



Tesoro Refining & Marketing Company LLC

539 South Main Street
Findlay, OH 45840

SUBMITTED ELECTRONICALLY

December 21, 2022

Cheryl Laskowski, Ph.D.
Industrial Strategies Division
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments on the November 9, 2022, public workshop to discuss potential changes to the Low Carbon Fuel Standard (LCFS) Program

Dr. Laskowski:

Tesoro Refining & Marketing Company LLC, an indirect, wholly-owned subsidiary of Marathon Petroleum Corporation, (collectively, MPC) appreciates the opportunity to provide comments on the California Air Resources Board's (CARB) November 9, 2022, public workshop to discuss Potential Changes to the LCFS Program.

MPC is a refiner and marketer of transportation fuels in the State of California and is investing in low-carbon solutions to meet the energy demands of today and into the future. MPC's commitment to lower-carbon solutions is reflected in the successful conversion of its Dickinson, North Dakota petroleum refinery, and the planned conversion of its Martinez, California petroleum refinery, into renewable fuel production facilities. Combined, these two facilities are expected to produce up to 2.5 million gallons per day of renewable transportation fuel from renewable feedstock sources with an aggregate life-cycle carbon intensity that is approximately 50 percent less than petroleum-based fuels.

During the November 9, 2022, workshop, CARB discussed potential changes to the LCFS program, introduced the California Transportation Supply (CATS) LCFS modeling tool, and provided several initial modeling scenarios that included three different 2030 carbon intensity (CI) benchmarks.

MPC's recommendations on these topics introduced in the workshop are listed below. Additional discussion and support for these recommendations are provided in the subsequent sections.

- MPC recommends CARB set a CI benchmark that enables all fuels to compete on a life-cycle basis, rather than capping crop-based lipid feedstocks or biomethane. CARB should rely on the CI benchmarks to drive to the lowest carbon intensive fuel mix in California.

- MPC recommends CARB not remove or limit petroleum-based crediting because this would eliminate a meaningful decarbonization pathway from the program.

The LCFS market signal must remain strong and allow for all fuels to compete to help California meet its goal to decarbonize the transportation sector.

CARB illustrated in this workshop that the LCFS has increased the diversity and volume of low carbon fuels. The diversification and increased volume of low carbon fuels show the desire by market participants to invest in the program. To respond to the growing pool of low carbon intensity fuels supplying California, CARB is taking the necessary steps to strengthen the program. MPC provided comments¹ to the July 7, 2022, LCFS workshop supporting a 30 percent CI target in 2030 and is encouraged to see CARB is also modeling adjustments to the CI targets prior to 2030.

During the November 9, 2022, workshop, CARB presented three alternatives: Alternative A, Alternative B, and Alternative C. Alternative A presents a fuel supply case with a 25 percent CI reduction by 2030. Alternative B presents a fuel supply case with a 30 percent CI reduction by 2030. Finally, Alternative C presents a fuel supply case with a 35 percent CI reduction by 2030. Each case was presented as varying in the amount of fuel by type that could receive credits under the LCFS program. In general, CARB has indicated Alternative A and Alternative B will constrain future low carbon fuel supply, whereas Alternative C represents an unconstrained low carbon fuel supply scenario. In addition, each Alternative will be optimized using the CATS model to ensure in any year the number of available program credits will equal or exceed the number of program deficits.

MPC's comment letter to the July 7, 2022, LCFS workshop stated that CARB should use the LCFS program to incentivize technologies and tools that reduce emissions in the fuel supply chain. One example MPC provided is the use of the Argonne National Laboratory Feedstock Carbon Intensity Calculator (FD-CIC)² to quantify emission reductions from the use of innovative agricultural techniques used during the production of agricultural feedstocks for biofuels. Opportunities to utilize tools like the FD-CIC calculator should be on the table as an alternative rather than considering constraints on future fuel supplies.

MPC does not support modeling constraints to the supply of low carbon fuels, as suggested in Alternative A and Alternative B. Instead, MPC recommends that CARB model the most feasible fuel supply scenarios, without constraining feedstocks or fuels, utilizing existing and expected fuel/technology mixes. This will allow the CI benchmarks to effectively drive the decarbonization of the transportation sector utilizing fuels made from a variety of feedstocks.

California's petroleum refineries are critical to delivering reliable energy. Opportunities to reduce emissions within refineries should be applauded and incentivized, not phased out.

¹ MPC [Comments](#) to July 7, 2022, LCFS workshop

² Argonne National Laboratory. [FD-CIC](#) 2021

MPC commented on the value and need for the Refinery Investment Credit³ as part of the December 7, 2021, public workshop⁴. While California has goals to reduce the consumption of petroleum fuels, as illustrated in CARB's Final Scoping Plan and Modeling Information⁵, petroleum fuels will continue to be a significant source of energy in California over the next two decades and into 2045 when the State anticipates achieving Carbon Neutrality. Achieving Carbon Neutrality is a significant task, and CARB should not limit which greenhouse gas (GHG) emission reductions are incentivized. A GHG emission reduction at a refinery provides the same benefit as a GHG emission reduction anywhere else in the economy.

The LCFS must continue to incentivize emission reductions from petroleum refineries so California refineries can lower the CI of petroleum products sold in the state. The Refinery Investment Credit program provides an economic signal that helps to differentiate energy efficiency and refinery modernization projects from other projects a company is evaluating. This difference prioritizes capital for projects that not only lower GHG emissions but also particulate matter and ozone precursors like oxides of nitrogen and volatile organic compounds.

It is unclear why CARB would suggest phasing out petroleum crediting in 2025 under Alternative C, provided it represents a case with unconstrained fuel supplies; the notion to phase out the provision is counterproductive. The existing Refinery Investment Credit provision decreases the number of credits awarded as a refinery's fuel supply for use in California is reduced. However, the actual emissions from the refinery will remain lower, whether the fuel is supplied to California, or some other jurisdiction. MPC recommends that CARB not phase out the Refinery Investment Credit in any Scenario it evaluates for the future LCFS design.

Other considerations for CATS Model Inputs

The war in Ukraine has significantly altered trade flows and the availability of sunflower seed used to produce nearly 60 percent⁶ of global sunflower seed oil. CARB should consider the impact of this market dynamic when developing its price and supply bins for available Virgin Oils in the CATS Summary Inputs spreadsheet⁷. Oil seed markets are complex, with many factors including but not limited to conflicts, weather and expanding and contracting economies that drive price changes. Consequently, any recent data used in developing CARB's feedstock supply curves should not solely attribute the change in oilseed prices to increased oilseed demand to produce biofuels.

If you have any questions about anything discussed here, feel free to reach out to me at bcmdonald@marathonpetroleum.com.

³ CARB LCFS [Regulation](#) §95489(e)

⁴ MPC [Comments](#) to December 7, 2022, LCFS workshop

⁵ CARB Final 2022 [Scoping Plan](#) and [Modeling Information](#) Energy Demand tab.

⁶ USDA Oil Crops Outlook: [March 2022](#)

⁷ CARB CATS Summary Inputs [spreadsheet](#)

Dr. Laskowski
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Sincerely,

A handwritten signature in black ink, appearing to read 'Brian McDonald', with a stylized, cursive script.

Brian McDonald
Marathon Petroleum Corporation | West Coast Regulatory Affairs Advisor

Cc: Rajinder Sahota, Deputy Executive Officer, Climate Change and Research
Matthew Botill, Division Chief, Industrial Strategies
Anil Prabhu, Manager, Fuels Evaluation Section
Rui Chen, Manager, Fuel Project Evaluation Section
Jordan Ramalingam, Manager, Low Carbon Fuels Policy