



July 5, 2018

VIA ELECTRONIC FILING AND ELECTRONIC MAIL

Clerk of the Board
Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Diamond Alternative Energy Comments on the Proposed Amendments to the Low Carbon Fuel Standard 15 Day Package, *Notice of Public Availability of Modified Text and Availability of Additional Documents and Information for the Proposed Amendments to the Low Carbon Fuel Standard Regulation and to the Regulation on Commercialization of Alternative Diesel Fuels (LCFS18)*

Dear Sir/Madam:

Diamond Alternative Energy LLC dba Diamond Green Diesel (hereafter “Diamond Green Diesel”) appreciates this opportunity to provide comments regarding the Air Resource Board’s proposed 15 day modifications to the Low Carbon Fuel Standard (LCFS), as proposed on June 20, 2018. Diamond Green Diesel is the largest producer of hydrotreated renewable diesel in North America marketing 170MM gallons per year for sale. A large percentage of Diamond Green Diesel’s production goes to the California market, where it serves as an important generator of LCFS credits.

Diamond Green uses only low-carbon sustainable feedstocks including tallow, used cooking oil, and distiller’s corn oil to produce a low carbon renewable diesel. As part of the 2018 LCFS program amendments, ARB has proposed modifications to the 2016 CA-GREET model to create CA-GREET 3.0. Diamond Green Diesel is concerned the recent changes to the California GREET 3.0 model do not fully account for errors in the 2016 CA-GREET. While ARB corrected the energy used for crushing soybeans, they neglected to correct for the tallow rendering energy value in CA-GREET 3.0.

The tallow rendering change made to GREET 2017 is based on a memorandum from Argonne National Laboratory issued on October 9, 2017 (Chen, R. Updates on the Energy Consumption of the Beef Tallow Rendering Process and the Ratio of Synthetic Fertilizer Nitrogen Supplementing Removed Crop Residue Nitrogen in GREET). In this memorandum, Argonne acknowledges it misinterpreted data in the peer reviewed literature on the energy used for rendering. The energy use for rendering in GREET 2017 was then corrected for the mistake. CARB should apply this correction to California GREET 3.0. The changes to California GREET 3.0 are straightforward and only involve correcting input data. Furthermore the changes do not impact any other pathway.

To fail to make this change results in an erroneous and substantially higher carbon intensity for renewable diesel made from tallow. This would be extremely unfortunate given the science is clear that tallow should

have a lower Carbon Intensity (CI) number. Additionally it would be inconsistent and counterproductive for CARB to grant changes from GREET 2017 that affect one feedstock (soybean oil), but not permit similar changes from GREET 2017 for another feedstock (tallow). Therefore Diamond Green Diesel strongly urges CARB to implement the lower tallow rendering change made to GREET 2017.

Also related to the proposed GREET 3.0 model are revisions to the renewable diesel production emission calculation methodology. Specifically, the spreadsheet model ("RD Production" sheet, cell M158), introduces a new factor which substantially increases the calculated production emissions from renewable diesel, with the effect of increasing the RD CI by more than 11 g/MJ. There is no analogous factor in the prior version of the GREET model, and the literature CARB has released to-date does not discuss the origin and/or necessity of this factor. Consequently, we contend that this increase constitutes an error in the GREET 3.0 model and should be corrected. However, to the extent that CARB believes the model to be accurate, CARB should provide, for public review and comment, the scientific justification for increasing the modeled production emissions based solely on a ratio of energy content between naphtha and renewable diesel.

Diamond Green Diesel is committed to working with the Agency to meet its goals and objectives under the Low Carbon Fuels Standard regulation as it relates to growing the renewable fuels market in ways that are reasonable, scientifically sound, technically feasible, and cost effective. We thank you for your consideration of these comments and we look forward to further discussion on this issue. Please contact me (210) 345-2438 should you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Matthew A. Hepp".

for,

Elizabeth A Hepp
Staff Fuels Compliance Engineer
Valero Companies
210-345-2438
elizabeth.hepp@valero.com