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California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Response to All Public Comments on Tier 2 Pathway Application No. D0025

To Whom It May Concern:

This letter responds to the comments of Clean Fuels Alliance America (CFAA) and Josh Kehoe on the above-referenced Tier 2 Pathway Application submitted by HIF USA LLC (HIF). Both of the submitted comments concern treatment of different types of waste carbon dioxide (CO_2) sources for purposes of the life cycle assessment (LCA) supporting HIF's Tier 2 Pathway Application.

As a threshold matter, HIF's design-based pathway application contains a sufficient level of detail to warrant confidence in the key performance metrics for carbon intensity (CI), as evidenced by CARB's publication of the pathway for public comment.[1] HIF will be eligible to report fuel volumes or generate LCFS credits only after completing a provisional pathway application per 17 CCR § 95488.9(c), which will provide more specifics on waste CO_2 streams.[2] Once a provisional CI is certified, it may be revised based on operations during the provisional period.[3] Given the status of HIF's pathway design-based application, neither CFAA's comment nor Dr. Kehoe's comment relates to "factual or methodological errors" that require response or revisions to HIF's application at this stage.[4] Therefore, nothing in these comments should impact certification of the design-based pathway at this time.

Nonetheless, we take this opportunity to address commenters' concerns, in particular their assertions related to the potential use of waste CO_2 from fossil sources as an input to HIF's production process:

- By utilizing waste CO_2 streams—regardless of their origin—HIF's fuel production process enables the reuse of CO_2 that would otherwise enter the atmosphere.

[1] 17 CCR § 95488.9(e)(2) (providing that the CARB Executive Officer may, fully at his or her discretion, choose to conduct a detailed evaluation of the information submitted for a design-based pathway application and evaluate whether it contains a sufficient level of detail to warrant confidence in energy consumption and other key CI performance metrics—and that if the Executive Officer chooses to undertake such a review, and agrees that the pathway warrants publication on the LCFS web site, a design-based pathway summary will be posted for public comment). *Id*. (emphasis added).
[2] *Id*. at § 95488.9(e)(3).
[3] *Id*. at § 95488.9(c).
[4] *Id*. at § 95488.7(d)(5)(A).

- Waste CO_2 from industrial sources (CFAA's "third category") represents a resource for producing carbon-neutral fuels. Disincentivizing use of these streams could reduce the availability of eFuels, inadvertently increasing reliance on conventional fossil fuels to meet energy demands and deterring the capture and beneficial use of CO_2 from third category sources.

- From an LCA CI standpoint, there is minimal difference between HIF sourcing waste CO_2 sourced from biogenic versus from fossil/industrial sources. Both scenarios entail the capture of a ***waste*** CO_2 stream—which would otherwise be emitted into the atmosphere—for beneficial reuse. As explained in the LCA report submitted in support of HIF's pathway application, because the fate of the CO_2 in either scenario would ***otherwise*** be to enter the atmosphere through venting or as plant emissions, the emissions impact of capturing such CO_2 for use in HIF's process would be neutral (other than emissions associated with capture and transport). This is consistent with the regulatory provisions of the LCFS.

- The reuse of CO_2 from industrial processes aligns with CARB's broader LCFS goals of innovation and carbon neutrality. While "third category" emissions originate from fossil-based sources, utilizing them in e-fuel production extends their lifecycle and replaces fossil-derived fuels in applications that currently lack viable alternatives. This approach complements California's broader decarbonization strategies, particularly for industries where direct electrification is not feasible.

The HIF LCA methodology adheres to CARB's standards, ensuring that the use of all waste CO_2 streams used in HIF's production process—whether biogenic, atmospheric, or industrial—are appropriately evaluated. Further, HIF's application includes rigorous reporting and verification mechanisms to ensure CI calculation integrity. For waste CO_2 sourced from industrial emitters, HIF will collaborate with partners to confirm that these emissions are accurately accounted for in compliance with applicable legal frameworks.

Sincerely,

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