Kern Oil & Refining Co.
7724 E. PANAMA LANE
BAKERSFIELD, CALIFORNIA 93307-9210
(661) 845-0761 FAX (661) 845-0330

April 11, 2014

VIA E-MAIL (KSIDECO@ARB.CA.GOV)

Mike Waugh, Chief, Transportation Fuels Branch
California Air Resources Board

Re: Comments on March 11, 2014 Workshop – Low Carbon Fuel Standard Re-Adoption

Dear Mr. Waugh:

Kern Oil & Refining Co. (Kern) is providing comments on the California Air Resources Board's (ARB) March 11, 2014, workshop, regarding the re-adoption of the Low Carbon Fuel Standard (LCFS). ARB's presentation briefly highlighted new concepts being considered as well as LCFS amendments previously proposed in 2013 that are anticipated to go before the Board in Fall of 2014. Kern is providing preliminary comments below with the understanding that additional specificity is necessary to finalize Kern's position on ARB's proposal – especially with the regard to the new concepts presented.

Specifically, Kern is providing comments regarding the: (1) GHG Emissions Reductions at Refineries; (2) Modification of Compliance Curves for Gasoline and Diesel Standards; (3) Refinery Specific Crude Oil Incremental Deficit Accounting; (4) Fuel Pathways and Producer Facility Registration; (5) Low-Complexity and Low-Energy Use Refinery Provisions; and (6) OPGEE Revisions and Crude Lookup Table Revisions.

GHG Emissions Reductions at Refineries

Kern is cautiously optimistic with regard to ARB's proposal to reward refiners for projects resulting in demonstrable emission reductions at a stationary source facility. As Kern understands it, refiners would earn program credits in consideration of those reductions, consistent with full life cycle analyses demonstrating lower resultant carbon intensity (CI) of fuels produced. ARB's proposal generally described an application process where the refinery's baseline transportation fuel CI would be calculated and compared to the new, post-project calculated transportation fuel CI. In order to fully evaluate the value of this proposal more information is required, for example, regarding specific details of the application process, data reporting, baseline and ongoing CI calculation, and ongoing monitoring requirements.

Modification of Compliance Curves for Gasoline and Diesel Standards

Given, the two year delay resulting from the *Poet* decision and the required re-adoption of the LCFS, Kern agrees with ARB that some adjustment must be made to the compliance curves to prevent imposition of a sudden dramatic reduction that would negatively affect the market and regulated parties' ability to comply. Kern understands that ARB is conducting in-depth analyses of projected fuels availabilities and evaluating the impact on compliance goals from separate proposed changes to the LCFS in order to make available proposed compliance curves for review. To that end, Kern supports ARB smoothing out the curve to 2020 to ensure that reductions are required in a ratable and smooth manner. ARB should release proposed curves and supporting data at the earliest opportunity to allow for maximum stakeholder review and input.

Refinery Specific Crude Oil Incremental Deficit Accounting

Kern is encouraged by ARB's acknowledgement that low volume refineries are disadvantaged by the current California Average Approach, in that they can be affected by the incremental deficit but cannot affect the sector-wide annual crude average CI. At the workshop, ARB proposed a one-time opportunity for small refiners to opt out of the California Average Approach, and instead have their incremental deficits determined through a comparison of the facility's annual average crude carbon intensity and its 2010 baseline crude carbon intensity. The workshop provided a general overview of the type of additional data that would be required from those considering the opt-out; however, additional information is needed regarding the data required and how ARB intends to utilize that data (i.e., in setting a baseline and calculating subsequent years). Specifically, ARB suggests requiring detailed information about refinery intermediates and blendstocks, yet provides no insight into how this data would be used in determining a facility's annual or baseline crude CI. At this time, Kern cannot fully evaluate this proposal and whether it adequately addresses the issues regarding the impact of the California Average on low-volume refineries like Kern. ARB has announced a subsequent workshop to address crude oil incremental deficit accounting on April 18, 2014. Kern urges ARB to provide additional detail, including those discussed above, at that workshop such that stakeholders can more fully understand this option and have sufficient time to consider its merit.

Fuel Pathways and Producer Facility Registration

Kern is concerned regarding ARB's proposal to "average" the carbon intensity of first generation biofuels by employing the proposed two-tier system where tier one biofuels are categorized in bins where all fuels within a bin receive a CI equivalent to the midpoint of the range that defines the bin. Kern is particularly concerned about how this would affect compliance strategies, compliance costs, and ultimately the resultant impact on the LCFS credit market.

A CI difference of even hundredths of gram of CO_2 per mega-joule (gCO_2/MJ) can have a pricing impact and a compliance impact for an obligated party. For example, a refiner producing 25,000 barrels per day of CARBOB, blending ten percent ethanol to meet ARB reformulated gasoline specifications, would need to blend approximately 383 million gallons of ethanol. A rounding effect within a CI bin as minute as 0.05 gCO_2/MJ would cost this refiner an additional

$100,000 per year in the purchase of ethanol alone [using an average LCFS credit price of $71/metric ton (average price during fourth quarter 2013 according to ARB price activity report)]. Minute CI differences as in the previous example will be become all the more important as the time goes by as compliance targets get more stringent and alternative fuels availability become tighter and more competitive.

Low-Complexity and Low-Energy Use Refinery Provisions

Kern appreciates ARB's inclusion of provisions for Low Complexity/Low Energy-Use Refineries in recognition of the inherent lower carbon intensities of transportation fuels produced at these facilities. ARB's proposal will help address the unfair subsidization of higher than average energy-use refiners that results from the current regulations' reliance upon the "average refinery" in determining CI values for finished transportation fuels. Any provision ultimately chosen by ARB needs to have a strong and demonstrable scientific and technical basis for the consideration given to low-complexity and low-energy-use refineries.

OPGEE Revisions and Crude Lookup Table Revisions

ARB will be posting a new crude lookup table this spring that incorporates additional modeled crudes, as well as incorporating slight changes to some CIs based on recent, minor revisions to the OPGEE model. ARB is proposing to update the "official" table of crude oil names only once every three years going forward. Three year updates are unreasonably far apart, especially given the simplicity of approving changes through an Executive Officer approval rather than an actual Board hearing.

In conclusion, Kern appreciates ARB's consideration of Kern's comments. As always, Kern is committed to working with Staff throughout this regulatory process.

Sincerely,

Melinda L. Hicks
Manager, Environmental Health and Safety
Kern Oil & Refining Co.