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April 21, 2025

Chair, Liane Randolph
Members of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Comments submitted electronically

RE: Comments Related to the April 4th, 2025, Third 15-Day Changes

Dear Chair Randolph and fellow board members,

Air Products is pleased to provide comments in support of the California Air Resources Board (CARB) rulemaking for the Low Carbon Fuel Standard (LCFS). We appreciate how quickly CARB staff has responded to the Office of Administrative Law (OAL) disapproval feedback and urge CARB to prepare the final package to return to OAL as expeditiously as possible following this 15-day public comment period. It is paramount that this LCFS amendment package be approved and made effective as soon as possible in 2025 with respect to the carbon intensity (CI) targets and the market signal they provide. In addition, there are many practical changes that should be implemented as soon as possible to promote the growth of the low-carbon hydrogen market.

Air Products is a global company providing essential industrial gases, related equipment, and end-use market applications expertise to customers in more than 50 countries. As the world's largest producer of hydrogen, Air Products is committed to driving the energy transition through global investment in clean hydrogen production capacity.

Renewable Hydrogen for Mobility Requirements

We strongly support the revised provision 95482(h) to recognize emission reductions associated with carbon capture & sequestration (CCS) as eligible in the context of the 2030 and 2035 renewable hydrogen provisions. This change will send an important market signal to decarbonize fossil-based hydrogen as renewable hydrogen production develops concurrently and recognizes the importance of all substantive decarbonization strategies. This amendment also promotes more low-carbon hydrogen supply for the California market and helps bring down the costs to the consumer.

Hydrogen Refueling Infrastructure Crediting

We are generally supportive of the amendments proposed in the Hydrogen Refueling Infrastructure (HRI) crediting for both the light- and medium-duty (LMD) vehicle and the heavy-duty (HD) vehicle provisions. With removal of the capital expenditure-based credit value limitations in Sections 95486(a)(4)(H) and 95486.4(a)(4)(I), we request CARB also eliminate Sections 95486.3(a)(6)(C) and 95486.4(a)(6)(C) and related sub-sections from the LCFS regulation. These sections address cost and revenue recordkeeping and reporting for LMD and HD and are only relevant to the capital expenditure-based credit value limitations proposed to be eliminated, respectively. This is highly competitively sensitive information which should not be collected if it is no longer required for the regulation.

Improve Low-CI Hydrogen Book-and-Claim Provisions

Air Products appreciates CARB's willingness to provide a 'book-and-claim' accounting approach for low-CI hydrogen. A robust book-and-claim system for hydrogen will leverage existing infrastructure to support development of new low CI hydrogen supply, reduce costs, and ensure that the low-carbon attributes of a hydrogen pathway are retained and applied to end-uses where the most environmental benefit can be derived.

One impediment that remains in the current low-CI hydrogen book-and-claim language is the in-state pipeline requirement that places an unnecessary constraint on a nascent market and will stifle investments at a time when significant capital outlays are needed to bring low-carbon hydrogen to scale. We are not aware of any other fuel, much less a low carbon fuel that is just beginning to ramp up production and use in California, being subject to such a requirement in the near-term that discriminates against out-of-state projects. Biomethane, as an example, is enabled without directionality requirements until 2040 – and even then, it must flow to California only 50% of the time. Based on the proposed provisions, low-CI hydrogen must flow to California 100% of the time once these amendments become effective. For the best emissions outcomes, lowest cost, access to a larger pool of low CI hydrogen supplies and thus a reliable supply chain, California should support the use of low CI hydrogen in multiple fuel value chains and geographies if the finished fuel is consumed in state and creditable under the LCFS.

To provide near-term opportunities for low-CI hydrogen to rapidly increase supply, we request that the Board ask CARB staff to modify §95488.8(i)(3)(A) as follows:

> *"Low-CI hydrogen is injected into a dedicated hydrogen pipeline physically connected to ~~California~~ a distribution system or a production facility that provides transportation fuel to California."*

Extend Clean Fuel Reward to Fuel-Cell Vehicles

To help spur demand for hydrogen fuel-cell vehicles concurrently with battery-electric vehicles, particularly medium- and heavy-duty vehicles considering the pause on Advanced Clean Fleet implementation, and maintain the technology-neutral approach of the regulation, we suggest opening the Clean Fuel Reward program to all zero-emission vehicles. Fuel cell electric vehicles are electric vehicles, and should be included in the Clean Fuel Reward along with battery electric vehicles.[1] We also believe that modifying the definition to not preclude rebates for high-priority and federal fleets given the paused status of the Advanced Clean Fleets regulation is prudent. We suggest modifying the definition as follows:

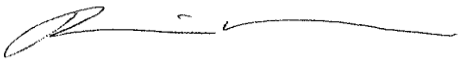
§95481(a)(29): *"Clean Fuel Reward" is a statewide program established by EDUs to provide a reduction in price for new and/or used commercial medium- or heavy-duty electric and fuel-cell vehicles ~~that are not subject to the High Priority and Federal Fleets requirements as specified in, title 13, California Code of Regulations, section 2015(a)(1)~~ in California. The Clean Fuel Reward is funded exclusively through LCFS proceeds generated by EDUs from electricity fuel.*

In addition to the definitional change above, we request CARB work with the California Public Utilities Commission (CPUC) to ensure that utility Clean Fuel Reward filings include fuel-cell vehicle incentive.

[1] As just one example, CARB's DriveClean website's page, "Electric Car Overview," includes fuel cell electric vehicles and describes them as follows: "A fuel cell electric car runs on electricity, but does so differently than battery-electric cars or plug-in hybrids…An additional benefit for fuel cell drivers is that auto manufacturers provide three years' worth of free hydrogen fuel. Incentives like this are why many Californian's are choosing to drive electric." https://driveclean.ca.gov/electric-car-overview

Air Products appreciates the opportunity to provide this feedback on the third 15-day package and we would be happy to meet with CARB to discuss any of these topics further. Please feel free to contact me at hellermt@airproducts.com.

Respectfully,



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