



California Independent Petroleum Association

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**Comments of the California Independent Petroleum Association
on LCFS 45-day Proposed Draft and Rulemaking Packet**

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California Air Resources Board
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Via electronic submittal to:

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

The California Independent Petroleum Association (CIPA) is pleased to submit these comments on the March 6, 2018, Rulemaking Package and Proposed Regulatory Amendments. CIPA has actively followed this rulemaking, and previously submitted comments last Fall.¹

The mission of CIPA is to promote greater understanding and awareness of the unique nature of California's independent oil and natural gas producer and the marketplace in which our members operate; highlight the economic contributions made by California independents to local, state and national economies; foster the efficient utilization of California's petroleum resources; promote a balanced approach to resource development and environmental protection and improve business conditions for members of our industry.

The proposed regulation and regulatory packet are important programmatic changes that will impact CIPA members for years to come. CIPA's comments are focused on the Innovative Crude provisions (administration, eligibility, calculations and Monitoring and Verification) and support for CCS provisions related to EOR.

Innovative Crude Provisions

We support CARB's efforts to improve the Innovative Crude provisions within the existing LCFS program. The Innovative Crude provisions recognize and credit the potential efficiencies that can be gained in our industry. Specifically, we support the proposed revision to the credit calculation methodology that adds additional bins for higher steam quality levels. The inclusion of these additional steam quality bins will more accurately track the enthalpy and emissions per barrel for California operations. CIPA supports basing these new values on the most robust science, as well as, industry standards. *CIPA requests that the proposed 95% steam quality factor be revisited prior to final adoption to verify its alignment with standard industry practice.*

¹ https://www.arb.ca.gov/fuels/lcfs/workshops/09082017_cipa.pdf

CIPA *supports* the new provisions allowing for joint application on projects and the ability of producers to opt into transferring credits to the provider of solar steam or solar electricity. These additional administrative options will help provide the business climate needed to incent more projects.

Innovative Methods for producing crude should be technology neutral and should recognize the use of biogas as a GHG reduction fuel. CIPA believes that significant GHG reductions could be achieved if the use of Renewable Natural Gas (RNG) was recognized in the innovative crude sections of the Regulation. There are significant sources of RNG in California's Central Valley operating within short distances of significant oil and gas production fields. If the LCFS rule allowed for book and claim mechanisms to get this RNG to oil fields, there could be substantial investment in new dairy projects from the oil/gas industry. This effort would be complementary to the State's Short-Lived Climate Pollutant efforts and entirely consistent with the RNG book and claim provisions of the existing LCFS, as well as, the book and claim proposal for renewable electricity crediting for electric vehicle charging. *CIPA believes that adding RNG to the list of eligible activities in Section 95489(c)(1)(A) is appropriate at this time, and that a simplified calculation could be added similar to that for solar steam.*

In addition to biogas, CIPA believes now is the time to expand the Innovative Crude provisions to all for a wider band of possible GHG reduction technologies, including geothermal energy, ocean wave energy, or some other innovative energy source or efficiency not considered under the current regulation. There should also be an option for the Executive Officer to review and approve other technologies not yet discussed. This option would allow for additional innovation without having to reopen the regulation. These additions will allow the Board flexibility and discretion to use other CI reduction methods to meet California's LCFS goals.

Section 95489(c)(4)(C) – Recordkeeping and Reporting requires documentation of BOTH of the following: that the innovative crude was supplied to California refineries, and the volume of innovative crude supplied to each refinery. CIPA supports the first requirement. It makes sense to ensure that the crude for which credits are supplied, actually comes to California. It is the second part of that requirement is problematic and unnecessary for in-state producers. It is problematic as the volume of crude produced is already supplied to other state agencies in a manner that has been established over the years. Separating the data out by one particular technology, or by one particular customer is a real issue. But due to the structure of the calculation, this information is unnecessary as the V_{innov} and $V_{\text{crudeproduced}}$ are identical terms, for in-state production, and therefore cancel each other out. This nullifies the need for the volume of crude produced to be collected and verified under this program.

Carbon Capture and Storage Provisions

CIPA is in very strong support for CARB's efforts and recognition of the benefits of Carbon Capture and Storage (CCS) for Enhanced Oil Recovery (EOR) operations. As pointed out in CARB's Scoping Plan, liquid fuels will be a significant component of California's transportation fuel mix for decades to come. It is also known that to achieve the longer-term greenhouse gas reduction goals, that CCS is an important policy to pursue. These two issues are interlinked. It does not make sense to pursue CCS if EOR is not an eligible activity. Staff is proposing this opportunity for industry, and the industry will rise to meet the challenge. Any thought that EOR related CCS should be removed from the rule would be significant negative policy decision.

It is also critically important to ensure that the requirements associated with CCS-EOR are achievable and realistic such that actual projects can be developed. There are a number of technical issues CIPA is aware of and have been submitted in this rulemaking and by a coalition of experts including representatives of academia, industry (including CIPA members), and non-governmental organizations. CIPA request that CARB review the proposed CCS methodologies to ensure the requirements are not overly burdensome. These requirements include: limited injection and annual pressure requirements, 100-year post-injection operator monitoring, downhole seismic monitoring, monitoring the CO2 plume and plugging and abandonments.

We hope to keep the lines of communication open on these very important issues as this rule progresses from adoption to implementation. Please do not hesitate to reach out to CIPA should you have any questions or if you or your staff would like to discuss these issues further.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rock Zierman', with a long horizontal flourish extending to the right.

Rock Zierman
Chief Executive Officer
California Independent Petroleum Association