August 27, 2024

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

RE: Proposed 15-Day Changes to Proposed Regulation Order

Dear Chair Randolph:

The Biotechnology Innovation Organization (BIO) -- the world's largest biotechnology focused trade group with members that produce agricultural, environmental, industrial, and health care products – submits these comments to the California Air Resources Board (CARB) in response to the August 12, 2024, Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information for the Proposed Low Carbon Fuel Standard (LCFS) Amendments.

On February 20, 2024, BIO submitted comments on CARB's proposed LCFS amendments and we continue to urge CARB's consideration of the comments we previously submitted in addition to these comments regarding areas elaborated in the 15-Day Notice.

Specific to the 15-day changes and the overall pending rulemaking, BIO members produce the feedstock, biofuels, sustainable aviation fuel, and renewable energy from which California's LCFS, along with the state's environment and economy has benefitted so greatly the last 14 years. As a result, it was shocking and extremely disappointing to see that the 15-Day Changes to the pending LCFS Amendments contain several problematic proposals that threaten the tremendous progress the program has achieved since it was first enacted in 2007.

Specifically, BIO opposes:

Virgin Soybean/Canola Oil Cap

The proposed addition of section 95482(i) would limit a producer's ability to generate credits from soybean and canola oil-based fuels to no more than 20 percent of total biomass-based diesel (BBD). Under the proposal, biomass-based diesel from virgin soybean and canola oil in excess of 20% would be assessed the Carbon Intensity (CI) of the applicable diesel pool benchmark for that year, or the certified CI of the applicable fuel pathway, whichever is higher.

For companies that already have a certified fuel pathway prior to the effective date of the amendments and for which the percentage of biomass-based diesel produced from virgin soybean oil or canola oil was greater than 20% of combined reporting biodiesel and renewable diesel quantities for that company's 2023 LCFS reporting, the provision would take effect Jan. 1, 2028, to provide time to adjust feedstock supply contracts as needed. All other companies would be subject to the requirement upon the effective date of the amended regulation.

CARB has not provided any basis for the proposed limitation on biofuels derived from these oilseeds other than to claim that fuels derived from crop oils should be available to markets outside of California.

Soybean and canola oil-based biofuels are already available in markets outside of California, including expanding volumes in Midwest markets and West Coast clean fuel standard incentivized states, along with growing volumes of biomass-based home heating oil in certain Northeast markets. California's LCFS is not hindering the availability of these products to other states – and there is no evidence that it is or will. Efforts to cap the use of soybean and canola oil-based BBD out of a desire to increase food security are misdirected. Raw food commodities, that include soybean and canola oil, comprise a small share of the overall cost of food production and contribute a small share of the retail price of food. Packaging, marketing and logistics make up over 80% of the retail cost of food items.

Currently, virgin vegetable oils make up approximately thirty percent of the feedstock portfolio used in the California biofuels market. In its 15-Day Changes, CARB has recommended imposing a combined twenty percent cap on vegetable oil feedstocks, per company. However, in its own presentation on April 10, CARB staff noted that it anticipates nearly eighty percent of vehicles on the road in California to still use combustion engines by 2030.

Moreover, using CARB's own analysis, imposing a cap on virgin vegetable oils, which already receive an unfavorable score through old modeling data and would face restrictions through other sustainability measures in the proposal, will lead to an increase in fossil diesel usage compared to the status quo by 2030. Without proof to the contrary, CARB has determined that more fossil diesel on the market in 2030 as opposed to increasing virgin vegetable oil biofuel usage is better for the long-term goals of the LCFS.

As steps are taken to address climate change both today and in the long-term, virgin vegetable oil biofuels will remain an important tool in the toolbox in both existing diesel engines and new ultra-low carbon liquid fuel engine technologies. Carbon emissions

continue to accumulate, and increased utilization of biofuels can help mitigate increasing emissions occurring at present.

Sustainability Guardrails

BIO was surprised to find that not only was a feedstock cap in the 15-Day Changes, but the sustainability guardrails were also retained. The cap, sustainability guardrails, and Indirect Land Use Change (ILUC) score all additively, and redundantly, address land use change. This has the equivalent effect of giving soy and canola a much higher CI score increasing the compliance cost associated with delivering the product, despite the lack of direct evidence.

Broadly, we are concerned that the requirement proposed by CARB is unneeded given the longstanding, excessively high ILUC figure (relative to more recent modeling efforts). Furthermore, we are extremely disheartened that CARB has not followed the example of governments across North America, where farmers who submit data for compliance are also given the opportunity to be incentivized for conservation efforts.

Adding supply chain traceability to a bulk delivery system adds significant administrative burden without changing the GHG emissions of the pathway. CARB's efforts could be improved and enhanced by outreach to U.S. Department of Agriculture (USDA) personnel who have engaged in activity regarding climate-smart farming practices. To that end, USDA recently closed a comment period on its Request for Information on Procedures for Quantification, Reporting, and Verification of Greenhouse Gas Emissions Associated with the Production of Domestic Agricultural Commodities Used as Biofuel Feedstocks. With the information received, USDA seeks to quantify and qualify the benefits of climate smart agriculture practices for biofuel programs at the state, national, and international level. Communication between CARB and USDA could be enlightening regarding ongoing agricultural sustainability practices.

Many of these additional sustainability and CI criteria are based on the myth that thousands of acres of land are being deforested to grow biofuel feedstocks. The reality is, under the federal Renewable Fuel Standard, fuel feedstocks must not be sourced from agricultural land cleared or deforested after December 19, 2007.

Furthermore, the USDA's 2022 Census of Agriculture, released in February, highlights a significant decrease of 14 million-acres (4%) in U.S. cropland since 2017, continuing a longstanding trend of declining cropland area. This data underscores the limited need for additional safeguards for U.S. cropland, as the decline in agricultural land suggests that existing regulations sufficiently protect against unwarranted land conversion. Given the limited availability of accredited third-party verification bodies and the stringent qualifications already required by the U.S. EPA's Renewable Fuel Standard aggregate

compliance, BIO believes imposing additional sustainability guardrails on U.S. produced renewable fuels is unnecessary

Frankly, it is more likely that agricultural land will be converted into a strip mall or other commercial development where EV chargers will be placed as opposed to forested land transitioned to a soybean or canola farm.

Fuel Pathway Applications/Biomass-Based Diesel Pathways

In § 95488(d), CARB proposes to allow the denial of new biomass-based diesel pathways beginning in 2031 if Class 3-8 ZEV registration exceeds 132,000. This is an inappropriate change as it is contrary to the technology-neutral design of the LCFS.

Fuel types and vehicle technologies should be allowed to compete freely in the California market without artificial and arbitrary barriers like this. It is also possible that emerging low-CI feedstocks will become commercially viable after 2031 and arbitrarily cutting off new pathways will deny the opportunity to further reduce the carbon intensity of the diesel fuel consumed in the state.

There is also no language around future BBD pathway registrations under subsequent versions of CA-GREET, which raises concerns about what will happen to BBD participation in the future. This change was not part of the original proposal under this rulemaking and is an inappropriate inclusion in a 15-day package.

Biomethane Pathway Life and Deliverability Restrictions

BIO strongly disagrees with the sunsetting of avoided methane crediting for biogas pathways under the LCFS. As CARB has recognized, capturing methane from dairies - greenhouse gas emissions that would otherwise be released to the atmosphere - is one of the primary measures for achieving the state's 2045 greenhouse gas reduction targets and methane reduction target. In addition, we note that use of dairy digesters creates synergistic environmental benefits, as farmers can generate soil amendments that provide nutrients and decrease the amount of fertilizer needed.

Specifically, CARB is now proposing to reduce the total number of crediting periods for pre-2030 avoided methane emissions projects from dairy and swine manure and landfill-diverted organic waste disposal to two 10-year crediting periods, rather than the three 10-year periods in the original LCFS proposal. Restricting established pathway renewals from 30 years to 20 years is an arbitrary change that devalues biomethane and biomethane production assets.

Projects that came online before 2030 assumed full crediting in the project evaluation. As such, it must be noted that dairy manure methane avoidance projects require significant capital investment and carry with them significant ongoing operating costs, so the proposed reduction seems a major betrayal to California's dairies that have bought into the LCFS program. Accordingly, limits on the crediting period for such projects not only inhibit initial investment but can also threaten the viability of continuing methane avoidance operations over time.

For these and many other reasons, we urge CARB to discard this proposal in order to realize future methane reductions and honor the significant financial commitment California dairy farmers have made to the LCFS and the state's environment.

BIO also opposes deliverability requirements. The current approach to book-and-claim accounting is practical, aligns with other U.S. policies, and provides the most effective means of reducing GHG emissions, which are global in nature. The development of a system map utilizing 2020-2023 data to impose deliverability requirements in 2037 is arbitrary relative to the 2041 date previously established. It is simply an arbitrary requirement—with no additional environmental benefit or grounding in the physical gas system. This has the potential to deter growth and cause backsliding.

Elimination of Intrastate Sustainable Aviation Fuel from Consideration for Deficit Generation

Previously, CARB had proposed that intrastate sustainable aviation fuel (about 10% of total jet fueled in California) be included as a deficit-generating fuel. BIO is disappointed that the 15-day proposal removes the inclusion of intrastate sustainable aviation fuel from consideration of credit generation under the LCFS. As other states aggressively pursue policies incentivizing SAF production and use, California remains in stuck in neutral and falling further behind states such as Georgia, Colorado, Illinois, Minnesota, Montana, Nebraska, North Dakota, and Washington State. Such small-minded thinking and action will result in California falling further behind the many other states that will soon enact pro-SAF policies.

BIO again wishes to take this opportunity to urge CARB to permit the use of E!5 in California in whatever way possible. Although E!5 is technically not related to this rulemaking, it should be noted that California is the only state that does not permit the sale of E15. This prohibition is illogical as ethanol is a cleaner burning fuel than gasoline. An earlier study commissioned by CARB found that adopting E15 in California could also provide significant environmental benefits, cutting emissions of tailpipe

pollutants—like particulate matter and carbon monoxide—that cause air quality and human health problems.

According to the Renewable Fuels Association, if all gasoline in California in 2022 had been E15 instead of E10, the state would have seen a 450-million-gallon reduction in petroleum consumption and additional GHG savings of 2.2 billion metric tons, based on CARB's own data. Furthermore, a recent UC Berkely/US Naval Academy study indicates that moving to E15 will save California motorists approximately $0.20 per gallon, or about $2.7 billion per year. All required testing for E-15 in California has been completed, and there is no reason to further delay its implementation. Until California vehicles have been converted to hybrids, EVs, or other technologies, it is antithetical to the LCFS for California to continue a 90% fossil fuel mandate, which only benefits petroleum producers.

Conclusion

In closing, proposing what are arguably the most far-reaching changes to the California LCFS in the program's 17-year lifespan at the height traveling season and limiting the comment period to 15 days is contrary to the transparent and input-heavy approach that CARB has generally followed. Frankly, any one of the concerns addressed in this letter could justifiably be the subject of an all-day standalone hearing. Instead, a virtual overhaul of the entire LCFS program – contrary to original technology neutral intent of the initiative - is subject to a two week review and comment time period at a time when many may be on vacation for that entire time.

Again, BIO appreciates the opportunity to comment on CARB's proposed amendments to the LCFS. Please feel free to contact me at gharrington@bio.org or (202) 365-6436 if you have any questions regarding BIO's comments.

Sincerely,

Gene Harrington
Senior Director, State Government Affairs, Agriculture & Environment