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ELECTRONIC SUBMITTAL DOCKET: lcfs-wkshp-jul22-ws

August 8, 2022

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

Dear Chair Randolph and Board Members:

Kern Oil & Refining Co. (Kern) is providing comments on the California Air Resources Board's (CARB) proposed amendments to the Low Carbon Fuel Standard (LCFS) regulation released on July 7, 2022. Kern recommends that CARB should (1) Support updated science-based policies that encourage both fuel and food production; (2) Maintain consistent and long-term LCFS targets; (3) Level the playing field between in-state and out-of-state biofuels; (4) Support adoption of sustainability criteria for all fuels; and (5) Prioritize fuels that reduce short-lived climate pollutants.

Kern is a family-owned, small refinery located in the Southern San Joaquin Valley, just outside Bakersfield, California. Kern has been in continuous operation since 1934, producing transportation fuels that meet CARB's strict emissions standards, including gasoline, ultra-low sulfur diesel, and co-processed renewable diesel. With a processing capacity of 26,000 barrels per day, Kern is the only refinery between the Bay Area and Los Angeles producing clean gasoline and renewable diesel, providing critical supply to the agricultural breadbasket and transportation corridors that make up California's southern Central Valley.

Kern was an early adopter of renewable fuels, being just the second refinery in the country to coprocess biomass to produce renewable diesel and the first small refinery to blend biodiesel. Kern continues to enhance its clean fuels portfolio and is in active pursuit as an incubator and catalyst for next generation renewable and cleaner transportation fuels. An all-of-the-above approach is a must in sustainably achieving climate goals and ensuring Californian's have access to a diverse and reliable array clean transportation fuels.

1. Support Science-Based Policies

Kern appreciates CARB's initial concern that allowing food crops to be used for biofuels production could impact food supplies and prices. These concerns are adequately addressed by

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supporting science-based models that accurately reflect food, fiber and fuel production. Limiting crop-based fuels as suggested is not based on science, and CARB should not be swayed by false assumptions or inaccurate correlations about food versus fuel. Kern encourages CARB to stay on target, using updated GREET and GTAP models along with vetted, scientifically well-documented, and supported papers/research to ensure that no matter the feedstock, the impacts (both direct and indirect) are supportive of GHG reductions for the near and long term.

"Food vs. fuel" is an oversimplification and dramatization that pits agriculture against consumers. CARB could simply adopt and utilize the latest models of GREET and GTAP to ensure both the indirect and direct impacts are best represented of the most accurate modeled GHG reductions. CARB has not updated its GTAP model since 2015. By updating the models to incorporate the latest changes, CARB and all global citizens will benefit from a greater reflection of real-world science.

A key part of the lifecycle analysis for organic waste-derived fuels – including biomethane, hydrogen, and electricity – is the calculation of avoided emissions. For fuels generated from diverted organic waste that would otherwise be disposed of in landfills, it is critical to assess avoided landfill emissions and to use the best available science to do so.

2. Maintain Consistent and Long-Term LCFS Targets

Kern strongly supports CARB's proposal of setting 5-year interim targets out to 2045 for several reasons. First, achieving carbon neutrality will not be possible without long-term carbon reduction targets in the transportation sector. Second, building long-term renewable projects is inherently riskier than maintaining current investments. New projects based on new technologies and supply chains are complex; they can take thousands of hours and millions, or hundreds of millions of dollars to come to fruition, often taking years or even decades. Long-term and consistent policy is crucial for stability and growth of these markets. Establishing 5-year interim targets will provide benchmarks and a smoother path for the market by providing longer term market signals and greater certainty. This certainty is critical for next generation renewable fuel innovators and ultra-low carbon fuel developers – those bringing online additional biofuels, hydrogen or electricity generated from organic waste – all of which can provide carbon negative emissions that will be needed to reach carbon neutrality.

3. Level the Playing Field for In-State vs. Out-Of-State Producers

The Staff presentation during the July 7, 2022 workshop shows that biomethane use, along with other biofuels, is increasing in California. Unfortunately, the vast majority of biomethane sold into the LCFS program is generated outside California and little, if any, of this out-of-state biomethane is physically delivered to California. While out-of-state biomethane may provide climate benefits, it puts in-state biomethane producers at a severe disadvantage and obscures the far greater benefits to California from in-state production. CARB should incentivize in-state biomethane production in the LCFS program or at least ensure that in-state and out-of-state biomethane are competing on a level playing field.

4. Support Adopting Sustainability Criteria for Fuels

The Staff presentation raised several questions related to the sustainability of biofuels.¹ Kern strongly supports the adoption of sustainability criteria for all fuels, not just biofuels. As we mentioned above, updated scientific models would best reflect the latest science and sustainability of fuels. Kern encourages CARB to consider sustainability criteria for batteries and other fuels, in addition to biofuels. The European Union has recently adopted sustainable battery standards that CARB could look to as a model and/or in consideration of adopting. All fuels and technologies should be held to appropriate and equal sustainability standards.

5. The LCFS Should Prioritize Fuels that Reduce Short-Lived Climate Pollutants.

Kern urges CARB to maintain the LCFS as a performance-based program – as the program was originally designed – based exclusively on the carbon intensity of fuels. Doing so ensures the program remains focused on its overarching goal of reducing the carbon intensity of transportation fuels while achieving the greatest potential carbon reductions, and makes measuring progress simpler and more objective.

However, should CARB continue to adopt incentives for infrastructure and/or goals beyond carbon intensity, Kern supports incentivize low carbon fuels that additionally reduce SLCP emissions to help meet the requirements of SB 1383 and to provide direct benefits to public health.

SB 1383 requires significant reductions in SLCP emissions – a 40 percent reduction in methane and a 50 percent reduction in anthropogenic black carbon - by 2030.² Climate science is now very clear that reducing SLCP emissions pays near-immediate dividends in reducing climate impacts. As CARB's *Short-Lived Climate Pollutant Reduction Strategy* states, "The science unequivocally underscores the need to immediately reduce emissions of short-lived climate pollutants (SLCPs)."³ Unlike reductions in carbon dioxide emissions, SLCP reductions provide immediate and significant public health benefits.⁴ Black carbon and methane are both air pollutants that impact air quality and public health significantly. Black carbon emissions also impact agriculture and forest health and can impact precipitation patterns.

Such incentives should include biofuels, hydrogen and electricity generated from organic waste in California, which reduce SLCP emissions from landfills, livestock, agricultural, and forest waste. This dual incentivization to reduce GHG and SLCP emissions prioritizes air quality and climate impacts for those communities most impacted by transportation fuel emissions.

¹ Staff Presentation at slides 33-37.

² Health and Safety Code section 39730.5.

³ *Short-Lived Climate Pollutant Reduction Strategy*, adopted by the California Air Resources Board, March 2017, at page 1.

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Kern appreciates CARB's consideration of its comments. As always, Kern is committed to working with Staff throughout this regulatory process. Please do not hesitate to reach out to me at (661) 845-0761 with any questions.

Sincerely,

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Melinda L. Palmer Vice President – Regulatory & Public Affairs Kern Oil & Refining Co.

cc: Jennifer Haley, Kern Oil & Refining Co.