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VIA The Federal eRulemaking Portal at www.regulations.gov

Internal Revenue Service
CC:PA:LPD:PR (Notice 2022-58)
Room 5203
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

Re: Comments on IRS Notice 2022-58

Ladies and Gentlemen:

Olin Corporation ("Olin") appreciates the opportunity to respond to the request from the Department of Treasury under Notice 2022-58 ("Notice") for Comments on Credits for Clean Hydrogen and Clean Fuel Production.

Olin is a leading vertically integrated global chlor-alkali producer and distributor of chemical products and is North America's largest producer of electrolytic hydrogen. Olin has proven itself as a market leader over its 130-year history of producing hydrogen as part of our chlor-alkali production process.

Olin views its role as a catalyst within the global clean hydrogen economy as it brings the untapped potential of its clean hydrogen supply capabilities from across North America to meet rapidly growing demand. Given our existing production capabilities, Olin and the chlor-alkali industry are uniquely positioned to serve the fuel cell market and make a lasting impact on the global carbon reduction efforts of the Biden Administration. With the appropriate regulatory framework, our unmatched ability to bring clean hydrogen to market in the near term has the potential to greatly accelerate the energy transition.

Olin is a demonstrated leader and innovator in the new hydrogen economy, recently announcing a first-of-its-kind partnership with Plug Power to produce, market, and deliver clean hydrogen from our plant in St. Gabriel, LA. Olin and our partner Plug Power recognize the important role the chlor-alkali industry can play in rapidly creating a sustainable clean hydrogen economy. This project represents only a small fraction of our total hydrogen capacity. Olin anticipates additional projects would become viable within a supportive policy environment.

This letter focuses on certain questions within the Notice pertaining to the clean hydrogen production tax credits under Section 45V.

I. Definition of a new qualified clean hydrogen production facility

Guidance is needed to clarify for taxpayers on how to define when they have originally placed in service a "new qualified clean hydrogen production facility" especially when a taxpayer has utilized some used property along with new property in the construction of a facility. Clean hydrogen production facilities that utilize electrolyzers require major overhauls. Electrolyzers do not have an unlimited useful life and require these major overhauls every five to ten years to continue the production of hydrogen. Although some used equipment is utilized during an electrolyzer overhaul, the significant majority of the electrolyzer facility is replaced with new equipment. Given the significant capital investment necessary to furnish and install the new equipment and implement such overhauls Treasury should provide guidance providing the conditions when such overhauls would be considered as originally placed in service as a new facility for purposes of Section 45V. Specifically, we request that Treasury explicitly provide that the "80/20 rule" as outlined in other clean energy production and investment tax credit guidance and regulations is applicable under Section 45V. See Rev. Rul. 94-31; Notice 2008-60; Notice 2013-29; Notice 2016-31; Treas. Reg 1.45Q-2(g)(5).

II. Lifecycle greenhouse gas emissions – Allocation of emissions to hydrogen as a by-product or co-product

Olin offers the allocation of emissions to hydrogen as a by-product or co-product may be fair and scientifically equitable under all the various allocation methods described in the Notice or within the constructs of the GREET model assumptions with each allocation method providing various administrative strengths and challenges. Generally, we give deference to the mass-based allocation method of calculating the lifecycle greenhouse gas emissions when hydrogen is produced as a by-product or co-product. The mass-based allocation method is efficient and equitable from both an administrative and quantitative perspective when considering how to promulgate regulations under Section 45V as well as being widely accepted by the accounting and reporting standards for calculating Scope 3 greenhouse gas emissions within the corporate value chain.

Overall, we propose the Department of Treasury generally retain the flexibility of allowing various methods for the allocation of emissions when determining the lifecycle greenhouse gas emissions for clean hydrogen production tax credit qualification under Section 45V. However, we also recognize the need for taxpayers to gain certainty that their approach is valid for compliance with the statute. Thus, we suggest adopting an approach whereby regulations (i) permit use of any reasonable method utilized by the taxpayer, and (ii) provide that certain method(s), such as the mass-based approach, are deemed reasonable in the regulations. To the extent that such flexibility is not administratively practicable, we recommend deferring to a mass-based approach.

III. Lifecycle greenhouse gas emissions – GREET Model

Olin is currently reviewing the GREET Model and the many benefits it provides with its significant repository of vetted and verified data and assumptions for calculating the lifecycle greenhouse gas emissions for the production of clean hydrogen across various pathways. Although the GREET Model should be included as an acceptable method to determine lifecycle greenhouse gas emissions, modifications to the GREET Model should also be appropriate as

emerging production technologies continually develop and the eGRID assumptions shift. Taxpayers must be able to see the advancements in the clean hydrogen economy reflected contemporaneously in the GREET Model. If not, despite the many benefits of the GREET Model, the tool could deter the development of those new technologies, or not adequately represent the lifecycle greenhouse gas emissions related the production of clean hydrogen utilizing new technologies. As such, Treasury should remain receptive to taxpayer feedback on when a successor or alternative model would supersede GREET and serve as a better tool for determining GHG intensity pursuant to Section 45V(c)(1)(B). We also recommend taking an expansive view of the authorization contained in Section 45(c)(1)(B) such that the most recent GREET model can still be the basis for analysis, but certain acceptable modifications are allowed. In other words, a "successor model (as determined by the Secretary)" may still be the GREET model with certain allowable modifications. This would afford Treasury the ability to keep a consistent base framework of analysis, but still be able to respond quickly to industry trends and technological innovation.

IV. Lifecycle greenhouse gas emissions – Renewable Energy Credits (RECs) and Power Purchase Agreements (PPAs)

The ability to produce the cleanest hydrogen generally requires use of renewable energy (solar, wind, hydro, geothermal, etc.) as the energy input in the production process. However, many if not most clean hydrogen production facilities will not be able to be co-located with such renewable energy generation. Thus, the industry will need to be able to purchase Renewable Energy Credits (RECs) from or enter into Virtual Power Purchase Agreements (VPPAs) with renewable energy resources in order to be able to use renewable energy as the energy input in the GREET model. Treasury appears to have recognized this need based on the requests for comment in Sections 3.01(1)(e)(i) and (ii). In response to these requests, Olin recommends that acquiring RECs from or entering into VPPAs with renewable energy resources be considered as sufficient for allowing a taxpayer to use renewable energy as the energy input in the GREET model. Clarification on the acceptance of RECs and VPPAs will eliminate the immediate uncertainty of taxpayers related to their qualification under Section 45V while broadly encouraging renewable energy sources and markets. Further, Olin recommends not including geographical limitations or restrictions or "additionality" requirements. Any such limitations, restrictions or requirements would simply create barriers to the efficacy of the Section 45V program. With respect to the question on granularity of time matching, Olin recommends taking as permissive of an approach as possible to facilitate and stimulate growth of the clean hydrogen production industry. Therefore, Olin recommends an annual time period for matching purposes. Olin further recommends that, to the extent REC purchases are utilized to enable a clean energy input in the GREET model, such RECs are allowed to be acquired at any point in time prior to the filing of a tax return with respect to the year in which the applicable clean hydrogen was produced (although the RECs would still need to be generated in the same year in which the applicable clean hydrogen was produced).

Olin appreciates the opportunity to provide these comments on the production tax credit for clean hydrogen under Section 45V as requested by the Notice. We are dedicated to supporting the Administration in ensuring the Inflation Reduction Act guidance on clean hydrogen tax incentives is successful. If you have any questions or comments regarding this submission or any other hydrogen related matter, please feel free to contact Mike Meenan at (314) 719-1780 or mmeenan@olin.com.