Don Gilstrap
Manager, Fuels Regulations

February 14, 2024

Rajinder Sahota
Deputy Executive Officer – Climate Change and Research
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Ms. Sahota:

Re: Intrastate Fossil Jet Proposal

Chevron appreciates the opportunity to review and comment on the subject Low Carbon Fuel Standard rulemaking proposal.

Chevron is a major refiner and marketer of petroleum products and renewable fuels in the state of California and a regulated party under the Low Carbon Fuel Standard (LCFS). Chevron is also an international producer of lower carbon intensity fuels with a global integrated procurement, distribution, and logistics network and 11 biorefineries in the U.S. and Europe.

Chevron is submitting multiple letters on key topics under the 2024 LCFS rulemaking. Following are our comments on the proposal to introduce LCFS deficits for intrastate fossil jet fuel consumption.

<u>Key Messages</u>

- Adding deficits for intrastate fossil jet consumption will not encourage faster adoption of alternative jet fuel.
- Designating refiners and importers as the first reporting entities creates an impractical framework for compliance.
- Measuring intrastate jet fuel consumption is more complex than one might expect.
- CARB has not proposed critical definitions or verification protocols to enable compliance.

<u>CARB's Proposal</u>

CARB proposes to remove the exemption for fossil jet fuel under the LCFS, unless that fuel is demonstrated to have been used for interstate or international flights. The intent is to assign deficits to fossil jet fuel used on intrastate flights, defined as taking off from a California airport and landing at another California airport. The rationale for this proposal is that "California must reduce GHG emissions from aviation." However, CARB has proposed refiners and importers of jet fuel as the first reporting parties for fossil jet fuel, treating jet fuel in the same way that gasoline and diesel fuel are treated. There are several problems with this proposal.

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Fossil Jet Deficits Would Have No Effect on AJF Growth

The proposed deficits will add a new cost to air transportation within the state of California. However, the credits needed to satisfy this new obligation are far more likely to come from established fuels under the LCFS: ethanol, biodiesel, renewable diesel, RNG, and electric vehicles. While Alternative Jet Fuel (AJF), commonly referred to as Sustainable Aviation Fuel, qualifies as an opt-in fuel under the LCFS, the proposed deficits do nothing to improve the economics of its use.

The market-based structure of the LCFS is a critical element of the program's success to date. Credits generated by one fuel can be used to satisfy the deficits from another, even if it is not a direct substitute. This has enabled the rapid growth of fuels like renewable diesel and renewable natural gas, which play a large role in compliance with the deficits from both gasoline and diesel. Adding deficits for fossil jet fuel will not drive growth in AJF because the fundamental hurdle is that AJF is more expensive to produce than renewable diesel. A fossil jet obligation will not change the compliance value of AJF. Credits from fuels that are more economic would satisfy the new obligation.

Further, demand for AJF is growing without the proposed changes. The apparent logic is that adding deficits for intrastate jet will boost demand for AJF, but demand is not the problem. In the Initial Statement of Reason for this rulemaking, CARB describes emission reduction targets set by several airlines, who are pursuing increased AJF use to meet those targets. CARB also discusses the conversion of multiple California refineries to produce bio-based fuels, including AJF. This is all happening without the proposed fossil jet deficits, which will do nothing to improve the economics of those efforts.

The LCFS is already doing its part to encourage AJF adoption through the ability to opt in and generate credits. If CARB is looking to increase the incentive for AJF, it is worth considering an approach proposed by alternative jet fuel producers in their comments during the 2018 rulemaking[1].

> *Another benchmarking approach that would be more consistent with ARB's regulatory authority would be to establish a fixed benchmark standard for conventional jet fuel. This would be consistent with conventional jet fuel's LCFS exemption and would appropriately recognize the difference between CARB's regulatory authority over diesel and gasoline and its authority to provide a voluntary incentive in the aviation sector. Rather than a curve, such an approach would establish a fixed benchmark. It would logically be fixed at the CA-GREET 3.0 carbon intensity score that ARB determines for conventional jet fuel for 2010.*

This approach recognizes the global nature of jet fuel as compared to gasoline and diesel, while adding a competitive incentive for AJF. There is logic in this proposal and it would be far more effective than adding deficits for approximately 10% of the jet fuel consumed in the state.

The Proposed Approach Is Not Practical

CARB has proposed to include fossil jet fuel in the LCFS in the same manner as gasoline and diesel with certain uses exempted. The intent is to obligate only intrastate jet but executing this will be extremely problematic. Designating refiners and importers as the first reporting entities

[1] https://www.arb.ca.gov/lists/com-attach/119-lcfs18-WjsHawdgV1sEclUn.pdf

will bring all fossil jet fuel produced in the state into the program, meaning that CARB will be regulating interstate and international commerce. This is because:

- Refiners and importers will not have the information needed to separate intrastate jet fuel use from interstate and international use.
- This will require reporting all produced and imported jet fuel.
- The LCFS obligation for this fuel will then have to be passed through the supply chain until it reaches the aircraft operators.
- Aircraft operators (airlines, shipping companies, small aircraft owners) are the only parties who will have the information necessary to determine intrastate use versus exempt uses.

There are numerous points in the supply chain where title transfer can take place. This includes, but is not limited to, refinery gates, pipeline transactions, truck deliveries from terminals, in-tank transfers, and sales from airport storage (see Figure 1). At none of these points will the division between intrastate and interstate/international use be known. The LCFS obligation must ultimately be transferred to the aircraft operators who are the only parties that could segregate and report the intrastate and exempt volumes. For multiple reasons, the segregation will be challenging to do accurately, with the likely outcome that some of the LCFS burden will be placed on jet fuel used for interstate and international flights.

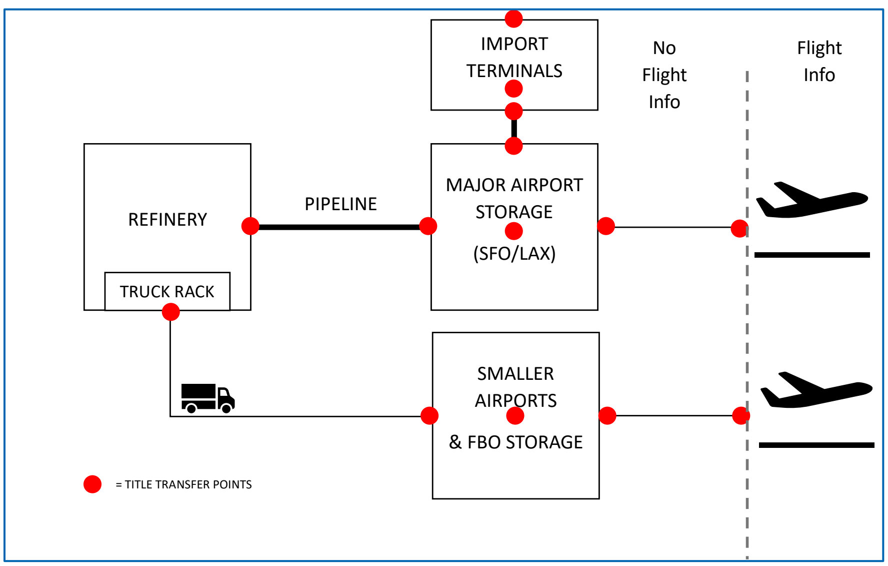

Figure 1. Jet fuel supply chain title transfer points

This adds a significant volume of additional reporting under the LCFS to track jet fuel production and import, purchase and sale, and ultimate consumption, only to have 90% (per CARB's estimate) of the fuel in question ultimately reported as exempt. This would also require changes to hundreds of contracts between parties involved in the jet fuel supply chain in California. Chevron alone has dozens of contracts related to jet fuel supplied on pipelines, via truck deliveries, terminal storage locations, and airport storage within California.

To further complicate the proposed approach, not all intrastate flights will have been fueled within California. It is common practice for aircraft to fuel at one airport (which could be outside California) and not refuel until multiple legs of a flight have been completed. This means an aircraft could fuel outside California, make multiple stops within the state, and refuel again out-of-state. So, CARB's proposal will not only end up regulating interstate/international use but will also exclude a portion of intrastate use.

While regulating intrastate jet fuel will not address CARB's goal of growing AJF use, if CARB chooses to proceed with this concept, it would be much more practical to designate the aircraft operators as the first reporting entity and avoid the excessive additional reporting activity and unavoidable inaccuracies described above.

Tracking and Reporting Intrastate Use Will Be Challenging
Designating aircraft operators as the first reporting entities will reduce the administrative burdens of the program but challenges with accuracy will remain. It is likely that aircraft operators will have to create new accounting and reporting systems to accurately measure and record fuel consumption for any California intrastate leg of a flight. Requiring that intrastate consumption be reported will add a significant, labor-intensive burden for aircraft operators.

A simple multiplier based on miles traveled between California airports and assumed fuel consumption could reduce the effort needed. However, aircraft size and type would have to be considered. This would lead to establishing multiple factors and clear guidelines from CARB on how to apply them, adding significant additional work for both aircraft operators and CARB staff.

This all assumes that this new obligation applies to a few large airlines and shipping companies. CARB must consider the added burden for small aircraft operators that fuel at fixed base operators (FBOs). It would be impractical to expect individual aircraft owners to understand and comply with this obligation under the LCFS. Even if the obligation belongs to a fuel supplier or the FBO itself, small aircraft owners would have a role to play in tracking and reporting intrastate jet fuel consumption.

More Specific Guidelines Are Needed
The minimal regulatory amendments made in this proposed rulemaking do not provide sufficient guidelines for compliance.

- An exemption is proposed for fossil jet fuel used for interstate or international flights but no definition is provided for these types of flights.
- No method is provided for measuring jet fuel use.
- § 95500(c)(1)(A) requires verifiers to include the transaction type "Fossil Jet Fuel Used for Intrastate Flights" in the scope of their review but it is not clear when this transaction type would be used and no parameters are given for verifying its use.
- As written, the proposed regulation requires parties to report production, import, purchase, sale, and all other transaction types that could apply to fossil jet fuel.
- No method is given for then reporting the portion of that fuel that is exempt based on interstate or international use.

Conclusion
CARB should remove the proposed introduction of deficits for intrastate jet fuel use. It does not address the intended goal of growing AJF. Instead, it introduces a confusing accounting burden into the California jet fuel supply chain and increases the cost of air travel without a corresponding benefit. Further, the burden will almost certainly increase the costs of interstate and international jet fuel use for flights that depart from California. To improve crediting for AJF

under the LCFS, CARB could consider the 2018 proposal to use a fixed benchmark for AJF crediting. Absent that, it would be more effective to pursue an incentive program outside the LCFS to provide more direct encouragement for AJF growth.

Thank you for the opportunity to comment on these matters. If you have any questions regarding our comments, please contact me at (925) 842-8903 or DGilstrap@chevron.com.

Sincerely,