Air Products (Miles Heller)

Air Products appreciates the opportunity to comment. Please find our comments attached.

Air Products and Chemicals, Inc.
4000 MacArthur Boulevard, Suite 420, East Tower
Newport Beach, CA 92660

www.airproducts.com

March 9th, 2026

Rajinder Sahota
Chief, Industrial Strategies Division
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Comments submitted electronically

<u>RE: Comments Related to Cap & Invest 45-day package Noticed January 13th, 2026</u>

Dear Ms. Sahota,

Air Products is pleased to provide comments regarding the proposed amendments to the California Air Resources Board's (CARB) rulemaking for the Cap-and-Invest (C&I) regulation. We believe that Air Products can help California with the energy transition needed to meet the State's climate objectives. Hydrogen has been key to helping California meet its air quality goals by enabling production of clean transportation fuels and can play a role in the clean energy transition and reducing greenhouse gas (GHG) emissions as well in the transportation, heavy industrial, and power sectors. We appreciate that CARB has recognized hydrogen's opportunity in the proposed manufacturing decarbonization incentive provisions and are proposing some measures to improve these provisions.

Air Products is the only U.S.-based global industrial gas company and the world's largest hydrogen producer and supplier for use in numerous markets. Within California, the company safely operates 9 hydrogen production facilities covered by the current C&I regulation, approximately 30 miles of hydrogen pipeline and currently supplies and operates hydrogen fueling stations in support of the State's zero-emission transportation goals.

<u>Industry Allocation and Leakage Prevention</u>

We strongly support the proposal to extend the 100% assistance factor through 2035 as proposed in revised Table 8-1 of §95871. It is clear from recent events, including ongoing and announced refinery shutdowns, that the refining industry is trade exposed, resulting in a shift of production and increased imports to the state. CARB should enable a smooth energy transition that balances achieving the State's emission reduction goals while retaining robust economic activity and affordable energy options for consumers. We encourage CARB to reclassify petroleum refining and associated industrial gas manufacturing to high leakage risk, instead of medium as currently proposed, given that refineries are already leaving California. To this end – we also request that CARB consider fixing the cap adjustment factor through 2045 for refining and associated hydrogen manufacturing at a level that is protective and encourages retention of in-state refining to prevent both emissions and economic leakage.

We also support the retention of the current allocation benchmarks (B_a) for on-purpose hydrogen and liquid hydrogen (industrial gas manufacturing) in Table 9-1 of §95891. These benchmarks are set at a level that recognizes best-in-class performance for the prevalent technology and sufficiently incentivizes initiatives to reduce direct emissions.

Air Products supports the new approach to direct allocation of electricity benchmark units to emission-intense, trade-exposed (EITE) facilities. This ensures consistent benchmarking for electricity purchases from both publicly-owned (POU) and investor-owned utilities (IOU) – and without the administrative complexity and less transparent California Public Utility Commission process for IOU allocation to EITE facilities.

Definitions

We suggest that CARB modify the definition of “eligible renewable energy resource” in §95802 to reference the list of renewable resources in Public Resource Code (PRC) 25741(a)(1) instead of Public Utilities Code (PUC) 399.12. We believe the intent of this definition is to specifically reference the eligible renewable resources that are listed in 25741(a)(1). The definition in 399.12 of the points to 25741 of the PRC but defines the resources in terms of a facility, which could be interpreted to be limiting because 399.12 includes size, geographic location restrictions and other requirements for facilities – which we do not believe is intended whenever the C&I regulation uses the term “eligible renewable energy resource” as defined. The definition should focus on the qualifying resources – not the design of a facility.

Carbon Capture, Removal, Utilization and Storage Program

Air Products supports the inclusion of regulatory text that recognizes the potential for reducing program obligations via carbon capture, utilization and sequestration (CCUS) projects (geologic or otherwise). This begins to close an important gap in the current regulation for CCUS projects that are needed to meet the State’s carbon neutrality targets in 2045. We anticipate that additional language will be added as a result of the on-going SB 905 process, and while we support robust language to ensure that the reductions occur and are properly monitored and managed over time, it will be important to find instruments or mechanisms to share or limit liability so that projects are viable and insurable for private entities. We look forward to CARB further developing concepts and language in the future.

Compliance Obligations for Biomass-Derived Fuels

We support CARB’s proposal to recognize biomass-derived process CO_2 emissions in §95852.1 by removing the reference to combustion, which has been interpreted to only apply an obligation exemption to biomass feeds consumed as fuel. This change is scientifically sound and particularly beneficial in incenting the use of biomass-derived fuels to further reduce conventional hydrogen plant emissions.

Manufacturing Decarbonization Incentive Allocation

We strongly support CARB’s inclusion of provisions for a manufacturing decarbonization incentive allocation in §95890 (g) to target support for hard to decarbonize manufacturing facilities and the additional leakage protection that such an approach can provide. This proposal is similar in concept to what we had proposed in prior comments to the workshops CARB during informal rulemaking over the last few years, and we appreciate that hydrogen is proposed as an eligible technology for this incentive.

While we support the overall concept and the inclusion of this manufacturing incentive in the regulation, we believe that this incentive could be made even more effective with the following improvements:

- Most importantly, all sectors should be able to participate in the program – especially existing hydrogen plants, given that hydrogen is an important tool to reduce both emissions as a fuel and feedstock, enable zero-emitting technologies in the transportation, industrial and power markets, and that decarbonizing existing hydrogen facilities may anchor broader use of hydrogen and decarbonization across sectors. By expanding eligibility, CARB can incentivize all facilities to innovate with new emission reduction technology and encourage the development of these technologies by creating more demand across a broader spectrum of facilities. In-state hydrogen plants, in particular, can reduce emissions via electrification and/or purchasing biogas – and while some of these same technologies are encouraged under the Low Carbon Fuel Standard, impediments remain within that program, including credit value, which could be improved by combining incentives under both programs. We urge CARB to enable all sectors to receive credit at some level – at least in the near-term to jump-start the necessary innovation and provide substantive demand for the emission-reducing technologies.

- Secondly, the requirement under §95890(g)(2)(C)(1) should not be limited to only those entities who have received the federal tax credit under 45V, as this will limit applicability to only those years for which the tax credit is available and subject eligibility of this provision to uncertain and variable federal policy. For example, the 45V tax credit can only be applied to projects that begin construction prior to 12/31/2027, while CARB's proposed manufacturing credit incentivizes the use of low carbon hydrogen through 2038. We suggest that CARB take an approach similar to what was done in the recent Low Carbon Fuel Standard rulemaking, where eligibility was defined by a carbon intensity equivalent to the threshold defined under the 45V tax credit, but did not require that the 45V credit be received. CARB should utilize the 4 kg CO_2e/kg H_2 produced as the eligibility threshold and reference that meeting this threshold can be demonstrated either utilizing the latest version of the CalGREET model or the version of the GREET model recognized by the federal government.

- Also, for the eligibility criteria in §95890(g)(2)(C)(2) and (3), CARB should clarify that only the hydrogen production feedstock need be from exempt, biomass-derived feedstocks or renewable electricity, and not that the process energy also is required to be 100% renewable. Given transient operating conditions and availability of renewable feedstocks/energy, these criteria, if applied to all energy use at a given facility would significantly limit or eliminate low-carbon hydrogen as a manufacturing decarbonization option.

<u>Transaction Agreement for Compliance Instruments Without Prices</u>

We support CARB's proposal to clarify the transaction agreements for which transfers of compliance instruments may be reported as unpriced to ensure that market participants are in conformance with the trade rules specified in the regulation. We suggest that CARB not specify the need to include invoice records or broad contractual agreements as part of the tracking system. We believe that a transaction agreement that includes a description of the agreement and signed counterparty confirmation is sufficient to substantiate the transaction. Broad contractual agreements may include complex and confidential information that is unnecessary to substantiate the instrument transactions.

Air Products appreciates the opportunity to provide this feedback. Please feel free to contact me by phone (916-860-9378) or email hellermt@airproducts.com.

Respectfully,

Miles Heller
Director, Greenhouse Gas Government Policy