

August 5, 2011

Mr. Floyd Vergara  
Chief, Alternative Fuels Branch  
California Air Resources Board  
Headquarters Building  
1001 I Street  
Sacramento, CA 95812

**RE:** Comments of the Renewable Fuels Association (RFA) in regard to LCFS proposed amendments and regulatory concepts as outlined at July 22, 2011 public workshop

Dear Mr. Vergara,

The Renewable Fuels Association (RFA) appreciates the opportunity to provide comments regarding the draft regulatory concepts and proposed amendments to the Low Carbon Fuels Standard (LCFS) that were discussed during the public workshop held July 22, 2011.

RFA is the leading trade association for America's ethanol industry. Its mission is to advance the development, production, and use of ethanol fuel by strengthening America's ethanol industry and raising awareness about the benefits of renewable fuels. Founded in 1981, RFA represents the majority of the U.S. ethanol industry and serves as the premier meeting ground for industry leaders and supporters.

While we believe many of the proposed regulatory amendments will enhance flexibility and improve the ability of regulated parties to comply with some of the requirements of the LCFS, we have several concerns related to other proposals discussed by the California Air Resources Board (CARB) staff at the workshop. Specifically, we disagree with CARB's contention that it would need to revise the carbon intensity (CI) of baseline gasoline to reflect the lower CI of corn ethanol resulting from reductions to ILUC emissions. Further, RFA is opposed to certain elements of CARB's plan to revise its indirect land use change (ILUC) analysis. RFA also is strongly opposed to some of the potential changes to the voluntary biofuel producer registration process that were discussed by CARB staff at the workshop.

- 1. RFA continues to believe that CARB should remove corn ethanol from the LCFS baseline gasoline formulation. Alternatively, CARB should treat any revisions to corn ethanol's CI value as improvements occurring since 2006; thus, such revisions would have no effect on the baseline.***

CARB staff indicated during the workshop that if the hypothetical corn ethanol ILUC factor is reduced, the “[b]aseline CI for CaRFG decreases” and the “[c]ompliance schedule targets for gasoline shift down.” This problem arises from the inclusion of 10% corn ethanol in the baseline gasoline formulation. Because corn ethanol is included in the baseline, changes to corn ethanol’s CI value may require a change to the CI of baseline gasoline. In turn, changing the CI value of baseline gasoline likely would result in the need to adjust the LCFS compliance schedule. These potential changes create uncertainty and result in “moving goalposts” for regulated parties.

The fact that revisions to corn ethanol’s CI value may necessitate fairly significant structural changes to the compliance schedule likely serves as a disincentive for CARB to revise corn ethanol’s CI value, even when changes are warranted and scientifically supported. That is, CARB may resist making changes to corn ethanol’s CI value—even when changes are clearly justified by the best available science—simply because of the associated administrative burden of restructuring the baseline and compliance schedule. Because the LCFS has been sold as a “performance-based standard,” we again encourage CARB to allow corn ethanol and other fuels to compete directly with a 100% gasoline baseline. As currently structured, the regulation forces corn ethanol to compete against itself; any reductions in corn ethanol’s CI value are likely offset by reductions in the baseline gasoline CI value.

Failing the removal of corn ethanol from the baseline, CARB should consider treating any changes to corn ethanol’s CI value as improvements that have occurred since the 2006 baseline year. Such treatment would allow CARB to maintain the baseline gasoline CI value, but make the appropriate changes to the CI values for individual ethanol pathways in the look-up table.

***II. RFA supports many of CARB’s proposed revisions to the existing ILUC analysis, but is opposed to several planned changes that are scientifically unsupported and go against the recommendations of the LCFS Expert Work Group.***

We agree with the decision by CARB staff to adopt the recommendations of the Expert Workgroup (EWG) pertaining to incorporation of cropland pasture for U.S. and Brazil, use of updated energy sector elasticity values, improved treatment of distillers grains, improved treatment of livestock sector responses, use of revised estimates for yield on new cropland, and revised emission factors. However, we disagree with CARB’s intent to reduce the “price/yield” elasticity value used in the Global Trade Analysis Project (GTAP) model. Further, we believe CARB’s proposal to prevent the GTAP model from reaching equilibrium by “freezing” food consumption raises serious technical concerns and likely will produce results that are inconclusive and unusable. CARB also suggested at the workshop that it may reduce or eliminate the “LUC credit” for biofuels that comes from the GTAP model’s predicted food consumption changes, despite no indication from the EWG that such a modification to the regulation is warranted or supportable.

- a. We are opposed to CARB’s proposal to disregard the recommendations of the EWG related to the “price/yield” elasticity in GTAP. There is insufficient scientific support for lowering this elasticity value and CARB has failed to justify this proposed revision.*

At the workshop, CARB staff announced that it “intends to use value(s) less than 0.25” for the price/yield elasticity. This proposal would be at odds with the recommendations of the EWG’s

elasticity subgroup, which advised that CARB should “[k]eep the central value of the yield elasticity with respect to price at 0.25 if only one value can be used for all crops and all countries.”<sup>1</sup> The elasticity subgroup included the recommendation to maintain the elasticity value at 0.25 as a “must-do” item for near-term modeling work.

CARB staff has provided no justification for disregarding the EWG recommendation and lowering this elasticity value, other than to reference a controversial white paper by Yale University economist Steve Berry. The Berry paper, which was commissioned by CARB, suggested lowering the elasticity value. At the final EWG meeting, the elasticities sub-group presented rebuttals to the contentions of the Berry paper and used empirical data to defend the recommendation to leave the elasticity value at 0.25.<sup>2</sup> CARB staff never responded to the rebuttals or data offered by the elasticities sub-group and still has not established a sound science-based justification for lowering the elasticity. Further, when asked by CARB staff during the July 22 workshop about the recommendation to lower the elasticity value, Purdue University economist Wally Tyner (CARB’s current contractor for GTAP work) indicated that he was not convinced of the validity of the Berry paper or the rationale for lowering the elasticity. Therefore, we strongly encourage CARB to abide by the clear recommendation of the EWG and maintain this elasticity value at 0.25.

- b. Because GTAP is a computable general equilibrium (CGE) model, preventing the model from reaching equilibrium by “freezing” food consumption raises serious technical concerns and likely will produce unusable and inconclusive results.*

CARB indicated at the workshop that it plans to “[r]un new model scenario(s) with and without food consumption held constant” as part of its update to the ILUC analysis. Holding food consumption constant would essentially prevent the GTAP model from functioning properly, thus producing results that likely have no meaning or value in assessing the hypothetical impacts of biofuels expansion on feed/food markets. GTAP is a computable general equilibrium model that only “solves” when supply and demand are equalized across all of the interconnected markets in the model’s representative economy. GTAP uses economic data to solve numerically for the levels of supply, demand and price that support equilibrium across a specified set of markets. CARB is proposing to prevent the model from reaching equilibrium by holding one factor (food consumption) constant while allowing all other factors to adjust. Holding one of a myriad of market variables constant undercuts the predictive value of the model and is akin to engineering the outcome by freezing variables that are not actually frozen in the real world. The model was not designed to be used in this way, and therefore, results obtained from manipulating the model in this manner cannot be considered relevant for decision-making. Consequently, RFA strongly opposes CARB’s proposal to prevent the GTAP model from functioning properly by freezing a single variable.

- c. CARB’s indication that it is considering “reducing or eliminating LUC credit” for hypothetical changes in food consumption goes against the recommendations of the EWG,*

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<sup>1</sup> See “Final Recommendations From The Elasticity Values Subgroup.” Nov. 2010. <http://www.arb.ca.gov/fuels/lcfs/workgroups/ewg/010511-final-rpt-elasticity.pdf>

<sup>2</sup> See “Elasticity Subgroup: Response to Requests and Queries from Last Meeting.” PowerPoint presentation to EWG. Nov. 5, 2010. <http://www.arb.ca.gov/fuels/lcfs/workgroups/ewg/ewg-reports.htm>

*which recommended only that CARB should “consider exploring” the relationship of biofuels and fiber, feed, and food markets.*

Aside from the technical modeling challenges described above, CARB staff’s suggestion at the workshop that it is considering “reducing or eliminating LUC credit” for hypothetical changes in food consumption is not supported by the EWG final recommendations. Though food consumption was not initially identified as one of the top eight priorities for examination by the EWG, a food sub-group was later added at the urging of one EWG member (a contractor for CARB) and CARB staff. Nonetheless, the food sub-group’s final recommendations did not advocate for changing the CI values of biofuels based on the proposed GTAP model manipulations described above.<sup>3</sup> In fact, the sub-group recognized that the LCFS is “...wholly focused on GHG-intensity of fuels...” and was not intended to address other issues unrelated to the policy’s overriding objective of GHG reduction. The sub-group acknowledged that this issue is outside the scope of the current regulation and is a “policy-related” matter that should be considered by policymakers, not addressed in an ad hoc fashion by staff.

Finally, the sub-group stated that it “made very little progress” in developing recommendations on how or whether ARB should address the issue and acknowledged that “[t]he development of robust modeling approaches that can be validated against recent empirical data...remains an obstacle yet to be overcome.”<sup>4</sup> Based on EWG’s recommendations and the technical modeling challenges illustrated above, RFA encourages CARB staff to reassess its consideration of reducing or eliminating the hypothetical “LUC credit.”

- d. RFA supports revisions to the emissions factors, but encourages CARB to ensure the effort to revise these factors is fully transparent. The methodology and all data and assumptions used to revise the emissions factors should be made available to the public as soon as possible.*

We agree with CARB and the EWG that the emissions factors used for the ILUC analysis should be revised. The EWG emissions factors subgroup recommended examining the impact of using the Winrock emissions data in conjunction with GTAP.<sup>5</sup> The Winrock data, which was used by the U.S. EPA for its ILUC analysis for the RFS2, is generally accepted as being more robust and detailed than the Woods Hole data used by CARB for the original analysis. RFA supports the use of the Winrock emissions factors and showed in an October 2010 white paper that using this data results in a significant reduction in corn ethanol ILUC emissions.<sup>6</sup> RFA also strongly supports the proposal to include consideration of carbon sequestration by harvested wood products in the revised emissions factors.

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<sup>3</sup> See “Recommendations from Food Consumption Subgroup.” Nov. 1, 2010 <http://www.arb.ca.gov/fuels/lcfs/workgroups/ewg/010511-final-rpt-food-consumption.pdf>

<sup>4</sup> Ibid

<sup>5</sup> See Carbon Emissions Factors Subgroup final recommendations. Nov. 19, 2010. <http://www.arb.ca.gov/fuels/lcfs/workgroups/ewg/010511-final-rpt-carbon-emiss-factors.pdf>

<sup>6</sup> See “Effect of Recent Expert Working Group Recommendations on California LCFS Corn Ethanol Land Use Change Emissions Estimate.” Oct. 29, 2010. <http://ethanolrfa.org/page/-/EWG%20Recommendations%20Effects%20on%20Corn%20Ethanol%20ILUC2.pdf?nocdn=1>

Because the emissions factors have a significant impact on determining the hypothetical ILUC emissions associated with biofuels expansion, we believe it is critical that CARB make the new methodology, all data and assumptions available to the public as soon as possible. We encourage CARB to release the new emissions factors methodology and data well in advance of the September workshop, so that stakeholders have adequate time to review this information.

***III. We generally support the notion of streamlining the Method 2A/2B approval process. However, we recommend that CARB re-evaluate some of the potential application requirements that were discussed at the July 22 workshop.***

We agree with CARB's assessment at the workshop that the current Method 2A/2B approval process is "cumbersome" and should be streamlined. We note that some Method 2 applications that were accepted and posted by CARB in January 2011 *still* have not been formally approved. While we agree with many of the basic elements of the Method 2 certification program as proposed at the workshop, we encourage CARB to reconsider some of the proposed "required application contents." We believe the information required for the current Method 2 application process will continue to be sufficient under the proposed streamlined process. Requiring two years' worth of invoices for energy consumed and receipts for fuel and co-product sales, as proposed, imposes an onerous and unnecessary burden on both the Method 2 applicant and CARB staff. These proposed requirements may discourage biofuel producers from utilizing the Method 2 process. At the very least, CARB should consider revising these proposed provisions to require that two years' worth of invoices and receipts be *available* for CARB's review *on an as-needed basis* rather than as a submission requirement.

Further, biofuel producers are already submitting much of the information that CARB is proposing to require to the U.S. EPA as part of the RFS2 program. A much simpler approach would be to request that Method 2 applicants forward copies of their RFS2 registration package, third-party engineering reviews and possibly copies of certain standard reports required by U.S. EPA for RFS2 compliance.<sup>7</sup>

***IV. RFA strongly opposes the suggested changes to the voluntary biofuel producer registration process and believes such changes would only serve to discourage biofuel producers from registering.***

We are adamantly opposed to the potential changes to the voluntary biofuel producer registration program that were discussed by CARB staff during the workshop. As noted by CARB, the program is entirely voluntary and non-regulatory, as biofuel producers are not regulated parties under the LCFS; thus, it is confusing why CARB would attempt to make changes to the program that would significantly discourage biofuel producers from registering.

RFA believes the current program is working effectively and contends that CARB has not established any clear justification for making these potential changes. CARB staff implied that regulated parties need greater confidence in the CI values that are being registered via the existing process. However, we have not heard a single complaint from regulated parties, either directly or

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<sup>7</sup> For example, the RFS2 Renewable Fuel Producer Co-products Report (RFS0700) requires producers to report the types and amounts of co-products they produce (i.e., DDGS, WDG, and other forms).

via comments to CARB, regarding the validity of CI values for registered biofuel producers under the existing program. Acceptance of the registration form by CARB and posting of the registrant's information to the online "registry" provides the necessary level of confidence to regulated parties.

The only information that regulated parties need from biofuel producers for the purposes of reporting and compliance is the CI of the biofuel, the production pathway, and the physical pathway. This information is already adequately provided by biofuel producers via the existing registration form. Any other information is extraneous to the needs of the regulated party and is unnecessary. Further, registrants using the existing process already attest to, and accept legal responsibility for, the accuracy of the information submitted. By signing the form, voluntary registrants accept that "submitting or attesting to false statements may constitute a serious crime, punishable under the California Penal Code, or other criminal offenses punishable under state, municipal, or federal law."

If CARB has sufficient reason to question the legitimacy of information submitted by registrants, it should independently validate the information on a special as-needed basis, rather than requiring every registrant to submit extraneous and unnecessary information. Because the existing biofuel producer registration process is working efficiently and providing regulated parties with the information they need for reporting and compliance, RFA strongly objects to the proposed changes to this program.

***V. RFA generally supports the concept of allowing out-of-state producers to voluntarily elect to become initial regulated parties. However, because most biofuel produced at out-of-state facilities is delivered to California via a third-party marketer or broker, we encourage CARB to allow for the transfer of the out-of-state producer's compliance obligation to the third party, or for the third party to voluntarily elect to become the initial regulated party in the event the out-of-state producer does not elect to become the regulated party.***

We agree with the concept of allowing out-of-state producers to voluntarily elect to become initial regulated parties under the LCFS if they so choose. RFA believes the proposed amendments to the opt-in/opt-out provisions and the proposed changes to the definition of "producer" are suitable and clearly allow the out-of-state biofuel producer to voluntarily elect to become the initial regulated party. However, as the proposed amendments are currently structured, it appears there is no ability for out-of-state producers to transfer the compliance obligation to third-party marketers or brokers who typically take ownership of the biofuel and deliver it to the California marketplace. Further, there appears to be no ability for third-party marketers or brokers to voluntarily elect to become the initial regulated parties themselves (i.e., in the event the original out-of-state biofuel producer does not elect to be the initial regulated party). To ensure maximum flexibility, CARB should revise the regulation to allow third-party biofuel suppliers to either 1) accept transfer of the compliance obligation from out-of-state biofuel producers who voluntarily elect to become the initial regulated parties; or 2) voluntarily elect to become the initial regulated party themselves, in the event the biofuel producer does not elect to become the initial regulated party.

RFA is aware of the efforts of several third-party ethanol marketing firms to suggest alternative regulatory language to CARB that would allow them to become the initial regulated party under the

LCFS. We encourage CARB to strongly consider the suggestions of these firms, provided that they do nothing to remove the ability of ethanol producers themselves to voluntarily elect to become the initial regulated party.

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Thank you for the opportunity to comment on the proposed regulatory concepts and amendments. Please do not hesitate to contact us with any questions or comments regarding the contents of this letter.

Sincerely,

A handwritten signature in black ink that reads "Geoff Cooper". The signature is written in a cursive, flowing style.

Geoff Cooper  
Vice President, Research & Analysis

cc:  
Richard Corey  
Mike Waugh  
Renee Littaua  
John Courtis  
Jim Duffy  
Aubrey Sideco