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August 26, 2024

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

*Via electronic submission*

**Re: Proposed 15-Day Changes to the Proposed Regulation Order**

Dear Chair Randolph and Members of the California Air Resources Board:

The American Soybean Association (ASA) appreciates the opportunity to comment on the proposed 15-day changes (15-Day Changes) to the Low Carbon Fuel Standard (LCFS) program. ASA has welcomed engagement with the California Air Resources Board (CARB) and staff throughout this multi-year process to update the LCFS program.

ASA represents approximately 500,000 U.S. soybean farmers on domestic and international policy issues important to the soybean industry and has 26 affiliated state associations representing 30 soybean-producing states. U.S. soybean growers have long been committed to producing the world's food, feed, fuel, and thousands of bioproducts in a sustainable and climate-smart way.

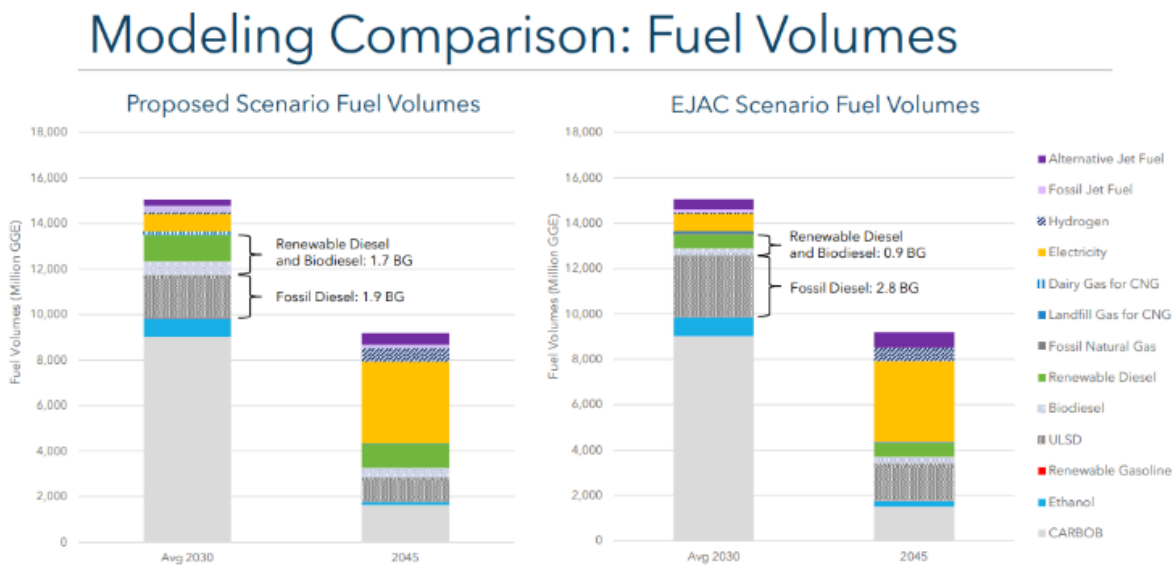
CARB's 15-Day Changes to revise the LCFS was quite surprising, as it diverged significantly from what was included in the Initial Statement of Reasons (ISOR) and the April 10 public workshop. Of top concern for ASA is a proposal that would cap the use of virgin vegetable oils as feedstocks for biofuels at 20 percent by company. Another significant concern for ASA remains regarding sustainability guardrails: how sustainability guardrails will work with current soybean reporting infrastructure. ASA continues to oppose CARB using data over two decades old to set carbon intensity (CI) scores for soy. ASA opposes discretionary authority provided to the Executive Officer to stop accepting new pathways for biomass-based diesel. ASA is also concerned that the aggressive step-down of CI benchmarks, combined with other changes, will reward importers of waste feedstocks while penalizing U.S. farmers.

As CARB seeks to finalize updates to the LCFS program in the coming months, ASA strongly encourages that these updates are based on science as required by AB-32. The determination to make such drastic changes to previous CARB proposals so late in the game was shocking to the soybean and biofuels industries. For CARB to move from arguing that a vegetable oil feedstock cap was detrimental to the goals of the LCFS based on the science at the April public workshop, to now recommending a wildly stringent cap on those feedstocks without data or science, is quite difficult to comprehend given the intention of the LCFS to be driven by science. CARB's analysis showed that a feedstock cap would increase greenhouse gas (GHG) emissions in California, which is contrary to requirements in AB-32.

### Vegetable Oil Feedstock Cap

The addition of a virgin vegetable oil feedstock cap in the 15-Day Changes was alarming to ASA, and clearly to the entire biofuels value chain. In the April 10 workshop on proposed LCFS updates, CARB noted that liquid fuels would continue to be needed in the transportation sector in California for at least the next decade. CARB also argued that the imposition of a virgin vegetable oil feedstock cap would have an increase in the utilization of petroleum diesel in the transportation sector (Figure 1).

Figure 1



Source: California Air Resources Board

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. Further, CARB staff noted that such a stringent cap on virgin vegetable oils will result in 2.8 billion gallons of fossil diesel utilization in 2030, versus 1.9 billion gallons using a scenario that does not impose the cap proposed by the Environmental Justice Advisory Committee (Figure 1).<sup>1</sup> This is because biofuels made with virgin vegetable oils displace a significant volume of fossil diesel, acting as a bridge fuel that will naturally move to other markets as CI thresholds decline in the LCFS program.

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. However, the Intergovernmental Panel on Climate Change notes in its sixth assessment report that using existing low carbon technologies is a crucial component to avoiding catastrophic temperature increases, stating that "biodiesel and renewable diesel fuels...could offer important near-term reductions" for several technologies, including buses, rail, and long-haul trucking.<sup>2</sup>

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.

ASA is concerned that a 20 percent soybean and canola cap by company could be much more restrictive in practice. Some biofuel producers utilize little to no soybean or canola oil and will likely have spare allotment. Other biofuel producers use almost all soybean oil and have few options to switch. The 20 percent cap would largely shut them out of the California LCFS program. The combination of these extremes could easily produce a result much more restrictive than the 20 percent level initially implies.

We also note that the proposed vegetable oil cap contradicts the statutory guidance in AB-32, which establishes the authority for the LCFS. We refer to the following sections of AB-32:

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<sup>1</sup> California Low Carbon Fuel Standard Workshop, Staff Presentation, Slide 23. April 10, 2024. <https://ww2.arb.ca.gov/sites/default/files/2024-04/LCFS%20April%20Workshop%20Slides.pdf>

<sup>2</sup> Jaramillo, P., S. Kahn Ribeiro, P. Newman, S. Dhar, O.E. Diemuodeke, T. Kajino, D.S. Lee, S.B. Nugroho, X. Ou, A. Hammer Strømman, J. Whitehead, 2022: Transport. In IPCC, 2022: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. [https://report.ipcc.ch/ar6wg3/pdf/IPCC\\_AR6\\_WGIII\\_FinalDraft\\_Chapter10.pdf](https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_FinalDraft_Chapter10.pdf)

### 38501(h)

*It is the intent of the Legislature that the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases established pursuant to this division in a manner that minimizes costs and maximizes benefits for California's economy, improves and modernizes California's energy infrastructure and maintains electric system reliability, maximizes additional environmental and economic co-benefits for California, and complements the state's efforts to improve air quality.*

### 38560.5(c)

*The regulations adopted by the state board pursuant to this section shall achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from those sources or categories of sources, in furtherance of achieving the statewide greenhouse gas emissions limit.*

### 38562(b)(1)

*Design the regulations, including distribution of emissions allowances where appropriate, in a manner that is equitable, seeks to minimize costs and maximize the total benefits to California, and encourages early action to reduce greenhouse gas emissions.*

Multiple sections of the authorizing language for the LCFS instruct CARB to achieve the maximum technologically feasible reductions in GHG emissions. As CARB's own analysis presented in the April workshop has demonstrated, that is achieved without a soybean and canola feedstock cap. CARB's 15-Day Changes to institute the cap clearly contradicts the authorizing language of the LCFS and leads to worse emission and air quality<sup>3</sup> outcomes for the state.

AB-32 also instructs CARB to minimize costs. Markets naturally do this, and CARB's 15-Day Changes that would implement a binding cap would increase costs. This is incongruous with the legislative mandate.

Furthermore, ASA is perplexed that CARB is partially justifying this decision by making sure that other states retain access to biomass-based diesel. Section 38501(h) explicitly directs CARB to maximize benefits in California. Even if current law were waived, CARB has not shown that the cap would benefit other states. ASA remains puzzled that CARB singles out soybeans and canola-based biomass-based diesel in the LCFS program for adverse treatment while also remaining concerned that other states retain access to these fuels.

## **Sustainability Guardrails**

While ASA was very surprised to find the feedstock cap in the 15-Day Changes, we were also surprised to find the sustainability guardrails retained with the cap. The cap,

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<sup>3</sup> <https://cleanfuels.org/wp-content/uploads/trinity-nbb-transportation-health-risks-review-v1-03.pdf>

sustainability guardrails and Indirect Land Use Change score all additively, and redundantly, address land use change. This has the equivalent effect of giving soy and canola a much higher CI score despite lack of evidence from the LCA modeling.

As CARB seeks to formalize sustainability requirements first presented at the April 10 workshop, ASA appreciates that CARB has developed a timetable and phase-in requirements so that industry can adapt to changes. However, if CARB's goal is to address land use change concerns, they are already capturing land use change risk by the LUC score penalty from the GTAP model. From an aggregate standpoint, whether biofuels were produced from a U.S. acre in production in 2007 or thereafter is largely irrelevant for carbon intensity. The total change in the system is the important component. Simply shifting eligibility among domestic acreage only adds costs without a program benefit.

Furthermore, this additional cost without benefit contradicts language authorizing the LCFS. Section 38562 (b)(7) of AB-32 directs CARB to, "Minimize the administrative burden of implementing and complying with these regulations." Adding supply chain traceability to a bulk delivery system adds significant administrative burden without changing the GHG emissions of the pathway. As aforementioned, GTAP modeling captures land use change, so the additional, and potentially significant, administrative burden of the guardrails contradicts the statutory language of AB-32.

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. 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.

Through the current sustainable aviation fuel (SAF) federal tax credit (40B), the CI of soy-based biofuels can improve through no-till and cover cropping on the field that the soybeans were produced. Other farming practices like low-till, nutrient management, enhanced efficiency fertilizers, buffers, wetland and grassland management, tree planting on working lands, planting for higher carbon sequestration, and soil amendments all can and should be accounted to assign a lower CI score to an agricultural feedstock. USDA already tracks all these practices through several of their managed conservation programs. In addition, there are a variety of other practices that scientifically lower the CI score of soybean feedstocks for biofuels, and USDA is actively working to develop mechanisms to account for those.

Given this work, ASA urges CARB to reconsider its proposed sustainability requirements to allow soybean growers the opportunity to participate in the California biofuels market

through innovative and climate smart agriculture practices. CARB should look to programs already developed through farmer input and provide improved scoring for feedstocks that employ sustainability practices to minimize the changes in comparative costs.

### **Outdated Scoring**

For the last several years, ASA has urged CARB to update its scoring methodology for soy-based biofuels, which uses outdated data that does not represent current U.S. soybean farming practices and environmental footprint.

ASA is concerned that without a comprehensive update to the Global Trade Analysis Project model for biofuels (GTAP-BIO) that CARB utilizes, soy-based feedstocks will be phased out of the LCFS even without the additional limitations being proposed in the 15-Day Changes. Current data indicates a much lower CI score for soybeans, as growers continue to improve soil practices, limit water use, lower on-farm emissions and more. On the one hand, CARB is recommending stringent sustainability guardrails for U.S. soy, but on the other hand is still on track to likely phase-out soy-based biofuels from credit generation by approximately 2035 or sooner.

CARB has indicated plans to update all major models for lifecycle emissions calculations except for GTAP-BIO in the updated LCFS rulemaking. The soy industry has made vast improvements in sustainability and efficiency over the past two decades, with even greater improvement goals ahead. At the same time, CARB continues to rely on a 2014 model that uses data from 2004. The ILUC score accounts for half or more of the CI score for soy-based biofuels. CARB's current modeling assigns soy biomass-based diesel with an ILUC impact of 29.1g CO<sub>2</sub>e/MJ whereas updated results from the model used to calculate ILUC scores indicate a value of between 9 and 10 gCO<sub>2</sub>e/MJ for soybeans<sup>4</sup>. The recently released 40BSAF-GREET 2024 model has an ILUC score of 12.2 for soy-based sustainable aviation fuel in federal programs.

The benefits of the LCFS can only be achieved if CI values are accurately captured. If land use change concerns are large enough to justify sustainability guardrails and capping virgin vegetable oil feedstocks, then the modeling should also be updated to reflect current land use change data.

ASA remains concerned that CARB's refusal to update ILUC modeling runs afoul of AB-32. 38562(e) of AB-32 states, "The state board shall rely upon the best available economic and scientific information and its assessment of existing and projected technological capabilities when adopting the regulations required by this section." As GTAP has been updated with more recent data and CARB has not yet updated the LCFS program despite

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<sup>4</sup> Taheripour, F., Karmai, O., and Sajedinia, E. (2023). *Biodiesel Induced Land Use Changes: An Assessment Using GTAP-BIO 2014 Data Base*. Purdue University

years of requests, ASA is concerned that CARB is not utilizing the best available science as required by statute.

ASA continues to urge CARB to update its GTAP model to align with other modeling changes being made.

### **Entities Eligible to Apply for Fuel Pathways**

ASA is concerned about CARB's 15-Day Changes to give the Executive Officer discretion to stop accepting new pathways for biomass-based diesel starting in 2031. ASA does not understand what statute of AB-32 is served, or justifies, this arbitrary and highly selective change. CARB must under statute minimize costs and maximize GHG reductions. It is unclear how this is served by rejecting new pathways. In fact, the requirements of current law are met by allowing the most available pathways. If these pathways cannot achieve cost-effective GHG savings, they will not be utilized by the market in the LCFS. In essence, an increase in pathways can only serve to improve GHG benefits in California. Singling out a single fuel for prejudicial treatment is baffling given the goals of the LCFS and the authority that establishes it. Executive Order S-01-07 establishing the LCFS specifically cites diversity of fuels as a motivation for the program, and this proposal contradicts one of the stated purposes of the program.

### **Updating Carbon Intensity Benchmarks**

The 15-Day Changes included a more aggressive update to CI benchmarks under the LCFS program, shifting from a five percent CI reduction for diesel fuel to nine percent starting in 2025. However, CARB is setting ambitious benchmarks while limiting the available feedstock portfolio for biomass-based diesel. Instead of seeking to achieve these benefits through domestically sourced feedstocks regulated and overseen by the U.S. government, CARB is gambling on imported feedstocks they are assigning lower CI scores to, though the provenance and actual CI of those feedstocks remains veiled from proper stringent oversight. Strong concerns remain about the integrity of these imports.

The aggressive step-down of CI benchmarks in the next few years, paired with proposed limitations on domestic biomass-based diesel feedstocks creates a system that ultimately will reward China, Brazil, or other major importers of waste feedstocks while penalizing U.S. farmers. ASA believes that our domestic clean energy sector wins when programs utilize all tools in the toolbox and support domestic fuel security.

### **Conclusion**

ASA is encouraged by the continued successes of programs that support the development of cleaner, low-carbon fuels. However, it is critical that CARB finalizes updates in a way that does not arbitrarily exclude agricultural feedstocks through policies that are not science-based and run afoul of CARB's mandate, including capping vegetable oil feedstocks and

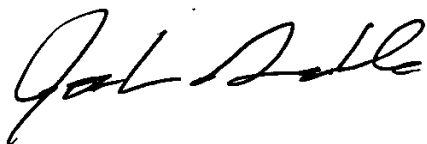
applying onerous sustainability guardrails that add cost without rewarding farming practices that lower CI.

CARB's 15-Day Changes, released in August 2024, is deeply concerning. CARB has singled out soybean and canola oil for adverse, prejudicial treatment. No scientific evidence is ever given for this treatment. In fact, CARB has refused to update the science as required by law for these feedstocks. This alone calls into question the integrity of a performance-based LCFS. On top of this, CARB is now proposing feedstock caps, traceability requirements and authority to reject applications for these fuels produced from them. CARB has not shown any scientific justification. In fact, the LCFS is already over penalizing soy for any land use change requirements.

CARB is required under law to achieve the maximum technically feasible and cost-effective reductions in GHGs. Markets minimize costs through the proper allocation of inputs. CARB's 15-Day Changes restricts those markets, thereby increasing GHG emissions and increasing costs in the program. CARB's own analysis has shown that GHG emissions are increased through a feedstock cap. While CARB is required under AB-32 to consider the cost effectiveness of the LCFS regulations, it has noticeably not shown how this proposal will affect costs. Not only does this proposal abandon a science-based approach, but it also appears to be at odds with CARB's statutory duties. We strongly urge CARB to conduct analysis on this proposal and hold a public hearing to allow for discussion prior to finalization.

ASA is eager to continue working with CARB to support the role of agriculture in diversifying the fuel supply while reducing GHGs and increasing clean air in California and beyond. On behalf of U.S. soybean farmers, we appreciate the opportunity to comment and look forward to collaborating with CARB and other relevant stakeholders on implementation of policies that expand the use of soy-based biofuels and market opportunities for soybean farmers.

Sincerely,

A handwritten signature in black ink, appearing to read "Josh Gackle". The signature is fluid and cursive, written in a professional style.

Josh Gackle  
President