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October 5, 2011

John Courtis  
Manager, Alternative Fuels Section  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95812

Dear Mr. Courtis:

I am writing to share the attached report, which provides an analysis of the work recently completed by Wally Tyner, Holly Gibbs, and Richard Plevin regarding theoretical indirect land use changes associated with use of soy biodiesel. Thank you, in advance, for your consideration of our thoughts on their work.

In our view, the GTAP work completed by Dr. Tyner represents a substantial improvement over the previous effort that was put forth by U.C. Berkeley in December of 2009. While some meaningful issues have yet to be addressed, the structural changes made to GTAP by Dr. Tyner have resulted in a model that produces results that are generally consistent with the way in which the agricultural economy functions – a major step forward.

The attached analysis from Don O'Connor, PE discusses a number of issues we would like to see addressed in the modeling before the new version of GTAP is approved for regulatory purposes. Since those items are discussed at length in the attached report, I only wish to briefly highlight four general points in this cover letter.

1. We believe the Air Resources Board (ARB) should defer to the recommendations of the Expert Work Group (Expert Group) in instances in which a consensus was found to exist. There are a few issues in which the ARB appears to be considering deviating from the recommendations of that group. The yield-price elasticity is perhaps the most notable example. In our view, the ARB did an excellent job appointing the Expert Group, running that process, and then hiring the best contractor available to implement the GTAP recommendations. We believe that the ARB should continue to support that process by implementing – and not amending – the Expert Group's consensus items.
2. There were several Expert Work Group recommendations that were not addressed in the modeling. In particular, the CET function still does not provide separate or realistic values for the different kinds of land. Until this issue is addressed, soy biodiesel will continue to bear the burden of a large, artificial carbon penalty.

3. The elasticities in GTAP are the same for corn ethanol, sugar cane ethanol, and soy biodiesel even though significant differences exist between the fuels and feedstocks. Perhaps because soy biodiesel is a much smaller industry than ethanol, this area has not received much attention. Nevertheless, in our view, it should be examined to determine if using the same elasticities for all fuels and feedstocks is an appropriate approach.
4. Don O'Connor raises several questions regarding the land cover data used by the GTAP model. Many of these points suggest that GTAP underestimates the land available for additional crop production with little or no emissions from land use change. In support of Mr. O'Connor's point that CRP acres should be accessed by the model, we would like to point out that the 2008 Farm Bill reduced support of CRP acres by 7.2 million acres. As contracts expire, millions of acres of productive cropland will be coming out of the program, reducing conversion of other land types relative to GTAP's current predictions.

As in the case with Dr. Tyner's work, we believe Professor Gibbs' analysis represents a major step forward. Both the detail and accuracy of the data appear to be improved markedly relative to that which was used by U.C. Berkeley in the previous effort. Since Don O'Connor provides in-depth comments in the attached analysis, I only wish to highlight one point – that Professor Gibbs notes in the work that she is aware of better data sets that could be used for the United States, Canada, and Australia. We agree with her assessment and believe that the most accurate data set should be used.

Finally, we feel that there are some rather obvious problems with Dr. Plevins' work that should be examined closely. These are noted in detail in the attached report. In brief, they include double counting for some carbon materials, values that are an order of magnitude (or more) higher than data seen in published literature, and poor documentation of methodology in certain key instances.

Again, while there are issues that still need to be addressed, the ARB is to be commended for the job it has done to improve the estimates regarding indirect land use change for soy biodiesel. If the problems outlined in the attached report are remedied, we believe the modeling to be sufficiently robust for regulatory purposes. If, however, sufficient time is not available for ARB contractors to address all of these issues, we would strongly urge the agency to delay the rulemaking until such time as these changes can be made.

Sincerely,

A handwritten signature in black ink, appearing to read "Shelby Neal", with a stylized, flowing script.

Shelby Neal

Director of State Governmental Affairs