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LATHAM & WATKINS LLP

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California Air Resources Board 1001 I Street Sacramento, CA 95814

Clerk of the Board

Electronically submitted at:

https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=lcfs18&comm_period=A

Re: Carbon Creek Energy Comments on ARB's Proposed Low Carbon Fuel Standard **Regulation Amendments**

Clerk of the Board:

On behalf of Carbon Creek Energy ("Carbon Creek"), we are pleased to submit the following comments on the proposed amendments to the Low Carbon Fuel Standard ("LCFS").

Carbon Creek produces responsibly-sourced natural gas in Wyoming's Powder River Basin. Carbon Creek's gas comes from naturally fractured coal seams at a shallow depth, meaning the gas does not require hydraulic fracture stimulation (aka "fracking"), resulting in a far less intensive effort than traditional gas production methods. Carbon Creek's unique natural gas requires very minimal processing, is biogenic (as opposed to thermogenic), and is less carbon intensive than gas from traditional sources.

Carbon Creek commends the California Air Resources Board's ("ARB") dedication to incentivizing innovative practices that reduce greenhouse gas emissions ("GHGs") at petroleum refineries in California. However, as currently worded the proposed regulation governing the Renewable Hydrogen Refinery Credit ("RHRC") Program unnecessarily may limit the sources

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of lower carbon intensity ("CI") hydrogen and natural gas that refineries could use to generate LCFS credits.

Under the Proposed Regulations, the RHRC Program will award LCFS credits to refineries when "renewable hydrogen" is utilized in the production of CARBOB or diesel. Per Section 95489(f)(2) of the Proposed Regulation Order, there are two methods for calculating credits under the RHRC Program. First, Section 95489(f)(2)(A) provides a credit calculation method for "CARBOB or diesel fuel that is partially or wholly derived from renewable hydrogen produced from RNG that displaces fossil natural gas in a steam methane reforming unit." Second, Section 95489(f)(2)(B) provides a credit calculation method for "CARBOB or diesel fuel that is partially or wholly derived from renewable hydrogen produced from other production processes, such as electrolysis using renewable electricity or syngas from biomass gasification." These are the only two credit calculation formulae offered under the proposed RHRC Program. ARB's Initial Statement of Reasons ("ISOR") clarifies that "RNG" refers to biomethane and implies that "renewable hydrogen" can be produced only from biomethane or renewable electricity.²

Both of the RHRC Program credit calculation methods focus on the difference between the CI of fossil fuel derived hydrogen and the CI of the renewable hydrogen, but a petroleum refinery may apply for credits under the RHRC Program only if it uses "renewable hydrogen" produced from biomethane and/or "renewable feedstock." Accordingly, other lower-CI methods of hydrogen production appear to be barred from applying for credits and, therefore, excluded from the RHRC Program.

Carbon Creek proposes that Section 95489(f) be revised to apply to lower-CI hydrogen more broadly, as opposed to only lower-CI hydrogen derived from particular sources. The Refinery Investment Credit Pilot ("RICP") Program, as structured in the Proposed Regulation Order, takes this approach. Specifically, Section 95489(e)(1)(E)(3) indicates that eligible project types under the RICP Program include, "Use of lower-CI process energy such as biomethane, renewable propane, and renewable coke, to displace fossil fuel." In other words, while biomethane is an exemplar of lower-CI process energy the use of which would be eligible to generate credits, the RICP Program is open to any project that would involve the displacement of higher-CI process energy with lower-CI process energy. This approach maintains the environmental integrity of the LCFS without unnecessarily limiting the sources of lower-CI process energy. Moreover, the RICP Program remains true to the design of the LCFS as a fuel-neutral program.

³ Proposed Regulation Order § 95489(f)(3)(A)(2); ISOR at p. III-81.

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¹ Proposed Regulation Order § 95489(f).

² ISOR at p. III-81.

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The primary goal of the RHRC and RICP Programs is to reduce the CI of CARBOB and diesel. As the ISOR indicates, RHRC Program projects "have significant potential to reduce the carbon intensities of CARBOB and diesel by introducing transformative technologies thereby contributing to the goals of the LCFS." By democratizing the RHRC Program to encompass all sources of lower-CI hydrogen, ARB will create more opportunities for petroleum refineries to generate LCFS credits and thereby maximize GHG emissions reductions. Further, focusing on the CI of hydrogen used at a refinery rather than identifying particular feedstocks incentivizes the development of innovative approaches to producing lower-CI fuels. Carbon Creek's proposed revisions, detailed below, would support the goals of the LCFS and catalyze additional reductions in GHG emissions.

Specifically, Carbon Creek proposes that the RHRC Program mimic the RICP Program so that all references to "renewable hydrogen," "RNG," and "renewable feedstock" in Section 95489(f) be replaced with references to "lower-CI hydrogen," "lower-CI natural gas," and "lower-CI feedstock."

Thank you for your time and attention to these comments, and we look forward to continued participation in the development of these proposed regulations. If you have any questions regarding these comments, please feel free to contact me.

Sincerely,

Joshua T. Bledsoe

of LATHAM & WATKINS LLP

cc: Chris Ginsbach (Vice President of Finance, Carbon Creek Energy)
Mr. Samuel Wade, Chief, Transportation Fuels Branch, Industrial Strategies Division

⁴ ISOR at III-50.