August 27, 2024

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

RE: 15-day notice for comment on additional Low Carbon Fuel Standard proposed amendments announced on August 12, 2024

Dear Chair Randolph and CARB Board Members:

On behalf of the members of the American Coalition for Ethanol (ACE), I am writing in response to additional amendments proposed on August 12 by the California Air Resources Board (CARB) on the Low Carbon Fuel Standard (LCFS).

Crop-Based/Biomass Sustainability Criteria

The subject of sustainability criteria for crop-based biofuels is complex and consequential. ACE members do not believe CARB's broad yet cursory proposal, nor the brief discussion of this topic during the April 10 workshop or additional regulatory red tape proposed in the 15-day comment package of amendments, warrant implementation of such criteria within the context of the overall LCFS.

Rushing to implement such criteria could backfire. As we noted in our February 20 comment letter, the broad proposal to require pathway holders to track crop-based feedstocks to their point of origin and obtain independent third-party certification will discourage participation in the LCFS and hinder the goals of the program.

In general terms, we could support CARB's goal to ensure biomass and crop-based feedstocks used to produce low carbon fuels are not grown on land converted from forests, native grasslands or wetlands after 2008. However, the rushed approach CARB is taking without adequately defining or being transparent about what constitutes "sustainability" beyond the above-stated goal leaves us with more questions and concerns than answers. While CARB seemingly is attempting to dull the biting nature of this proposal by "phasing-in" the documentation and verification of certain feedstock supply chain data, the overall proposal still lacks adequate explanation and transparency about the underlying need or goal for sustainability criteria.

Instead, we recommend initiating a thoughtful stakeholder engagement process so all parties can better understand what CARB wants to accomplish through sustainability criteria. We believe this process can help surface the fact there are multiple existing protocols which can be relied upon to satisfy any real or perceived concerns related to ensuring the LCFS is not causing land use change (LUC) to forests, wetlands and native prairies.

One such protocol is the "R&D Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies (GREET) 2023 Rev1 Technical Report" on indirect effects of biofuels completed by the U.S. Department of Energy to help establish the 40B GREET model for the 40B sustainable aviation fuel (SAF) tax credit. The Department of Energy engaged Purdue University to generate results on induced land use changes (ILUC), crop production, livestock production and rice production with its

GTAP-BIO model, and ICF to develop emission profiles of crop production, livestock production and rice paddy fields.[1]

Argonne modified R&D GREET 2023 to create an updated version, R&D GREET 2023 Rev1, that addresses the lifecycle GHG emissions associated with seven SAF pathways for 40B use. The technical report includes updates to ensure the indirect effects of four SAF pathways using dedicated feedstocks (corn, soybean, canola and sugarcane) are covered. It can help inform questions CARB may have relative to indirect effects, including ILUC, from crop-based biofuels.

Second, the U.S. Department of Agriculture (USDA) has an existing and robust apparatus which, since 1985, has been enforcing certain requirements ensuring farmers meet conservation requirements on croplands in order to be eligible for federal farm programs administered by USDA's Farm Service Agency (FSA), Risk Management Agency (RMA) and Natural Resource Conservation Service (NRCS). Known as "conservation compliance," Congress charged USDA with this responsibility to ensure federal farm programs did not entice farmers to grow crops on highly erodible lands or convert wetlands for agricultural production.

Farmers who fail to abide by these rules are ineligible for federal farm programs including FSA loans and disaster assistance payments, NRCS and FSA conservation benefits, and federal crop insurance support.

USDA has 40 years of experience enforcing these provisions. Under federal regulation, farmers and affiliated persons must affirmatively attest (form AD-1026) that they will not plant or produce an agricultural commodity on highly erodible land without following an NRCS approved conservation plan or system, plant or produce an agricultural commodity on a converted wetland, or convert a wetland which makes the production of an agricultural commodity possible. Additionally, activities that may affect compliance such as removing fence rows, combining fields or conducting drainage activities must be pre-approved by USDA to ensure compliance.

USDA's FSA and NRCS are tasked with ensuring eligibility. Leveraging nearly 10,000 staff in state and county offices, NRCS is responsible for making the technical determinations of compliance at the farm level, and FSA's staff of nearly 7,000 state and county offices use this information to make program eligibility determinations for the covered programs. Farmers understand and accept this system. There is no need to re-invent the wheel. Instead, CARB should leverage USDA's existing enforcement infrastructure to verify desired sustainability criteria.

Speaking of federal fuel programs, third, as you know, the U.S. Environmental Protection Agency (EPA) is charged with enforcement of land use and total cropland acres relative to implementation of the Renewable Fuel Standard (RFS). This is yet another safeguard in place to prevent expansion of cropland for biofuel use.

Finally, ACE has previously written about a project we are engaged on with USDA's Regional Conservation Partnership Program (RCPP) to unlock corn ethanol access to LCFS markets and new tax

[1] https://greet.anl.gov/files/greet-2023rev1-summary April 2024. Development of R&D GREET 2023 Rev1 to Estimate Greenhouse Gas Emissions of Sustainable Aviation Fuels for 40B Provision of the Inflation Reduction Act. Michael Wang, Hao Cai, Uisung Lee, Saurajyoti Kar, Tom Sykora, and Xinyu Liu, Systems Assessment Center, Energy Systems and Infrastructure Analysis Division, Argonne National Laboratory

incentives based on the adoption of climate-smart agricultural (CSA) practices which reduce GHG emissions.

Specifically, in late 2021, NRCS provided ACE with $7.5 million in RCPP funds to work with a member ethanol company (Dakota Ethanol, LLC) and farmers in the counties surrounding the facility to: (1) incentivize farmer adoption of CSA practices at scale, (2) partner with leading land-grant university scientists and Sandia National Laboratory to collect data to measure, verify and model resulting soil health and GHG benefits, and (3) use this data to help participating farmers access clean fuel markets and take advantage of other opportunities to monetize CSA practices.[2]

Since the launch of this South Dakota-based RCPP, ACE and our partners have successfully executed contracts with farmers in the seven counties surrounding Dakota Ethanol, LLC to adopt CSA practices on nearly 20,000 acres of cropland. Currently our technical team, led by South Dakota State University, is conducting ongoing verification of practices and we are making reimbursement payments to participating farmers. Soon our technical team will begin collecting soil samples and other relevant data to pressure test the agro-ecosystem models.

Based on this progress, earlier this year, NRCS invested an additional $25 million for a larger 10-state RCPP led by ACE.[3] The USDA funding will help hundreds of farmers adopt reduced and no-tillage, nutrient management and cover crops on nearly 100,000 acres across 167 counties surrounding 13 ethanol facilities partnering with ACE to implement the project in Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, Ohio, South Dakota and Wisconsin. The sites were strategically chosen to provide our project's scientific team with statistically significant data regarding the GHG effect of conservation practices in different soil types and climates.

ACE and our partners will accomplish three important objectives with this funding support from USDA. First, we will incentivize farmers in 10 states to adopt conservation practices. Three-fourths of the funding will go toward farmer adoption of practices. Second, our team of soil scientists and agronomists will monitor, measure and verify how the conservation practices adopted by the farmers reduce GHG emissions from corn production. The data they collect will be shared with the U.S. Department of Energy who will use it to pressure test existing models such as the GREET model to address real and perceived 'information gaps' which currently prevent farmers and ethanol producers from adequately monetizing climate-smart ag practices. Third, our ultimate objective is to empower ethanol producers and farmers with modeling and calculator tools to earn higher tax credits and premium prices in clean or low carbon fuel markets based on climate-smart ag practices.
Our partners, including 13 ethanol companies and team of technical experts, are currently making plans to ensure farmers in the 167 counties are aware of their eligibility and we hope to execute contracts for initial conservation practices following the 2024 fall harvest.

While we may share CARB's goal for better understanding the GHG impacts farming practices have on crop-based biofuels, we disagree feedstocks such as corn must be tracked to their point of origin.

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[2] https://ethanol.org/ace-news/usda-announces-investment-in-effort-to-utilize-climate-smart-practices-to-secure-market-access-to-clean-fuel-markets-for-farmers-and-ethanol-producers

[3] https://ethanol.org/ace-news/ace-announces-project-to-unlock-ethanols-access-to-new-markets-and-tax-credits

Rather, GREET and other models CARB and other regulators use today to penalize corn ethanol for LUC and farm-level practices can be improved and modified to assign carbon credits based on climate-smart agriculture practices. Specifically, GREET currently estimates nitrous oxide emissions from fertilizer use, contains a module for estimating LUC penalties through the Carbon Calculator for Land Use Change from Biofuels (CCLUB), and features a relatively new Feedstock-Carbon Intensity Calculator (FD-CIC) module estimating soil carbon emissions and sequestration credits for practices such as conservation tillage and cover crops on corn production.

Capping Credits for Soy and Canola-based Biomass-based Diesel

CARB's August 12 surprise proposal to cap credits for biomass-based diesel produced from soy and canola oil to just 20% of a company's annual LCFS obligation also lacks transparency and rationale. It would appear this proposal does not apply to distillers corn oil (DCO) or used cooking oil (UCO) but once again, CARB needs to provide more information about the purpose and scientific need for such a radical proposal.

Agriculture and crop-based biofuels are poised to play an even more meaningful role in helping CARB achieve the more ambitious carbon intensity reduction targets set forth in your overall package of amendments, but proposals to limit or cap the volume of carbon credits which can be derived from crop-based biofuels would make it appear CARB is altogether abandoning the "performance-based" nature of the LCFS and simply picking winners and losers.

E15

While it is outside the scope of the proposed amendments to the LCFS, we were encouraged by discussion during the April 10 workshop about how E15 could help reduce retail pump prices. This is true. E15 typically costs 5 to 25 cents per gallon less than E10 and 40 cents to $1.00 less than non-ethanol gasolines. E15 also has a higher octane rating, so allowing the sale of this fuel would give consumers the option to buy a higher quality product for less money. Moreover, 95% of all U.S. vehicles are approved to use E15 and nearly 3,400 retail sites offer E15 across 30 states.

We implore CARB to finally approve the use of E15 in California, noting that the Center for Environmental Research and Technology at the University of California Riverside found that replacing E10 with E15 in California will significantly improve air quality.[4]

Thank you for your time and consideration of these comments.

Sincerely,

Brian Jennings, CEO
American Coalition for Ethanol

[4] https://ww2arb.ca.gov/resources/documents/comparison-exhaust-emissions-between-e10-carfg-and-splash-blended-e15