Gasoline*, N.Y. TIMES (Feb. 23, 2012), http://www.nytimes.com/2012/02/24/opinion/methanol-as-an-alternative-to-gasoline.html?_r=0.

³² BROMBERG, *supra* note 25, at 4, 72.

³³ THE FUTURE OF NATURAL GAS: AN INTERDISCIPLINARY MIT STUDY 126 (2011), available at https://mitei.mit.edu/system/files/NaturalGas_Report.pdf.



growth segment of China's methanol demand.³⁶ And the expectation of continued growth is prompting increased interest in constructing more methanol refineries on the U.S. Gulf Coast.³⁷ Moreover, as China continues to have success using methanol as a fuel, other countries have begun to study and incorporate methanol into their fuel supply. For example, efforts to increase the use of methanol as an automotive fuel are underway in Australia, Denmark, Iceland, Israel, Malaysia, Pakistan and Sweden among others.³⁸

Methanol is also used as a non-automotive liquid fuel. For instance, methanol is used as a fuel for tractors and light aircraft. There has also been growing interest in methanol as a fuel for ships,³⁹ which has been sparked by stricter emissions standards and successful research into new ship engines that run on methanol.⁴⁰ For example, ferry operator Stena Line is currently using a passenger ship that runs entirely on methanol, which drastically reduces the ship's sulfur, carbon and carbon dioxide emissions.⁴¹

In 2014, approximately 40% of the 64 million metric tons of methanol sold globally was used for energy and fuel-related applications.⁴² And the current use of and interest in methanol as a fuel source is expected to continue to grow. Industry researchers expect that gasoline blending applications for methanol fuel will increase at an average annual rate of about 12.5% in the next five years, growing from a market share of 11% in 2013 to about 14% in 2018. All other fuel-related end uses are expected to increase in the next five years as well.⁴³ Some industry participants expect gasoline and other fuel applications to become the largest demand sector for methanol in the near future accounting for nearly one-third of total global methanol use.⁴⁴

³⁷ See Tucker, supra note 35.

³⁸ METHANOL INSTITUTE, MILESTONES 2013: METHANOL INDUSTRY IN FOCUS 7 (2013), available at http://www.methanol.org/getattachment/cbafe847-88c6-4736-8823-82ac55dc9d45/2013-Milestones-Final.pdf.aspx; GREGORY DOLAN, METHANOL: A CLEAR ALTERNATIVE (2012), available at http://www.methanolfuels.org/wpcontent/uploads/2013/05/FUEL-0912-pg8_9-REPRINT-pdf.pdf; *China's Geely Invests in Iceland Methanol Factory*, BIO FUEL DAILY (JUL. 3, 2015), http://www.biofueldaily.com/reports/Chinas_Geely_invests_in_Iceland_methanol_factory_999.html; Ari Rabinovitch, *Israel's New Motor Fuels Strategy Leans on Gas*, REUTERS (Dec. 24, 2013), http://uk.reuters.com/article/2013/12/24/us-israel-cars-fuels-idUKBRE9BN0BC20131224.

idINKBN0FB0Z220140706?mlt_click=Master+Sponsor+Logo%28Active%29_25_*Top+Story_sec-col1-m0_News; *Ferry Operator Stena Line Tests Running Ship on Methanol*, N.Y. TIMES (Mar. 30, 2015), http://www.nytimes.com/aponline/2015/03/30/world/europe/ap-eu-sweden-methanol-powered-ferry.html?_r=1.

⁴⁰ MAN Announces Success in Methanol Marine Engine Demo, SHIP & BUNKER (Apr. 1, 2015), http://shipandbunker.com/news/emea/814984-man-announces-success-in-methanol-marine-engine-demo.

⁴¹ See Stena Line Announces World's First Methanol Ship, CONTAINER MANAGEMENT MAGAZINE (Nov. 20, 2014), http://container-mag.com/2014/11/20/stena-line-announces-worlds-first-methanol-ship/.

⁴² Methanol Institute, *supra* note 36, at 13.

⁴³ IHS, CHEMICAL ECONOMICS HANDBOOK: METHANOL (May 1, 2014), *available at* https://www.ihs.com/products/methanol-chemical-economics-handbook.html.

⁴⁴ Dewey Johnson, *Global Methanol Market Review*, at 7 (2012), *available at* http://www.ptq.pemex.com/productosyservicios/eventosdescargas/Documents/Foro%20PEMEX%20Petroqu%C3%ADmica/2012/ PEMEX_DJohnson.pdf.

³⁶ Methanol Institute, *Methanol and China's Energy Security Future*, CATALYST, Spring/Summer 2015, at 12, 13; Zana Nesheiwat, *China's Growing Methanol Economy*, CLEANTECHNIA (Apr. 15, 2013), http://cleantechnica.com/2013/04/15/chinas-growing-methanol-economy/.



Methanol has long been and will likely continue to be used as a liquid fuel to power automobiles, aircraft and ships throughout the world.

The Proposed Regulations treat income from processing natural gas into liquid fuels that are otherwise produced from petroleum as qualifying income. Income from the marketing of such fuels is also qualifying income under the Proposed Regulations, subject only to the exclusion of income from retail sales (sales made in small quantities directly to end users). There are no provisions in either the statute or in the legislative history that force a PTP to treat the income from non-retail sales of a qualifying product as anything other than qualifying income regardless of the customers' uses of the product. In fact, in the case of sales through large distributors, it is at best impractical and at worst impossible to determine how each customer uses the product. Stated differently, neither section 7704 nor the legislative history requires a PTP to conduct ongoing investigations into its customers' uses of a product as an integral part of the PTP's determination of whether its sales constitute qualifying income. Rather, as the legislative history makes clear, the PTP's responsibility is to make certain that the purchasers are not end users. Therefore, while customers may use methanol other than as a liquid fuel, such methanol is, nonetheless, suitable for use as a liquid fuel.

Because methanol is a liquid fuel that can be produced from petroleum,⁴⁵ income earned by converting natural gas into methanol is qualifying income even under the Proposed Regulations. Example 3 under section 1.7704-4(e) of the Proposed Regulations is, therefore, incorrect and inconsistent with section 1.7704-4(c)(5)(ii)(C) of the Proposed Regulations in stating that "[t]he production of methanol, an intermediate product in the conversion process, is not a section 7704(d)(1)(E) activity because methanol is not a liquid fuel otherwise produced from the processing of crude oil."

IV.

Fertilizer is explicitly included as a mineral or natural resource under section 7704(d)(1)(E). While the Proposed Regulations include fertilizer in the definition of mineral or natural resource, they reserve the provisions relating to processing fertilizer. This is perhaps due to the small number of fertilizer PTPs and section 7704(d)(1)(E) private letter ruling requests relating to fertilizer.⁴⁶

In anticipation of the Treasury and the Service developing provisions relating to the processing of fertilizer, we assert that the Service's position as evidenced by its private letter rulings is consistent with section 7704(d)(1)(E) and the legislative history.

In particular, the issue of the extent to which an PTP is required to monitor its customers' uses of fertilizer has been addressed in two recent private letter rulings, Priv. Ltr. Rul. 201308004 (Feb. 22, 2013) and Priv. Ltr. Rul. 201331002 (Aug. 2, 2013). In both of these rulings, the Service concluded that income derived from the production and marketing of certain nitrogenbased products for non-retail sale to customers operating in non-agricultural industries would constitute qualifying income within the meaning of section 7704(d) to the extent that such products were otherwise marketable as fertilizer for agricultural purposes. Therefore, aside from the prohibition on non-bulk retail sales, the determination of whether the PTP's income from producing and marketing fertilizer did not depend on the customers' actual uses of the fertilizer.

While section 7704(d)(1)(E) does not define fertilizer, the legislative history clarifies the meaning of the term. Specifically, the Conference Report states that "fertilizer includes plant nutrients such as sulphur, phosphate, potash and nitrogen that are used for the production of crops and phosphate-based livestock feed." By treating all "plant nutrients" as fertilizer (and, indeed, phosphate-based cattle feed as well), it is apparent that Congress intended the term "fertilizer," within the meaning of section 7704(d)(1)(E), to be construed broadly and to include products other than just the direct-application market leaders.

⁴⁵ See OLAH, supra note 21, at 218, 228; R. Rapier, *The Global Petroleum Picture, in* THE ECONOMICS OF ALTERNATIVE ENERGY SOURCES AND GLOBALIZATION 3, 6 n.6 (Andrew Schmitz et al. eds., 2011).

⁴⁶ We are aware of only four private letter rulings under section 7704(d)(1)(E) regarding fertilizer.



Nitrogen-based fertilizers, such as ammonia and urea in solution, in addition to be being direct-application fertilizers, have various non-agricultural uses. For instance, ammonia is used (a) as a neutralizing agent in the petroleum industry, (b) in "stack" emission control systems, (c) in the production of certain pharmaceuticals and cosmetics and (d) in the wastewater treatment industry.

Urea in solution, which is urea put into a solution with demineralized water or steam condensate and is traditionally used as a foliar spray fertilizer, can be used in selective catalytic reduction systems to lower harmful vehicle exhaust emissions, such as nitrogen oxide, from diesel engines. As such, particular concentrations of urea in solution are often marketed as diesel exhaust fluid or DEF. Urea in solution is also used in (a) abatement applications for power plants to reduce NOx emissions, (b) the fermentation process of ethanol production and (c) the manufacture of resins and polyurethanes.

Nitric acid, which is not used as a direct-application fertilizer but is a primary feedstock of direct-application fertilizers like urea ammonium nitrate or UAN, also has non-agricultural uses. For example, nitric acid is used (a) as an oxidizer in liquid-fueled rockets, (b) as a chemical reagent in laboratory science, (c) in the manufacture of various dyes and drugs made from coal tar products and (d) in the purification of precious metals.

Income derived from processing and marketing a mineral or natural resource, such as fertilizer, and selling it to customers is qualifying income, subject only to the exclusion of income from retail sales. The one fertilizer-specific exception to this is the provision in the 1988 legislative history that allows for certain bulk sales of fertilizer to end users.⁴⁷ There are, therefore, no provisions in either the statute or in the legislative history that require an PTP to treat the income from non-retail sales of fertilizer as anything other than qualifying income regardless of the customers' uses of the product.

Therefore, income derived from the production and marketing of fertilizers for non-retail sale to customers operating in non-agricultural industries should constitute qualifying income within the meaning of section 7704(d) to the extent that such products are otherwise marketable as fertilizer for agricultural purposes. This is consistent with Section 7704(d)(1)(E), the legislative history and the recent ruling position of the Service and should be reflected in any provisions the Treasury and the Service develop relating to the processing of fertilizer.

V.

We believe that the final Treasury Regulations promulgated under section 7704(d)(1)(E) should be amended as follows:

⁴⁷ See H. Rep. No. 1104, 100th Cong., 2d Sess. vol. 2, at 17-18 (1988).



- 1. The general definition of mineral or natural resource provided in section 1.7704-4(b) of the Proposed Regulations should be amended to match the definition of such term provided by Congress in section 7704(d)(1)(E) of the Code, as expounded upon in the related legislative history.
- 2. The general definition of "processing or refining" in section 1.7704-4(c)(5)(i) of the Proposed Regulations should be amended to eliminate (i) the exclusion of activities involving a substantial physical or chemical change or the transformation of the mineral into a new and different product from the definition of refining or processing, and (ii) the MACRS consistency requirement.
- 3. Section 1.7704-4(c)(5) of the Proposed Regulations should be amended to provide separate definitions for "processing" and "refining." Such activities should be considered qualifying activities when performed with respect to any mineral or natural resource. With respect to hydrocarbons, refining should be generally defined as an activity that uses heat, pressure and/or the presence of a catalyst to effect a physical or chemical change in the hydrocarbon.
- 4. Section 1.7704-4(c)(1) of the Proposed Regulations should be amended to eliminate the concept that qualifying activities are limited to those specifically identified in paragraph (c).
- 5. If the above recommended changes are accepted, amend section 1.7704-4(e), Example 3, as follows, to accurately reflect such changes.

Example (3). Refining methane gas into synthetic fuels through chemical change.

(i) Y, a publicly traded partnership, chemically converts methane into methanol and synthesis gas, and further chemically converts those products into gasoline and diesel fuel. Y receives income from sales of gasoline and diesel created during the conversion processes, as well as from sales of methanol.

(ii) With respect to the production of gasoline or diesel, Y is engaged in the refining of natural gas as provided in paragraph [(c)(5)] of this section. The production and sale of methanol, an intermediate product in the refining activity, is a section 7704(d)(1)(E) activity because methanol is a natural resource.

6. If the above recommended changes are not accepted, amend section 1.7704-4(e), Example 3, as follows, to accurately reflect the current form of the Proposed Regulations.

Example (3). Processing methane gas into synthetic fuels through chemical change.

(i) Y, a publicly traded partnership, chemically converts methane into methanol and synthesis gas, and further chemically converts those products into gasoline and diesel fuel. Y receives income from sales of gasoline and diesel created during the conversion processes, as well as from sales of methanol.



(ii) With respect to the production of gasoline or diesel, Y is engaged in the processing of natural gas as provided in paragraph (c)(5)(ii)(C) of this section. The production and sale of methanol, an intermediate product in the conversion process, is a section 7704(d)(1)(E) activity because methanol is a liquid fuel otherwise produced from petroleum.

We believe that the foregoing changes will result in a clear, consistent and workable definition for each of the terms "mineral or natural resource," "processing" and "refining" that is consistent with the original language of section 7704(d)(1)(E) of the Code and the original Congressional intent as expressed in the related legislative history.

7. If the Treasury and the Service develop provisions related to the meaning of processing fertilizer under section 7704(d)(1)(E), such provisions should reflect the ruling position of the Service demonstrated in the private letter rulings issued under section 7704(d)(1)(E) relating to fertilizer, which are consistent with the statute and the legislative history. In particular, income derived from the production and marketing of fertilizers for non-retail sale to customers operating in non-agricultural industries should be treated as qualifying income within the meaning of section 7704(d) to the extent that such products are otherwise marketable as fertilizer for agricultural purposes.

Sincerely,

Frank Bakker President – CEO OCI Beaumont LLC

cc: C. Timothy Fenn (Latham & Watkins LLP)