

NexSteppe
Comments to the California Air Resources Board

**On the Low Carbon Fuel Standard
Concept Paper and ILUC Revisions,
October 15, 2014**

NexSteppe Inc. (NexSteppe) appreciates the opportunity to submit comments on the Low Carbon Fuel Standard (LCFS) Concept Paper and ILUC revision. NexSteppe, headquartered in South San Francisco, California, is a developer and producer of high performance sweet sorghum and high biomass sorghum hybrids. Our sweet sorghum hybrids are grown as feedstocks for advanced ethanol and our high biomass hybrids as a feedstock for cellulosic ethanol on a worldwide basis.

We commend the collaborative nature of CARB's rulemaking process. We have reviewed the recent LCFS Concept Paper and ILUC Revisions as well as the CARB presentation on indirect land use change analysis presented at the recent CARB workshop on 29 September, 2014.

High biomass sorghum and sweet sorghum, along with energy cane and certain other crops are being treated as "specialty crops" and still require GTAP analysis and the assignment of a carbon intensity score. Given the urgency of broadening the range of available feedstocks for producers of low-carbon fuels, especially for cellulosic ethanol producers, we hope that CARB will consider whether these feedstocks can be assessed in the near future.

To that end we would make two comments:

1. Grain sorghum provides a useful guide for determining the carbon intensity of high biomass sorghum and sweet sorghum feedstocks. Inputs for all types of sorghum are similar, can be and are grown on similar land and under similar agronomic

conditions. We believe that using grain sorghum as a starting point and then reducing the carbon intensity of high biomass sorghum and sweet sorghum in proportion to the higher ethanol yields that each of high biomass sorghum and sweet sorghum produce on a per acre basis would be a simple and effective method to determine carbon intensity scores for these new feedstock crops.

2. In many cases sweet sorghum and high biomass sorghum will be grown as a cover crop. In tropical conditions in particular the ability of growers to plant and harvest sorghum crops when land is otherwise fallow should be addressed in indirect land use change analysis. In Brazil, for example, “safrinha” or “second crop” plantings (for which crops like sweet sorghum and high biomass sorghum are well suited) provide a feedstock opportunity as an alternative to a cover crop and cause no indirect land use change as the land remains available for the principal (safra) growing season.

We hope that you find these comments useful and look forward to working with CARB on the analysis related to sweet sorghum and high biomass sorghum derived ethanol. Please do not hesitate to contact us if we can be of any assistance in this matter.

Respectfully submitted,

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