

**To:** Dean Simeroth: California Air Resources Board  
John Courtis: California Air Resources Board  
Christina Zhang-Tillman: California Air Resources Board

**Re:** Comments and Recommendations Regarding the Low Carbon Fuel Standard

**From:** Rahul Iyer: Executive Vice President – Primafuel, Inc.

**Date:** April 23, 2008

Primafuel applauds the California Air Resources Board (ARB) for its ground-breaking work towards the first Low Carbon Fuel Standard (LCFS) regulations. Primafuel strongly supports the goals of the LCFS as articulated in the Proposed Concept Outline for the LCFS Regulations in March 2008 and at the LCFS workshop on March 25, 2008.

As a technology and infrastructure company focused on low-carbon fuels, the rules-of-engagement as defined by the LCFS are deeply relevant to our continued success. As such, Primafuel offers the following recommendations based on the Proposed Concept Outline for the LCFS Regulations.

#### **Volume Obligation for Ultra Low Carbon Fuel (ULCF) – 2.9a**

Primafuel strongly supports the concept of an ULCF standard. It is important that this standard provide a challenging performance metric in life-cycle GHG reductions and a reasonable initial market size in order to catalyze technology investment. Based on Primafuel's analysis of currently available waste streams and conversion technology, it is reasonable to conclude that 5 to 10% of the entire low-carbon fuels market can meet an aggressive ULCF standard. A volumetric standard based on gallons, rather than percentage, tends to send a clearer market signal. This volumetric number could be calculated and published based on available pathways on an annual or bi-annual basis. Looking forward, this standard may be the most targeted vehicle by which the State could prioritize technology demonstration programs towards commercializing ever lower-carbon fuels.

#### **Procedure for Using Default Values – 3.3.2**

In order for California to meet the ambitious goals of the LCFS, the conventional biofuels industry must be clearly guided by price-signals to invest in both existing and new feedstock systems (including improved farming practices) and improved fuel production facilities. It is therefore imperative that a system be established for rapid replicability of best practices and improved technologies.

*Example: A conventional corn ethanol producer may initially accept default values of GHG reductions for their product. The producer would ideally be compelled by market forces to invest in new equipment, in this case perhaps a biomass gasification system to offset natural gas use. The adoption of this best practice would be significantly accelerated if the producer knew the expected reduction in GHG emissions in advance of purchasing the equipment*

In this type of system, a developer of technology and equipment would supply ARB with performance data from both the laboratory and first commercial installation. With subsequent installations, the fuel producer could use this 'ARB verified' data in the GREET model for submittal to ARB. This system would allow a fuel producer to reasonably project the increased value of their lower-carbon fuel product and justify investment in best practices.

### **Compliance and Enforcement – 3.0**

The definitions set forth of obligated parties and options for compliance are sound. In order to ensure that double-counting of GHG reductions does not occur, there must be incentive for low-carbon fuels to be used within the State of California. While shuttling of fuel presents inefficiencies, this issue will only be material when California's in-state low-carbon fuels production capacity is significantly increased. Until that time, low-carbon fuels produced out of state should be used within the state of California in order to achieve LCFS targets.

### **Tracking and Reporting – 3.3**

Quarterly reporting frequency is important to maintain, as it requires regulated parties to focused attention on GHG reduction four times a year. This is vital in order to maintain a dynamic and competitive market.

Primafuel would be pleased to offer more detailed comments and further points of clarification if requested

Respectfully,

Rahul Iyer

Executive Vice President  
Primafuel, Inc.  
2774 Dawson Ave.  
Signal Hill, California 90755  
USA

