OCI

December 3, 2020

CC:PA: LPD:PR (REG-112339-19)
Room 5203
Internal Revenue Service
P.O. Box 7604
Ben Franklin Station
Washington, D.C. 20044

Re: Comments to REG-112339-19 – Amended 45Q Tax Credit

Dear Ladies and Gentlemen:

OCI USA Inc. ("OCI USA") is pleased to submit comments in response to the published Internal Revenue Service ("IRS") Notice of Proposed Rulemaking, REG-112339-19 ("Proposed Regulations"), which requested comments on the Internal Revenue Code ("IRC") § 45Q Credit for Carbon Oxide Sequestration ("45Q Credit"), as amended by § 41110 of the Bipartisan Budget Act of 2018 ("BBA"), P.L. 115-123, effective February 9, 2018.

OCI USA is a wholly owned subsidiary of OCI N.V. which is headquartered in Amsterdam, the Netherlands. OCI N.V. is a leading producer and distributor of nitrogen and methanol products. The Company produces and distributes approximately 16.1 million metric tons per year of merchant ammonia, granular urea, calcium ammonium nitrate ("CAN"), urea ammonium nitrate ("UAN"), ammonium sulphate ("AS"), methanol, diesel exhaust fluid, melamine, and other nitrogen products, serving agricultural and industrial customers around the world.

The Proposed Regulations provide significant clarification regarding the 45Q Credit. However, OCI USA respectfully requests guidance and clarification on several open items in order to move forward with significant capital investments and to determine whether, and to what extent, it is entitled to the 45Q Credit. Specifically, OCI USA requests guidance that addresses the technical issues outlined under the below Section III. *Recommendations*.

Thank you for the diligence undertaken by the Department of Treasury ("Treasury") and the IRS to engage industry stakeholders. We appreciate the opportunity to submit this comment letter and your consideration of the recommendations outlined below. We look forward to the issuance of 45Q Credit final regulations and any other regulatory guidance which will drive crucial investment in carbon capture equipment to reduce greenhouse gas emissions. If we can be of any assistance or if you have any questions, please do not hesitate to contact us: Kevin Struve <kevin.struve@oci.nl>, Serge Hoover <serge.hoover@oci.nl>, and Craig Pulver <craig.pulver@oci.nl>.

Sincerely,

/s/ Kevin Struve, President of OCI USA Inc.
OCI USA Inc.

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I. Company Background

As used in this letter, the terms "the partnership," "we," "our," "us" and similar terms refer to OCI Partners, LP, a Delaware limited partnership ("OCIP"), and its wholly-owned subsidiary OCI Beaumont, LLC, a Texas limited liability company ("OCIB"). References to "OCI" refer to OCI N.V., a Dutch public limited liability company, and its consolidated subsidiaries. References to "OCI USA" refer to OCI USA Inc., a Delaware corporation, which is an indirect, wholly-owned subsidiary of OCI.

OCI Partners LP is a Delaware limited partnership whose focus is on the production, marketing and distribution of methanol and anhydrous ammonia. Our production facility ("Facility") is located on the Texas Gulf Coast near Beaumont, Texas and commenced full operations during August 2012. OCI Beaumont LLC is a Texas limited liability company formed on December 10, 2010 as the acquisition vehicle to purchase the production facility and related assets offered for sale by Eastman Chemical Company on May 5, 2011.

The Facility was originally placed in service in the late 1960s, but the methanol unit was modernized in the early 1980s using Lurgi GmbHs Low Pressure Methanol technology and the ammonia line was started up in 2000 based on the Haldor Topsoe technology. OCI acquired the production facility (which had been idled by the previous owner since 2004) in May 2011, commenced a $267 million rehabilitation / upgrade that was completed in July 2012, and began operating the production facility at full capacity in the fourth quarter of 2012. During 2015, OCI completed a $384 million debottlenecking project that included a maintenance turnaround, environmental upgrades, which we collectively refer to as our "debottlenecking project." The debottlenecking project increased the annual methanol and ammonia production design capacity by 25%. As part of our debottlenecking project, we installed best available control technology ("BACT") to reduce our greenhouse gas emissions and to reduce our energy consumption.

II. Facility Description – OCI Beaumont Manufacturing Process

OCI Beaumont uses carbon monoxide ("CO") and carbon dioxide ("CO2") (collectively "CO/CO2") in conjunction with hydrogen ("H2") to synthesize methanol through an exothermic reaction. The CO, CO2, and H2 are intermediate raw materials generated through a process known as steam reforming. Steam reforming is a method of producing synthetic gas ("syngas"), an intermediate feedstock which consists of CO and H2, from natural gas. OCI captures the CO/CO2 that would otherwise be emitted from the syngas process at the Facility and also purchases CO2 that is piped into the Facility from an unrelated third-party supplier.

The captured CO/CO2 and purchased CO2 is then used for methanol production ("Project"). The methanol, which is used as a feedstock for the production of a wide range of industrial chemicals, is then sold as a commercial product to third parties. Based on the available guidance, we believe the Project satisfies the requirements to be an "applicable facility" under Section 45Q(f)(6)(A) where the Facility captures at least 500,000 metric tons of qualified carbon oxides in a taxable year, was placed in service before February 8, 2018, and no taxpayer claimed a 45Q Credit for any taxable year before February 8, 2018 related to the Facility. In addition, we believe that a portion of CO2 purchased satisfies the 45Q Credit requirements provided that the CO2 was captured by a "qualified facility" as defined under Section 45Q(d).

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The Facility utilizes two different sources of carbon oxides (see bullets below) in its chemical manufacturing process which includes synthesizing methanol from a mixture of CO, CO2, and H2.

1. **Process Generated Stream**: Carbon dioxide and carbon monoxide captured after syngas production.
2. **Third Party Supplier**: An out-sourced pipeline supply composed of carbon dioxide sourced from:
   a. A naturally occurring carbon dioxide dome; and
   b. Carbon dioxide captured from other industrial sources.

Desulfurized natural gas is mixed with steam and fed through a steam-methane reformer to produce syngas, an intermediate raw material for methanol production. Syngas is primarily composed of H2, CO, and CO2 with trace amounts of methane ("CH4"). The steam methane reforming reaction is highly endothermic, thus requiring external energy for this material conversion. The energy requirement for this reaction is supplemented by burning natural gas and other waste recycle streams within the methanol process. The combustion products that are generated from this external firing are put through a selective catalytic reduction unit to convert any nitrogen oxides ("NOx") to a less harmful compound. These combustion products are the only gases that are released to the atmosphere; the rest is converted into methanol.

The high temperature syngas exiting the reformer is cooled down through a series of waste heat recovery exchangers prior to it being compressed to the required operating pressure for methanol synthesis.

After the syngas is cooled and compressed, it is combined with the outside source of carbon dioxide and fed through two methanol synthesis reactors. Exiting the reactors, the gaseous reaction products are cooled down and a portion of the components are condensed in a series of heat exchange equipment. The crude methanol mixture produced in the synthesis loop is fed to a series of distillation columns to remove impurities to make International Methanol Producers and Consumers Association ("IMPCA") standard methanol. A large portion of the unreacted carbon oxides and H2 in the methanol synthesis loop are recycled to optimize overall carbon oxide conversion to methanol. The balance of the unreacted material is sent to the steam reformer as a fuel, and a portion is sent to a Pressure Swing Adsorption ("PSA") unit for H2 recovery which is then used as a raw material in the ammonia process.

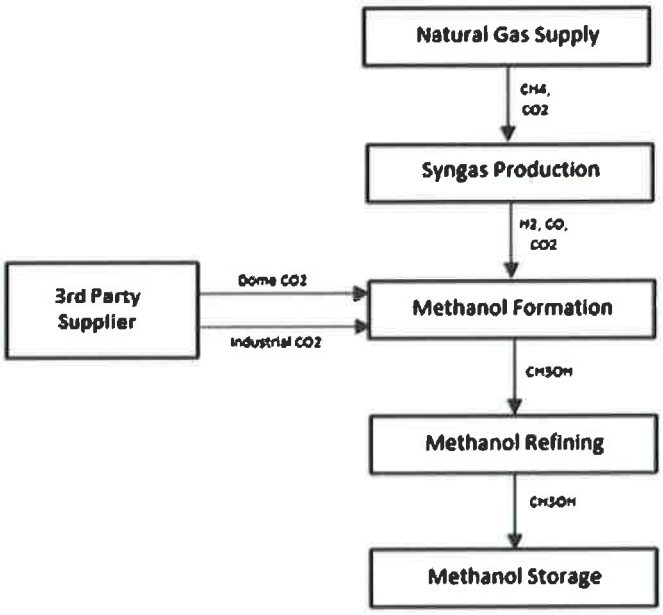

Figure 1: Flow Diagram of Methanol Process

Through its ammonia manufacturing process, OCI utilizes pipeline supply such as H2 and nitrogen ("N2") to produce syngas. OCI also uses H2 from the PSA process, which is used to recover and purify H2 from a purge stream within the methanol synthesis loop.

The pipeline H2, N2, and PSA recovered H2 are compressed to a target pressure and fed through an ammonia synthesis loop. In ammonia synthesis process, the H2 and N2 react to form ammonia. Once the ammonia is produced, the ammonia refrigeration and separation then cool the stream and the liquid ammonia is sent to the ammonia tank where it is stored until sold. The unreacted gas is recycled back to the ammonia reactor with a portion of it being burned to prevent accumulation of inert gases within the ammonia synthesis loop. See Figure 2 for the methanol and ammonia process flow. Please note that the ammonia production is shown for completeness as part of the methanol process flow due to the recovered PSA but the ammonia process itself does not use CO or CO2 in the generation of ammonia. The use of CO and CO2 is limited to the methanol manufacturing itself.

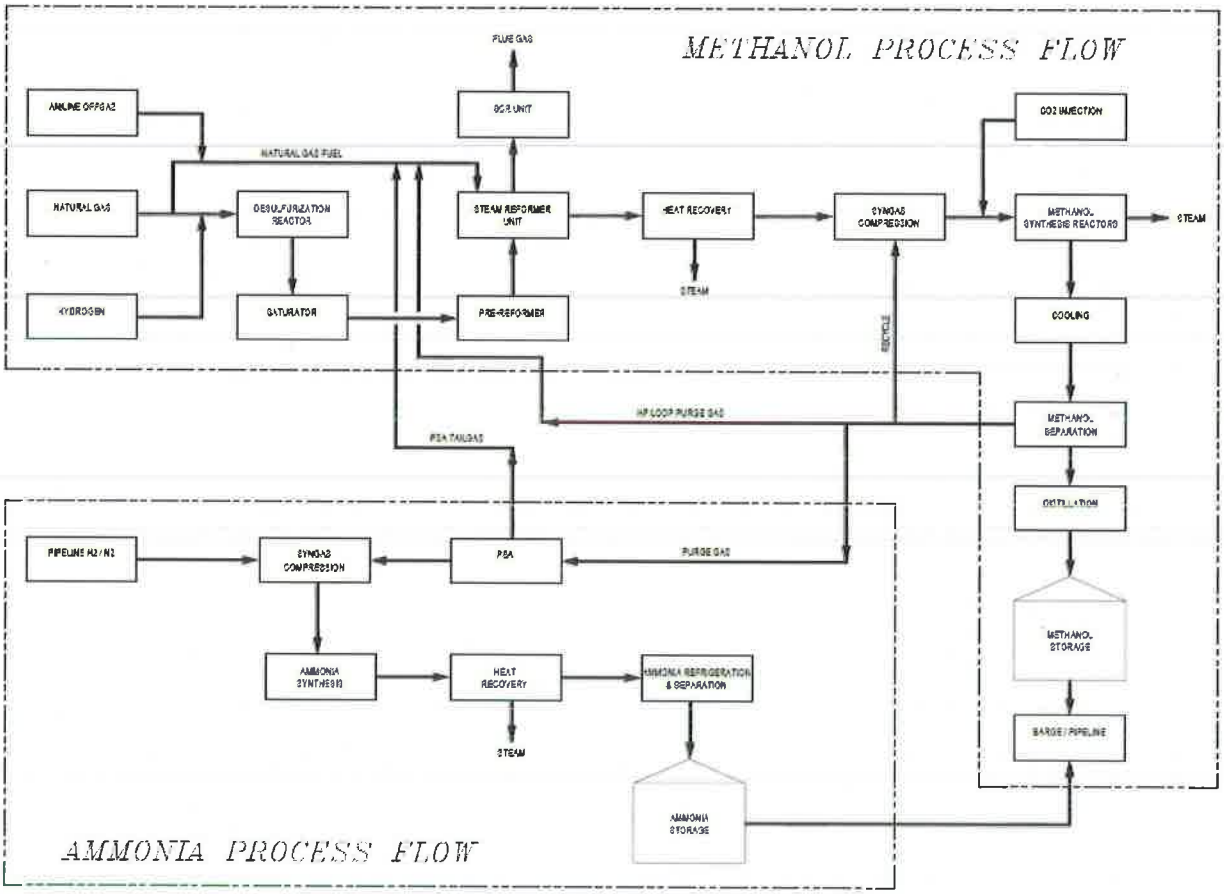

Figure 2: Flow Diagram of the Methanol and Ammonia Process

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III. Recommendations

1. **Qualified Carbon Oxides and Utilization** – The production of syngas and methanol should be considered an industrial source where the CO and CO2 captured (the Process Generated Stream) meets the definition of "qualified carbon oxide." Furthermore, the process of chemically converting CO and/or CO2 to methanol or similar compounds, which are used in various commercially available customer products (or are further refined), should be included within the scope of "utilization of qualified carbon oxide."

   Section 45Q(c)(1)(B) provides that the term "qualified carbon oxide" means any carbon dioxide or other carbon oxide which is captured from an industrial source by carbon capture equipment which is originally placed in service on or after the date of the BBA, would otherwise be released into the atmosphere as industrial emission of greenhouse gas or lead to such relates, and is measured at the source of capture and verified at the point of disposal, injection or utilization.

   Section 45Q(f)(5)(A) provides that "utilization of qualified carbon oxide" means (i) the fixation of such qualified carbon oxide through photosynthesis or chemosynthesis, such as through the growing of algae or bacteria; (ii) the chemical conversion of such qualified carbon oxide to a material or chemical compound in which such qualified carbon oxide is securely stored; or (iii) the use of such qualified carbon oxide for any other purpose for which a commercial market exists.

2. **Qualified Facility Provisions** – We suggest that the final regulations clarify eligibility requirements within the 12-year credit period. For example, in the event that an applicable facility does not meet the capture threshold of at least 100,000 metric tons of qualified carbon oxide during a given year under Section 45Q(d)(2)(C) within its 12-year credit period, the taxpayer may continue to claim the 45Q Credit in a subsequent year within its credit period provided that the threshold is met during that taxable year. Furthermore, we suggest reasonable cause relief provisions to provide relief in the event that a qualified facility or applicable facility fails to meet the threshold or emissions requirements due to causes outside the taxpayer's control in a given tax year within a 12-year credit period such as a natural disaster or an unforeseen mechanical failure where, upon IRS approval, the taxpayer may be exempt from meeting the requirement during such taxable year.

   Section 45Q(d) provides that the term "qualified facility" means any industrial facility or direct air capture facility where the construction of which begins before January 1, 2024, and (A) construction of carbon capture equipment begins before such date, or (B) the original planning and design for such facility includes installation of carbon capture equipment. A qualified facility must capture: **(A)** in the case of a facility which emits not more than 500,000 metric tons of carbon oxide into the atmosphere during the taxable year, not less than 25,000 metric tons of qualified carbon oxide during the taxable year which is utilized in a manner described in subsection (f)(5); **(B)** in the case of an electricity generating facility which is not described in subparagraph (A), not less than 500,000 metric tons of qualified carbon oxide during the taxable year, or **(C)** in the case of a direct air capture facility or any

facility not described in subparagraph (A) or (B), not less than 100,000 metric tons of qualified carbon oxide during the taxable year.

Section 45Q(f)(6) provides that in the case of an applicable facility, for any taxable year in which such facility captures not less than 500,000 metric tons of qualified carbon oxide during the taxable year, the person described in paragraph (3)(A)(ii) may elect to have such facility, and any carbon capture equipment placed in service at such facility, deemed as having been placed in service on the date of the enactment of the Bipartisan Budget Act of 2018. The term "applicable facility" means a qualified facility— (i) which was placed in service before the date of the enactment of the Bipartisan Budget Act of 2018, and (ii) for which no taxpayer claimed a credit under this section in regards to such facility for any taxable year ending before the date of the enactment of such Act.

3. **Election to Transfer Credit** – A timely election made by a taxpayer that elects to pass the 45Q Credit to the person that disposes of or uses the qualified CO under § 45Q(f)(3)(B) ("claiming party"), shall include an annual election on Form 8933 on a timely filed (including extensions) or an amended return for the taxable year in which the taxpayer so chooses to pass through the 45Q Credit. This provides for flexibility as such information may not be available or such decision may not be made at the time the parties files their respective tax return for the taxable year. Additionally, we recommend that the electing taxpayer should be responsible for providing details related to the credit amount to be transferred to the claiming party and not the full details of the credit attributable to the electing taxpayer (e.g. Form 8933 and election statement). Furthermore, the claiming party should be able to reasonably rely upon information provided by the electing taxpayer to determine if the CO and/or CO2 falls within the definition of "qualified carbon oxides." If a proper election is made, the burden of proof associated with 45Q Credit qualification and recapture should transfer to the taxpayer claiming the 45Q Credit.

   Section 45Q(f)(3)(B) provides that if the person described in subparagraph (A) makes an election under this subparagraph in such time and manner as the Secretary may prescribe by regulations, the credit under this section— (i) shall be allowable to the person that disposes of the qualified carbon oxide, utilizes the qualified carbon oxide, or uses the qualified carbon oxide as a tertiary injectant, and (ii) shall not be allowable to the person described in subparagraph (A).

4. **Lifecycle Assessment ("LCA") for Utilization** – The Proposed Regulations outlines the requirement of an LCA study to measure the amount of carbon oxides captured and utilized which must be consistent with the International Organization for Standardization ("ISO") 14044:2006, Environmental management — Life cycle assessment — Requirements and Guidelines ("ISO 14044:2006"). We suggest that the final regulations provide clear guidelines regarding the topics below.

   a. Use of Lifecycle Inventory ("LCI") – ISO 14044:2006 covers both LCA studies and LCI studies. LCA studies include the goal and scope definition, inventory analysis, impact assessment analysis, and interpretation of results. LCI studies include the goal and scope definition, inventory analysis, and interpretation of results but does not

require impact assessment analysis. For purposes of the 45Q Credit, we suggest that the final guidance provides that the performance of an LCI is acceptable for purposes of the LCA requirement as the impact assessment analysis is administratively burdensome for the taxpayer to prepare and for the government agencies to review, and does not provide information necessary to calculate any reduction to a 45Q Credit which may be necessary.

b. Goal Statement – Based on our understanding, the goal of the LCA is to assess the loss of captured carbon oxides from an approved industrial use (e.g., in methanol) through the end of the product's useful life (e.g., in landfill, through combustion) to be able to assess how much of the captured carbon oxides are truly diverted from emissions. The goal is not to assess the total carbon emissions of the activities associated with moving and processing the captured carbon oxides (e.g., in this instance, emissions from fuel used during transporting methanol which, notably, would have occurred whether or not the methanol was produced using captured or purchased CO/CO2). We suggest that the final guidance clarify that the LCA study is intended to specifically assess the potential loss of captured carbon oxides, and not the overall emissions impact of the lifecycle of the qualified carbon oxides.

c. Scope Boundary – We recommend that consistent boundary requirements should be provided for use by all taxpayers performing LCA studies. ISO 14044:2006 is a welcome standard but additional guidance is necessary to establish a consistent scope boundary to an LCA (or LCI) for the purposes of a 45Q Credit analysis.

d. Functional Unit – We suggest that the appropriate functional unit for the LCA study is metric tons of qualified carbon oxides to be consistent with the 45Q Credit calculation.

e. Use of Industry Averages – The use of industry averages should be appropriate when actual figures are not available.

f. Emissions Impacts – LCA studies typically account for a broad range of greenhouse gas emissions. Based on our understanding of the goal, we suggest that the LCA study only needs to measure the carbon monoxide and carbon dioxide emissions (no other forms of greenhouse gases) for purposes of the 45Q Credit.

g. Study Timeframe – We suggest a requirement for the LCA study to include one year's worth of emissions (as opposed to an extrapolation of a smaller data set).

h. Comparative Assertion Shared with the Public – Some LCA studies are completed with the intention to use them as a comparative assertion to be shared with the public and are therefore subject to additional requirements under ISO 14044:2006. However, LCI studies for the purposes of the 45Q Credit are not used for comparisons nor are they intended to be used by the public in decision making around personal purchases or behavior. We recommend that for the purposes of the 45Q Credit, the LCA study should not be subject to those additional requirements.

i. IRS Approval – The Proposed Regulations reserves a section related to the submission of the LCA to the IRS and the Department of Energy ("DOE") for approval prior to the taxpayer claiming the 45Q Credit. We suggest the inclusion of a timing requirement for an IRS response within 90 days of submittal which will allow taxpayers to plan accordingly.