

COMMENTS OF HIF USA ON

CALIFORNIA AIR RESOURCES BOARD SECOND NOTICE OF PUBLIC AVAILABILITY OF MODIFIED TEXT PROPOSED LOW CARBON FUEL STANDARD AMENDMENTS

OCTOBER 16, 2024

Highly Innovative Fuels USA (HIF USA) appreciates the opportunity to offer comments in response to the California Air Resources Board's (CARB or the Board) Second 15-day Notice of Public Availability (the Second 15-day Notice) of modified text for the proposed Low Carbon Fuel Standard (LCFS) amendments, which was posted for comment on October 1, 2024.

As we have previously explained, HIF USA is a global eFuels company focused on harnessing renewable energy sources to achieve fuel sector decarbonization. HIF USA is currently developing a large-scale commercially viable facility for generating low-carbon eFuels that can be used in a number of transportation applications and has submitted an LCFS pathway for its process that is currently awaiting CARB approval. HIF USA has been an active participant in support of CARB's LCFS update process, submitting comments on the regulatory amendment package that CARB released on December 19, 2023, participating in the September 28, 2023 hearing and April 10, 2024 workshop, and submitting comments in response to the April 2024 workshop and the First 15-day Notice of Public Availability of modified text for the LCFS amendments posted on August 12, 2024 (the First 15-day Notice).

HIF USA has reviewed the Second 15-day Notice and observes that, as in the First 15-day Notice, CARB does not in any way address the two key points made in our previous submittals. Because these two issues are important for diversifying California's transportation fuel supply and for encouraging the proliferation of low-carbon eFuels for a variety of transportation modes, we reiterate them here and incorporate our previous comments by reference.¹

I. CARB Should Propose Narrow Amendments to the LCFS to Include Low-CI Methanol as an Opt-In Fuel.

We acknowledge that CARB has not proposed in the current LCFS amendment process to include low carbon intensity (CI) methanol (also referred to as "green methanol") as an opt-in fuel, as we and other stakeholders have previously suggested.

Specifically, we urge CARB staff to propose targeted changes to 17 C.C.R. § 95482 to make low-CI methanol eligible for crediting as an opt-in fuel when sold for use in marine and other specialty

¹ See Comment 17 for Public Meeting to Hear an Update on the Low Carbon Fuel Standard (Sept. 28, 2023), available <a href="https://doi.org/10.10/10.



transportation applications such as direct methanol fuel cells. As HIF USA has explained in its previous submittals, amending the LCFS regulations to include green methanol as an opt-in fuel would create another opportunity for CARB to incentivize low-CI fuels in hard-to-decarbonize sectors. Low-CI methanol has significant potential as a drop-in fuel to alleviate emission impacts on port-adjacent communicates in the near term and requires limited regulatory incentives to accelerated adoption.

CARB indicated its willingness to make this change at the beginning of its process to update the LCFS. In a July 2022 LCFS workshop presentation, CARB staff indicated that it was considering the inclusion of methanol as an opt-in fuel for "novel applications," including "commercial harbor craft" under Tier 2 EER-adjusted pathways.² Yet, its proposed regulatory amendments released in December 2023 did not include this proposed change, nor did CARB include this change in the First or Second 15-Day Notices, despite recommendations from multiple entities that it do so.³

In comments submitted after the April 2024 workshop, HIF USA offered to support CARB's efforts to obtain whatever data is needed to support inclusion of green methanol as an opt-in fuel. We reiterate our readiness to assist CARB in obtaining this data, as we believe it is critical to move forward with including low-CI methanol as an LCFS opt-in fuel. The benefits of low-CI methanol in marine applications more than justifies a regulatory amendment to make this change, and we stand ready to support CARB staff in developing a proposal to make it a reality.

II. Book and Claim Accounting Should Be Preserved for Low-CI Electricity Used to Produce Hydrogen as an Input to E-Fuels.

The Second 15-Notice still does not address HIF USA's and other commenters' concerns that the proposed changes to the regulatory text in 17 C.C.R. § 95488.8(i)(1)(A) appear to eliminate bookand-claim accounting for low-CI electricity used to produce electrolytic hydrogen as an input for eFuels. As commenters noted during the April 10, 2024 workshop,⁴ and as HIF USA has explained in its previous submittals, CARB's proposed changes to this provision, if finalized, would negatively impact the commercial availability of low-CI eFuels in the California transportation fuel market.

CARB has not explained in this rulemaking process the rationale for the proposed change, other than brief comments at the April 10 workshop, in which a CARB representative indicated that the change may reflect CARB's interest in prioritizing the production of hydrogen as a primary transportation fuel rather than as a process input. HIF USA does not believe that elimination of the current book-and-claim allowance for hydrogen produced by electrolysis for transportation purposes is necessary to incentivize the production and use of hydrogen as a transportation fuel—as these two uses of hydrogen are complimentary and not mutually exclusive. In any event, because CARB proposes a significant change to the current regulations, it is obligated to provide a rationale and address the comments provided on this issue.

² See CARB, "Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard," "CARB Presentation" at Slide 31 (July 7, 2022), available here">here.

³ See, e.g., Comments of the Methanol Institute on Low Carbon Fuel Standard Public Workshop - April 10, 2024 (April 11, 2024), available <u>here</u>.

⁴ CARB, Workshop Recording, Low Carbon Fuel Standard Public Workshop - April 10, 2024, available <u>here</u> at 3:40 (comments of Infinium and Rocky Mountain Institute advocating for use of book-and-claim accounting for low-CI electricity used to produce hydrogen as feedstock for eFuels).



In sum, we urge CARB to refrain from finalizing any changes to 17 C.C.R. § 95488.8(i)(1)(A) that would preclude the continued use of book-and-claim accounting for low-CI electricity used for hydrogen production through electrolysis as a process step for eFuels. We reiterate our request that CARB review and consider our submittal on this topic in response to the 45-day proposed rule.⁵

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If you have any questions or would like to discuss this submittal, please contact Shannon S. Broome, Hunton Andrews Kurth LLP (sbroome@huntonak.com or (415) 818-2275).

⁵ See HIF USA 45-Day Comments at 2-4.