Center for Energy Efficiency and Renewable Technologies
Coalition for Clean Air ● Energy Independence Now
Natural Resources Defense Council ● Union of Concerned Scientists

May 11, 2011

Robert Fletcher
Deputy Executive Officer - EWG Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Mr. Fletcher,

The undersigned organizations strongly support the Air Resources Board's work to implement the Low Carbon Fuel Standard and commend the board and staff on the thoughtful, measured implementation process you have undertaken. We appreciate the comprehensive analytical approach you and your colleagues have taken to the latest science involving land-use change and your commitment to an open public process via the Land Use Change Expert Workgroup.

As we examine the reports prepared by sub-teams within the LUC Expert Workgroup, we feel compelled to highlight in this short letter a few key areas where we believe additional staff attention and analysis is warranted. The Expert Workgroup, expert peer reviews and new models and analyses provide valuable new information; the Workgroup process allowed expert participants and other stakeholders to voice their occasionally divergent perspectives. Combining this input to develop a high quality, independent science-based analysis and practical regulatory implementation will require skill and judgment, for which your agency is renowned.

As you revise the lifecycle analyses in light of the new data, models and input that have become available in the last year, we urge you to focus special attention on addressing the following important considerations raised in the review process.

1. It is inappropriate to treat reduced food consumption, especially among the global poor, as a compliance strategy for the LCFS. ARB should undertake a careful analysis of the impact of biofuel production on food consumption and make the extent of this phenomenon very clear. ARB should take measures to reduce, insofar as possible, negative impacts of California fuel policy on hunger by excluding the lifecycle benefits of reduced food consumption from the lifecycle accounting of all fuels.

2. The price yield elasticity is a critical variable for which good econometric data are lacking. In the absence of reliable data it will be important to consider a range of possible values including those suggested by the Expert Workgroup sub-team on elasticity values and recommended by Professor Steven T. Berry in his peer review.

3. The use of net primary productivity projections from the Terrestrial Ecosystem Model as a proxy for crop yields of new lands brought into production is inadequate to capture potential yield degradation owing to previous land use history and economic factors that may influence yield (e.g. access to technology and markets). ARB should exercise caution if it is considering implementing this novel approach. Any novel analysis of this sort should be compared to simpler approaches based on economic data or economically plausible estimates (insofar as econometric data are unavailable).

While there are many other recommendations and opportunities to improve the analysis of land use, we highlight these three in particular as they are areas that could substantially bias the results leading to a significant underestimate of the magnitude of land use change emissions.

The Expert Workgroup and external review process highlighted many specific areas that contribute to uncertainty in the quantitative determination of carbon intensity associated with different fuels. While many opportunities exist to refine and augment the analysis, it is also important to balance the desire to refine the analysis with the need to move forward with the implementation based on the robust analysis ARB staff has done to date. The best means to reconcile these competing goals is to conduct a thorough and transparent uncertainty analysis. Such an analysis will demonstrate that there is a range of plausible carbon intensities. In selecting final carbon intensity assignments from these plausible ranges it is important to be transparent and consistent, as we have come to expect from ARB, but it does not necessarily follow that the mean or median is the best choice. Instead, ARB should choose a result that reduces the risk that the LCFS drives the expansion of fuels that increase land-use change at the expense of carbon emissions and loss of critical ecological values, such as those associated with tropical forests.

Thank you for your continued work to implement and refine this important standard. We will continue to engage through your public process and appreciate the offer to provide these comments.

Sincerely,

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