California Air Resources Board Mary Nichols, Chairperson 1001 "I" Street P.O. Box 2815 Sacramento, CA 95812

ORIGINAL:

Board Clerk

Copies:

Executive Officer

Chair

RE: The California Low Carbon Fuel Standard

I am writing in support of the principle of the Low Carbon Fuel Standard, however I believe that changes to the draft regulation are needed to ensure that it will actually mitigate climate change.

Specifically, the inclusion of agrofuels (industrial biofuels) threatens to undermine the impact of the regulation and could lead to it actually exacerbating global warming.

The California LCFS is also likely to set a national precedent, as other states look to California as a model for how to achieve similar carbon reductions.

Provided that agrofuels are excluded, the LCFS could substantially reduce California's carbon emissions by penalizing oil companies for refining raw materials that have a higher a carbon footprint than that of conventional oil.

The dirtiest of these raw materials include synthetic crude oil made from sticky bitumen mined from Canada's tar sands, a most destructive form of mining.

I urge CARB to adopt a precautionary approach and to exclude agrofuels from the LCFS given current evidence of serious negative impacts on forests, climate and food security.

To ensure we obtain real reductions in carbon and achieve the full economic benefits of the LCFS without sacrificing California's and other domestic and international public lands, forests and sensitive ecosystems, it is critical to avoid pitfalls that would compromise the success of the regulation.

When considering the inclusion of agrofuels, it is important to recognize that emissions from indirect land use change (iLUC) are a major source of pollution, loss of biodiversity and escalating food prices.

There is no one standard methodology that has been accepted as a legitimate way of measuring all indirect impacts associated with agrofuels production whether they relate to climate, biodiversity or food security, among other issues.

Yet, the risks of serious unintended consequences are real and well documented and cannot be fully addressed by the currently available methodologies that CARB has embraced.

- All standard methodologies for calculation of carbon intensity of biofuels both ignore indirect
 emissions and actually presume major 'indirect greenhouse gas savings' from the use of
 biofuel co-products. This is not a full accounting of the lifecycle of agrofuel production.
- Evidence provided by Paul Crutzen, Howarth et al., and Searchinger et al. among others, that indirect nitrous oxide emissions from agrofuels linked to the use of nitrogen fertilizer, or from legume monocultures, are far higher than suggested by IPCC methodology has not been fully assessed, nor has it been addressed in any way by the IPCC. This alone means that there is no scientifically credible way of calculating life-cycle greenhouse gas emissions from agrofuels.

We know from peer-reviewed studies that every industrial agrofuel feedstock is more greenhouse gas emitting than petroleum. The lead author of one such peer-reviewed article, Joseph Fargione, has clearly stated "From a climate change perspective, current biofuels are worse than fossil fuels."

When all impacts are assessed, agrofuel production not only does not deliver reductions in greenhouse gases but actually increases global warming emissions, particularly when forests, peatlands and wetlands are converted as a direct or indirect impact of biofuels.

We cannot substitute one liquid fuel (petroleum) with another (agrofuel), which is just as destructive.

- To avoid the worst consequences of global warming, CARB must not only make our cars and trucks more fuel-efficient and less polluting, but work to provide real transportation alternatives such as expanding mass transit; creating bike and pedestrian-friendly cities.
- Also, CARB should work to encourage less overall consumption of energy, including transport fuels so that we do not continue to pursue inefficient and unsustainable alternatives, such as agrofuels, to meet our insatiable demand.

Thank you for your consideration of these comments and suggestions, and your help on behalf of California's, and our nation's, future.

Respectfully,

J. Capozzelli

315 West 90th Street

New York, NY 10024